

Squid Reference Manual

1.0

Generated by Doxygen 1.4.2

Wed May 4 13:11:03 2005

Contents

1	Squid Directory Hierarchy	1
1.1	Squid Directories	1
2	Squid Namespace Index	3
2.1	Squid Package List	3
3	Squid Hierarchical Index	5
3.1	Squid Class Hierarchy	5
4	Squid Class Index	9
4.1	Squid Class List	9
5	Squid File Index	11
5.1	Squid File List	11
6	Squid Page Index	13
6.1	Squid Related Pages	13
7	Squid Directory Documentation	15
7.1	My Documents/squid/src/ikayaki/gui/ Directory Reference	15
7.2	My Documents/squid/src/ikayaki/ Directory Reference	17
7.3	My Documents/ Directory Reference	18
7.4	My Documents/squid/src/ikayaki/squid/ Directory Reference	19
7.5	My Documents/squid/ Directory Reference	20
7.6	My Documents/squid/src/ Directory Reference	21
7.7	My Documents/squid/src/ikayaki/util/ Directory Reference	22
8	Squid Namespace Documentation	23
8.1	Package ikayaki	23
8.2	Package ikayaki.gui	24
8.3	Package ikayaki.gui.SequenceColumn	29

8.4	Package ikayaki.MeasurementEvent.Type	30
8.5	Package ikayaki.MeasurementResult.Type	31
8.6	Package ikayaki.MeasurementStep.State	32
8.7	Package ikayaki.Project.Normalization	33
8.8	Package ikayaki.Project.Orientation	34
8.9	Package ikayaki.Project.SampleType	35
8.10	Package ikayaki.Project.State	36
8.11	Package ikayaki.Project.Type	37
8.12	Package ikayaki.ProjectEvent.Type	38
8.13	Package ikayaki.squid	39
8.14	Package ikayaki.util	40
8.15	Package java.awt	41
8.16	Package java.awt.event	42
8.17	Package java.io	43
8.18	Package java.util	44
8.19	Package javax.comm	45
8.20	Package javax.swing	46
8.21	Package javax.swing.event	47
9	Squid Class Documentation	49
9.1	ikayaki.gui.AbstractPlot Class Reference	49
9.2	ikayaki.gui.CalibrationPanel Class Reference	51
9.3	ikayaki.gui.ComponentFlasher Class Reference	54
9.4	ikayaki.util.ComponentPrinter Class Reference	56
9.5	ikayaki.squid.Degausser Class Reference	59
9.6	ikayaki.gui.DeviceSettingsPanel Class Reference	67
9.7	ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory Class Reference	76
9.8	ikayaki.util.DocumentUtilities Class Reference	77
9.9	ikayaki.gui.FittedComboBoxRenderer Class Reference	79
9.10	ikayaki.gui.GenericFileFilter Class Reference	83
9.11	ikayaki.squid.Handler Class Reference	85
9.12	ikayaki.Ikayaki Class Reference	101
9.13	ikayaki.gui.IntensityPlot Class Reference	106
9.14	ikayaki.util.LastExecutor Class Reference	108
9.15	ikayaki.util.LastExecutor.LastExecutorThread Class Reference	113
9.16	ikayaki.util.LastExecutor.RunDelayed Class Reference	114
9.17	ikayaki.util.LoggerPrintStream Class Reference	116

9.18	ikayaki.squid.Magnetometer Class Reference	119
9.19	ikayaki.gui.MagnetometerStatusPanel Class Reference	126
9.20	ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator Class Reference	135
9.21	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel Class Reference	140
9.22	ikayaki.gui.MainMenuBar Class Reference	150
9.23	ikayaki.gui.MainStatusBar Class Reference	155
9.24	ikayaki.gui.MainViewPanel Class Reference	157
9.25	ikayaki.gui.MainViewPanel.NewProjectFileChooser Class Reference	168
9.26	ikayaki.gui.MeasurementControlsPanel Class Reference	170
9.27	ikayaki.gui.MeasurementDetailsPanel Class Reference	177
9.28	ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel Class Reference	180
9.29	ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel Class Reference	184
9.30	ikayaki.MeasurementEvent Class Reference	188
9.31	ikayaki.gui.MeasurementGraphsPanel Class Reference	191
9.32	ikayaki.MeasurementListener Interface Reference	194
9.33	ikayaki.MeasurementResult Class Reference	195
9.34	ikayaki.MeasurementSequence Class Reference	202
9.35	ikayaki.gui.MeasurementSequencePanel Class Reference	208
9.36	ikayaki.gui.MeasurementSequencePanel.HeaderPopupMenu Class Reference	215
9.37	ikayaki.gui.MeasurementSequencePanel.MyFormatterFactory Class Reference	216
9.38	ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu Class Reference	217
9.39	ikayaki.gui.MeasurementSequenceTableModel Class Reference	220
9.40	ikayaki.MeasurementStep Class Reference	228
9.41	ikayaki.MeasurementValue< T > Class Reference	238
9.42	ikayaki.gui.NullableDecimalFormat Class Reference	247
9.43	ikayaki.gui.Plot Interface Reference	248
9.44	ikayaki.gui.PositiveDecimalFormat Class Reference	249
9.45	ikayaki.gui.PrintPanel Class Reference	250
9.46	ikayaki.gui.PrintPanel.PrintSequenceTableModel Class Reference	257
9.47	ikayaki.gui.ProgramSettingsPanel Class Reference	259
9.48	ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel Class Reference	262
9.49	ikayaki.Project Class Reference	264
9.50	ikayaki.Project.DummyMeasurement Class Reference	301
9.51	ikayaki.Project.ManualDemag Class Reference	302
9.52	ikayaki.Project.ManualMeasure Class Reference	303
9.53	ikayaki.Project.ManualMove Class Reference	304

9.54	ikayaki.Project.ManualRotate Class Reference	305
9.55	ikayaki.Project.Measurement Class Reference	306
9.56	ikayaki.gui.ProjectComponent Class Reference	307
9.57	ikayaki.ProjectEvent Class Reference	310
9.58	ikayaki.gui.ProjectExplorerPanel Class Reference	312
9.59	ikayaki.gui.ProjectExplorerPanel.NewProjectPanel Class Reference	318
9.60	ikayaki.gui.ProjectExplorerTable Class Reference	320
9.61	ikayaki.gui.ProjectExplorerTable.ProjectExplorerPopupMenu Class Reference . . .	327
9.62	ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableComparator Class Reference	329
9.63	ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel Class Reference . . .	330
9.64	ikayaki.gui.ProjectInformationPanel Class Reference	333
9.65	ikayaki.gui.ProjectInformationPanel.MyFormatterFactory Class Reference	342
9.66	ikayaki.ProjectListener Interface Reference	343
9.67	ikayaki.squid.SerialIO Class Reference	344
9.68	ikayaki.squid.SerialIOEvent Class Reference	350
9.69	ikayaki.squid.SerialIOException Class Reference	352
9.70	ikayaki.squid.SerialIOListener Interface Reference	353
9.71	ikayaki.squid.SerialParameters Class Reference	354
9.72	ikayaki.util.SerialProxy Class Reference	358
9.73	ikayaki.util.SerialProxy.Forwarder Class Reference	359
9.74	ikayaki.Settings Class Reference	361
9.75	ikayaki.gui.SettingsDialog Class Reference	381
9.76	ikayaki.squid.Squid Class Reference	384
9.77	ikayaki.squid.SquidEmulator Class Reference	388
9.78	ikayaki.squid.SquidEmulator.DegausserEmu Class Reference	394
9.79	ikayaki.squid.SquidEmulator.HandlerEmu Class Reference	396
9.80	ikayaki.squid.SquidEmulator.MagnetometerEmu Class Reference	398
9.81	ikayaki.squid.SquidFront Class Reference	400
9.82	ikayaki.gui.StereoPlot Class Reference	411
9.83	ikayaki.gui.StyledCellEditor Class Reference	414
9.84	ikayaki.gui.StyledTableCellRenderer Class Reference	416
9.85	ikayaki.gui.StyledWrapper Class Reference	417
10	Squid File Documentation	421
10.1	My Documents/squid/src/ikayaki/gui/AbstractPlot.java File Reference	421
10.2	My Documents/squid/src/ikayaki/gui/CalibrationPanel.java File Reference	422
10.3	My Documents/squid/src/ikayaki/gui/ComponentFlasher.java File Reference . . .	423

10.4	My Documents/squid/src/ikayaki/gui/DeviceSettingsPanel.java File Reference . . .	424
10.5	My Documents/squid/src/ikayaki/gui/FittedComboBoxRenderer.java File Reference	425
10.6	My Documents/squid/src/ikayaki/gui/GenericFileFilter.java File Reference	426
10.7	My Documents/squid/src/ikayaki/gui/IntensityPlot.java File Reference	427
10.8	My Documents/squid/src/ikayaki/gui/MagnetometerStatusPanel.java File Reference	428
10.9	My Documents/squid/src/ikayaki/gui/MainMenuBar.java File Reference	429
10.10	My Documents/squid/src/ikayaki/gui/MainStatusBar.java File Reference	430
10.11	My Documents/squid/src/ikayaki/gui/MainViewPanel.java File Reference	431
10.12	My Documents/squid/src/ikayaki/gui/MeasurementControlsPanel.java File Refer- ence	432
10.13	My Documents/squid/src/ikayaki/gui/MeasurementDetailsPanel.java File Reference	433
10.14	My Documents/squid/src/ikayaki/gui/MeasurementGraphsPanel.java File Reference	434
10.15	My Documents/squid/src/ikayaki/gui/MeasurementSequencePanel.java File Refer- ence	435
10.16	My Documents/squid/src/ikayaki/gui/MeasurementSequenceTableModel.java File Reference	436
10.17	My Documents/squid/src/ikayaki/gui/NullableDecimalFormat.java File Reference	437
10.18	My Documents/squid/src/ikayaki/gui/Plot.java File Reference	438
10.19	My Documents/squid/src/ikayaki/gui/PositiveDecimalFormat.java File Reference .	439
10.20	My Documents/squid/src/ikayaki/gui/PrintPanel.java File Reference	440
10.21	My Documents/squid/src/ikayaki/gui/ProgramSettingsPanel.java File Reference .	441
10.22	My Documents/squid/src/ikayaki/gui/ProjectComponent.java File Reference . . .	442
10.23	My Documents/squid/src/ikayaki/gui/ProjectExplorerPanel.java File Reference . .	443
10.24	My Documents/squid/src/ikayaki/gui/ProjectExplorerTable.java File Reference . .	444
10.25	My Documents/squid/src/ikayaki/gui/ProjectInformationPanel.java File Reference	445
10.26	My Documents/squid/src/ikayaki/gui/SequenceColumn.java File Reference	446
10.27	My Documents/squid/src/ikayaki/gui/SettingsDialog.java File Reference	451
10.28	My Documents/squid/src/ikayaki/gui/StereoPlot.java File Reference	452
10.29	My Documents/squid/src/ikayaki/gui/StyledCellEditor.java File Reference	453
10.30	My Documents/squid/src/ikayaki/gui/StyledTableCellRenderer.java File Reference	454
10.31	My Documents/squid/src/ikayaki/gui/StyledWrapper.java File Reference	455
10.32	My Documents/squid/src/ikayaki/Ikayaki.java File Reference	456
10.33	My Documents/squid/src/ikayaki/MeasurementEvent.java File Reference	457
10.34	My Documents/squid/src/ikayaki/MeasurementListener.java File Reference	458
10.35	My Documents/squid/src/ikayaki/MeasurementResult.java File Reference	459
10.36	My Documents/squid/src/ikayaki/MeasurementSequence.java File Reference . . .	460
10.37	My Documents/squid/src/ikayaki/MeasurementStep.java File Reference	461

10.38	My Documents/squid/src/ikayaki/MeasurementValue.java File Reference	462
10.39	My Documents/squid/src/ikayaki/Project.java File Reference	463
10.40	My Documents/squid/src/ikayaki/ProjectEvent.java File Reference	464
10.41	My Documents/squid/src/ikayaki/ProjectListener.java File Reference	465
10.42	My Documents/squid/src/ikayaki/Settings.java File Reference	466
10.43	My Documents/squid/src/ikayaki/squid/Degausser.java File Reference	467
10.44	My Documents/squid/src/ikayaki/squid/Handler.java File Reference	468
10.45	My Documents/squid/src/ikayaki/squid/Magnetometer.java File Reference	469
10.46	My Documents/squid/src/ikayaki/squid/SerialIO.java File Reference	470
10.47	My Documents/squid/src/ikayaki/squid/SerialIOEvent.java File Reference	471
10.48	My Documents/squid/src/ikayaki/squid/SerialIOException.java File Reference	472
10.49	My Documents/squid/src/ikayaki/squid/SerialIOListener.java File Reference	473
10.50	My Documents/squid/src/ikayaki/squid/SerialParameters.java File Reference	474
10.51	My Documents/squid/src/ikayaki/squid/Squid.java File Reference	475
10.52	My Documents/squid/src/ikayaki/squid/SquidEmulator.java File Reference	476
10.53	My Documents/squid/src/ikayaki/squid/SquidFront.java File Reference	477
10.54	My Documents/squid/src/ikayaki/util/ComponentPrinter.java File Reference	478
10.55	My Documents/squid/src/ikayaki/util/DocumentUtilities.java File Reference	479
10.56	My Documents/squid/src/ikayaki/util/LastExecutor.java File Reference	480
10.57	My Documents/squid/src/ikayaki/util/LoggerPrintStream.java File Reference	481
10.58	My Documents/squid/src/ikayaki/util/SerialProxy.java File Reference	482
11	Squid Page Documentation	483
11.1	Deprecated List	483

Chapter 1

Squid Directory Hierarchy

1.1 Squid Directories

This directory hierarchy is sorted roughly, but not completely, alphabetically:

My Documents	18
squid	20
src	21
ikayaki	17
gui	15
squid	19
util	22

Chapter 2

Squid Namespace Index

2.1 Squid Package List

Here are the packages with brief descriptions (if available):

ikayaki	23
ikayaki.gui	24
ikayaki.gui.SequenceColumn	29
ikayaki.MeasurementEvent.Type	30
ikayaki.MeasurementResult.Type	31
ikayaki.MeasurementStep.State	32
ikayaki.Project.Normalization	33
ikayaki.Project.Orientation	34
ikayaki.Project.SampleType	35
ikayaki.Project.State	36
ikayaki.Project.Type	37
ikayaki.ProjectEvent.Type	38
ikayaki.squid	39
ikayaki.util	40
java.awt	41
java.awt.event	42
java.io	43
java.util	44
javax.comm	45
javax.swing	46
javax.swing.event	47

Chapter 3

Squid Hierarchical Index

3.1 Squid Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

ikayaki.gui.ComponentFlasher	54
ikayaki.util.ComponentPrinter	56
ikayaki.gui.DeviceSettingsPanel	67
ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory	76
ikayaki.util.DocumentUtilities	77
ikayaki.gui.FittedComboBoxRenderer	79
ikayaki.gui.GenericFileFilter	83
ikayaki.Ikayaki	101
ikayaki.util.LastExecutor	108
ikayaki.util.LastExecutor.LastExecutorThread	113
ikayaki.util.LastExecutor.RunDelayed	114
ikayaki.util.LoggerPrintStream	116
ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator	135
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel	140
ikayaki.gui.MainMenuBar	150
ikayaki.gui.MainViewPanel.NewProjectFileChooser	168
ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel	180
ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel	184
ikayaki.MeasurementEvent	188
ikayaki.MeasurementListener	194
ikayaki.gui.MagnetometerStatusPanel	126
ikayaki.gui.MeasurementSequenceTableModel	220
ikayaki.gui.ProjectComponent	307
ikayaki.gui.CalibrationPanel	51
ikayaki.gui.MainStatusBar	155
ikayaki.gui.MainViewPanel	157
ikayaki.gui.MeasurementControlsPanel	170
ikayaki.gui.MeasurementDetailsPanel	177
ikayaki.gui.MeasurementGraphsPanel	191
ikayaki.gui.MeasurementSequencePanel	208
ikayaki.gui.ProjectExplorerPanel	312
ikayaki.gui.ProjectInformationPanel	333
ikayaki.MeasurementResult	195

ikayaki.MeasurementSequence	202
ikayaki.gui.MeasurementSequencePanel.HeaderPopupMenu	215
ikayaki.gui.MeasurementSequencePanel.MyFormatterFactory	216
ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu	217
ikayaki.MeasurementStep	228
ikayaki.MeasurementValue< T >	238
ikayaki.gui.NullableDecimalFormat	247
ikayaki.gui.Plot	248
ikayaki.gui.AbstractPlot	49
ikayaki.gui.IntensityPlot	106
ikayaki.gui.StereoPlot	411
ikayaki.gui.PositiveDecimalFormat	249
ikayaki.gui.PrintPanel	250
ikayaki.gui.PrintPanel.PrintSequenceTableModel	257
ikayaki.gui.ProgramSettingsPanel	259
ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel	262
ikayaki.Project	264
ikayaki.Project.DummyMeasurement	301
ikayaki.Project.ManualDemag	302
ikayaki.Project.ManualMeasure	303
ikayaki.Project.ManualMove	304
ikayaki.Project.ManualRotate	305
ikayaki.Project.Measurement	306
ikayaki.ProjectEvent	310
ikayaki.gui.ProjectExplorerPanel.NewProjectPanel	318
ikayaki.gui.ProjectExplorerTable.ProjectExplorerPopupMenu	327
ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableComparator	329
ikayaki.gui.ProjectInformationPanel.MyFormatterFactory	342
ikayaki.ProjectListener	343
ikayaki.gui.MeasurementGraphsPanel	191
ikayaki.gui.MeasurementSequenceTableModel	220
ikayaki.gui.ProjectComponent	307
ikayaki.gui.ProjectExplorerTable	320
ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel	330
ikayaki.squid.SerialIO	344
ikayaki.squid.SerialIOEvent	350
ikayaki.squid.SerialIOException	352
ikayaki.squid.SerialIOListener	353
ikayaki.squid.Degausser	59
ikayaki.squid.Handler	85
ikayaki.squid.Magnetometer	119
ikayaki.squid.SquidEmulator.DegausserEmu	394
ikayaki.squid.SquidEmulator.HandlerEmu	396
ikayaki.squid.SquidEmulator.MagnetometerEmu	398
ikayaki.util.SerialProxy.Forwarder	359
ikayaki.squid.SerialParameters	354
ikayaki.util.SerialProxy	358
ikayaki.Settings	361
ikayaki.gui.SettingsDialog	381
ikayaki.squid.Squid	384
ikayaki.squid.SquidEmulator	388
ikayaki.squid.SquidFront	400
ikayaki.gui.StyledCellEditor	414

ikayaki.gui.StyledTableCellRenderer	416
ikayaki.gui.StyledWrapper	417

Chapter 4

Squid Class Index

4.1 Squid Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

ikayaki.gui.AbstractPlot	49
ikayaki.gui.CalibrationPanel	51
ikayaki.gui.ComponentFlasher	54
ikayaki.util.ComponentPrinter	56
ikayaki.squid.Degausser	59
ikayaki.gui.DeviceSettingsPanel	67
ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory	76
ikayaki.util.DocumentUtilities	77
ikayaki.gui.FittedComboBoxRenderer	79
ikayaki.gui.GenericFileFilter	83
ikayaki.squid.Handler	85
ikayaki.Ikayaki	101
ikayaki.gui.IntensityPlot	106
ikayaki.util.LastExecutor	108
ikayaki.util.LastExecutor.LastExecutorThread	113
ikayaki.util.LastExecutor.RunDelayed	114
ikayaki.util.LoggerPrintStream	116
ikayaki.squid.Magnetometer	119
ikayaki.gui.MagnetometerStatusPanel	126
ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator	135
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel	140
ikayaki.gui.MainMenuBar	150
ikayaki.gui.MainStatusBar	155
ikayaki.gui.MainViewPanel	157
ikayaki.gui.MainViewPanel.NewProjectFileChooser	168
ikayaki.gui.MeasurementControlsPanel	170
ikayaki.gui.MeasurementDetailsPanel	177
ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel	180
ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel	184
ikayaki.MeasurementEvent	188
ikayaki.gui.MeasurementGraphsPanel	191
ikayaki.MeasurementListener	194
ikayaki.MeasurementResult	195

ikayaki.MeasurementSequence	202
ikayaki.gui.MeasurementSequencePanel	208
ikayaki.gui.MeasurementSequencePanel.HeaderPopupMenu	215
ikayaki.gui.MeasurementSequencePanel.MyFormatterFactory	216
ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu	217
ikayaki.gui.MeasurementSequenceTableModel	220
ikayaki.MeasurementStep	228
ikayaki.MeasurementValue< T >	238
ikayaki.gui.NullableDecimalFormat	247
ikayaki.gui.Plot	248
ikayaki.gui.PositiveDecimalFormat	249
ikayaki.gui.PrintPanel	250
ikayaki.gui.PrintPanel.PrintSequenceTableModel	257
ikayaki.gui.ProgramSettingsPanel	259
ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel	262
ikayaki.Project	264
ikayaki.Project.DummyMeasurement	301
ikayaki.Project.ManualDemag	302
ikayaki.Project.ManualMeasure	303
ikayaki.Project.ManualMove	304
ikayaki.Project.ManualRotate	305
ikayaki.Project.Measurement	306
ikayaki.gui.ProjectComponent	307
ikayaki.ProjectEvent	310
ikayaki.gui.ProjectExplorerPanel	312
ikayaki.gui.ProjectExplorerPanel.NewProjectPanel	318
ikayaki.gui.ProjectExplorerTable	320
ikayaki.gui.ProjectExplorerTable.ProjectExplorerPopupMenu	327
ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableComparator	329
ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel	330
ikayaki.gui.ProjectInformationPanel	333
ikayaki.gui.ProjectInformationPanel.MyFormatterFactory	342
ikayaki.ProjectListener	343
ikayaki.squid.SerialIO	344
ikayaki.squid.SerialIOEvent	350
ikayaki.squid.SerialIOException	352
ikayaki.squid.SerialIOListener	353
ikayaki.squid.SerialParameters	354
ikayaki.util.SerialProxy	358
ikayaki.util.SerialProxy.Forwarder	359
ikayaki.Settings	361
ikayaki.gui.SettingsDialog	381
ikayaki.squid.Squid	384
ikayaki.squid.SquidEmulator	388
ikayaki.squid.SquidEmulator.DegausserEmu	394
ikayaki.squid.SquidEmulator.HandlerEmu	396
ikayaki.squid.SquidEmulator.MagnetometerEmu	398
ikayaki.squid.SquidFront	400
ikayaki.gui.StereoPlot	411
ikayaki.gui.StyledCellEditor	414
ikayaki.gui.StyledTableCellRenderer	416
ikayaki.gui.StyledWrapper	417

Chapter 5

Squid File Index

5.1 Squid File List

Here is a list of all files with brief descriptions:

My Documents/squid/src/ikayaki/ Ikayaki.java	456
My Documents/squid/src/ikayaki/ MeasurementEvent.java	457
My Documents/squid/src/ikayaki/ MeasurementListener.java	458
My Documents/squid/src/ikayaki/ MeasurementResult.java	459
My Documents/squid/src/ikayaki/ MeasurementSequence.java	460
My Documents/squid/src/ikayaki/ MeasurementStep.java	461
My Documents/squid/src/ikayaki/ MeasurementValue.java	462
My Documents/squid/src/ikayaki/ Project.java	463
My Documents/squid/src/ikayaki/ ProjectEvent.java	464
My Documents/squid/src/ikayaki/ ProjectListener.java	465
My Documents/squid/src/ikayaki/ Settings.java	466
My Documents/squid/src/ikayaki/gui/ AbstractPlot.java	421
My Documents/squid/src/ikayaki/gui/ CalibrationPanel.java	422
My Documents/squid/src/ikayaki/gui/ ComponentFlasher.java	423
My Documents/squid/src/ikayaki/gui/ DeviceSettingsPanel.java	424
My Documents/squid/src/ikayaki/gui/ FittedComboBoxRenderer.java	425
My Documents/squid/src/ikayaki/gui/ GenericFileFilter.java	426
My Documents/squid/src/ikayaki/gui/ IntensityPlot.java	427
My Documents/squid/src/ikayaki/gui/ MagnetometerStatusPanel.java	428
My Documents/squid/src/ikayaki/gui/ MainMenuBar.java	429
My Documents/squid/src/ikayaki/gui/ MainStatusBar.java	430
My Documents/squid/src/ikayaki/gui/ MainViewPanel.java	431
My Documents/squid/src/ikayaki/gui/ MeasurementControlsPanel.java	432
My Documents/squid/src/ikayaki/gui/ MeasurementDetailsPanel.java	433
My Documents/squid/src/ikayaki/gui/ MeasurementGraphsPanel.java	434
My Documents/squid/src/ikayaki/gui/ MeasurementSequencePanel.java	435
My Documents/squid/src/ikayaki/gui/ MeasurementSequenceTableModel.java	436
My Documents/squid/src/ikayaki/gui/ NullableDecimalFormat.java	437
My Documents/squid/src/ikayaki/gui/ Plot.java	438
My Documents/squid/src/ikayaki/gui/ PositiveDecimalFormat.java	439
My Documents/squid/src/ikayaki/gui/ PrintPanel.java	440
My Documents/squid/src/ikayaki/gui/ ProgramSettingsPanel.java	441
My Documents/squid/src/ikayaki/gui/ ProjectComponent.java	442

My Documents/squid/src/ikayaki/gui/ ProjectExplorerPanel.java	443
My Documents/squid/src/ikayaki/gui/ ProjectExplorerTable.java	444
My Documents/squid/src/ikayaki/gui/ ProjectInformationPanel.java	445
My Documents/squid/src/ikayaki/gui/ SequenceColumn.java	446
My Documents/squid/src/ikayaki/gui/ SettingsDialog.java	451
My Documents/squid/src/ikayaki/gui/ StereoPlot.java	452
My Documents/squid/src/ikayaki/gui/ StyledCellEditor.java	453
My Documents/squid/src/ikayaki/gui/ StyledTableCellRenderer.java	454
My Documents/squid/src/ikayaki/gui/ StyledWrapper.java	455
My Documents/squid/src/ikayaki/squid/ Degausser.java	467
My Documents/squid/src/ikayaki/squid/ Handler.java	468
My Documents/squid/src/ikayaki/squid/ Magnetometer.java	469
My Documents/squid/src/ikayaki/squid/ SerialIO.java	470
My Documents/squid/src/ikayaki/squid/ SerialIOEvent.java	471
My Documents/squid/src/ikayaki/squid/ SerialIOException.java	472
My Documents/squid/src/ikayaki/squid/ SerialIOListener.java	473
My Documents/squid/src/ikayaki/squid/ SerialParameters.java	474
My Documents/squid/src/ikayaki/squid/ Squid.java	475
My Documents/squid/src/ikayaki/squid/ SquidEmulator.java	476
My Documents/squid/src/ikayaki/squid/ SquidFront.java	477
My Documents/squid/src/ikayaki/util/ ComponentPrinter.java	478
My Documents/squid/src/ikayaki/util/ DocumentUtilities.java	479
My Documents/squid/src/ikayaki/util/ LastExecutor.java	480
My Documents/squid/src/ikayaki/util/ LoggerPrintStream.java	481
My Documents/squid/src/ikayaki/util/ SerialProxy.java	482

Chapter 6

Squid Page Index

6.1 Squid Related Pages

Here is a list of all related documentation pages:

Deprecated List	483
---------------------------	-----

Chapter 7

Squid Directory Documentation

7.1 My Documents/squid/src/ikayaki/gui/ Directory Reference

Files

- file **AbstractPlot.java**
- file **CalibrationPanel.java**
- file **ComponentFlasher.java**
- file **DeviceSettingsPanel.java**
- file **FittedComboBoxRenderer.java**
- file **GenericFileFilter.java**
- file **IntensityPlot.java**
- file **MagnetometerStatusPanel.java**
- file **MainMenuBar.java**
- file **MainStatusBar.java**
- file **MainViewPanel.java**
- file **MeasurementControlsPanel.java**
- file **MeasurementDetailsPanel.java**
- file **MeasurementGraphsPanel.java**
- file **MeasurementSequencePanel.java**
- file **MeasurementSequenceTableModel.java**
- file **NullableDecimalFormat.java**
- file **Plot.java**
- file **PositiveDecimalFormat.java**
- file **PrintPanel.java**
- file **ProgramSettingsPanel.java**
- file **ProjectComponent.java**
- file **ProjectExplorerPanel.java**
- file **ProjectExplorerTable.java**
- file **ProjectInformationPanel.java**
- file **SequenceColumn.java**
- file **SettingsDialog.java**
- file **StereoPlot.java**
- file **StyledCellEditor.java**

- file `StyledTableCellRenderer.java`
- file `StyledWrapper.java`

7.2 My Documents/squid/src/ikayaki/ Directory Reference

Directories

- directory **gui**
- directory **squid**
- directory **util**

Files

- file **Ikayaki.java**
- file **MeasurementEvent.java**
- file **MeasurementListener.java**
- file **MeasurementResult.java**
- file **MeasurementSequence.java**
- file **MeasurementStep.java**
- file **MeasurementValue.java**
- file **Project.java**
- file **ProjectEvent.java**
- file **ProjectListener.java**
- file **Settings.java**

7.3 My Documents/ Directory Reference

Directories

- `directory squid`

7.4 My Documents/squid/src/ikayaki/squid/ Directory Reference

Files

- file **Degausser.java**
- file **Handler.java**
- file **Magnetometer.java**
- file **SerialIO.java**
- file **SerialIOEvent.java**
- file **SerialIOException.java**
- file **SerialIOListener.java**
- file **SerialParameters.java**
- file **Squid.java**
- file **SquidEmulator.java**
- file **SquidFront.java**

7.5 My Documents/squid/ Directory Reference

Directories

- `directory src`

7.6 My Documents/squid/src/ Directory Reference

Directories

- directory `ikayaki`

7.7 My Documents/squid/src/ikayaki/util/ Directory Reference

Files

- file **ComponentPrinter.java**
- file **DocumentUtilities.java**
- file **LastExecutor.java**
- file **LoggerPrintStream.java**
- file **SerialProxy.java**

Chapter 8

Squid Namespace Documentation

8.1 Package ikayaki

Classes

- class **Ikayaki**
- class **MeasurementEvent**
- interface **MeasurementListener**
- class **MeasurementResult**
- class **MeasurementSequence**
- class **MeasurementStep**
- class **MeasurementValue< T >**
- class **Project**
- class **ProjectEvent**
- interface **ProjectListener**
- class **Settings**

Packages

- package **gui**
- package **squid**
- package **util**

8.2 Package ikayaki.gui

Classes

- class **AbstractPlot**
- class **CalibrationPanel**
- class **ComponentFlasher**
- class **DeviceSettingsPanel**
- class **FittedComboBoxRenderer**
- class **GenericFileFilter**
- class **IntensityPlot**
- class **MagnetometerStatusPanel**
- class **MainMenuBar**
- class **MainStatusBar**
- class **MainViewPanel**
- class **MeasurementControlsPanel**
- class **MeasurementDetailsPanel**
- class **MeasurementGraphsPanel**
- class **MeasurementSequencePanel**
- class **MeasurementSequenceTableModel**
- class **NullableDecimalFormat**
- interface **Plot**
- class **PositiveDecimalFormat**
- class **PrintPanel**
- class **ProgramSettingsPanel**
- class **ProjectComponent**
- class **ProjectExplorerPanel**
- class **ProjectExplorerTable**
- class **ProjectInformationPanel**
- class **SettingsDialog**
- class **StereoPlot**
- class **StyledCellEditor**
- class **StyledTableCellRenderer**
- class **StyledWrapper**

Enumerations

- enum **SequenceColumn** {
 rowIndex = "Number of the measurement step", **project**, **rowIndex** = "Number of the measurement step", **null**,
 rowIndex = "Number of the measurement step", **value**, **rowIndex** = "Number of the measurement step", **data**,
 rowIndex = "Number of the measurement step", **rowIndex** = "Number of the measurement step", **rowIndex** = "Number of the measurement step", **null**,
 rowIndex = "Number of the measurement step", **value**, **rowIndex** = "Number of the measurement step", **data**,
 rowIndex = "Number of the measurement step", **rowIndex** = "Number of the measurement step", **false**, **rowIndex** = "Number of the measurement step",


```

null, rowIndex = "Number of the measurement step", value, rowIndex = "Number of
the measurement step",
data, rowIndex = "Number of the measurement step", rowIndex = "Number of the
measurement step", false,
rowIndex = "Number of the measurement step", null, rowIndex = "Number of the mea-
surement step", value,
rowIndex = "Number of the measurement step", data, rowIndex = "Number of the
measurement step", rowIndex = "Number of the measurement step",
false, E0, E0, E0,
E0, E0, E0, E0,
setMaximumFractionDigits, setMaximumFractionDigits, E0, project,
setMaximumFractionDigits, COUNT, STEP, VOLUME,
MASS, SUSCEPTIBILITY, DECLINATION, INCLINATION,
MAGNETIZATION, RELATIVE_MAGNETIZATION, THETA63, MOMENT,
GEOGRAPHIC_X, GEOGRAPHIC_X_NORMALIZED, GEOGRAPHIC_Y,
GEOGRAPHIC_Z,
SAMPLE_X, SAMPLE_Y, value, rowIndex = "Number of the measurement step",
rowIndex = "Number of the measurement step", data, rowIndex = "Number of the
measurement step", rowIndex = "Number of the measurement step",
numberFormat }

```

8.2.1 Enumeration Type Documentation

8.2.1.1 enum ikayaki::gui::SequenceColumn

Represents a column in the measurement sequence table. Calculates the values of that column.

Author:

Esko Luontola

Enumeration values:

rowIndex Showing ordinal number of the measurement step, starting from number 1.

project

rowIndex Showing ordinal number of the measurement step, starting from number 1.

null

rowIndex Showing ordinal number of the measurement step, starting from number 1.

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

null

rowIndex Showing ordinal number of the measurement step, starting from number 1.

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

false

rowIndex Showing ordinal number of the measurement step, starting from number 1.

null

rowIndex Showing ordinal number of the measurement step, starting from number 1.

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.
project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

false

rowIndex Showing ordinal number of the measurement step, starting from number 1.

null

rowIndex Showing ordinal number of the measurement step, starting from number 1.

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

false

E0

E0

E0

E0

E0

E0

E0

setMaximumFractionDigits

setMaximumFractionDigits

E0

project

setMaximumFractionDigits

COUNT Returns all the columns supported by the program. The returned values are in the order that they should be shown in the measurement sequence table.

STEP

VOLUME

MASS
SUSCEPTIBILITY
DECLINATION
INCLINATION
MAGNETIZATION
RELATIVE_MAGNETIZATION
THETA63
MOMENT
GEOGRAPHIC_X
GEOGRAPHIC_X_NORMALIZED
GEOGRAPHIC_Y
GEOGRAPHIC_Z
SAMPLE_X
SAMPLE_Y

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.
rowIndex the index of the row. Can be greater than the number of measurement steps.
project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.
rowIndex the index of the row. Can be greater than the number of measurement steps.
project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

numberFormat Sets the number format used for rendering the numbers in this column.

Exceptions:

NullPointerException if numberFormat is null.

Definition at line 42 of file SequenceColumn.java.

8.3 Package ikayaki.gui.SequenceColumn

8.4 Package ikayaki.MeasurementEvent.Type

8.5 Package ikayaki.MeasurementResult.Type

8.6 Package ikayaki.MeasurementStep.State

8.7 Package ikayaki.Project.Normalization

8.8 Package ikayaki.Project.Orientation

8.9 Package ikayaki.Project.SampleType

8.10 Package ikayaki.Project.State

8.11 Package ikayaki.Project.Type

8.12 Package ikayaki.ProjectEvent.Type

8.13 Package ikayaki.squid

Classes

- class **Degausser**
- class **Handler**
- class **Magnetometer**
- class **SerialIO**
- class **SerialIOEvent**
- class **SerialIOException**
- interface **SerialIOListener**
- class **SerialParameters**
- class **Squid**
- class **SquidEmulator**
- class **SquidFront**

8.14 Package ikayaki.util

Classes

- class **ComponentPrinter**
- class **DocumentUtilities**
- class **LastExecutor**
- class **LoggerPrintStream**
- class **SerialProxy**

8.15 Package java.awt

8.16 Package java.awt.event

8.17 Package java.io

8.18 Package java.util

8.19 Package javax.comm

8.20 Package javax.swing

8.21 Package javax.swing.event

Chapter 9

Squid Class Documentation

9.1 ikayaki.gui.AbstractPlot Class Reference

Inherits **ikayaki.gui.Plot**.

Inherited by **ikayaki.gui.IntensityPlot**, and **ikayaki.gui.StereoPlot**.

Inheritance diagram for ikayaki.gui.AbstractPlot: Collaboration diagram for ikayaki.gui.AbstractPlot:

Public Member Functions

- Override void **paintComponent** (Graphics *g*)
- abstract void **render** (int *w*, int *h*, Graphics2D *g2*)

9.1.1 Detailed Description

Abstract class that implements general construction of a graphical plot.

Author:

Aki Sysmäläinen

Definition at line 33 of file AbstractPlot.java.

9.1.2 Member Function Documentation

9.1.2.1 Override void ikayaki.gui.AbstractPlot.paintComponent (Graphics *g*)

Painter method

Definition at line 39 of file AbstractPlot.java.

References ikayaki.gui.AbstractPlot.render().

Here is the call graph for this function:

9.1.2.2 abstract void ikayaki.gui.AbstractPlot.render (int *w*, int *h*, Graphics2D *g2*)
[pure virtual]

Classes extending this class must implement this

Parameters:

w

h

g2

Implemented in **ikayaki.gui.IntensityPlot** (p. 107), and **ikayaki.gui.StereoPlot** (p. 412).

Referenced by ikayaki.gui.AbstractPlot.paintComponent().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**AbstractPlot.java**

9.2 ikayaki.gui.CalibrationPanel Class Reference

Inherits **ikayaki.gui.ProjectComponent**.

Inheritance diagram for ikayaki.gui.CalibrationPanel: Collaboration diagram for ikayaki.gui.CalibrationPanel:

Public Member Functions

- **CalibrationPanel** (**ProjectComponent** parent)
- void **setProject** (**Project** project)

Private Attributes

- **ProjectComponent** parent
- File **directory**
- **ProjectExplorerTable** **calibrationProjectTable**
- **JButton** **calibrateButton**
- **JPanel** **calibratePanel**

9.2.1 Detailed Description

Holds predefined "Holder noise" and "Standard sample" projects for calibration; they are in a technically same table as **Project**(p.264) explorer files. Also has a "Calibrate" button, which executes selected calibration project, similarly to clicking "Single step" in normal projects.

Author:

Samuli Kaipiainen

Definition at line 39 of file CalibrationPanel.java.

9.2.2 Constructor & Destructor Documentation

9.2.2.1 ikayaki.gui.CalibrationPanel.CalibrationPanel (**ProjectComponent** *parent*)

Creates a new calibration panel. Loads the contents of the program's calibration file directory.

Parameters:

parent the parent component whose **setProject**(p.52) method will be called on opening a new project file.

Definition at line 84 of file CalibrationPanel.java.

References **ikayaki.gui.CalibrationPanel.calibrateButton**, **ikayaki.gui.CalibrationPanel.calibratePanel**, **ikayaki.gui.CalibrationPanel.calibrationProjectTable**, **ikayaki.gui.null**, and **ikayaki.gui.CalibrationPanel.setProject**().

Here is the call graph for this function:

9.2.3 Member Function Documentation

9.2.3.1 void ikayaki.gui.CalibrationPanel.setProject (Project *project*)

Call `super.setProject(project)`, highlight selected calibration project, or unhighlight unselected calibration project.

Parameters:

project project opened, or null to open no project.

Reimplemented from `ikayaki.gui.ProjectComponent` (p. 309).

Definition at line 117 of file `CalibrationPanel.java`.

References `ikayaki.Project.addProjectListener()`, `ikayaki.gui.CalibrationPanel.calibrationProjectTable`, `ikayaki.gui.CalibrationPanel.directory`, `ikayaki.gui.null`, and `ikayaki.gui.ProjectExplorerTable.setDirectory()`.

Referenced by `ikayaki.gui.CalibrationPanel.CalibrationPanel()`.

Here is the call graph for this function:

9.2.4 Member Data Documentation

9.2.4.1 JButton ikayaki.gui.CalibrationPanel.calibrateButton [private]

Definition at line 75 of file `CalibrationPanel.java`.

Referenced by `ikayaki.gui.CalibrationPanel.CalibrationPanel()`.

9.2.4.2 JPanel ikayaki.gui.CalibrationPanel.calibratePanel [private]

Definition at line 77 of file `CalibrationPanel.java`.

Referenced by `ikayaki.gui.CalibrationPanel.CalibrationPanel()`.

9.2.4.3 ProjectExplorerTable ikayaki.gui.CalibrationPanel.calibrationProjectTable [private]

Table for the two calibration projects; has "filename", "last modified" and "time" (time since last modification) columns.

Definition at line 73 of file `CalibrationPanel.java`.

Referenced by `ikayaki.gui.CalibrationPanel.CalibrationPanel()`, and `ikayaki.gui.CalibrationPanel.setProject()`.

9.2.4.4 File ikayaki.gui.CalibrationPanel.directory [private]

Directory where calibration projects reside.

Definition at line 67 of file `CalibrationPanel.java`.

Referenced by `ikayaki.gui.CalibrationPanel.setProject()`.

9.2.4.5 ProjectComponent ikayaki.gui.CalibrationPanel.parent [private]

The component whose `setProject()` (p. 52) method will be called on opening a new project file.

Definition at line 62 of file CalibrationPanel.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/CalibrationPanel.java

9.3 ikayaki.gui.ComponentFlasher Class Reference

Public Member Functions

- **ComponentFlasher** (JComponent **component**)
- **ComponentFlasher** (JComponent **component**, Color **flashcolor**)
- **ComponentFlasher** (JComponent **component**, int **flashtime**)
- **ComponentFlasher** (JComponent **component**, Color **flashcolor**, int **flashtime**)
- void **flash** ()

Private Attributes

- final JComponent **component**
- final Color **componentBG**
- final Color **flashcolor**

Static Private Attributes

- static final Color **defaultFlashColor** = new Color(0xff6060)

9.3.1 Detailed Description

Timer used for flashing a JComponent background light red (or given color), for 100 ms (or given time).

Author:

Samuli Kaipainen

Definition at line 35 of file ComponentFlasher.java.

9.3.2 Constructor & Destructor Documentation

9.3.2.1 ikayaki.gui.ComponentFlasher.ComponentFlasher (JComponent *component*)

Definition at line 42 of file ComponentFlasher.java.

References ikayaki.gui.ComponentFlasher.defaultFlashColor.

9.3.2.2 ikayaki.gui.ComponentFlasher.ComponentFlasher (JComponent *component*, Color *flashcolor*)

Definition at line 46 of file ComponentFlasher.java.

9.3.2.3 ikayaki.gui.ComponentFlasher.ComponentFlasher (JComponent *component*, int *flashtime*)

Definition at line 50 of file ComponentFlasher.java.

References ikayaki.gui.ComponentFlasher.defaultFlashColor.

9.3.2.4 ikayaki.gui.ComponentFlasher.ComponentFlasher (JComponent component, Color flashcolor, int flashtime)

Definition at line 54 of file ComponentFlasher.java.

References ikayaki.gui.ComponentFlasher.componentBG, and ikayaki.gui.null.

9.3.3 Member Function Documentation

9.3.3.1 void ikayaki.gui.ComponentFlasher.flash ()

Definition at line 68 of file ComponentFlasher.java.

9.3.4 Member Data Documentation

9.3.4.1 final JComponent ikayaki.gui.ComponentFlasher.component [private]

Definition at line 37 of file ComponentFlasher.java.

9.3.4.2 final Color ikayaki.gui.ComponentFlasher.componentBG [private]

Definition at line 38 of file ComponentFlasher.java.

Referenced by ikayaki.gui.ComponentFlasher.ComponentFlasher().

9.3.4.3 final Color ikayaki.gui.ComponentFlasher.defaultFlashColor = new Color(0xff6060) [static, private]

Definition at line 40 of file ComponentFlasher.java.

Referenced by ikayaki.gui.ComponentFlasher.ComponentFlasher().

9.3.4.4 final Color ikayaki.gui.ComponentFlasher.flashcolor [private]

Definition at line 39 of file ComponentFlasher.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**ComponentFlasher.java**

9.4 ikayaki.util.ComponentPrinter Class Reference

Public Member Functions

- **ComponentPrinter** (Component **componentToBePrinted**)
- void **print** (String **jobName**)
- int **print** (Graphics **g**, PageFormat **pageFormat**, int **pageIndex**)

Static Public Member Functions

- static void **printComponent** (Component **c**)
- static void **printComponent** (Component **c**, String **jobName**)
- static void **disableDoubleBuffering** (Component **c**)
- static void **enableDoubleBuffering** (Component **c**)

Private Attributes

- Component **componentToBePrinted**
- final int **plotHeight** = 200

9.4.1 Detailed Description

Offers methods to print Components (only for PrintPanel actually)

Author:

Aki Korpua

Definition at line 37 of file ComponentPrinter.java.

9.4.2 Constructor & Destructor Documentation

9.4.2.1 ikayaki.util.ComponentPrinter.ComponentPrinter (Component *componentToBePrinted*)

Creates new printable "component"

Parameters:

componentToBePrinted Component

Definition at line 55 of file ComponentPrinter.java.

Referenced by ikayaki.util.ComponentPrinter.printComponent().

9.4.3 Member Function Documentation

9.4.3.1 static void ikayaki.util.ComponentPrinter.disableDoubleBuffering (Component *c*) [static]

Definition at line 134 of file ComponentPrinter.java.

Referenced by ikayaki.util.ComponentPrinter.print().

9.4.3.2 static void ikayaki.util.ComponentPrinter.enableDoubleBuffering (Component *c*) [static]

Definition at line 139 of file ComponentPrinter.java.

Referenced by ikayaki.util.ComponentPrinter.print().

9.4.3.3 int ikayaki.util.ComponentPrinter.print (Graphics *g*, PageFormat *pageFormat*, int *pageIndex*)

Absolutely chaotic printing mechanism. Spilts component in pages and prevents last 400 pixels on last page to split awfully (we only use this for PrintPanel and last 400 pixels are Plots, so DONT use this in any other component printing :)

Parameters:

g Graphics

pageFormat PageFormat

pageIndex int

Returns:

int

Definition at line 108 of file ComponentPrinter.java.

References ikayaki.util.ComponentPrinter.componentToBePrinted, ikayaki.util.ComponentPrinter.disableDoubleBuffering(), ikayaki.util.ComponentPrinter.enableDoubleBuffering(), and ikayaki.util.ComponentPrinter.plotHeight.

Here is the call graph for this function:

9.4.3.4 void ikayaki.util.ComponentPrinter.print (String *jobName*)

Opens printer dialog and start printing job if we get printer

Definition at line 81 of file ComponentPrinter.java.

References ikayaki.gui.null.

9.4.3.5 static void ikayaki.util.ComponentPrinter.printComponent (Component *c*, String *jobName*) [static]

Static printing command

Parameters:

c Component to be printed (use Only PrintPanel)

jobName name for the printing job

Definition at line 74 of file ComponentPrinter.java.

References ikayaki.util.ComponentPrinter.ComponentPrinter().

Here is the call graph for this function:

9.4.3.6 `static void ikayaki.util.ComponentPrinter.printComponent (Component c)` [static]

Static printing command

Parameters:

`c` Component to be printed (use Only PrintPanel)

Definition at line 64 of file ComponentPrinter.java.

References `ikayaki.util.ComponentPrinter.ComponentPrinter()`, and `ikayaki.gui.null`.

Here is the call graph for this function:

9.4.4 Member Data Documentation

9.4.4.1 `Component ikayaki.util.ComponentPrinter.componentToBePrinted` [private]

Component to be printed

Definition at line 42 of file ComponentPrinter.java.

Referenced by `ikayaki.util.ComponentPrinter.print()`.

9.4.4.2 `final int ikayaki.util.ComponentPrinter.plotHeight = 200` [private]

plots height

Definition at line 47 of file ComponentPrinter.java.

Referenced by `ikayaki.util.ComponentPrinter.print()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/util/ComponentPrinter.java`

9.5 ikayaki.squid.Degausser Class Reference

Inherits `ikayaki.squid.SerialIOListener`.

Inheritance diagram for `ikayaki.squid.Degausser`:
Collaboration diagram for `ikayaki.squid.Degausser`:

Public Member Functions

- `Degausser ()` throws `SerialIOException`
- void `updateSettings ()`
- boolean `demagnetizeZ (double amp)`
- boolean `demagnetizeY (double amp)`
- boolean `isDemagnetizing ()`
- char `getRampStatus ()`
- int `getRamp ()`
- int `getDelay ()`
- char `getCoil ()`
- int `getAmplitude ()`
- boolean `isOK ()`
- void `serialIOEvent (SerialIOEvent event)`

Protected Member Functions

- void `setCoil (char coil)`
- void `setAmplitude (double amplitude)`
- void `executeRampUp ()`
- void `executeRampDown ()`
- void `executeRampCycle ()`
- void `blockingWrite (String command)` throws `SerialIOException`

Protected Attributes

- `SerialIO serialIO`

Private Attributes

- `Stack< String > messageBuffer`
- `SynchronousQueue< String > queue`
- int `pollTimeout = 60`
- int `degausserDelay`
- int `degausserRamp`
- boolean `waitingForMessage = false`
- double `minimumField`
- double `maximumField`
- boolean `demagnetizing = false`

9.5.1 Detailed Description

Offers an interface for controlling the degausser (demagnetizer). Because the data link is implemented in the degausser by a single board computer running a small basic program, the response time of the degausser to commands is slow. This class will make sure that commands are not sent faster than the device can handle.

Author:

Aki Korpua

Definition at line 38 of file Degausser.java.

9.5.2 Constructor & Destructor Documentation

9.5.2.1 ikayaki.squid.Degausser.Degausser () throws SerialIOException

Creates a new degausser interface. Opens connection to degausser COM port (if not open yet) and reads settings from the Setting class.

Definition at line 76 of file Degausser.java.

References ikayaki.squid.SerialIO.addSerialIOListener(), ikayaki.squid.Degausser.blockingWrite(), ikayaki.squid.Degausser.degausserDelay, ikayaki.squid.Degausser.degausserRamp, ikayaki.squid.Degausser.messageBuffer, ikayaki.squid.Degausser.queue, and ikayaki.squid.Degausser.serialIO.

Here is the call graph for this function:

9.5.3 Member Function Documentation

9.5.3.1 void ikayaki.squid.Degausser.blockingWrite (String *command*) throws SerialIOException [protected]

Definition at line 199 of file Degausser.java.

References ikayaki.squid.Degausser.queue, ikayaki.squid.Degausser.serialIO, ikayaki.squid.Degausser.waitForMessage, and ikayaki.squid.SerialIO.sendMessage().

Referenced by ikayaki.squid.Degausser.Degausser(), ikayaki.squid.Degausser.executeRampCycle(), ikayaki.squid.Degausser.executeRampDown(), ikayaki.squid.Degausser.executeRampUp(), ikayaki.squid.Degausser.getAmplitude(), ikayaki.squid.Degausser.getCoil(), ikayaki.squid.Degausser.getDelay(), ikayaki.squid.Degausser.getRamp(), ikayaki.squid.Degausser.getRampStatus(), ikayaki.squid.Degausser.setAmplitude(), ikayaki.squid.Degausser.setCoil(), and ikayaki.squid.Degausser.updateSettings().

Here is the call graph for this function:

9.5.3.2 boolean ikayaki.squid.Degausser.demagnetizeY (double *amp*)

Performs full sequence to demagnetize Y (and X) coil with the given amplitude. Blocking method.

Parameters:

amp amplitude to demag.

Returns:

true if process was sended succesfully, otherwise false.

Definition at line 257 of file Degausser.java.

References ikayaki.squid.Degausser.demagnetizing, ikayaki.squid.Degausser.executeRampCycle(), ikayaki.gui.null, ikayaki.squid.Degausser.queue, ikayaki.squid.Degausser.setAmplitude(), ikayaki.squid.Degausser.setCoil(), and ikayaki.squid.Degausser.waitForMessage.

Here is the call graph for this function:

9.5.3.3 boolean ikayaki.squid.Degausser.demagnetizeZ (double *amp*)

Performs full sequence to demagnetize Z coil with the given amplitude. Blocking method.

Parameters:

amp amplitude to demag.

Returns:

true if process was sended succesfully, otherwise false.

Definition at line 226 of file Degausser.java.

References ikayaki.squid.Degausser.demagnetizing, ikayaki.squid.Degausser.executeRampCycle(), ikayaki.gui.null, ikayaki.squid.Degausser.queue, ikayaki.squid.Degausser.setAmplitude(), ikayaki.squid.Degausser.setCoil(), and ikayaki.squid.Degausser.waitForMessage.

Here is the call graph for this function:

9.5.3.4 void ikayaki.squid.Degausser.executeRampCycle () [protected]

Performs Ramp up and down.

Definition at line 191 of file Degausser.java.

References ikayaki.squid.Degausser.blockingWrite().

Referenced by ikayaki.squid.Degausser.demagnetizeY(), and ikayaki.squid.Degausser.demagnetizeZ().

Here is the call graph for this function:

9.5.3.5 void ikayaki.squid.Degausser.executeRampDown () [protected]

Brings Ramp down.

Definition at line 180 of file Degausser.java.

References ikayaki.squid.Degausser.blockingWrite().

Here is the call graph for this function:

9.5.3.6 void ikayaki.squid.Degausser.executeRampUp () [protected]

Performs Ramp up. If this is used, make sure you Ramp down in less than 10 seconds because it can damage coil

Definition at line 169 of file Degausser.java.

References `ikayaki.squid.Degausser.blockingWrite()`.

Here is the call graph for this function:

9.5.3.7 `int ikayaki.squid.Degausser.getAmplitude ()`

Sends amplitude query to degausser and returns answer. Blocking.

Returns:

0 to 3000

Definition at line 378 of file Degausser.java.

References `ikayaki.squid.Degausser.blockingWrite()`, `ikayaki.gui.null`, `ikayaki.squid.Degausser.poll-Timeout`, `ikayaki.squid.Degausser.queue`, and `ikayaki.squid.Degausser.waitingForMessage`.

Here is the call graph for this function:

9.5.3.8 `char ikayaki.squid.Degausser.getCoil ()`

Sends coil query to degausser and returns answer. Blocking.

Returns:

X=X Axis, Y=Y Axis, Z=Z Axis, ?=Unknown

Definition at line 356 of file Degausser.java.

References `ikayaki.squid.Degausser.blockingWrite()`, `ikayaki.gui.null`, `ikayaki.squid.Degausser.poll-Timeout`, `ikayaki.squid.Degausser.queue`, and `ikayaki.squid.Degausser.waitingForMessage`.

Here is the call graph for this function:

9.5.3.9 `int ikayaki.squid.Degausser.getDelay ()`

Sends delay query to degausser and returns answer. Blocking.

Returns:

1 to 9 as seconds

Definition at line 334 of file Degausser.java.

References `ikayaki.squid.Degausser.blockingWrite()`, `ikayaki.gui.null`, `ikayaki.squid.Degausser.poll-Timeout`, `ikayaki.squid.Degausser.queue`, and `ikayaki.squid.Degausser.waitingForMessage`.

Here is the call graph for this function:

9.5.3.10 `int ikayaki.squid.Degausser.getRamp ()`

Sends ramp query to degausser and returns answer. Blocking.

Returns:

3, 5, 7 or 9

Definition at line 312 of file Degausser.java.

References `ikayaki.squid.Degausser.blockingWrite()`, `ikayaki.gui.null`, `ikayaki.squid.Degausser.poll-Timeout`, `ikayaki.squid.Degausser.queue`, and `ikayaki.squid.Degausser.waitingForMessage`.

Here is the call graph for this function:

9.5.3.11 char ikayaki.squid.Degausser.getRampStatus ()

Sends status query to degausser and returns answer. Blocking.

Returns:

Z=Zero, T=Tracking, ?=Unknown

Definition at line 290 of file Degausser.java.

References `ikayaki.squid.Degausser.blockingWrite()`, `ikayaki.gui.null`, `ikayaki.squid.Degausser.poll-Timeout`, `ikayaki.squid.Degausser.queue`, and `ikayaki.squid.Degausser.waitingForMessage`.

Here is the call graph for this function:

9.5.3.12 boolean ikayaki.squid.Degausser.isDemagnetizing ()

Definition at line 281 of file Degausser.java.

References `ikayaki.squid.Degausser.demagnetizing`.

9.5.3.13 boolean ikayaki.squid.Degausser.isOK ()

Checks if connection is ok.

Returns:

true if ok.

Definition at line 401 of file Degausser.java.

References `ikayaki.gui.null`, and `ikayaki.squid.Degausser.serialIO`.

Referenced by `ikayaki.squid.Squid.isOK()`.

9.5.3.14 void ikayaki.squid.Degausser.serialIOEvent (SerialIOEvent event)

Propagates serial port message event.

Parameters:

event the event that happened.

Implements `ikayaki.squid.SerialIOListener` (p. 353).

Definition at line 409 of file Degausser.java.

References `ikayaki.squid.Degausser.messageBuffer`, `ikayaki.gui.null`, `ikayaki.squid.Degausser.queue`, and `ikayaki.squid.Degausser.waitingForMessage`.

9.5.3.15 void ikayaki.squid.Degausser.setAmplitude (double *amplitude*)
[protected]

Sets amplitude to ramp, range 1.0 to maximumField. A value of 1.0 will actually be rounded to 1.1 which is the actual minimum amplitude of the degausser.

Parameters:

amplitude amplitude to demag.

Exceptions:

IllegalArgumentException if the amplitude is not in the allowed range.

Definition at line 146 of file Degausser.java.

References ikayaki.squid.Degausser.blockingWrite(), ikayaki.squid.Degausser.maximumField, and ikayaki.squid.Degausser.minimumField.

Referenced by ikayaki.squid.Degausser.demagnetizeY(), and ikayaki.squid.Degausser.demagnetizeZ().

Here is the call graph for this function:

9.5.3.16 void ikayaki.squid.Degausser.setCoil (char *coil*) [protected]

Sets coil X,Y,Z.

Parameters:

coil coil to set on.

Definition at line 127 of file Degausser.java.

References ikayaki.squid.Degausser.blockingWrite().

Referenced by ikayaki.squid.Degausser.demagnetizeY(), and ikayaki.squid.Degausser.demagnetizeZ().

Here is the call graph for this function:

9.5.3.17 void ikayaki.squid.Degausser.updateSettings ()

Checks which settings have changed and updates the degausser interface. This method will be called by the **Squid**(p.384) class.

Definition at line 104 of file Degausser.java.

References ikayaki.squid.Degausser.blockingWrite(), ikayaki.squid.Degausser.degausserDelay, and ikayaki.squid.Degausser.degausserRamp.

Here is the call graph for this function:

9.5.4 Member Data Documentation**9.5.4.1 int ikayaki.squid.Degausser.degausserDelay** [private]

1-9 seconds default delay 1 second

Definition at line 59 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.Degausser()`, and `ikayaki.squid.Degausser.updateSettings()`.

9.5.4.2 `int ikayaki.squid.Degausser.degausserRamp` [private]

(3, 5, 7, 9) default 3

Definition at line 64 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.Degausser()`, and `ikayaki.squid.Degausser.updateSettings()`.

9.5.4.3 `boolean ikayaki.squid.Degausser.demagnetizing = false` [private]

Definition at line 70 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.demagnetizeY()`, `ikayaki.squid.Degausser.demagnetizeZ()`, and `ikayaki.squid.Degausser.isDemagnetizing()`.

9.5.4.4 `double ikayaki.squid.Degausser.maximumField` [private]

Definition at line 68 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.setAmplitude()`.

9.5.4.5 `Stack<String> ikayaki.squid.Degausser.messageBuffer` [private]

buffer for incoming messages, readed when needed.

Definition at line 43 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.Degausser()`, and `ikayaki.squid.Degausser.serialIOEvent()`.

9.5.4.6 `double ikayaki.squid.Degausser.minimumField` [private]

Definition at line 67 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.setAmplitude()`.

9.5.4.7 `int ikayaki.squid.Degausser.pollTimeout = 60` [private]

Definition at line 49 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.getAmplitude()`, `ikayaki.squid.Degausser.getCoil()`, `ikayaki.squid.Degausser.getDelay()`, `ikayaki.squid.Degausser.getRamp()`, and `ikayaki.squid.Degausser.getRampStat us()`.

9.5.4.8 `SynchronousQueue<String> ikayaki.squid.Degausser.queue` [private]

Synchronous queue for waiting result message from degausser

Definition at line 48 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.blockingWrite()`, `ikayaki.squid.Degausser.Degausser()`, `ikayaki.squid.Degausser.demagnetizeY()`, `ikayaki.squid.Degausser.demagnetizeZ()`, `ikayaki.squid.Degausser.getAmplitude()`, `ikayaki.squid.Degausser.getCoil()`, `ikayaki.squid.Degausser.getDelay()`, `ikayaki.squid.Degausser.getRamp()`, `ikayaki.squid.Degausser.getRampStat us()`, and `ikayaki.squid.Degausser.serialIOEvent()`.

9.5.4.9 SerialIO `ikayaki.squid.Degausser.serialIO` [protected]

COM port for communication.

Definition at line 54 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.blockingWrite()`, `ikayaki.squid.Degausser.Degausser()`, and `ikayaki.squid.Degausser.isOK()`.

9.5.4.10 boolean `ikayaki.squid.Degausser.waitingForMessage = false` [private]

Definition at line 66 of file Degausser.java.

Referenced by `ikayaki.squid.Degausser.blockingWrite()`, `ikayaki.squid.Degausser.demagnetizeY()`, `ikayaki.squid.Degausser.demagnetizeZ()`, `ikayaki.squid.Degausser.getAmplitude()`, `ikayaki.squid.Degausser.getCoil()`, `ikayaki.squid.Degausser.getDelay()`, `ikayaki.squid.Degausser.getRamp()`, `ikayaki.squid.Degausser.getRampStat us()`, and `ikayaki.squid.Degausser.serialIOEvent()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/squid/Degausser.java`

9.6 ikayaki.gui.DeviceSettingsPanel Class Reference

Public Member Functions

- **DeviceSettingsPanel** (JDialog creator)
- void **saveSettings** ()
- Action **getSaveAction** ()
- Action **getCancelAction** ()

Package Functions

- [instance initializer]

Private Member Functions

- boolean **correctValues** ()
- void **\$\$setupUI** ()

Private Attributes

- JComboBox **magnetometerPort**
- JComboBox **demagnetizerPort**
- JComboBox **handlerPort**
- JFormattedTextField **xAxisCalibration**
- JFormattedTextField **yAxisCalibration**
- JFormattedTextField **zAxisCalibration**
- JComboBox **demagRamp**
- JComboBox **demagDelay**
- JFormattedTextField **acceleration**
- JFormattedTextField **deceleration**
- JFormattedTextField **velocity**
- JFormattedTextField **measurementVelocity**
- JFormattedTextField **transverseYAFPosition**
- JFormattedTextField **axialAFPosition**
- JFormattedTextField **sampleLoadPosition**
- JFormattedTextField **backgroundPosition**
- JFormattedTextField **measurementPosition**
- JFormattedTextField **rotation**
- JFormattedTextField **rotationVelocity**
- JFormattedTextField **rotationAcc**
- JFormattedTextField **rotationDec**
- JFormattedTextField **maximumField**
- JPanel **contentPane**
- JLabel **warningLabel**
- JButton **saveButton**
- JButton **cancelButton**
- Action **saveAction**
- Action **cancelAction**
- JDialog **creator**

Classes

- class **MyFormatterFactory**

9.6.1 Detailed Description

Creates its components and updates changes to **Settings**(p. 361) and saves them in Configuration file. These settings are critical for SQUID to work.

Author:

Aki Korpua

Definition at line 51 of file DeviceSettingsPanel.java.

9.6.2 Constructor & Destructor Documentation

9.6.2.1 ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel (JDialog *creator*)

Creates all components and puts them in right places. Labels are created only here (no global fields). Creates ActionListeners for buttons.

Definition at line 180 of file DeviceSettingsPanel.java.

References ikayaki.gui.DeviceSettingsPanel.\$\$setupUI(), ikayaki.gui.DeviceSettingsPanel.acceleration, ikayaki.gui.DeviceSettingsPanel.axialAFPosition, ikayaki.gui.DeviceSettingsPanel.backgroundPosition, ikayaki.gui.DeviceSettingsPanel.cancelButton, ikayaki.gui.DeviceSettingsPanel.contentPane, ikayaki.gui.DeviceSettingsPanel.correctValues(), ikayaki.gui.DeviceSettingsPanel.deceleration, ikayaki.gui.DeviceSettingsPanel.demagDelay, ikayaki.gui.DeviceSettingsPanel.demagnetizerPort, ikayaki.gui.DeviceSettingsPanel.demagRamp, ikayaki.gui.DeviceSettingsPanel.getCancelAction(), ikayaki.gui.DeviceSettingsPanel.getSaveAction(), ikayaki.gui.DeviceSettingsPanel.handlerPort, ikayaki.gui.DeviceSettingsPanel.magnetometerPort, ikayaki.gui.DeviceSettingsPanel.maximumField, ikayaki.gui.DeviceSettingsPanel.measurementPosition, ikayaki.gui.DeviceSettingsPanel.measurementVelocity, ikayaki.gui.DeviceSettingsPanel.rotation, ikayaki.gui.DeviceSettingsPanel.rotationAcc, ikayaki.gui.DeviceSettingsPanel.rotationDec, ikayaki.gui.DeviceSettingsPanel.rotationVelocity, ikayaki.gui.DeviceSettingsPanel.sampleLoadPosition, ikayaki.gui.DeviceSettingsPanel.saveButton, ikayaki.gui.DeviceSettingsPanel.transverseYAFPosition, ikayaki.gui.DeviceSettingsPanel.velocity, ikayaki.gui.DeviceSettingsPanel.warningLabel, ikayaki.gui.DeviceSettingsPanel.xAxisCalibration, ikayaki.gui.DeviceSettingsPanel.yAxisCalibration, and ikayaki.gui.DeviceSettingsPanel.zAxisCalibration.

Here is the call graph for this function:

9.6.3 Member Function Documentation

9.6.3.1 void ikayaki.gui.DeviceSettingsPanel.\$\$setupUI () [private]

Method generated by IntelliJ IDEA GUI Designer !!! IMPORTANT !!! DO NOT edit this method OR call it in your code!

Definition at line 438 of file DeviceSettingsPanel.java.

References ikayaki.gui.DeviceSettingsPanel.acceleration, ikayaki.gui.DeviceSettingsPanel.axialAFPosition, ikayaki.gui.DeviceSettingsPanel.backgroundPosition, ikayaki.gui.DeviceSettings-

Panel.cancelButton, ikayaki.gui.DeviceSettingsPanel.contentPane, ikayaki.gui.DeviceSettingsPanel.deceleration, ikayaki.gui.DeviceSettingsPanel.demagDelay, ikayaki.gui.DeviceSettingsPanel.demagnetizerPort, ikayaki.gui.DeviceSettingsPanel.demagRamp, ikayaki.gui.DeviceSettingsPanel.handlerPort, ikayaki.gui.DeviceSettingsPanel.magnetometerPort, ikayaki.gui.DeviceSettingsPanel.maximumField, ikayaki.gui.DeviceSettingsPanel.measurementPosition, ikayaki.gui.DeviceSettingsPanel.measurementVelocity, ikayaki.gui.null, ikayaki.gui.DeviceSettingsPanel.rotation, ikayaki.gui.DeviceSettingsPanel.rotationAcc, ikayaki.gui.DeviceSettingsPanel.rotationDec, ikayaki.gui.DeviceSettingsPanel.rotationVelocity, ikayaki.gui.DeviceSettingsPanel.sampleLoadPosition, ikayaki.gui.DeviceSettingsPanel.saveButton, ikayaki.gui.DeviceSettingsPanel.transverseYAFPosition, ikayaki.gui.DeviceSettingsPanel.velocity, ikayaki.gui.DeviceSettingsPanel.warningLabel, ikayaki.gui.DeviceSettingsPanel.xAxisCalibration, ikayaki.gui.DeviceSettingsPanel.yAxisCalibration, and ikayaki.gui.DeviceSettingsPanel.zAxisCalibration.

Referenced by ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel().

9.6.3.2 ikayaki.gui.DeviceSettingsPanel.[instance initializer] () [package]

9.6.3.3 boolean ikayaki.gui.DeviceSettingsPanel.correctValues () [private]

Should check if COM ports are selected correctly

Returns:

boolean

Definition at line 388 of file DeviceSettingsPanel.java.

Referenced by ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel().

9.6.3.4 Action ikayaki.gui.DeviceSettingsPanel.getCancelAction ()

Definition at line 410 of file DeviceSettingsPanel.java.

References ikayaki.gui.DeviceSettingsPanel.cancelAction, ikayaki.gui.DeviceSettingsPanel.creator, and ikayaki.gui.null.

Referenced by ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel().

9.6.3.5 Action ikayaki.gui.DeviceSettingsPanel.getSaveAction ()

Definition at line 398 of file DeviceSettingsPanel.java.

References ikayaki.gui.null, ikayaki.gui.DeviceSettingsPanel.saveAction, and ikayaki.gui.DeviceSettingsPanel.saveSettings().

Referenced by ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel().

Here is the call graph for this function:

9.6.3.6 void ikayaki.gui.DeviceSettingsPanel.saveSettings ()

Saves all settings to Settings-singleton and calls closeWindow().

Definition at line 352 of file DeviceSettingsPanel.java.

References `ikayaki.gui.DeviceSettingsPanel.acceleration`, `ikayaki.gui.DeviceSettingsPanel.axialAFPosition`, `ikayaki.gui.DeviceSettingsPanel.backgroundPosition`, `ikayaki.gui.DeviceSettingsPanel.creator`, `ikayaki.gui.DeviceSettingsPanel.deceleration`, `ikayaki.gui.DeviceSettingsPanel.demagDelay`, `ikayaki.gui.DeviceSettingsPanel.demagnetizerPort`, `ikayaki.gui.DeviceSettingsPanel.demagRamp`, `ikayaki.gui.DeviceSettingsPanel.handlerPort`, `ikayaki.gui.DeviceSettingsPanel.magnetometerPort`, `ikayaki.gui.DeviceSettingsPanel.maximumField`, `ikayaki.gui.DeviceSettingsPanel.measurementPosition`, `ikayaki.gui.DeviceSettingsPanel.measurementVelocity`, `ikayaki.gui.DeviceSettingsPanel.rotation`, `ikayaki.gui.DeviceSettingsPanel.rotationAcc`, `ikayaki.gui.DeviceSettingsPanel.rotationDec`, `ikayaki.gui.DeviceSettingsPanel.rotationVelocity`, `ikayaki.gui.DeviceSettingsPanel.sampleLoadPosition`, `ikayaki.gui.DeviceSettingsPanel.transverseYAFPosition`, `ikayaki.gui.DeviceSettingsPanel.velocity`, `ikayaki.gui.DeviceSettingsPanel.xAxisCalibration`, `ikayaki.gui.DeviceSettingsPanel.yAxisCalibration`, and `ikayaki.gui.DeviceSettingsPanel.zAxisCalibration`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.getSaveAction()`.

9.6.4 Member Data Documentation

9.6.4.1 JFormattedTextField `ikayaki.gui.DeviceSettingsPanel.acceleration` [private]

Handler acceleration

Definition at line 96 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.2 JFormattedTextField `ikayaki.gui.DeviceSettingsPanel.axialAFPosition` [private]

axial AF demag position in steps, must be divisible by 10. Relative to Home.

Definition at line 121 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.3 JFormattedTextField `ikayaki.gui.DeviceSettingsPanel.backgroundPosition` [private]

Position in steps, must be divisible by 10. Relative to Home.

Definition at line 131 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.4 Action `ikayaki.gui.DeviceSettingsPanel.cancelAction` [private]

Definition at line 172 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.getCancelAction()`.

9.6.4.5 JButton `ikayaki.gui.DeviceSettingsPanel.cancelButton` [private]

Definition at line 170 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, and `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`.

9.6.4.6 JPanel `ikayaki.gui.DeviceSettingsPanel.contentPane` [private]

Contains the layout.

Definition at line 166 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, and `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`.

9.6.4.7 JDialog `ikayaki.gui.DeviceSettingsPanel.creator` [private]

Definition at line 174 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.getCancelAction()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.8 JFormattedTextField `ikayaki.gui.DeviceSettingsPanel.deceleration` [private]

Handler deceleration

Definition at line 101 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.9 JComboBox `ikayaki.gui.DeviceSettingsPanel.demagDelay` [private]

How long SQUID waits on ramping?

Definition at line 91 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.10 JComboBox `ikayaki.gui.DeviceSettingsPanel.demagnetizerPort` [private]

COM port for demagnetizer, can be sharing same port with magnetometer

Definition at line 61 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.11 JComboBox ikayaki.gui.DeviceSettingsPanel.demagRamp [private]

how fast demagnetization goes

Definition at line 86 of file DeviceSettingsPanel.java.

Referenced by ikayaki.gui.DeviceSettingsPanel.\$\$setupUI(), ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel(), and ikayaki.gui.DeviceSettingsPanel.saveSettings().

9.6.4.12 JComboBox ikayaki.gui.DeviceSettingsPanel.handlerPort [private]

COM port for sample handler

Definition at line 66 of file DeviceSettingsPanel.java.

Referenced by ikayaki.gui.DeviceSettingsPanel.\$\$setupUI(), ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel(), and ikayaki.gui.DeviceSettingsPanel.saveSettings().

9.6.4.13 JComboBox ikayaki.gui.DeviceSettingsPanel.magnetometerPort [private]

COM port for magnetometer

Definition at line 56 of file DeviceSettingsPanel.java.

Referenced by ikayaki.gui.DeviceSettingsPanel.\$\$setupUI(), ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel(), and ikayaki.gui.DeviceSettingsPanel.saveSettings().

9.6.4.14 JFormattedTextField ikayaki.gui.DeviceSettingsPanel.maximumField [private]

Maximum field to allow for equipment

Definition at line 161 of file DeviceSettingsPanel.java.

Referenced by ikayaki.gui.DeviceSettingsPanel.\$\$setupUI(), ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel(), ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter(), and ikayaki.gui.DeviceSettingsPanel.saveSettings().

9.6.4.15 JFormattedTextField ikayaki.gui.DeviceSettingsPanel.measurement-Position [private]

Position in steps, must be divisible by 10. Relative to Home.

Definition at line 136 of file DeviceSettingsPanel.java.

Referenced by ikayaki.gui.DeviceSettingsPanel.\$\$setupUI(), ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel(), ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter(), and ikayaki.gui.DeviceSettingsPanel.saveSettings().

9.6.4.16 JFormattedTextField ikayaki.gui.DeviceSettingsPanel.measurement-Velocity [private]

speed in measurement, should be small

Definition at line 111 of file DeviceSettingsPanel.java.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.17 **JFormattedTextField** `ikayaki.gui.DeviceSettingsPanel.rotation` [private]

steps to perform full rotation, must be clockwise, determined by sign

Definition at line 141 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.18 **JFormattedTextField** `ikayaki.gui.DeviceSettingsPanel.rotationAcc` [private]

rotation acceleration

Definition at line 151 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.19 **JFormattedTextField** `ikayaki.gui.DeviceSettingsPanel.rotationDec` [private]

rotation deceleration

Definition at line 156 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.20 **JFormattedTextField** `ikayaki.gui.DeviceSettingsPanel.rotationVelocity` [private]

rotation velocity

Definition at line 146 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.21 **JFormattedTextField** `ikayaki.gui.DeviceSettingsPanel.sampleLoadPosition` [private]

Position in steps, must be divisible by 10. Relative to Home. (same as Home?)

Definition at line 126 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.22 Action `ikayaki.gui.DeviceSettingsPanel.saveAction` [private]

Definition at line 171 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.getSaveAction()`.

9.6.4.23 JButton `ikayaki.gui.DeviceSettingsPanel.saveButton` [private]

Definition at line 169 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, and `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`.

9.6.4.24 JFormattedTextField `ikayaki.gui.DeviceSettingsPanel.transverseYAFPosition` [private]

AF demag position for transverse

Definition at line 116 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.25 JFormattedTextField `ikayaki.gui.DeviceSettingsPanel.velocity` [private]

Handler Max speed

Definition at line 106 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.26 JLabel `ikayaki.gui.DeviceSettingsPanel.warningLabel` [private]

Definition at line 167 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, and `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`.

9.6.4.27 JFormattedTextField `ikayaki.gui.DeviceSettingsPanel.xAxisCalibration` [private]

Calibration constants with polarization (factory set?)

Definition at line 71 of file `DeviceSettingsPanel.java`.

Referenced by `ikayaki.gui.DeviceSettingsPanel.$$setupUI()`, `ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel()`, `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter()`, and `ikayaki.gui.DeviceSettingsPanel.saveSettings()`.

9.6.4.28 JFormattedTextField ikayaki.gui.DeviceSettingsPanel.yAxisCalibration [private]

Calibration constants with polarization (factory set?)

Definition at line 76 of file DeviceSettingsPanel.java.

Referenced by ikayaki.gui.DeviceSettingsPanel.\$\$setupUI(), ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel(), ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter(), and ikayaki.gui.DeviceSettingsPanel.saveSettings().

9.6.4.29 JFormattedTextField ikayaki.gui.DeviceSettingsPanel.zAxisCalibration [private]

Calibration constants with polarization (factory set?)

Definition at line 81 of file DeviceSettingsPanel.java.

Referenced by ikayaki.gui.DeviceSettingsPanel.\$\$setupUI(), ikayaki.gui.DeviceSettingsPanel.DeviceSettingsPanel(), ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter(), and ikayaki.gui.DeviceSettingsPanel.saveSettings().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/DeviceSettingsPanel.java

9.7 ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory Class Reference

Public Member Functions

- `JFormattedTextField.AbstractFormatter` **getFormatter** (`JFormattedTextField tf`)

9.7.1 Detailed Description

Custom formatter factory for the `JFormattedTextFields` in this class.

Definition at line 804 of file `DeviceSettingsPanel.java`.

9.7.2 Member Function Documentation

9.7.2.1 `JFormattedTextField.AbstractFormatter` `ikayaki.gui.DeviceSettingsPanel.MyFormatterFactory.getFormatter` (`JFormattedTextField tf`)

Returns an `AbstractFormatter` that can handle formatting of the passed in `JFormattedTextField`.

Parameters:

tf `JFormattedTextField` requesting `AbstractFormatter`

Returns:

`AbstractFormatter` to handle formatting duties, a null return value implies the `JFormattedTextField` should behave like a normal `JTextField`

Definition at line 814 of file `DeviceSettingsPanel.java`.

References `ikayaki.gui.DeviceSettingsPanel.acceleration`, `ikayaki.gui.DeviceSettingsPanel.axialAFPosition`, `ikayaki.gui.DeviceSettingsPanel.backgroundPosition`, `ikayaki.gui.DeviceSettingsPanel.deceleration`, `ikayaki.gui.DeviceSettingsPanel.maximumField`, `ikayaki.gui.DeviceSettingsPanel.measurementPosition`, `ikayaki.gui.DeviceSettingsPanel.measurementVelocity`, `ikayaki.gui.DeviceSettingsPanel.rotation`, `ikayaki.gui.DeviceSettingsPanel.rotationAcc`, `ikayaki.gui.DeviceSettingsPanel.rotationDec`, `ikayaki.gui.DeviceSettingsPanel.rotationVelocity`, `ikayaki.gui.DeviceSettingsPanel.sampleLoadPosition`, `ikayaki.gui.DeviceSettingsPanel.transverseYAFPosition`, `ikayaki.gui.DeviceSettingsPanel.velocity`, `ikayaki.gui.DeviceSettingsPanel.xAxisCalibration`, `ikayaki.gui.DeviceSettingsPanel.yAxisCalibration`, and `ikayaki.gui.DeviceSettingsPanel.zAxisCalibration`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/DeviceSettingsPanel.java`

9.8 ikayaki.util.DocumentUtilities Class Reference

Static Public Member Functions

- static boolean **storeToXML** (File file, Document document)
- static boolean **storeToXML** (OutputStream out, Document document)
- static Document **loadFromXML** (File file)
- static Document **loadFromXML** (InputStream in)

9.8.1 Detailed Description

Tools for reading and writing DOM documents.

Author:

Esko Luontola

Definition at line 44 of file DocumentUtilities.java.

9.8.2 Member Function Documentation

9.8.2.1 static Document ikayaki.util.DocumentUtilities.loadFromXML (InputStream *in*) [static]

Returns a DOM document represented by the XML document on the specified input stream.

Parameters:

in the input stream from which to read the XML document.

Returns:

the loaded document, or null if there was an error in loading it.

Exceptions:

NullPointerException if any of the arguments is null.

Definition at line 130 of file DocumentUtilities.java.

References ikayaki.gui.null.

9.8.2.2 static Document ikayaki.util.DocumentUtilities.loadFromXML (File *file*) [static]

Returns a DOM document represented by the XML document on the specified file.

Parameters:

file the file from which to read the XML document.

Returns:

the loaded document, or null if there was an error in loading it.

Exceptions:

NullPointerException if any of the arguments is null.

Definition at line 111 of file DocumentUtilities.java.

References ikayaki.gui.null.

9.8.2.3 static boolean ikayaki.util.DocumentUtilities.storeToXML (OutputStream *out*, Document *document*) [static]

Emits an XML document representing the specified DOM document.

Parameters:

out the output stream on which to emit the XML document.

document the document to be emitted.

Returns:

true if the operation was successful, otherwise false.

Exceptions:

NullPointerException if any of the arguments is null.

Definition at line 74 of file DocumentUtilities.java.

References ikayaki.gui.null.

9.8.2.4 static boolean ikayaki.util.DocumentUtilities.storeToXML (File *file*, Document *document*) [static]

Emits an XML document representing the specified DOM document.

Parameters:

file the file on which to emit the XML document.

document the document to be emitted.

Returns:

true if the operation was successful, otherwise false.

Exceptions:

NullPointerException if any of the arguments is null.

Definition at line 54 of file DocumentUtilities.java.

References ikayaki.gui.null.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/util/**DocumentUtilities.java**

9.9 ikayaki.gui.FittedComboBoxRenderer Class Reference

Public Member Functions

- **FittedComboBoxRenderer** (JComponent **fitToComponent**)
- **FittedComboBoxRenderer** (JComponent **fitToComponent**, String **delimiter**, String **regexp**)
- int **getFitLimit** ()
- void **setFitLimit** (int **fitLimit**)
- Override Component **getListCellRendererComponent** (JList list, Object value, int index, boolean isSelected, boolean cellHasFocus)
- int **fitValue** (Object value)
- int **fitValue** (Object value, int **fitLimit**)

Private Attributes

- JComponent **fitToComponent**
- int **fitLimit** = -1
- String **delimiter**
- String **delimiterRegexp**

9.9.1 Detailed Description

Fits the contents of a ComboBox list to a components width by shortening the text. Especially useful for showing long file paths in a narrow list.

Author:

Esko Luontola

Definition at line 35 of file FittedComboBoxRenderer.java.

9.9.2 Constructor & Destructor Documentation

9.9.2.1 ikayaki.gui.FittedComboBoxRenderer.FittedComboBoxRenderer (JComponent *fitToComponent*)

Creates a **FittedComboBoxRenderer**(p. 79) that will fit the list items to the width of a component. The list items' string values will be split using the "\" character.

Parameters:

fitToComponent the component to whose width the list items will be fit to.

Exceptions:

NullPointerException if *fitToComponent* is null.

Definition at line 50 of file FittedComboBoxRenderer.java.

References ikayaki.gui.null.

9.9.2.2 `ikayaki.gui.FittedComboBoxRenderer.FittedComboBoxRenderer` (`JComponent` *fitToComponent*, `String` *delimiter*, `String` *regex*)

Creates a `FittedComboBoxRenderer`(p.79) that will fit the list items to the width of a component. The list items' string values will be split using the specified pattern.

Parameters:

fitToComponent the component to whose width the list items will be fit to.

delimiter the string with which to join the parts after they have been split.

regex a regular expression of the delimiter with which to split the text into parts.

Exceptions:

`NullPointerException` if any of the parameters is null.

Definition at line 68 of file `FittedComboBoxRenderer.java`.

References `ikayaki.gui.null`.

9.9.3 Member Function Documentation

9.9.3.1 `int ikayaki.gui.FittedComboBoxRenderer.fitValue` (`Object` *value*, `int` *fitLimit*)

Fits the specified object to this component. After this method call the possibly shortened string value of the object will be the text in this renderer component. Tells how many parts were removed from the text.

Parameters:

value the object whose `toString()` value to fit into this renderer component.

fitLimit the fixed number parts to chop off the value, or -1 to detect it automatically.

Returns:

the number of parts that were chopped off the value.

Definition at line 124 of file `FittedComboBoxRenderer.java`.

References `ikayaki.gui.FittedComboBoxRenderer.delimiter`, `ikayaki.gui.FittedComboBoxRenderer.delimiterRegex`, `ikayaki.gui.FittedComboBoxRenderer.fitToComponent`, and `ikayaki.gui.null`.

9.9.3.2 `int ikayaki.gui.FittedComboBoxRenderer.fitValue` (`Object` *value*)

Fits the specified object to this component. After this method call the possibly shortened string value of the object will be the text in this renderer component. Tells how much had to be removed from the string value before it did fit.

Parameters:

value the object whose `toString()` value to fit into this renderer component.

Returns:

the number of parts that were chopped off the value.

Definition at line 112 of file `FittedComboBoxRenderer.java`.

Referenced by `ikayaki.gui.FittedComboBoxRenderer.getListCellRendererComponent()`.

9.9.3.3 int ikayaki.gui.FittedComboBoxRenderer.getFitLimit ()

Returns the number of parts that will be chopped of the text, or -1 if it is being detected automatically.

Definition at line 80 of file FittedComboBoxRenderer.java.

References ikayaki.gui.FittedComboBoxRenderer.fitLimit.

9.9.3.4 Override Component ikayaki.gui.FittedComboBoxRenderer.getListCellRendererComponent (JList list, Object value, int index, boolean isSelected, boolean cellHasFocus)

Definition at line 93 of file FittedComboBoxRenderer.java.

References ikayaki.gui.FittedComboBoxRenderer.fitLimit, and ikayaki.gui.FittedComboBoxRenderer.fitValue().

Here is the call graph for this function:

9.9.3.5 void ikayaki.gui.FittedComboBoxRenderer.setFitLimit (int fitLimit)

Sets the number of parts that should be chopped of the text.

Parameters:

fitLimit a fixed number of parts to chop off, or -1 to detected it automatically.

Definition at line 89 of file FittedComboBoxRenderer.java.

9.9.4 Member Data Documentation

9.9.4.1 String ikayaki.gui.FittedComboBoxRenderer.delimiter [private]

Definition at line 40 of file FittedComboBoxRenderer.java.

Referenced by ikayaki.gui.FittedComboBoxRenderer.fitValue().

9.9.4.2 String ikayaki.gui.FittedComboBoxRenderer.delimiterRegexp [private]

Definition at line 41 of file FittedComboBoxRenderer.java.

Referenced by ikayaki.gui.FittedComboBoxRenderer.fitValue().

9.9.4.3 int ikayaki.gui.FittedComboBoxRenderer.fitLimit = -1 [private]

Definition at line 38 of file FittedComboBoxRenderer.java.

Referenced by ikayaki.gui.FittedComboBoxRenderer.getFitLimit(), and ikayaki.gui.FittedComboBoxRenderer.getListCellRendererComponent().

9.9.4.4 JComponent ikayaki.gui.FittedComboBoxRenderer.fitToComponent [private]

Definition at line 37 of file FittedComboBoxRenderer.java.

Referenced by `ikayaki.gui.FittedComboBoxRenderer.fitValue()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/FittedComboBoxRenderer.java`

9.10 ikayaki.gui.GenericFileFilter Class Reference

Public Member Functions

- **GenericFileFilter** (String *description*, String...*extensions*)
- boolean **accept** (File *pathname*)
- String **getDescription** ()

Static Private Member Functions

- static String **getExtension** (File *f*)

Private Attributes

- String[] *extensions*
- String *description*

9.10.1 Detailed Description

A FileFilter for a FileChooser. Can be used to show only some file types, determined by extension.

Author:

Esko Luontola

Definition at line 33 of file GenericFileFilter.java.

9.10.2 Constructor & Destructor Documentation

9.10.2.1 ikayaki.gui.GenericFileFilter.GenericFileFilter (String *description*, String... *extensions*)

Creates a new file filter for the specified file type. The file extensions can have "." prefixes or not.

Parameters:

description a description for the file type, or null to have no description.

extensions the file extensions that should be shown, or null to accept no extensions.

Definition at line 51 of file GenericFileFilter.java.

References ikayaki.gui.GenericFileFilter.*extensions*, and ikayaki.gui.*null*.

9.10.3 Member Function Documentation

9.10.3.1 boolean ikayaki.gui.GenericFileFilter.accept (File *pathname*)

Tests whether or not the specified abstract pathname should be included in a pathname list.

Parameters:

pathname the abstract pathname to be tested.

Returns:

true if and only if pathname should be included.

Definition at line 83 of file GenericFileFilter.java.

References ikayaki.gui.GenericFileFilter.extensions, ikayaki.gui.GenericFileFilter.getExtension(), and ikayaki.gui.null.

Here is the call graph for this function:

9.10.3.2 String ikayaki.gui.GenericFileFilter.getDescription ()

Returns the file type description.

Definition at line 118 of file GenericFileFilter.java.

9.10.3.3 static String ikayaki.gui.GenericFileFilter.getExtension (File *f*) [static, private]

Returns the extension of the given file.

Parameters:

f the file which's extension is wanted

Returns:

the characters after the last dot in the file name

Definition at line 105 of file GenericFileFilter.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.GenericFileFilter.accept().

9.10.4 Member Data Documentation**9.10.4.1 String ikayaki.gui.GenericFileFilter.description [private]**

File type desription for the extensions.

Definition at line 43 of file GenericFileFilter.java.

9.10.4.2 String [] ikayaki.gui.GenericFileFilter.extensions [private]

Extensions to be shown.

Definition at line 38 of file GenericFileFilter.java.

Referenced by ikayaki.gui.GenericFileFilter.accept(), and ikayaki.gui.GenericFileFilter.GenericFileFilter().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**GenericFileFilter.java**

9.11 ikayaki.squid.Handler Class Reference

Inherits `ikayaki.squid.SerialIOListener`.

Inheritance diagram for `ikayaki.squid.Handler`: Collaboration diagram for `ikayaki.squid.Handler`:

Public Member Functions

- `boolean isMoving ()`
- `boolean isRotating ()`
- `int getPosition ()`
- `int getRotation ()`
- `int getEstimatedPosition ()`
- `int getEstimatedRotation ()`
- `boolean isOK ()`
- `void moveToSampleLoad ()`
- `void moveToDegausserZ ()`
- `void moveToDegausserY ()`
- `void moveToMeasurement ()`
- `void moveToBackground ()`
- `void moveToLeftLimit ()`
- `void moveToRightLimit ()`
- `void rotateTo (final int rotationAngle)`
- `void join ()` throws `InterruptedException`
- `void serialIOEvent (SerialIOEvent event)`

Protected Member Functions

- `Handler ()` throws `SerialIOException`
- `void setUp ()` throws `SerialIOException`
- `void updateSettings ()`
- `void setPosition (int position)`
- `void setRotation (int rotationSteps)`
- `void seekHome ()` throws `SerialIOException`
- `void moveToPosition (int position)` throws `SerialIOException`
- `void moveSteps (int steps, int velocity)` throws `SerialIOException`
- `void slewToLimit (boolean toRight)` throws `SerialIOException`
- `void setOnline ()` throws `SerialIOException`
- `void selectMovement ()` throws `SerialIOException`
- `void selectRotation ()` throws `SerialIOException`
- `void setAcceleration (int acceleration)` throws `SerialIOException`
- `void setDeceleration (int deceleration)` throws `SerialIOException`
- `void setVelocity (int velocity)` throws `SerialIOException`
- `void stopExecution ()` throws `SerialIOException`
- `void performSlew ()` throws `SerialIOException`
- `void setMotorPositive ()` throws `SerialIOException`
- `void setMotorNegative ()` throws `SerialIOException`
- `void go ()` throws `SerialIOException`
- `void waitForMessage ()` throws `SerialIOException`
- `String verify (char registry)` throws `SerialIOException`
- `char takeMessage ()` throws `SerialIOException`

Protected Attributes

- `SerialIO serialIO`

Private Member Functions

- `void fireMovementStopped ()`
- `void fireRotationStopped ()`

Private Attributes

- `SynchronousQueue<String> answerQueue = new SynchronousQueue<String>()`
- `LastExecutor workQueue = new LastExecutor(0, false)`
- `final int POLL_TIMEOUT = 60`
- `int ACCELERATION`
- `int DECELERATION`
- `int VELOCITY`
- `int MEASUREMENT_VELOCITY`
- `int SAMPLE_LOAD_POSITION`
- `int TRANSVERSE_YAF_POSITION`
- `int AXIAL_AF_POSITION`
- `int BACKGROUND_POSITION`
- `int MEASUREMENT_POSITION`
- `int ROTATION_VELOCITY`
- `int ROTATION_ACCELERATION`
- `int ROTATION_DECELERATION`
- `int HANDLER_ROTATION`
- `int currentMotor = -1`
- `int currentPosition = 0`
- `int currentRotation = 0`
- `int currentVelocity = 0`
- `int estimatedPositionStart = 0`
- `long estimatedPositionStartTime = 0`
- `int estimatedPositionEnd = 0`
- `int estimatedRotationStart = 0`
- `long estimatedRotationStartTime = 0`
- `int estimatedRotationEnd = 0`
- `boolean waitingForMessage = false`

9.11.1 Detailed Description

Offers an interface for controlling the sample handler.

Author:

Aki Korpua, Esko Luontola

Definition at line 36 of file Handler.java.

9.11.2 Constructor & Destructor Documentation

9.11.2.1 ikayaki.squid.Handler.Handler () throws SerialIOException [protected]

Creates a new handler interface. Opens connection to handler COM port and reads settings from the **Settings**(p. 361) class.

Definition at line 171 of file Handler.java.

References `ikayaki.squid.SerialIO.addSerialIOListener()`, `ikayaki.squid.SerialIO.openPort()`, `ikayaki.squid.Handler.serialIO`, and `ikayaki.squid.Handler.updateSettings()`.

Here is the call graph for this function:

9.11.3 Member Function Documentation

9.11.3.1 void ikayaki.squid.Handler.fireMovementStopped () [private]

Stops calculating estimated current position

Definition at line 286 of file Handler.java.

References `ikayaki.squid.Handler.currentPosition`, `ikayaki.squid.Handler.estimatedPositionEnd`, `ikayaki.squid.Handler.estimatedPositionStart`, `ikayaki.squid.Handler.estimatedPositionStartTime`, and `ikayaki.squid.Handler.getEstimatedPosition()`.

Referenced by `ikayaki.squid.Handler.seekHome()`.

Here is the call graph for this function:

9.11.3.2 void ikayaki.squid.Handler.fireRotationStopped () [private]

Stops calculating estimated current position

Definition at line 306 of file Handler.java.

References `ikayaki.squid.Handler.currentRotation`, `ikayaki.squid.Handler.estimatedRotationEnd`, `ikayaki.squid.Handler.estimatedRotationStart`, and `ikayaki.squid.Handler.estimatedRotationStartTime`.

Referenced by `ikayaki.squid.Handler.seekHome()`.

9.11.3.3 int ikayaki.squid.Handler.getEstimatedPosition ()

Returns an estimation that where handler is right now. Used for drawing graphics.

Returns:

the estimated position we are at, or current position if it is known.

Definition at line 320 of file Handler.java.

References `ikayaki.squid.Handler.currentVelocity`, `ikayaki.squid.Handler.estimatedPositionEnd`, `ikayaki.squid.Handler.estimatedPositionStart`, `ikayaki.squid.Handler.estimatedPositionStartTime`, and `ikayaki.squid.Handler.isMoving()`.

Referenced by `ikayaki.squid.Handler.fireMovementStopped()`, and `ikayaki.squid.Handler.setPosition()`.

Here is the call graph for this function:

9.11.3.4 int ikayaki.squid.Handler.getEstimatedRotation ()

Used for graphics of squid, estimates from speed and starting time where handler is.

Returns:

estimated rotation of where we are at in angles.

Definition at line 357 of file Handler.java.

References ikayaki.squid.Handler.currentVelocity, ikayaki.squid.Handler.estimatedRotationEnd, ikayaki.squid.Handler.estimatedRotationStart, ikayaki.squid.Handler.estimatedRotationStartTime, ikayaki.squid.Handler.getRotation(), ikayaki.squid.Handler.HANDLER_ROTATION, and ikayaki.squid.Handler.isRotating().

Here is the call graph for this function:

9.11.3.5 int ikayaki.squid.Handler.getPosition ()

Returns the position where the handler is currently, or where it is heading right now. Integer.MAX_VALUE means the right limit and Integer.MIN_VALUE means the left limit.

Returns:

position relative to home.

Definition at line 228 of file Handler.java.

References ikayaki.squid.Handler.currentPosition.

9.11.3.6 int ikayaki.squid.Handler.getRotation ()

Returns the handler's current rotation, or where it is rotating to right now.

Returns:

rotation in range of 0 to 359 degrees

Definition at line 237 of file Handler.java.

References ikayaki.squid.Handler.currentRotation, and ikayaki.squid.Handler.HANDLER_ROTATION.

Referenced by ikayaki.squid.Handler.getEstimatedRotation().

9.11.3.7 void ikayaki.squid.Handler.go () throws IOException [protected]

Send handler on move (G).

Definition at line 801 of file Handler.java.

9.11.3.8 boolean ikayaki.squid.Handler.isMoving ()

Tells whether handler is moving right now.

Definition at line 211 of file Handler.java.

References `ikayaki.squid.Handler.estimatedPositionEnd`, and `ikayaki.squid.Handler.estimatedPositionStart`.

Referenced by `ikayaki.squid.Handler.getEstimatedPosition()`.

9.11.3.9 boolean `ikayaki.squid.Handler.isOK` ()

Checks if the serial communication channel is open.

Returns:

true if ok.

Definition at line 386 of file `Handler.java`.

References `ikayaki.gui.null`, and `ikayaki.squid.Handler.serialIO`.

9.11.3.10 boolean `ikayaki.squid.Handler.isRotating` ()

Tells whether handler is rotating right now.

Definition at line 218 of file `Handler.java`.

References `ikayaki.squid.Handler.estimatedRotationEnd`, and `ikayaki.squid.Handler.estimatedRotationStart`.

Referenced by `ikayaki.squid.Handler.getEstimatedRotation()`.

9.11.3.11 void `ikayaki.squid.Handler.join` () throws `InterruptedException`

Waits that all commands sent to the **Handler**(p. 85) have been executed.

Exceptions:

InterruptedException if another thread has interrupted the current thread. The interrupted status of the current thread is cleared when this exception is thrown.

Definition at line 680 of file `Handler.java`.

9.11.3.12 void `ikayaki.squid.Handler.moveSteps` (int *steps*, int *velocity*) throws `SerialIOException` [protected]

Commands the holder to move to the specified number of steps. Only sends the move commands and will not wait for the handler to arrive.

Parameters:

steps the number of steps to move to.

Exceptions:

IllegalArgumentExpection if *steps* is not in range -16777215 to 16777215.

Definition at line 599 of file `Handler.java`.

9.11.3.13 void ikayaki.squid.Handler.moveToBackground ()

Commands the holder to move to background position. Only starts the movement and will not wait for it to finish.

Definition at line 483 of file Handler.java.

9.11.3.14 void ikayaki.squid.Handler.moveToDegausserY ()

Commands the holder to move to degauss Y (and X) position. Only starts the movement and will not wait for it to finish.

Definition at line 452 of file Handler.java.

9.11.3.15 void ikayaki.squid.Handler.moveToDegausserZ ()

Commands the holder to move to degauss Z position. Only starts the movement and will not wait for it to finish.

Definition at line 436 of file Handler.java.

9.11.3.16 void ikayaki.squid.Handler.moveToLeftLimit ()

Commands the holder to go to left limit. Only starts the movement and will not wait for it to finish.

Definition at line 498 of file Handler.java.

9.11.3.17 void ikayaki.squid.Handler.moveToMeasurement ()

Commands the holder to move to measure position. Only starts the movement and will not wait for it to finish.

Definition at line 468 of file Handler.java.

**9.11.3.18 void ikayaki.squid.Handler.moveToPosition (int *position*) throws
SerialIOException [protected]**

Moves the handler to an absolute position. Waits for the handler to arrive there. Changes the speed of the handler when necessary.

Parameters:

position the position to move to, relative to home. If equal to Integer.MIN_VALUE, will go to left limit. If equal to Integer.MAX_VALUE, will go to right limit.

Definition at line 532 of file Handler.java.

Referenced by ikayaki.squid.Handler.moveToSampleLoad().

9.11.3.19 void ikayaki.squid.Handler.moveToRightLimit ()

Commands the holder to go to right limit. Only starts the movement and will not wait for it to finish.

Definition at line 513 of file Handler.java.

9.11.3.20 void ikayaki.squid.Handler.moveToSampleLoad ()

Commands the holder to move to sample load position. Only starts the movement and will not wait for it to finish.

Definition at line 421 of file Handler.java.

References `ikayaki.util.LastExecutor.execute()`, `ikayaki.squid.Handler.moveToPosition()`, `ikayaki.squid.Handler.SAMPLE_LOAD_POSITION`, and `ikayaki.squid.Handler.workQueue`.

Here is the call graph for this function:

9.11.3.21 void ikayaki.squid.Handler.performSlew () throws SerialIOException [protected]

Slew the motor up to maximum speed and continue until reaching a hard limit switch or receiving a quit (Q) command. (S). Automatically runs `selectMovement()`(p. 92) before slewing.

Definition at line 777 of file Handler.java.

9.11.3.22 void ikayaki.squid.Handler.rotateTo (final int *rotationAngle*)

Rotates the handler to the specified angle. If angle is over than 360 or lower than 0, it is divided by 360 and value is remainder.

Parameters:

rotationAngle the angle in degrees to rotate the handler to.

Definition at line 639 of file Handler.java.

9.11.3.23 void ikayaki.squid.Handler.seekHome () throws SerialIOException [protected]

Commands the holder to seek home position and rotation. Waits for the home to be found and resets the home position and rotation.

Definition at line 394 of file Handler.java.

References `ikayaki.squid.Handler.currentPosition`, `ikayaki.squid.Handler.fireMovement-Stopped()`, `ikayaki.squid.Handler.fireRotationStopped()`, `ikayaki.squid.Handler.selectMovement()`, `ikayaki.squid.Handler.selectRotation()`, `ikayaki.squid.Handler.serialIO`, `ikayaki.squid.Handler.setMotorNegative()`, `ikayaki.squid.Handler.setMotorPositive()`, `ikayaki.squid.Handler.setPosition()`, `ikayaki.squid.Handler.setRotation()`, `ikayaki.squid.Handler.slewToLimit()`, `ikayaki.squid.Handler.waitForMessage()`, and `ikayaki.squid.SerialIO.writeMessage()`.

Referenced by `ikayaki.squid.Handler.setUp()`.

Here is the call graph for this function:

9.11.3.24 void ikayaki.squid.Handler.selectMovement () throws SerialIOException [protected]

Selects the movement motor to receive all commands. Sets the default velocity, acceleration and deceleration for the motor. If the movement motor is already selected, does nothing.

Definition at line 695 of file Handler.java.

Referenced by ikayaki.squid.Handler.seekHome().

9.11.3.25 void ikayaki.squid.Handler.selectRotation () throws SerialIOException [protected]

Selects the rotation motor to receive all commands. Sets the default velocity, acceleration and deceleration for the motor. If the rotation motor is already selected, does nothing.

Definition at line 710 of file Handler.java.

Referenced by ikayaki.squid.Handler.seekHome().

9.11.3.26 void ikayaki.squid.Handler.serialIOEvent (SerialIOEvent event)

Propagates serial port message event.

Parameters:

event the event that happened.

Implements ikayaki.squid.SerialIOListener (p. 353).

Definition at line 877 of file Handler.java.

9.11.3.27 void ikayaki.squid.Handler.setAcceleration (int acceleration) throws SerialIOException [protected]

Sends message to handler to set acceleration (Aa).

Parameters:

acceleration Acceleration is a number from 0 to 127

Exceptions:

IllegalArgumentException if the parameter is not in range.

Definition at line 727 of file Handler.java.

9.11.3.28 void ikayaki.squid.Handler.setDeceleration (int deceleration) throws SerialIOException [protected]

Sends message to handler to set deceleration (Dd).

Parameters:

deceleration Deceleration is a number from 0 to 127

Exceptions:

IllegalArgumentException if the parameter is not in range.

Definition at line 740 of file Handler.java.

9.11.3.29 void ikayaki.squid.Handler.setMotorNegative () throws SerialIOException [protected]

Set the motor direction of movement to negative. (-).

Definition at line 793 of file Handler.java.

Referenced by ikayaki.squid.Handler.seekHome().

9.11.3.30 void ikayaki.squid.Handler.setMotorPositive () throws SerialIOException [protected]

Set the motor direction of movement to positive. (+).

Definition at line 785 of file Handler.java.

Referenced by ikayaki.squid.Handler.seekHome().

9.11.3.31 void ikayaki.squid.Handler.setOnline () throws SerialIOException [protected]

Sends message to handler go online ().

Definition at line 687 of file Handler.java.

Referenced by ikayaki.squid.Handler.setUp().

9.11.3.32 void ikayaki.squid.Handler.setPosition (int *position*) [protected]

Sets the position that we start heading to. Integer.MAX_VALUE means the right limit and Integer.MIN_VALUE means the left limit.

Definition at line 246 of file Handler.java.

References ikayaki.squid.Handler.currentPosition, ikayaki.squid.Handler.estimatedPositionEnd, ikayaki.squid.Handler.estimatedPositionStart, ikayaki.squid.Handler.estimatedPositionStartTime, and ikayaki.squid.Handler.getEstimatedPosition().

Referenced by ikayaki.squid.Handler.seekHome().

Here is the call graph for this function:

9.11.3.33 void ikayaki.squid.Handler.setRotation (int *rotationSteps*) [protected]

Sets the rotation that we start heading to. The value is in rotation steps and relative to the home position (no limit to how high the value can be).

Definition at line 266 of file Handler.java.

References ikayaki.squid.Handler.currentRotation, ikayaki.squid.Handler.estimatedRotationEnd, ikayaki.squid.Handler.estimatedRotationStart, ikayaki.squid.Handler.estimatedRotationStartTime, and ikayaki.squid.Handler.HANDLER_ROTATION.

Referenced by ikayaki.squid.Handler.seekHome().

9.11.3.34 void ikayaki.squid.Handler.setUp () throws SerialIOException [protected]

Starts up the handler and seeks the home position. Will wait until the handler is ready for operation.

Definition at line 180 of file Handler.java.

References ikayaki.squid.Handler.seekHome(), and ikayaki.squid.Handler.setOnline().

Referenced by ikayaki.squid.Squid.Squid().

Here is the call graph for this function:

9.11.3.35 void ikayaki.squid.Handler.setVelocity (int velocity) throws SerialIOException [protected]

Sends message to handler to set maximum velocity (Mv).

Parameters:

velocity Velocity range is 50 to 8,500

Exceptions:

IllegalArgumentException if the parameter is not in range.

Definition at line 753 of file Handler.java.

9.11.3.36 void ikayaki.squid.Handler.slewToLimit (boolean toRight) throws SerialIOException [protected]

Definition at line 619 of file Handler.java.

Referenced by ikayaki.squid.Handler.seekHome().

9.11.3.37 void ikayaki.squid.Handler.stopExecution () throws SerialIOException [protected]

This command stops execution of the internal program if it is used in the program. If the motor is indexing it will ramp down and then stop. Use this command to stop the motor after issuing a slew command. (Q).

Definition at line 769 of file Handler.java.

9.11.3.38 char ikayaki.squid.Handler.takeMessage () throws SerialIOException [protected]

take the device for any waiting messages such as errors or end of move. (

Returns:

0 Normal, no service required
1 Command error, illegal command sent
2 Range error, an out of range numeric parameter was sent
3 Command invalid while moving (e.g. G, S, H)
4 Command only valid in program (e.g. I, U, L)
5 End of move notice, a previous G command is complete
6 End of wait notice, a previous W command is complete
7 Hard limit stop, the move was stopped by the hard limit
8 End

of program notice, internal program has completed
G Motor is indexing and no other notice pending

Definition at line 863 of file Handler.java.

References ikayaki.gui.null.

9.11.3.39 void ikayaki.squid.Handler.updateSettings () [protected]

Checks which settings have changed and updates the handler interface. This method will be called by the **Squid**(p. 384) class.

Definition at line 192 of file Handler.java.

References ikayaki.squid.Handler.ACCELERATION, ikayaki.squid.Handler.AXIAL_POSITION, ikayaki.squid.Handler.BACKGROUND_POSITION, ikayaki.squid.Handler.DECCELERATION, ikayaki.squid.Handler.HANDLER_ROTATION, ikayaki.squid.Handler.MEASUREMENT_POSITION, ikayaki.squid.Handler.MEASUREMENT_VELOCITY, ikayaki.squid.Handler.ROTATION_ACCELERATION, ikayaki.squid.Handler.ROTATION_DECELERATION, ikayaki.squid.Handler.ROTATION_VELOCITY, ikayaki.squid.Handler.SAMPLE_LOAD_POSITION, ikayaki.squid.Handler.TRANSVERSE_YAF_POSITION, and ikayaki.squid.Handler.VELOCITY.

Referenced by ikayaki.squid.Handler.Handler().

9.11.3.40 String ikayaki.squid.Handler.verify (char *registry*) throws IOException [protected]

Gives result for wanted registry. (V v).

Parameters:

registry A Acceleration
B Base speed
D Deceleration
E Internal program
G Steps remaining in current move. Zero if not indexing.
H Hold time
I Input pins
J Slow jog speed
M Maximum speed
N Number of steps to index
O Output pins
P Position. If motor is indexing this returns the position at the end of the index.
R Internal program pointer used by trace (T) or continue (X) commands. Also updated by enter (E) command.
W Ticks remaining on wait counter
X Crystal frequency

Returns:

registry as a string

Definition at line 839 of file Handler.java.

References ikayaki.gui.null.

9.11.3.41 void ikayaki.squid.Handler.waitForMessage () throws IOException [protected]

Wait for handler to be idle. Blocking (F). Without the this command the SMC25 (**Handler**(p. 85) system) will continue to accept commands while the motor is moving. This may be desirable, as when changing speed during a move or working with the inputs or outputs. Or it may be undesirable, such as when you wish to make a series of indexes. Without the this command any

subsequent Go commands received while the motor is indexing would set the "Not allowed while moving" message. Caution: If this command is used while the motor is executing a Slew command the only way to stop is with a reset or a hard limit switch input.

Definition at line 813 of file Handler.java.

Referenced by `ikayaki.squid.Handler.seekHome()`.

9.11.4 Member Data Documentation

9.11.4.1 `int ikayaki.squid.Handler.ACCELERATION` [private]

Value between 0 and 127 default 5. **Settings**(p. 361) in the 20-50 range are usually employed.

Definition at line 62 of file Handler.java.

Referenced by `ikayaki.squid.Handler.updateSettings()`.

9.11.4.2 `SynchronousQueue<String> ikayaki.squid.Handler.answerQueue = new SynchronousQueue<String>()` [private]

Synchronous queue for waiting result message from handler

Definition at line 41 of file Handler.java.

9.11.4.3 `int ikayaki.squid.Handler.AXIAL_AF_POSITION` [private]

Axial AF demag position in steps, must be divisible by 10. Relative to Home.

Definition at line 96 of file Handler.java.

Referenced by `ikayaki.squid.Handler.updateSettings()`.

9.11.4.4 `int ikayaki.squid.Handler.BACKGROUND_POSITION` [private]

Position in steps, must be divisible by 10. Relative to Home.

Definition at line 101 of file Handler.java.

Referenced by `ikayaki.squid.Handler.updateSettings()`.

9.11.4.5 `int ikayaki.squid.Handler.currentMotor = -1` [private]

Currently selected motor to send the commands to.

Definition at line 128 of file Handler.java.

9.11.4.6 `int ikayaki.squid.Handler.currentPosition = 0` [private]

The position where the handler is currently, or where it is heading right now. `Integer.MIN_VALUE` means the left limit, `Integer.MAX_VALUE` is the right limit.

Definition at line 134 of file Handler.java.

Referenced by `ikayaki.squid.Handler.fireMovementStopped()`, `ikayaki.squid.Handler.getPosition()`, `ikayaki.squid.Handler.seekHome()`, and `ikayaki.squid.Handler.setPosition()`.

9.11.4.7 int ikayaki.squid.Handler.currentRotation = 0 [private]

Angles are between 0 (0) and 2000 (360).

Definition at line 139 of file Handler.java.

Referenced by ikayaki.squid.Handler.fireRotationStopped(), ikayaki.squid.Handler.getRotation(), and ikayaki.squid.Handler.setRotation().

9.11.4.8 int ikayaki.squid.Handler.currentVelocity = 0 [private]

Last set velocity. Negative for moving to left and positive for moving to right.

Definition at line 144 of file Handler.java.

Referenced by ikayaki.squid.Handler.getEstimatedPosition(), and ikayaki.squid.Handler.getEstimatedRotation().

9.11.4.9 int ikayaki.squid.Handler.DECELERATION [private]

Value between 0 and 127 default 10. **Settings**(p. 361) in the 20-50 range are usually employed.

Definition at line 67 of file Handler.java.

Referenced by ikayaki.squid.Handler.updateSettings().

9.11.4.10 int ikayaki.squid.Handler.estimatedPositionEnd = 0 [private]

Definition at line 156 of file Handler.java.

Referenced by ikayaki.squid.Handler.fireMovementStopped(), ikayaki.squid.Handler.getEstimatedPosition(), ikayaki.squid.Handler.isMoving(), and ikayaki.squid.Handler.setPosition().

9.11.4.11 int ikayaki.squid.Handler.estimatedPositionStart = 0 [private]

Starting point at start of movement

Definition at line 149 of file Handler.java.

Referenced by ikayaki.squid.Handler.fireMovementStopped(), ikayaki.squid.Handler.getEstimatedPosition(), ikayaki.squid.Handler.isMoving(), and ikayaki.squid.Handler.setPosition().

9.11.4.12 long ikayaki.squid.Handler.estimatedPositionStartTime = 0 [private]

Time in milliseconds when we started movement

Definition at line 154 of file Handler.java.

Referenced by ikayaki.squid.Handler.fireMovementStopped(), ikayaki.squid.Handler.getEstimatedPosition(), and ikayaki.squid.Handler.setPosition().

9.11.4.13 int ikayaki.squid.Handler.estimatedRotationEnd = 0 [private]

Definition at line 160 of file Handler.java.

Referenced by `ikayaki.squid.Handler.fireRotationStopped()`, `ikayaki.squid.Handler.getEstimatedRotation()`, `ikayaki.squid.Handler.isRotating()`, and `ikayaki.squid.Handler.setRotation()`.

9.11.4.14 `int ikayaki.squid.Handler.estimatedRotationStart = 0` [private]

Definition at line 158 of file `Handler.java`.

Referenced by `ikayaki.squid.Handler.fireRotationStopped()`, `ikayaki.squid.Handler.getEstimatedRotation()`, `ikayaki.squid.Handler.isRotating()`, and `ikayaki.squid.Handler.setRotation()`.

9.11.4.15 `long ikayaki.squid.Handler.estimatedRotationStartTime = 0` [private]

Definition at line 159 of file `Handler.java`.

Referenced by `ikayaki.squid.Handler.fireRotationStopped()`, `ikayaki.squid.Handler.getEstimatedRotation()`, and `ikayaki.squid.Handler.setRotation()`.

9.11.4.16 `int ikayaki.squid.Handler.HANDLER_ROTATION` [private]

Definition at line 123 of file `Handler.java`.

Referenced by `ikayaki.squid.Handler.getEstimatedRotation()`, `ikayaki.squid.Handler.getRotation()`, `ikayaki.squid.Handler.setRotation()`, and `ikayaki.squid.Handler.updateSettings()`.

9.11.4.17 `int ikayaki.squid.Handler.MEASUREMENT_POSITION` [private]

Position in steps, must be divisible by 10. Relative to Home.

Definition at line 106 of file `Handler.java`.

Referenced by `ikayaki.squid.Handler.updateSettings()`.

9.11.4.18 `int ikayaki.squid.Handler.MEASUREMENT_VELOCITY` [private]

Speed in measurement, should be small.

Definition at line 81 of file `Handler.java`.

Referenced by `ikayaki.squid.Handler.updateSettings()`.

9.11.4.19 `final int ikayaki.squid.Handler.POLL_TIMEOUT = 60` [private]

timeout how long we wait answer from Squid-system, debugging to prevent lock-ups if communication fails.

Definition at line 52 of file `Handler.java`.

9.11.4.20 `int ikayaki.squid.Handler.ROTATION_ACCELERATION` [private]

Value between 0 and 127.

Definition at line 116 of file `Handler.java`.

Referenced by `ikayaki.squid.Handler.updateSettings()`.

9.11.4.21 int ikayaki.squid.Handler.ROTATION_DECELERATION [private]

Value between 0 and 127.

Definition at line 121 of file Handler.java.

Referenced by ikayaki.squid.Handler.updateSettings().

9.11.4.22 int ikayaki.squid.Handler.ROTATION_VELOCITY [private]

Value between 50 and 8500, but should be small

Definition at line 111 of file Handler.java.

Referenced by ikayaki.squid.Handler.updateSettings().

9.11.4.23 int ikayaki.squid.Handler.SAMPLE_LOAD_POSITION [private]

Value between 1 and 16,777,215. Relative to Home.

Definition at line 86 of file Handler.java.

Referenced by ikayaki.squid.Handler.moveToSampleLoad(), and ikayaki.squid.Handler.updateSettings().

9.11.4.24 SerialIO ikayaki.squid.Handler.serialIO [protected]

COM port for communication.

Definition at line 57 of file Handler.java.

Referenced by ikayaki.squid.Handler.Handler(), ikayaki.squid.Handler.isOK(), and ikayaki.squid.Handler.seekHome().

9.11.4.25 int ikayaki.squid.Handler.TRANSVERSE_YAF_POSITION [private]

AF demag position for transverse. Relative to Home.

Definition at line 91 of file Handler.java.

Referenced by ikayaki.squid.Handler.updateSettings().

9.11.4.26 int ikayaki.squid.Handler.VELOCITY [private]

Value between 50 and 12 000. The decimal number issued is 10 times the actual pulse rate to the motor. Since the motor requires 200 pulses (full step) or 400 pulses (half step) per revolution, a speed setting of M10000 sets the motor to revolve at 5 revolutions per second in full step or 2.5 revolutions in half step. This rate is one-half the sample rate rotation due to the pulley ratios. The sample handler is set up at the factory for half stepping.

Definition at line 76 of file Handler.java.

Referenced by ikayaki.squid.Handler.updateSettings().

9.11.4.27 `boolean ikayaki.squid.Handler.waitForMessage = false` [private]

Only one at time can be waiting for answer, works like semaphore for commanding handler

Definition at line 165 of file Handler.java.

9.11.4.28 `LastExecutor ikayaki.squid.Handler.workQueue = new LastExecutor(0, false)` [private]

Executes the commands to the handler one at a time. All public interfaces should send their commands to this queue so that they would not conflict eachother.

Definition at line 47 of file Handler.java.

Referenced by `ikayaki.squid.Handler.moveToSampleLoad()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/squid/Handler.java`

9.12 ikayaki.Ikayaki Class Reference

Public Member Functions

- **Ikayaki** (**Project** project) throws `HeadlessException`
- Override void **setTitle** (String title)

Static Public Member Functions

- static void **main** (String[] args)

Static Public Attributes

- static final String **APP_NAME** = "Ikayaki"
- static final String **APP_VERSION** = "0.92"
- static final String **APP_BUILD** = "2005-04-xx"
- static final String **APP_HOME_PAGE** = "http://www.cs.helsinki.fi/group/squid/"
- static final String **FILE_TYPE** = ".ika"
- static final String **FILE_DESCRIPTION** = "Measurement **Project**"
- static final String[] **AUTHORS**
- static final File **STARTUP_DIRECTORY** = new File(System.getProperty("user.dir").getAbsolutePath())
- static final String **PROGRAM_JAR_NAME** = "ikayaki.jar"
- static final File **PROPERTIES_FILE** = new File("ikayaki.config").getAbsolutePath()
- static final File **SEQUENCES_FILE** = new File("ikayaki.sequences").getAbsolutePath()
- static final File **CALIBRATION_PROJECT_DIR** = new File("calibration").getAbsolutePath()
- static final File **DEBUG_LOG_DIR** = new File("logs").getAbsolutePath()
- static final File **DEBUG_LOG_FILE** = new File("debug.log").getAbsolutePath()
- static final String **HELP_PAGES** = new File("manual/index.html").getAbsolutePath()

Static Package Functions

- [static initializer]

Static Private Member Functions

- static void **logFileCleanup** (File logFile, long maxLength, int maxFiles)
- static void **logDirCleanup** (File directory, int maxDays)

9.12.1 Detailed Description

Starts the program. Lays out `MainViewPanel`, `MainMenuBar` and `MainStatusBar` in a `JFrame`.

Author:

Esko Luontola

Definition at line 46 of file `Ikayaki.java`.

9.12.2 Constructor & Destructor Documentation

9.12.2.1 ikayaki.Ikayaki.Ikayaki (Project *project*) throws HeadlessException

Starts the user interface of the program.

Parameters:

project a project to be opened when the program starts, or null to open no project.

Exceptions:

HeadlessException if GraphicsEnvironment.isHeadless() returns true.

Definition at line 194 of file Ikayaki.java.

References ikayaki.gui.MainViewPanel.getMenuBar(), ikayaki.gui.MainViewPanel.getStatusBar(), ikayaki.Ikayaki.main(), ikayaki.gui.null, ikayaki.gui.project, and ikayaki.Ikayaki.setTitle().

Referenced by ikayaki.Ikayaki.main().

Here is the call graph for this function:

9.12.3 Member Function Documentation

9.12.3.1 ikayaki.Ikayaki.[static initializer] () [static, package]

9.12.3.2 static void ikayaki.Ikayaki.logDirCleanup (File *directory*, int *maxDays*) [static, private]

Removes all old files from the specified directory.

Parameters:

directory the directory from which the old files will be removed.

maxDays the maximum age for the files in days.

Definition at line 170 of file Ikayaki.java.

Referenced by ikayaki.Ikayaki.main().

9.12.3.3 static void ikayaki.Ikayaki.logFileCleanup (File *logFile*, long *maxLength*, int *maxFiles*) [static, private]

Removes the old entries of a log file. When the maximum size for the current log file is reached, it will be renamed to file.1, file.2 and so on.

Parameters:

logFile the log file to be cleaned.

maxLength maximum size in bytes for an individual log file.

maxFiles maximum number of log files. When the number is reached, the oldest file will be deleted.

Definition at line 143 of file Ikayaki.java.

Referenced by ikayaki.Ikayaki.main().

9.12.3.4 static void ikayaki.Ikayaki.main (String[] args) [static]

Starts the program with the provided command line parameters. If the location of a project file is given as a parameter, the program will try to load it.

Parameters:

args command line parameters.

Definition at line 97 of file Ikayaki.java.

References ikayaki.Ikayaki.APP_NAME, ikayaki.Ikayaki.APP_VERSION,
ikayaki.Ikayaki.DEBUG_LOG_DIR, ikayaki.Ikayaki.DEBUG_LOG_FILE,
ikayaki.Ikayaki.Ikayaki(), ikayaki.Project.loadProject(), ikayaki.Ikayaki.logDir-
Cleanup(), ikayaki.Ikayaki.logFileCleanup(), ikayaki.gui.null, ikayaki.gui.project, and
ikayaki.Ikayaki.STARTUP_DIRECTORY.

Referenced by ikayaki.Ikayaki.Ikayaki().

Here is the call graph for this function:

9.12.3.5 Override void ikayaki.Ikayaki.setTitle (String title)

Sets the title of the program. Appends the name and version of the program with the supplied parameter.

Parameters:

title the text to be shown in the title, or null to show only the program's name and version.

Definition at line 268 of file Ikayaki.java.

References ikayaki.gui.null.

Referenced by ikayaki.Ikayaki.Ikayaki().

9.12.4 Member Data Documentation

9.12.4.1 final String ikayaki.Ikayaki.APP_BUILD = "2005-04-xx" [static]

Definition at line 52 of file Ikayaki.java.

9.12.4.2 final String ikayaki.Ikayaki.APP_HOME_PAGE = "http://www.cs.helsinki.fi/group/squid/" [static]

Definition at line 53 of file Ikayaki.java.

9.12.4.3 final String ikayaki.Ikayaki.APP_NAME = "Ikayaki" [static]

Definition at line 50 of file Ikayaki.java.

Referenced by ikayaki.Ikayaki.main().

9.12.4.4 `final String ikayaki.Ikayaki.APP_VERSION = "0.92" [static]`

Definition at line 51 of file Ikayaki.java.

Referenced by `ikayaki.Ikayaki.main()`.

9.12.4.5 `final String [] ikayaki.Ikayaki.AUTHORS [static]`

Initial value:

```
new String[]{
    "Mikko Jormalainen",
    "Samuli Kaipainen",
    "Aki Korpua",
    "Esko Luontola",
    "Aki Sysmäläinen"
}
```

Definition at line 58 of file Ikayaki.java.

9.12.4.6 `final File ikayaki.Ikayaki.CALIBRATION_PROJECT_DIR = new File("calibration").getAbsolutePath() [static]`

Definition at line 86 of file Ikayaki.java.

9.12.4.7 `final File ikayaki.Ikayaki.DEBUG_LOG_DIR = new File("logs").getAbsolutePath() [static]`

Definition at line 87 of file Ikayaki.java.

Referenced by `ikayaki.Ikayaki.main()`.

9.12.4.8 `final File ikayaki.Ikayaki.DEBUG_LOG_FILE = new File("debug.log").getAbsolutePath() [static]`

Definition at line 88 of file Ikayaki.java.

Referenced by `ikayaki.Ikayaki.main()`.

9.12.4.9 `final String ikayaki.Ikayaki.FILE_DESCRIPTION = "Measurement Project" [static]`

Definition at line 56 of file Ikayaki.java.

9.12.4.10 `final String ikayaki.Ikayaki.FILE_TYPE = ".ika" [static]`

Definition at line 55 of file Ikayaki.java.

9.12.4.11 `final String ikayaki.Ikayaki.HELP_PAGES = new File("manual/index.html").getAbsolutePath() [static]`

Definition at line 89 of file Ikayaki.java.

9.12.4.12 `final String ikayaki.Ikayaki.PROGRAM_JAR_NAME = "ikayaki.jar"`
[static]

Definition at line 69 of file Ikayaki.java.

9.12.4.13 `final File ikayaki.Ikayaki.PROPERTIES_FILE = new File("ikayaki.config").getAbsolutePath()` [static]

Definition at line 84 of file Ikayaki.java.

9.12.4.14 `final File ikayaki.Ikayaki.SEQUENCES_FILE = new File("ikayaki.sequences").getAbsolutePath()` [static]

Definition at line 85 of file Ikayaki.java.

9.12.4.15 `final File ikayaki.Ikayaki.STARTUP_DIRECTORY = new File(System.getProperty("user.dir")).getAbsolutePath()` [static]

Definition at line 68 of file Ikayaki.java.

Referenced by ikayaki.Ikayaki.main().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/**Ikayaki.java**

9.13 ikayaki.gui.IntensityPlot Class Reference

Inherits `ikayaki.gui.AbstractPlot`.

Inheritance diagram for `ikayaki.gui.IntensityPlot`:
Collaboration diagram for `ikayaki.gui.IntensityPlot`:

Public Member Functions

- `void add (MeasurementStep step)`
- `void reset ()`
- `int getNumMeasurements ()`
- `void render (int w, int h, Graphics2D g2)`

Private Attributes

- `Vector< Point2D > points = new Vector<Point2D>()`
- `Project project = null`

9.13.1 Detailed Description

Implements intensity graph plot.

Author:

Aki Sysmäläinen

Definition at line 38 of file `IntensityPlot.java`.

9.13.2 Member Function Documentation

9.13.2.1 `void ikayaki.gui.IntensityPlot.add (MeasurementStep step)`

Adds new measurement data to plot.

Parameters:

measurement `MeasurementStep`(p. 228) to be added to this graph

Implements `ikayaki.gui.Plot` (p. 248).

Definition at line 47 of file `IntensityPlot.java`.

References `ikayaki.MeasurementStep.getProject()`, `ikayaki.MeasurementStep.getStepValue()`, `ikayaki.gui.null`, `ikayaki.gui.IntensityPlot.points`, `ikayaki.gui.IntensityPlot.project`, and `ikayaki.gui.value`.

Here is the call graph for this function:

9.13.2.2 `int ikayaki.gui.IntensityPlot.getNumMeasurements ()`

Returns the number of measurements in this graph.

Returns:

Number of measurements.

Implements **ikayaki.gui.Plot** (p. 248).

Definition at line 62 of file IntensityPlot.java.

References ikayaki.gui.IntensityPlot.points.

**9.13.2.3 void ikayaki.gui.IntensityPlot.render (int *w*, int *h*, Graphics2D *g2*)
[virtual]**

Draws the contents of the plot

Parameters:

w

h

g2

Implements **ikayaki.gui.AbstractPlot** (p. 50).

Definition at line 73 of file IntensityPlot.java.

References ikayaki.gui.IntensityPlot.points, and ikayaki.gui.IntensityPlot.project.

9.13.2.4 void ikayaki.gui.IntensityPlot.reset ()

Removes all measurements from the graph.

Implements **ikayaki.gui.Plot** (p. 248).

Definition at line 57 of file IntensityPlot.java.

References ikayaki.gui.IntensityPlot.points.

9.13.3 Member Data Documentation**9.13.3.1 Vector<Point2D> ikayaki.gui.IntensityPlot.points = new
Vector<Point2D>() [private]**

Contains all the data that is shown in this graph.

Definition at line 43 of file IntensityPlot.java.

Referenced by ikayaki.gui.IntensityPlot.add(), ikayaki.gui.IntensityPlot.getNumMeasurements(), ikayaki.gui.IntensityPlot.render(), and ikayaki.gui.IntensityPlot.reset().

9.13.3.2 Project ikayaki.gui.IntensityPlot.project = null [private]

Definition at line 45 of file IntensityPlot.java.

Referenced by ikayaki.gui.IntensityPlot.add(), and ikayaki.gui.IntensityPlot.render().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**IntensityPlot.java**

9.14 ikayaki.util.LastExecutor Class Reference

Public Member Functions

- **LastExecutor** ()
- **LastExecutor** (int **delayMillis**)
- **LastExecutor** (boolean **execOnlyLast**)
- **LastExecutor** (int **delayMillis**, boolean **execOnlyLast**)
- synchronized boolean **isExecOnlyLast** ()
- synchronized void **setExecOnlyLast** (boolean **execOnlyLast**)
- synchronized int **getDelayMillis** ()
- synchronized void **setDelayMillis** (int **delayMillis**)
- synchronized void **execute** (Runnable command)
- synchronized void **join** () throws InterruptedException
- synchronized void **clear** ()

Static Public Member Functions

- static void **main** (String[] args) throws InterruptedException

Private Attributes

- int **delayMillis**
- boolean **execOnlyLast**
- DelayQueue< **RunDelayed** > **queue** = new DelayQueue<**RunDelayed**>()
- Thread **workerThread** = null

Classes

- class **LastExecutorThread**
- class **RunDelayed**

9.14.1 Detailed Description

Executes the last Runnable tasks of a series of tasks after a delay. The worker thread will terminate automatically when there are no runnables to be executed. Optionally executes all of the tasks and not only the last one. All operations are thread-safe. <p/> This class can be used for example in connection with a "continuous search" invoked by a series of GUI events (such as a DocumentListener), but it is necessary to react to only the last event after a short period of user inactivity.

Author:

Esko Luontola

Definition at line 40 of file LastExecutor.java.

9.14.2 Constructor & Destructor Documentation

9.14.2.1 ikayaki.util.LastExecutor.LastExecutor ()

Creates an empty **LastExecutor**(p.108) with a delay of 0 and `execOnlyLast` set to true.

Definition at line 68 of file `LastExecutor.java`.

Referenced by `ikayaki.util.LastExecutor.main()`.

9.14.2.2 ikayaki.util.LastExecutor.LastExecutor (int *delayMillis*)

Creates an empty **LastExecutor**(p.108) with `execOnlyLast` set to true.

Parameters:

delayMillis the length of execution delay in milliseconds; if less than 0, then 0 will be used.

Definition at line 77 of file `LastExecutor.java`.

9.14.2.3 ikayaki.util.LastExecutor.LastExecutor (boolean *execOnlyLast*)

Creates an empty **LastExecutor**(p.108) with a delay of 0.

Parameters:

execOnlyLast if true, only the last event will be executed after the delay; otherwise all are executed in order of appearance.

Definition at line 87 of file `LastExecutor.java`.

9.14.2.4 ikayaki.util.LastExecutor.LastExecutor (int *delayMillis*, boolean *execOnlyLast*)

Creates an empty **LastExecutor**(p.108).

Parameters:

delayMillis the length of execution delay in milliseconds; if less than 0, then 0 will be used.

execOnlyLast if true, only the last task will be executed after the delay; otherwise all are executed in order of appearance.

Definition at line 98 of file `LastExecutor.java`.

9.14.3 Member Function Documentation

9.14.3.1 synchronized void ikayaki.util.LastExecutor.clear ()

Removes all of the elements from the execution queue. The queue will be empty after this call returns. The execution thread will stop after the currently running task, if any.

Definition at line 175 of file `LastExecutor.java`.

References `ikayaki.gui.null`, `ikayaki.util.LastExecutor.queue`, and `ikayaki.util.LastExecutor.workerThread`.

Referenced by `ikayaki.Project.saveNow()`.

9.14.3.2 synchronized void ikayaki.util.LastExecutor.execute (Runnable *command*)

Inserts a runnable task to the end of the queue. It will remain there until it is executed or another object replaces it. If `execOnlyLast` is set to true, the queue will be cleared before inserting this runnable to it. If there is no worker thread running, a new one will be spawned.

Parameters:

command the runnable task to be executed after a pre-defined delay.

Exceptions:

NullPointerException if *command* is null.

Definition at line 145 of file LastExecutor.java.

References ikayaki.util.LastExecutor.delayMillis, ikayaki.util.LastExecutor.execOnlyLast, ikayaki.gui.null, ikayaki.util.LastExecutor.queue, and ikayaki.util.LastExecutor.workerThread.

Referenced by ikayaki.util.LastExecutor.main(), ikayaki.squid.Handler.moveToSampleLoad(), ikayaki.Settings.save(), and ikayaki.Project.save().

9.14.3.3 synchronized int ikayaki.util.LastExecutor.getDelayMillis ()

Returns:

the delay in milliseconds.

Definition at line 124 of file LastExecutor.java.

References ikayaki.util.LastExecutor.delayMillis.

9.14.3.4 synchronized boolean ikayaki.util.LastExecutor.isExecOnlyLast ()

Returns:

true if only the last task will be executed after the delay; otherwise false.

Definition at line 109 of file LastExecutor.java.

References ikayaki.util.LastExecutor.execOnlyLast.

9.14.3.5 synchronized void ikayaki.util.LastExecutor.join () throws InterruptedException

Waits for the queue to become empty.

Exceptions:

InterruptedException if another thread has interrupted the current thread. The interrupted status of the current thread is cleared when this exception is thrown.

Definition at line 165 of file LastExecutor.java.

References ikayaki.gui.null, and ikayaki.util.LastExecutor.workerThread.

9.14.3.6 static void ikayaki.util.LastExecutor.main (String[] args) throws InterruptedException [static]

TEST METHOD

Definition at line 281 of file LastExecutor.java.

References ikayaki.util.LastExecutor.execute(), and ikayaki.util.LastExecutor.LastExecutor().

Here is the call graph for this function:

9.14.3.7 synchronized void ikayaki.util.LastExecutor.setDelayMillis (int delayMillis)

Parameters:

delayMillis delay in milliseconds; if less than 0, then the new value is ignored.

Definition at line 131 of file LastExecutor.java.

9.14.3.8 synchronized void ikayaki.util.LastExecutor.setExecOnlyLast (boolean execOnlyLast)

Parameters:

execOnlyLast if true, only the last task will be executed after the delay; otherwise all are executed in order of appearance.

Definition at line 117 of file LastExecutor.java.

9.14.4 Member Data Documentation

9.14.4.1 int ikayaki.util.LastExecutor.delayMillis [private]

Defines how long is the delay in milliseconds, after which the events need to be run.

Definition at line 45 of file LastExecutor.java.

Referenced by ikayaki.util.LastExecutor.execute(), and ikayaki.util.LastExecutor.getDelayMillis().

9.14.4.2 boolean ikayaki.util.LastExecutor.execOnlyLast [private]

Defines if only the last event should be executed. If false, then all of the events are executed in the order of appearance.

Definition at line 51 of file LastExecutor.java.

Referenced by ikayaki.util.LastExecutor.execute(), and ikayaki.util.LastExecutor.isExecOnlyLast().

9.14.4.3 DelayQueue<RunDelayed> ikayaki.util.LastExecutor.queue = new DelayQueue<RunDelayed>() [private]

Prioritized FIFO queue for containing the **RunDelayed**(p. 114) items that have not expired. If *execOnlyLast* is true, then this queue should never contain more than one item.

Definition at line 57 of file LastExecutor.java.

Referenced by `ikayaki.util.LastExecutor.clear()`, `ikayaki.util.LastExecutor.execute()`, and `ikayaki.util.LastExecutor.LastExecutorThread.run()`.

9.14.4.4 Thread `ikayaki.util.LastExecutor.workerThread = null` [private]

The worker thread that will run the inserted runnables. If the thread has no more work to do, it will set `workerThread` to null and terminate itself.

Definition at line 63 of file LastExecutor.java.

Referenced by `ikayaki.util.LastExecutor.clear()`, `ikayaki.util.LastExecutor.execute()`, `ikayaki.util.LastExecutor.join()`, and `ikayaki.util.LastExecutor.LastExecutorThread.run()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/util/LastExecutor.java`

9.15 ikayaki.util.LastExecutor.LastExecutorThread Class Reference

Public Member Functions

- void `run ()`

9.15.1 Detailed Description

Keeps on checking the `LastExecutor.queue`(p. 111) to see if there are `Runnable`s to be executed. If there is one, execute it and proceed to the next one. If an uncaught `Throwable` is thrown during the execution, prints an error message and stack trace to `stderr`. If the queue is empty, this thread will set `LastExecutor.workerThread`(p. 112) to null and terminate itself.

Author:

Esko Luontola

Definition at line 195 of file `LastExecutor.java`.

9.15.2 Member Function Documentation

9.15.2.1 void ikayaki.util.LastExecutor.LastExecutorThread.run ()

Definition at line 196 of file `LastExecutor.java`.

References `ikayaki.util.LastExecutor.RunDelayed.getRunnable()`, `ikayaki.gui.null`, `ikayaki.util.LastExecutor.queue`, and `ikayaki.util.LastExecutor.workerThread`.

Here is the call graph for this function:

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/util/LastExecutor.java`

9.16 ikayaki.util.LastExecutor.RunDelayed Class Reference

Public Member Functions

- **RunDelayed** (Runnable *runnable*, int *delayMillis*)
- long **getDelay** (TimeUnit *unit*)
- Runnable **getRunnable** ()
- int **compareTo** (Delayed *delayed*)

Private Attributes

- long **expires**
- Runnable **runnable**

9.16.1 Detailed Description

Wraps a Runnable object and sets the delay after which it should be executed by a worker thread.

Author:

Esko Luontola

Definition at line 223 of file LastExecutor.java.

9.16.2 Constructor & Destructor Documentation

9.16.2.1 ikayaki.util.LastExecutor.RunDelayed.RunDelayed (Runnable *runnable*, int *delayMillis*)

Creates a new **RunDelayed**(p. 114) item that contains *runnable*.

Parameters:

runnable the Runnable to be contained

delayMillis delay in milliseconds

Definition at line 241 of file LastExecutor.java.

9.16.3 Member Function Documentation

9.16.3.1 int ikayaki.util.LastExecutor.RunDelayed.compareTo (Delayed *delayed*)

Compares this object with the specified object for order. Returns a negative integer, zero, or a positive integer as this object is less than, equal to, or greater than the specified object.

Parameters:

delayed the Delayed to be compared.

Returns:

a negative integer, zero, or a positive integer as this delay is less than, equal to, or greater than the specified delay.

Definition at line 273 of file LastExecutor.java.

References ikayaki.util.LastExecutor.RunDelayed.getDelay().

Here is the call graph for this function:

9.16.3.2 long ikayaki.util.LastExecutor.RunDelayed.getDelay (TimeUnit *unit*)

Returns the remaining delay associated with this object, always in milliseconds.

Parameters:

unit ignored; always assumed TimeUnit.MILLISECONDS

Returns:

the remaining delay; zero or negative values indicate that the delay has already elapsed

Definition at line 252 of file LastExecutor.java.

References ikayaki.util.LastExecutor.RunDelayed.expires.

Referenced by ikayaki.util.LastExecutor.RunDelayed.compareTo().

9.16.3.3 Runnable ikayaki.util.LastExecutor.RunDelayed.getRunnable ()

Returns the contained Runnable.

Returns:

the Runnable given as constructor parameter

Definition at line 261 of file LastExecutor.java.

References ikayaki.util.LastExecutor.RunDelayed.runnable.

Referenced by ikayaki.util.LastExecutor.LastExecutorThread.run().

9.16.4 Member Data Documentation

9.16.4.1 long ikayaki.util.LastExecutor.RunDelayed.expires [private]

The point in time when this **RunDelayed**(p. 114) will expire.

Definition at line 228 of file LastExecutor.java.

Referenced by ikayaki.util.LastExecutor.RunDelayed.getDelay().

9.16.4.2 Runnable ikayaki.util.LastExecutor.RunDelayed.runnable [private]

Contained Runnable object to be run after this **RunDelayed**(p. 114) has expired.

Definition at line 233 of file LastExecutor.java.

Referenced by ikayaki.util.LastExecutor.RunDelayed.getRunnable().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/util/**LastExecutor.java**

9.17 ikayaki.util.LoggerPrintStream Class Reference

Public Member Functions

- **LoggerPrintStream** (OutputStream *out*)
- **LoggerPrintStream** (OutputStream *out*, PrintStream *screen*)
- **LoggerPrintStream** (OutputStream *out*, PrintStream *screen*, String *message*)
- Override void **print** (Object *obj*)
- Override void **print** (String *s*)
- Override void **println** ()
- Override void **println** (Object *obj*)
- Override void **println** (String *s*)

Private Member Functions

- void **timestamp** ()

Private Attributes

- DateFormat **dateFormat** = new SimpleDateFormat("HH:mm:ss.SSS")
- boolean **lineStart** = true
- PrintStream **screen**

9.17.1 Detailed Description

PrintStream for directing the output to another PrintStream and a OutputStream. Can be used for printing System.err to screen and to a log file. Writes timestamps for each printed line.

Author:

Esko Luontola

Definition at line 15 of file LoggerPrintStream.java.

9.17.2 Constructor & Destructor Documentation

9.17.2.1 ikayaki.util.LoggerPrintStream.LoggerPrintStream (OutputStream *out*)

Creates a timestamped print stream directed to one output.

Parameters:

out an OutputStream to direct all output with timestamps.

Definition at line 28 of file LoggerPrintStream.java.

References ikayaki.gui.null.

9.17.2.2 ikayaki.util.LoggerPrintStream.LoggerPrintStream (OutputStream *out*, PrintStream *screen*)

Creates a timestamped print stream directed to two outputs.

Parameters:

out an OutputStream to direct all output with timestamps.

screen a PrintStream to direct all output with timestamps. Will be ignored if null.

Definition at line 38 of file LoggerPrintStream.java.

References ikayaki.gui.null.

9.17.2.3 ikayaki.util.LoggerPrintStream.LoggerPrintStream (OutputStream *out*, PrintStream *screen*, String *message*)

Creates a timestamped print stream directed to two outputs with a startup message.

Parameters:

out an OutputStream to direct all output with timestamps.

screen a PrintStream to direct all output with timestamps. Will be ignored if null.

message a message to be printed at the creation of this print stream. This will not be timestamped. Will be ignored if null.

Definition at line 50 of file LoggerPrintStream.java.

References ikayaki.gui.null.

9.17.3 Member Function Documentation

9.17.3.1 Override void ikayaki.util.LoggerPrintStream.print (String *s*)

Definition at line 82 of file LoggerPrintStream.java.

References ikayaki.gui.null, ikayaki.util.LoggerPrintStream.screen, and ikayaki.util.LoggerPrintStream.timestamp().

Here is the call graph for this function:

9.17.3.2 Override void ikayaki.util.LoggerPrintStream.print (Object *obj*)

Definition at line 74 of file LoggerPrintStream.java.

References ikayaki.gui.null, ikayaki.util.LoggerPrintStream.screen, and ikayaki.util.LoggerPrintStream.timestamp().

Here is the call graph for this function:

9.17.3.3 Override void ikayaki.util.LoggerPrintStream.println (String *s*)

Definition at line 103 of file LoggerPrintStream.java.

9.17.3.4 Override void ikayaki.util.LoggerPrintStream.println (Object *obj*)

Definition at line 98 of file LoggerPrintStream.java.

9.17.3.5 Override void ikayaki.util.LoggerPrintStream.println ()

Definition at line 90 of file LoggerPrintStream.java.

References ikayaki.util.LoggerPrintStream.lineStart, ikayaki.gui.null, and ikayaki.util.LoggerPrintStream.screen.

9.17.3.6 void ikayaki.util.LoggerPrintStream.timestamp () [private]

Definition at line 63 of file LoggerPrintStream.java.

References ikayaki.util.LoggerPrintStream.dateFormat, ikayaki.util.LoggerPrintStream.lineStart, ikayaki.gui.null, and ikayaki.util.LoggerPrintStream.screen.

Referenced by ikayaki.util.LoggerPrintStream.print().

9.17.4 Member Data Documentation**9.17.4.1 DateFormat ikayaki.util.LoggerPrintStream.dateFormat = new SimpleDateFormat("HH:mm:ss.SSS") [private]**

Definition at line 17 of file LoggerPrintStream.java.

Referenced by ikayaki.util.LoggerPrintStream.timestamp().

9.17.4.2 boolean ikayaki.util.LoggerPrintStream.lineStart = true [private]

Definition at line 19 of file LoggerPrintStream.java.

Referenced by ikayaki.util.LoggerPrintStream.println(), and ikayaki.util.LoggerPrintStream.timestamp().

9.17.4.3 PrintStream ikayaki.util.LoggerPrintStream.screen [private]

Definition at line 21 of file LoggerPrintStream.java.

Referenced by ikayaki.util.LoggerPrintStream.print(), ikayaki.util.LoggerPrintStream.println(), and ikayaki.util.LoggerPrintStream.timestamp().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/util/**LoggerPrintStream.java**

9.18 ikayaki.squid.Magnetometer Class Reference

Inherits `ikayaki.squid.SerialIOListener`.

Inheritance diagram for `ikayaki.squid.Magnetometer`: Collaboration diagram for `ikayaki.squid.Magnetometer`:

Public Member Functions

- `Magnetometer ()` throws `SerialIOException`
- void `updateSettings ()`
- void `pulseReset (char axis)`
- void `clearFlux (char axis)`
- double[] `readData ()`
- boolean `isMeasuring ()`
- char[] `getFilters ()`
- char[] `getRange ()`
- boolean[] `getSlew ()`
- boolean[] `getLoop ()`
- boolean `isOK ()`
- void `serialIOEvent (SerialIOEvent event)`

Protected Member Functions

- void `reset (char axis)`
- void `resetCounter (char axis)`
- void `configure (char axis, char subcommand, char option)`
- void `latchAnalog (char axis)`
- void `latchCounter (char axis)`
- String `getData (char axis, char command, String datavalues)`

Protected Attributes

- `SerialIO serialIO`

Private Attributes

- Stack< String > `messageBuffer`
- SynchronousQueue< String > `queue`
- int `pollTimeout = 60`
- boolean `waitingForMessage = false`
- boolean `measuring = false`

9.18.1 Detailed Description

Offers an interface for controlling the magnetometer."

Author:

Aki Korpua

Definition at line 36 of file `Magnetometer.java`.

9.18.2 Constructor & Destructor Documentation

9.18.2.1 ikayaki.squid.Magnetometer.Magnetometer () throws SerialIOException

Creates a new magnetometer interface. Opens connection to **Magnetometer**(p. 119) COM port (if its not open already) and reads settings from the Setting class.

Exceptions:

SerialIOException(p. 352)

Definition at line 65 of file Magnetometer.java.

References ikayaki.squid.SerialIO.addSerialIOListener(), ikayaki.squid.Magnetometer.configure(), ikayaki.squid.Magnetometer.messageBuffer, ikayaki.squid.Magnetometer.queue, ikayaki.squid.Magnetometer.resetCounter(), ikayaki.squid.Magnetometer.serialIO, and ikayaki.squid.SerialIO.sendMessage().

Here is the call graph for this function:

9.18.3 Member Function Documentation

9.18.3.1 void ikayaki.squid.Magnetometer.clearFlux (char *axis*)

Clears flux counter for axis. Need to be done measuring.

Parameters:

axis 'X', 'Y', 'Z' or 'A' (all). All characters are in upper case.

Definition at line 248 of file Magnetometer.java.

References ikayaki.squid.Magnetometer.resetCounter().

Here is the call graph for this function:

9.18.3.2 void ikayaki.squid.Magnetometer.configure (char *axis*, char *subcommand*, char *option*) [protected]

Used for configuring **Magnetometer**(p. 119) parameters. See subcommand for usages.

Parameters:

axis 'X', 'Y', 'Z' or 'A' (all). All characters are in upper case.

subcommand The CONFIGURE subcommands follow:
"F" Set filter configuration.

The data subfield sets the filter to the indicated range. The four possible data values are: "1" One Hertz Filter; 1 Hz "T" Ten Hertz Filter; 10 Hz "H" One hundred Hertz Filter; 100 Hz "W" Wide band filter; WB
"R" Set DC SQUID electronic range. The data subfield selects the range desired. The four possible data values are: "1" One time range; 1x "T" Ten times range; 10x "H" One hundred times range; 100x "E" Extended range; 1000x
"S" Set the fast-slew option. Two data values are possible: "E" Enable the fast-slew; turn it on. "D" Disable the fast-slew; turn it off.
"L" This subcommand opens or closes the SQUID feedback loop or resets the analog signal to +/- 1/2 flux quantum about zero. The three possible data values are: "O" Open the feedback loop. (This command also zeros the flux counter) "C" Close the feedback loop. "P" Pulse-reset (open then close) the feedback loop. (This command also zeros the flux counter)

option see data values from subcommands.

Definition at line 149 of file Magnetometer.java.

Referenced by `ikayaki.squid.Magnetometer.Magnetometer()`, `ikayaki.squid.Magnetometer.pulseReset()`, and `ikayaki.squid.Magnetometer.pulseReset()`.

9.18.3.3 String `ikayaki.squid.Magnetometer.getData (char axis, char command, String datavalues)` [protected]

Generic send message sender, use with caution and knowledge. Checks if commands are good.

Parameters:

axis 'X', 'Y' or 'Z'. All characters are in upper case.

command "D" Send back the analog data last captured with the LATCH command. The data field is not required.
"C" Send back the counter value last captured with the LATCH command. The data field is not required.
"S" Send back status. Various pieces of status can be sent by the magnetometer electronics.

datavalues Datavalues one or more:
"A" Send back all status.
"F" Send back all filter status.
"R" Send back all range status.
"S" Send back slew status.
"L" Send back SQUID feedback loop status. Return feedback, waiting time?

Returns:

Returns data wanted, see command and datavalue

Definition at line 201 of file Magnetometer.java.

References `ikayaki.gui.null`, `ikayaki.squid.Magnetometer.pollTimeout`, `ikayaki.squid.Magnetometer.queue`, and `ikayaki.squid.Magnetometer.waitForMessage`.

Referenced by `ikayaki.squid.Magnetometer.getFilters()`, `ikayaki.squid.Magnetometer.getRange()`, and `ikayaki.squid.Magnetometer.readData()`.

9.18.3.4 char [] `ikayaki.squid.Magnetometer.getFilters ()`

Returns filter configurations for all axis.

Returns:

return filter values for all axis in order (x,y,z).
Values:
"1" One Hertz Filter; 1 Hz
"T" Ten Hertz Filter; 10 Hz
"H" One hundred Hertz Filter; 100 Hz
"W" Wide band filter; WB

Definition at line 304 of file Magnetometer.java.

References `ikayaki.gui.data`, and `ikayaki.squid.Magnetometer.getData()`.

Here is the call graph for this function:

9.18.3.5 boolean [] `ikayaki.squid.Magnetometer.getLoop ()`

Returns if Loops have been opened on axes.

Returns:

return Loop status for all axis in order (x,y,z). Values true = on, false = off.

Definition at line 366 of file Magnetometer.java.

References ikayaki.gui.data.

9.18.3.6 char [] ikayaki.squid.Magnetometer.getRange ()

Returns range configurations for all axis.

Returns:

return filter values for all axis in order (x,y,z).
Values: "1" One time range; 1x "T" Ten times range; 10x "H" One hundred times range; 100x "E" Extended range; 1000x

Definition at line 325 of file Magnetometer.java.

References ikayaki.gui.data, and ikayaki.squid.Magnetometer.getData().

Here is the call graph for this function:

9.18.3.7 boolean [] ikayaki.squid.Magnetometer.getSlew ()

Returns Fast Slew options value.

Returns:

true if Fast Slew is on, false if not. In order (x,y,z).

Definition at line 346 of file Magnetometer.java.

References ikayaki.gui.data.

9.18.3.8 boolean ikayaki.squid.Magnetometer.isMeasuring ()

Definition at line 294 of file Magnetometer.java.

References ikayaki.squid.Magnetometer.measuring.

9.18.3.9 boolean ikayaki.squid.Magnetometer.isOK ()

Checks if connection is ok.

Returns:

true if ok.

Definition at line 386 of file Magnetometer.java.

References ikayaki.gui.null, and ikayaki.squid.Magnetometer.serialIO.

9.18.3.10 void ikayaki.squid.Magnetometer.latchAnalog (char *axis*) [protected]

Parameters:

axis 'X', 'Y', 'Z' or 'A' (all). All characters are in upper case.

Definition at line 163 of file Magnetometer.java.

Referenced by ikayaki.squid.Magnetometer.readData().

9.18.3.11 void ikayaki.squid.Magnetometer.latchCounter (char *axis*) [protected]**Parameters:**

axis 'X', 'Y', 'Z' or 'A' (all). All characters are in upper case.

Definition at line 177 of file Magnetometer.java.

Referenced by ikayaki.squid.Magnetometer.readData().

9.18.3.12 void ikayaki.squid.Magnetometer.pulseReset (char *axis*)

Pulse reset (open then close) feedback loop for axis. Need to be done before measuring.

Parameters:

axis 'X', 'Y', 'Z' or 'A' (all). All characters are in upper case.

Definition at line 238 of file Magnetometer.java.

References ikayaki.squid.Magnetometer.configure().

Here is the call graph for this function:

9.18.3.13 double [] ikayaki.squid.Magnetometer.readData ()

Latches axes, reads counters and analog. Calculates data from them and returns them.

Returns:

Returns 3 double values in following order: (x,y,z)

Definition at line 257 of file Magnetometer.java.

References ikayaki.squid.Magnetometer.getData(), ikayaki.squid.Magnetometer.latchAnalog(), ikayaki.squid.Magnetometer.latchCounter(), and ikayaki.squid.Magnetometer.measuring.

Here is the call graph for this function:

9.18.3.14 void ikayaki.squid.Magnetometer.reset (char *axis*) [protected]

Reset settings for axis.

Parameters:

axis 'X', 'Y', 'Z' or 'A' (all). All characters are in upper case.

Definition at line 105 of file Magnetometer.java.

9.18.3.15 void ikayaki.squid.Magnetometer.resetCounter (char *axis*) [protected]

Reset counter for axis.

Parameters:

axis 'X', 'Y', 'Z' or 'A' (all). All characters are in upper case.

Definition at line 121 of file Magnetometer.java.

Referenced by ikayaki.squid.Magnetometer.clearFlux(), and ikayaki.squid.Magnetometer.Magnetometer().

9.18.3.16 void ikayaki.squid.Magnetometer.serialIOEvent (SerialIOEvent *event*)

Propagates serial port message event.

Parameters:

event the event that happened.

Implements `ikayaki.squid.SerialIOListener` (p. 353).

Definition at line 393 of file `Magnetometer.java`.

References `ikayaki.squid.Magnetometer.messageBuffer`, `ikayaki.gui.null`, `ikayaki.squid.Magnetometer.queue`, and `ikayaki.squid.Magnetometer.waitingForMessage`.

9.18.3.17 void ikayaki.squid.Magnetometer.updateSettings ()

Checks which settings have changed and updates the magnetometer interface. This method will be called by the `Squid`(p. 384) class.

Definition at line 96 of file `Magnetometer.java`.

9.18.4 Member Data Documentation

9.18.4.1 boolean ikayaki.squid.Magnetometer.measuring = false [private]

Definition at line 56 of file `Magnetometer.java`.

Referenced by `ikayaki.squid.Magnetometer.isMeasuring()`, and `ikayaki.squid.Magnetometer.readData()`.

9.18.4.2 Stack<String> ikayaki.squid.Magnetometer.messageBuffer [private]

Buffer for incoming messages, readed when needed.

Definition at line 41 of file `Magnetometer.java`.

Referenced by `ikayaki.squid.Magnetometer.Magnetometer()`, and `ikayaki.squid.Magnetometer.serialIOEvent()`.

9.18.4.3 int ikayaki.squid.Magnetometer.pollTimeout = 60 [private]

Definition at line 47 of file `Magnetometer.java`.

Referenced by `ikayaki.squid.Magnetometer.getData()`.

9.18.4.4 SynchronousQueue<String> ikayaki.squid.Magnetometer.queue [private]

Synchronous queue for waiting result message from magnetometer

Definition at line 46 of file `Magnetometer.java`.

Referenced by `ikayaki.squid.Magnetometer.getData()`, `ikayaki.squid.Magnetometer.Magnetometer()`, and `ikayaki.squid.Magnetometer.serialIOEvent()`.

9.18.4.5 SerialIO ikayaki.squid.Magnetometer.serialIO [protected]

COM port for communication.

Definition at line 52 of file Magnetometer.java.

Referenced by ikayaki.squid.Magnetometer.isOK(), and ikayaki.squid.Magnetometer.Magnetometer().

9.18.4.6 boolean ikayaki.squid.Magnetometer.waitingForMessage = false [private]

Definition at line 54 of file Magnetometer.java.

Referenced by ikayaki.squid.Magnetometer.getData(), and ikayaki.squid.Magnetometer.serialIOEvent().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/squid/**Magnetometer.java**

9.19 ikayaki.gui.MagnetometerStatusPanel Class Reference

Inherits `ikayaki.MeasurementListener`.

Inheritance diagram for `ikayaki.gui.MagnetometerStatusPanel`:
Collaboration diagram for `ikayaki.gui.MagnetometerStatusPanel`:

Public Member Functions

- `MagnetometerStatusPanel ()`
- `void setSquid (Squid squid)`
- `void updateStatus ()`
- `void measurementUpdated (MeasurementEvent e)`

Static Public Attributes

- static final `Color DEMAGNETIZING_COLOR = new Color(0xFFCCCC)`
- static final `Color MEASURING_COLOR = new Color(0xFFFF99)`
- static final `Color MOVING_COLOR = new Color(0xCCCCFF)`
- static final `Color IDLE_COLOR = Color.WHITE`

Protected Member Functions

- `void paintComponent (Graphics g)`

Package Attributes

- final `ManualControlsPanel manualControlsPanel`

Private Member Functions

- `void updatePositions ()`
- `void updateButtonPositions ()`
- `void drawFillOval (Graphics2D g2, Color fill, int x, int y, int width, int height)`
- `void drawFillSideRect (Graphics2D g2, Color fill, int x, int y, int width, int height)`
- `void drawArrow (Graphics2D g2, int x, int y, int length, int rotation)`

Private Attributes

- `Squid squid = null`
- `int position = 0`
- `int rotation = 0`
- `boolean moving = false`
- `boolean rotating = false`
- `boolean demagnetizing = false`
- `boolean measuring = false`
- `int maxposition = 50000`
- `int maxrotation = 360`
- `int posMove = -2`

- int **posLeft** = -1
- int **posHome**
- int **posDemagZ**
- int **posDemagY**
- int **posBG**
- int **posMeasure**
- int **posRight** = 2 << 24 - 1
- `TreeMap< Integer, JComponent > moveButtons = new TreeMap<Integer, JComponent>()`

Classes

- class **MagnetometerStatusAnimator**
- class **ManualControlsPanel**

9.19.1 Detailed Description

Picture of current magnetometer status, with sample holder position and rotation. Status is updated according to MeasurementEvents received by **MeasurementControlsPanel**(p. 170). And, manual controls in **ManualControlsPanel**(p. 140) inner class. Now that I got over myself and painfully merged the two classes.

Author:

Samuli Kaipiainen

Definition at line 44 of file MagnetometerStatusPanel.java.

9.19.2 Constructor & Destructor Documentation

9.19.2.1 ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel ()

Sets magnetometer status to current position.

Definition at line 100 of file MagnetometerStatusPanel.java.

References
ikayaki.gui.MagnetometerStatusPanel.manualControlsPanel,
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveBG, ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveDemagY,
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveDemagZ, ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveHome,
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveLabel, ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveLeft,
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveMeasure, ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveRight,
ikayaki.gui.MagnetometerStatusPanel.updatePositions(), and ikayaki.gui.MagnetometerStatusPanel.updateStatus().

Here is the call graph for this function:

9.19.3 Member Function Documentation

9.19.3.1 void ikayaki.gui.MagnetometerStatusPanel.drawArrow (Graphics2D *g2*, int *x*, int *y*, int *length*, int *rotation*) [private]

Draws the rotation arrow.

Parameters:

g2 marsu.

x x-center.

y y-center.

length arrow length; arrow pointing lines' length will be length/4.

rotation rotation angle as 0..maxrotation (meaning 0..360 degrees).

Definition at line 334 of file MagnetometerStatusPanel.java.

References ikayaki.gui.MagnetometerStatusPanel.maxrotation.

Referenced by ikayaki.gui.MagnetometerStatusPanel.paintComponent().

9.19.3.2 void ikayaki.gui.MagnetometerStatusPanel.drawFillOval (Graphics2D *g2*, Color *fill*, int *x*, int *y*, int *width*, int *height*) [private]

Draws a filled oval with line.

Definition at line 305 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.paintComponent().

9.19.3.3 void ikayaki.gui.MagnetometerStatusPanel.drawFillSideRect (Graphics2D *g2*, Color *fill*, int *x*, int *y*, int *width*, int *height*) [private]

Draws a filled rectangle with lines on left and right side.

Definition at line 316 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.paintComponent().

9.19.3.4 void ikayaki.gui.MagnetometerStatusPanel.measurementUpdated (MeasurementEvent *e*)

Updates magnetometer status picture; called by **MeasurementControlsPanel**(p. 170) when it receives **MeasurementEvent**(p. 188).

Implements **ikayaki.MeasurementListener** (p. 194).

Definition at line 208 of file MagnetometerStatusPanel.java.

References ikayaki.gui.MagnetometerStatusPanel.manualControlsPanel, ikayaki.gui.null, ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.setEnabled(), ikayaki.gui.MagnetometerStatusPanel.updatePositions(), and ikayaki.gui.MagnetometerStatusPanel.updateStatus().

Here is the call graph for this function:

9.19.3.5 void ikayaki.gui.MagnetometerStatusPanel.paintComponent (Graphics *g*) [protected]

Paints the magnetometer status picture.

Parameters:

g mursu.

Definition at line 223 of file MagnetometerStatusPanel.java.

References ikayaki.gui.MagnetometerStatusPanel.demagnetizing, ikayaki.gui.MagnetometerStatusPanel.DEMAGNETIZING_COLOR, ikayaki.gui.MagnetometerStatusPanel.drawArrow(), ikayaki.gui.MagnetometerStatusPanel.drawFillOval(), ikayaki.gui.MagnetometerStatusPanel.drawFillSideRect(), ikayaki.gui.MagnetometerStatusPanel.IDLE_COLOR, ikayaki.gui.MagnetometerStatusPanel.maxposition, ikayaki.gui.MagnetometerStatusPanel.measuring, ikayaki.gui.MagnetometerStatusPanel.MEASURING_COLOR, ikayaki.gui.MagnetometerStatusPanel.moving, ikayaki.gui.MagnetometerStatusPanel.MOVING_COLOR, ikayaki.gui.MagnetometerStatusPanel.posBG, ikayaki.gui.MagnetometerStatusPanel.posDemagZ, ikayaki.gui.MagnetometerStatusPanel.position, ikayaki.gui.MagnetometerStatusPanel.rotating, ikayaki.gui.MagnetometerStatusPanel.rotation, and ikayaki.gui.MagnetometerStatusPanel.updateButtonPositions().

Here is the call graph for this function:

9.19.3.6 void ikayaki.gui.MagnetometerStatusPanel.setSquid (Squid *squid*)

Sets our Squid to command; called by **MainViewPanel**(p. 157). Uses the sample handler to read positions and command with move/rotate commands. Degausser and magnetometer are used for displaying their status.

Definition at line 134 of file MagnetometerStatusPanel.java.

References ikayaki.gui.MagnetometerStatusPanel.manualControlsPanel, ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.setEnabled(), and ikayaki.gui.MagnetometerStatusPanel.updateStatus().

Here is the call graph for this function:

9.19.3.7 void ikayaki.gui.MagnetometerStatusPanel.updateButtonPositions () [private]

Updates moveButtons' positions. Stacks 'em up nicely so that noone is on top of another or out of screen.

Definition at line 176 of file MagnetometerStatusPanel.java.

References ikayaki.gui.MagnetometerStatusPanel.maxposition, ikayaki.gui.MagnetometerStatusPanel.moveButtons, and ikayaki.gui.MagnetometerStatusPanel.position.

Referenced by ikayaki.gui.MagnetometerStatusPanel.paintComponent().

9.19.3.8 void ikayaki.gui.MagnetometerStatusPanel.updatePositions () [private]

Reads handler positions from **Settings**(p. 361), posLeft and posRight are hard-coded. Updates maxposition and position->radiobutton-treemap.

Definition at line 144 of file MagnetometerStatusPanel.java.

References `ikayaki.gui.MagnetometerStatusPanel.manualControlsPanel`,
`ikayaki.gui.MagnetometerStatusPanel.maxposition`, `ikayaki.gui.Magnetometer-`
`StatusPanel.ManualControlsPanel.moveBG`, `ikayaki.gui.MagnetometerStatus-`
`Panel.moveButtons`, `ikayaki.gui.MagnetometerStatusPanel.ManualControls-`
`Panel.moveDemagY`, `ikayaki.gui.MagnetometerStatusPanel.ManualControls-`
`Panel.moveDemagZ`, `ikayaki.gui.MagnetometerStatusPanel.ManualControls-`
`Panel.moveHome`, `ikayaki.gui.MagnetometerStatusPanel.ManualControls-`
`Panel.moveLabel`, `ikayaki.gui.MagnetometerStatusPanel.ManualControls-`
`Panel.moveLeft`, `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.move-`
`Measure`, `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveRight`,
`ikayaki.gui.MagnetometerStatusPanel.posBG`, `ikayaki.gui.MagnetometerStatusPanel.posDemagY`,
`ikayaki.gui.MagnetometerStatusPanel.posDemagZ`, `ikayaki.gui.MagnetometerStatusPanel.pos-`
`Home`, `ikayaki.gui.MagnetometerStatusPanel.posLeft`, `ikayaki.gui.MagnetometerStatusPanel.pos-`
`Measure`, `ikayaki.gui.MagnetometerStatusPanel.posMove`, and `ikayaki.gui.MagnetometerStatus-`
`Panel.posRight`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel()`, and
`ikayaki.gui.MagnetometerStatusPanel.measurementUpdated()`.

9.19.3.9 void ikayaki.gui.MagnetometerStatusPanel.updateStatus ()

Updates magnetometer status picture. Reads current Squid status from Handler, Magnetometer and Degausser.

Definition at line 192 of file MagnetometerStatusPanel.java.

References `ikayaki.gui.MagnetometerStatusPanel.demagnetizing`, `ikayaki.squid.Squid.get-`
`Degausser()`, `ikayaki.squid.Squid.getHandler()`, `ikayaki.squid.Squid.getMagnetometer()`,
`ikayaki.gui.MagnetometerStatusPanel.measuring`, `ikayaki.gui.MagnetometerStatusPanel.moving`,
`ikayaki.gui.null`, `ikayaki.gui.MagnetometerStatusPanel.position`, `ikayaki.gui.MagnetometerStatus-`
`Panel.rotating`, `ikayaki.gui.MagnetometerStatusPanel.rotation`, and `ikayaki.gui.Magnetometer-`
`StatusPanel.squid`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel()`,
`ikayaki.gui.MagnetometerStatusPanel.measurementUpdated()`, and `ikayaki.gui.Magnetometer-`
`StatusPanel.setSquid()`.

Here is the call graph for this function:

9.19.4 Member Data Documentation

9.19.4.1 boolean ikayaki.gui.MagnetometerStatusPanel.demagnetizing = false [private]

Definition at line 74 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, and
`ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.19.4.2 final Color ikayaki.gui.MagnetometerStatusPanel.DEMAGNETIZING _ - COLOR = new Color(0xFFCCCC) [static]

Definition at line 46 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`.

9.19.4.3 `final Color ikayaki.gui.MagnetometerStatusPanel.IDLE_COLOR = Color.WHITE [static]`

Definition at line 49 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`.

9.19.4.4 `final ManualControlsPanel ikayaki.gui.MagnetometerStatusPanel.manualControlsPanel [package]`

`ManualControlsPanel`(p. 140) whose `move-radiobuttons` to show.

Definition at line 54 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel()`, `ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel()`, `ikayaki.gui.MagnetometerStatusPanel.measurementUpdated()`, `ikayaki.gui.MagnetometerStatusPanel.setSquid()`, and `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.5 `int ikayaki.gui.MagnetometerStatusPanel.maxposition = 50000 [private]`

Definition at line 79 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, `ikayaki.gui.MagnetometerStatusPanel.updateButtonPositions()`, and `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.6 `int ikayaki.gui.MagnetometerStatusPanel.maxrotation = 360 [private]`

Definition at line 79 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.drawArrow()`.

9.19.4.7 `boolean ikayaki.gui.MagnetometerStatusPanel.measuring = false [private]`

Definition at line 75 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, and `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.19.4.8 `final Color ikayaki.gui.MagnetometerStatusPanel.MEASURING_COLOR = new Color(0xFFFF99) [static]`

Definition at line 47 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`.

9.19.4.9 `TreeMap<Integer, JComponent> ikayaki.gui.MagnetometerStatusPanel.moveButtons = new TreeMap<Integer, JComponent>()` [private]

Sorted map for move-radiobuttons' positions.

Definition at line 95 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updateButtonPositions()`, and `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.10 `boolean ikayaki.gui.MagnetometerStatusPanel.moving = false` [private]

Definition at line 70 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, and `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.19.4.11 `final Color ikayaki.gui.MagnetometerStatusPanel.MOVING_COLOR = new Color(0xCCCCFF)` [static]

Definition at line 48 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`.

9.19.4.12 `int ikayaki.gui.MagnetometerStatusPanel.posBG` [private]

Definition at line 88 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, and `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.13 `int ikayaki.gui.MagnetometerStatusPanel.posDemagY` [private]

Definition at line 87 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.14 `int ikayaki.gui.MagnetometerStatusPanel.posDemagZ` [private]

Definition at line 86 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, and `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.15 `int ikayaki.gui.MagnetometerStatusPanel.posHome` [private]

Definition at line 85 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.16 `int ikayaki.gui.MagnetometerStatusPanel.position = 0` [private]

Definition at line 68 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going()`, `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old()`, `ikayaki.gui.MagnetometerStatusPanel.updateButtonPositions()`, and `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.19.4.17 `int ikayaki.gui.MagnetometerStatusPanel.posLeft = -1` [private]

Definition at line 84 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.18 `int ikayaki.gui.MagnetometerStatusPanel.posMeasure` [private]

Definition at line 89 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.19 `int ikayaki.gui.MagnetometerStatusPanel.posMove = -2` [private]

Definition at line 83 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.20 `int ikayaki.gui.MagnetometerStatusPanel.posRight = 2 << 24 - 1` [private]

Definition at line 90 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.19.4.21 `boolean ikayaki.gui.MagnetometerStatusPanel.rotating = false` [private]

Definition at line 71 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`, and `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.19.4.22 `int ikayaki.gui.MagnetometerStatusPanel.rotation = 0` [private]

Definition at line 69 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going()`, `ikayaki.gui.MagnetometerStatusPanel.paintComponent()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old()`, and `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.19.4.23 `Squid ikayaki.gui.MagnetometerStatusPanel.squid = null` [private]

Squid to read the device's state and command the handler to move and rotateto. Is null if the current project does not have access to the Squid.

Definition at line 65 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run()`, and `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/MagnetometerStatusPanel.java`

9.20 ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator Class Reference

Public Member Functions

- **MagnetometerStatusAnimator** ()
- **MagnetometerStatusAnimator** (int **updateDelay**)
- synchronized void **going** (int **posTo**, int **rotateTo**)
- synchronized void **gone** ()
- void **run** ()
- void **run_old** ()

Private Member Functions

- void **killAnimatorThread** ()

Private Attributes

- int **updateDelay**
- int **sps**
- int **msps**
- int **rps**
- int **posFrom**
- int **rotateFrom**
- int **posAmount**
- int **rotateAmount**
- int **posDirection**
- int **rotateDirection**
- long **startTime**
- boolean **going**
- Thread **animatorThread**

9.20.1 Detailed Description

Animator-thread for updating magnetometer status pic.

Deprecated

replaced by a simple Timer in constructor

Definition at line 350 of file MagnetometerStatusPanel.java.

9.20.2 Constructor & Destructor Documentation

9.20.2.1 ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.MagnetometerStatusAnimator ()

Definition at line 365 of file MagnetometerStatusPanel.java.

9.20.2.2 `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.MagnetometerStatusAnimator (int updateDelay)`

Definition at line 369 of file MagnetometerStatusPanel.java.

9.20.3 Member Function Documentation

9.20.3.1 `synchronized void ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going (int posTo, int rotateTo)`

Starts to move...

Deprecated

handler positions estimated by Handler.

Definition at line 381 of file MagnetometerStatusPanel.java.

References `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.animatorThread()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.killAnimatorThread()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.posFrom()`, `ikayaki.gui.MagnetometerStatusPanel.position`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rotateFrom()`, and `ikayaki.gui.MagnetometerStatusPanel.rotation`.

Here is the call graph for this function:

9.20.3.2 `synchronized void ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.gone ()`

...And we're done; called by `updateStatus`.

Definition at line 409 of file MagnetometerStatusPanel.java.

References `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.animatorThread()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.killAnimatorThread()`, `ikayaki.gui.null`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.posAmount()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rotateAmount()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rps()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.sps()`, and `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.startTime()`.

Here is the call graph for this function:

9.20.3.3 `void ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.killAnimatorThread () [private]`

Definition at line 428 of file MagnetometerStatusPanel.java.

References `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.animatorThread()`, and `ikayaki.gui.null`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going()`, and `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.gone()`.

9.20.3.4 void ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run ()

Definition at line 440 of file MagnetometerStatusPanel.java.

References ikayaki.squid.Squid.getHandler(), ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going, ikayaki.gui.MagnetometerStatusPanel.position, ikayaki.gui.MagnetometerStatusPanel.rotation, ikayaki.gui.MagnetometerStatusPanel.squid, and ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.updateDelay.

Here is the call graph for this function:

9.20.3.5 void ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old ()

Deprecated

handler positions now estimated by Handler.

Definition at line 461 of file MagnetometerStatusPanel.java.

References ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.posAmount, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.posDirection, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.posFrom, ikayaki.gui.MagnetometerStatusPanel.position, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rotateAmount, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rotateDirection, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rotateFrom, ikayaki.gui.MagnetometerStatusPanel.rotation, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rps, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.sps, ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.startTime, and ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.updateDelay.

9.20.4 Member Data Documentation

9.20.4.1 Thread ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.animatorThread [private]

Definition at line 363 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going(), ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.gone(), and ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.killAnimatorThread().

9.20.4.2 boolean ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going [private]

Definition at line 361 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run(), and ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old().

9.20.4.3 `int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.msps` [private]

Definition at line 355 of file MagnetometerStatusPanel.java.

9.20.4.4 `int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.posAmount` [private]

Definition at line 358 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.gone()`, and `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old()`.

9.20.4.5 `int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.posDirection` [private]

Definition at line 358 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old()`.

9.20.4.6 `int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.posFrom` [private]

Definition at line 358 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going()`, and `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old()`.

9.20.4.7 `int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rotateAmount` [private]

Definition at line 358 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.gone()`, and `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old()`.

9.20.4.8 `int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rotateDirection` [private]

Definition at line 358 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old()`.

9.20.4.9 `int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rotateFrom` [private]

Definition at line 358 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.going()`, and `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old()`.

9.20.4.10 int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.rps [private]

Definition at line 355 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.gone(), and ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old().

9.20.4.11 int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.sps [private]

Definition at line 355 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.gone(), and ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old().

9.20.4.12 long ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.startTime [private]

Definition at line 360 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.gone(), and ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old().

9.20.4.13 int ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.updateDelay [private]

Definition at line 352 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run(), and ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run_old().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MagnetometerStatusPanel.java

9.21 ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel Class Reference

Collaboration diagram for ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel:

Public Member Functions

- **ManualControlsPanel** ()
- void **setEnabled** (boolean enabled)
- void **setEnabled** ()
- void **setProject** (**Project** project)

Private Member Functions

- double **getDemagAmplitude** ()
- void **demagAmplitudeFieldError** ()

Private Attributes

- **Project** project
- final **ButtonGroup** **moveButtonGroup** = new **ButtonGroup**()
- final **JRadioButton** **moveLeft** = new **JRadioButton**("Left limit")
- final **JRadioButton** **moveHome** = new **JRadioButton**("Home")
- final **JRadioButton** **moveDemagZ** = new **JRadioButton**("Demag Z")
- final **JRadioButton** **moveDemagY** = new **JRadioButton**("Demag Y")
- final **JRadioButton** **moveBG** = new **JRadioButton**("BG")
- final **JRadioButton** **moveMeasure** = new **JRadioButton**("Measure")
- final **JRadioButton** **moveRight** = new **JRadioButton**("Right limit")
- final **ButtonGroup** **rotateButtonGroup** = new **ButtonGroup**()
- final **JRadioButton** **rotate0** = new **JRadioButton**("0176")
- final **JRadioButton** **rotate90** = new **JRadioButton**("90176")
- final **JRadioButton** **rotate180** = new **JRadioButton**("180176")
- final **JRadioButton** **rotate270** = new **JRadioButton**("270176")
- final **JButton** **measureAllButton** = new **JButton**()
- final **ComponentFlasher** **measureAllButtonFlasher** = new **ComponentFlasher**(**measureAllButton**)
- final **String** **measureAllButtonBaseText** = "Measure "
- final **JButton** **resetAllButton** = new **JButton**("Reset XYZ")
- final **ComponentFlasher** **resetAllButtonFlasher** = new **ComponentFlasher**(**resetAllButton**)
- final **JButton** **nextLineButton** = new **JButton**("Next line")
- final **ComponentFlasher** **nextLineButtonFlasher** = new **ComponentFlasher**(**nextLineButton**)
- final **JTextField** **demagAmplitudeField** = new **JTextField**()
- final **JLabel** **demagAmplitudeLabel** = new **JLabel**("mT")
- final **ComponentFlasher** **demagAmplitudeFieldFlasher** = new **ComponentFlasher**(**demagAmplitudeField**)
- final **JButton** **demagButton** = new **JButton**()

- final **ComponentFlasher** **demagButtonFlasher** = new **ComponentFlasher**(**demagButton**)
- final **String** **demagButtonBaseText** = "Demag "
- boolean **demagButtonIsY** = false
- final **JButton** **demagZButton** = new **JButton**("Demag in Z")
- final **ComponentFlasher** **demagZButtonFlasher** = new **ComponentFlasher**(**demagZButton**)
- final **JButton** **demagYButton** = new **JButton**("Demag in Y")
- final **ComponentFlasher** **demagYButtonFlasher** = new **ComponentFlasher**(**demagYButton**)
- final **JLabel** **moveLabel** = new **JLabel**("Move")
- final **JLabel** **rotateLabel** = new **JLabel**("Rotate")
- final **JLabel** **measureLabel** = new **JLabel**("Measure")
- final **JLabel** **demagLabel** = new **JLabel**("Demagnetize")
- final **Component**[] **components**

9.21.1 Detailed Description

Magnetometer manual controls. **MeasurementControlsPanel**(p.170) disables these whenever a normal measurement step is going.

Definition at line 492 of file `MagnetometerStatusPanel.java`.

9.21.2 Constructor & Destructor Documentation

9.21.2.1 ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel ()

Creates our stupid **ManualControlsPanel**(p.140).

Definition at line 627 of file `MagnetometerStatusPanel.java`.

References	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demag-
AmplitudeField,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demag-
AmplitudeLabel,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demag-
Button,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demag-
Label,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagYButton,
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagZButton,	ikayaki.Project.do-
ManualMoveLeftLimit(),	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.measure-
AllButton,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.measureLabel,
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveBG,	ikayaki.gui.Magnetometer-
StatusPanel.ManualControlsPanel.moveButtonGroup,	ikayaki.gui.Magnetometer-
StatusPanel.ManualControlsPanel.moveDemagY,	ikayaki.gui.Magnetometer-
StatusPanel.ManualControlsPanel.moveDemagZ,	ikayaki.gui.MagnetometerStatus-
Panel.ManualControlsPanel.moveHome,	ikayaki.gui.MagnetometerStatusPanel.Manual-
ControlsPanel.moveLabel,	ikayaki.gui.MagnetometerStatusPanel.ManualControls-
Panel.moveLeft,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.move-
Measure,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.move-
Right,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.nextLineButton,
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.project,	ikayaki.gui.Magnetometer-
StatusPanel.ManualControlsPanel.resetAllButton,	ikayaki.gui.MagnetometerStatus-
Panel.ManualControlsPanel.rotate0,	ikayaki.gui.MagnetometerStatusPanel.ManualControls-
Panel.rotate180,	ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotate270,

ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotate90, ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotateButtonGroup, and ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotateLabel.

Here is the call graph for this function:

9.21.3 Member Function Documentation

9.21.3.1 void ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagAmplitudeFieldError () [private]

Notifies of an error in demagAmplitudeField double-value: requests focus and flashes it.

Definition at line 868 of file MagnetometerStatusPanel.java.

9.21.3.2 double ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.getDemagAmplitude () [private]

Reads demag amplitude from demagAmplitudeField.

Returns:

double demagAmplitudeField's double-value, or, -1 if not valid.

Definition at line 854 of file MagnetometerStatusPanel.java.

9.21.3.3 void ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.setEnabled ()

Updates our enabled-status according to current project and handler-availability.

Definition at line 952 of file MagnetometerStatusPanel.java.

References ikayaki.gui.project.

9.21.3.4 void ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.setEnabled (boolean *enabled*)

Enables/disables all our components. Also sets selected radioboxes and demag-button to current handler status.

Parameters:

enabled true==enabled, false==disabled.

Definition at line 880 of file MagnetometerStatusPanel.java.

References ikayaki.gui.null, and ikayaki.gui.project.

Referenced by ikayaki.gui.MagnetometerStatusPanel.measurementUpdated(), and ikayaki.gui.MagnetometerStatusPanel.setSquid().

9.21.3.5 void ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.setProject (Project *project*)

Set active project, enable ourself if it's non-null.

Parameters:

project active project, or null for none.

Definition at line 961 of file MagnetometerStatusPanel.java.

References ikayaki.Project.isManualControlEnabled(), and ikayaki.gui.null.

Here is the call graph for this function:

9.21.4 Member Data Documentation

9.21.4.1 final Component [] ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.components [private]

Initial value:

```
new Component[]{
    moveLeft, moveHome, moveDemagZ, moveDemagY, moveBG, moveMeasure, moveRight,
    rotate0, rotate90, rotate180, rotate270,
    measureAllButton, resetAllButton, nextLineButton,
    demagAmplitudeField, demagAmplitudeLabel, demagButton, demagZButton, demagYButton,
    moveLabel, rotateLabel, measureLabel, demagLabel
}
```

Definition at line 616 of file MagnetometerStatusPanel.java.

9.21.4.2 final JTextField ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagAmplitudeField = new JTextField() [private]

Demagnetization amplitude in mT, used when demagZ/YButton is clicked.

Definition at line 585 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.3 final ComponentFlasher ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagAmplitudeFieldFlasher = new ComponentFlasher(demagAmplitudeField) [private]

Definition at line 587 of file MagnetometerStatusPanel.java.

9.21.4.4 final JLabel ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagAmplitudeLabel = new JLabel("mT") [private]

Definition at line 586 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.5 `final JButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagButton = new JButton()` [private]

Demagnetizes in Z, X or Y, depending on current handler position and rotation.

Definition at line 592 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`.

9.21.4.6 `final String ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagButtonBaseText = "Demag "` [private]

Definition at line 594 of file MagnetometerStatusPanel.java.

9.21.4.7 `final ComponentFlasher ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagButtonFlasher = new ComponentFlasher(demagButton)` [private]

Definition at line 593 of file MagnetometerStatusPanel.java.

9.21.4.8 `boolean ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagButtonIsY = false` [private]

Definition at line 595 of file MagnetometerStatusPanel.java.

9.21.4.9 `final JLabel ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagLabel = new JLabel("Demagnetize")` [private]

Definition at line 613 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`.

9.21.4.10 `final JButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagYButton = new JButton("Demag in Y")` [private]

Demagnetizes in Y (at current sample holder position) by calling `project.doManualDemagY(double)`.

Definition at line 606 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`.

9.21.4.11 `final ComponentFlasher ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagYButtonFlasher = new ComponentFlasher(demagYButton)` [private]

Definition at line 607 of file MagnetometerStatusPanel.java.

9.21.4.12 `final JButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagZButton = new JButton("Demag in Z")`
[private]

Demagnetizes in Z (at current sample holder position) by calling `project.doManualDemagZ(double)`.

Definition at line 600 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`.

9.21.4.13 `final ComponentFlasher ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.demagZButtonFlasher = new ComponentFlasher(demagZButton)` [private]

Definition at line 601 of file `MagnetometerStatusPanel.java`.

9.21.4.14 `final JButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.measureAllButton = new JButton()`
[private]

Measures X, Y and Z (at current sample holder position) by calling `project.doManualMeasure()`.

Definition at line 566 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`.

9.21.4.15 `final String ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.measureAllButtonBaseText = "Measure "`
[private]

Definition at line 568 of file `MagnetometerStatusPanel.java`.

9.21.4.16 `final ComponentFlasher ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.measureAllButtonFlasher = new ComponentFlasher(measureAllButton)` [private]

Definition at line 567 of file `MagnetometerStatusPanel.java`.

9.21.4.17 `final JLabel ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.measureLabel = new JLabel("Measure")`
[private]

Definition at line 612 of file `MagnetometerStatusPanel.java`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`.

9.21.4.18 `final JRadioButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveBG = new JRadioButton("BG")`
[private]

Moves sample holder to background position.

Definition at line 526 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel()`,
`ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`, and
`ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.21.4.19 `final ButtonGroup ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveButtonGroup = new ButtonGroup()`
[private]

Groups together all sample holder moving RadioButtons (moveXXX).

Definition at line 501 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`.

9.21.4.20 `final JRadioButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveDemagY = new JRadioButton("Demag Y")`
[private]

Moves sample holder to demagnetize-Y position.

Definition at line 521 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel()`,
`ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`, and
`ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.21.4.21 `final JRadioButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveDemagZ = new JRadioButton("Demag Z")`
[private]

Moves sample holder to demagnetize-Z position.

Definition at line 516 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel()`,
`ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel()`, and
`ikayaki.gui.MagnetometerStatusPanel.updatePositions()`.

9.21.4.22 `final JRadioButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.moveHome = new JRadioButton("Home")`
[private]

Moves sample holder to home position.

Definition at line 511 of file MagnetometerStatusPanel.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel()`,

ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel(), and
ikayaki.gui.MagnetometerStatusPanel.updatePositions().

**9.21.4.23 final JLabel ikayaki.gui.MagnetometerStatusPanel.Manual-
ControlsPanel.moveLabel = new JLabel("Move")**
[private]

Definition at line 610 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel(),
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel(), and
ikayaki.gui.MagnetometerStatusPanel.updatePositions().

**9.21.4.24 final JRadioButton ikayaki.gui.MagnetometerStatusPanel.Manual-
ControlsPanel.moveLeft = new JRadioButton("Left limit")**
[private]

Moves sample holder to left limit position.

Definition at line 506 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel(),
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel(), and
ikayaki.gui.MagnetometerStatusPanel.updatePositions().

**9.21.4.25 final JRadioButton ikayaki.gui.MagnetometerStatusPanel.Manual-
ControlsPanel.moveMeasure = new JRadioButton("Measure")**
[private]

Moves sample holder to measurement position.

Definition at line 531 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel(),
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel(), and
ikayaki.gui.MagnetometerStatusPanel.updatePositions().

**9.21.4.26 final JRadioButton ikayaki.gui.MagnetometerStatusPanel.Manual-
ControlsPanel.moveRight = new JRadioButton("Right limit")**
[private]

Moves sample holder to right limit position.

Definition at line 536 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusPanel(),
ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel(), and
ikayaki.gui.MagnetometerStatusPanel.updatePositions().

**9.21.4.27 final JButton ikayaki.gui.MagnetometerStatusPanel.Manual-
ControlsPanel.nextLineButton = new JButton("Next line")**
[private]

Moves to next measurement line (in main table).

Definition at line 579 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.28 final ComponentFlasher ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.nextLineButtonFlasher = new ComponentFlasher(nextLineButton) [private]

Definition at line 580 of file MagnetometerStatusPanel.java.

9.21.4.29 Project ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.project [private]

Currently open project.

Definition at line 496 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.30 final JButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.resetAllButton = new JButton("Reset XYZ") [private]

Resets X, Y and Z by calling project.doManualReset()? Does what?

Definition at line 573 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.31 final ComponentFlasher ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.resetAllButtonFlasher = new ComponentFlasher(resetAllButton) [private]

Definition at line 574 of file MagnetometerStatusPanel.java.

9.21.4.32 final JRadioButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotate0 = new JRadioButton("0176") [private]

Rotates sample holder to angle 0.

Definition at line 546 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.33 final JRadioButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotate180 = new JRadioButton("180176") [private]

Rotates sample holder to angle 180.

9.21 ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel Class Reference149

Definition at line 556 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.34 final JRadioButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotate270 = new JRadioButton("270176")
[private]

Rotates sample holder to angle 270.

Definition at line 561 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.35 final JRadioButton ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotate90 = new JRadioButton("90176")
[private]

Rotates sample holder to angle 90.

Definition at line 551 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.36 final ButtonGroup ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotateButtonGroup = new ButtonGroup()
[private]

Groups together all sample holder rotating RadioButtons (rotateXXX).

Definition at line 541 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.21.4.37 final JLabel ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.rotateLabel = new JLabel("Rotate")
[private]

Definition at line 611 of file MagnetometerStatusPanel.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MagnetometerStatusPanel.java

9.22 ikayaki.gui.MainMenuBar Class Reference

Collaboration diagram for ikayaki.gui.MainMenuBar:

Public Member Functions

- **MainMenuBar** (**MainViewPanel** main)

Private Member Functions

- void **initialize** ()

Private Attributes

- **MainViewPanel** main
- **JMenu** fileMenu
- Action newProject
- Action openProject
- **JMenu** openRecentProjectMenu
- **JMenu** exportProjectMenu
- Action exportProjectToDAT
- Action exportProjectToDTD
- Action exportProjectToSRM
- Action print
- Action printPreview
- Action exit
- **JMenu** measurementMenu
- Action autoStep
- Action singleStep
- Action pause
- Action abort
- **JMenu** toolsMenu
- Action programSettings
- Action deviceSettings
- **JMenu** helpMenu
- Action help
- Action about

9.22.1 Detailed Description

Creates Menu items for Menubar and makes action listeners for them.

Author:

Esko Luontola

Definition at line 40 of file MainMenuBar.java.

9.22.2 Constructor & Destructor Documentation

9.22.2.1 ikayaki.gui.MainMenuBar.MainMenuBar (MainViewPanel *main*)

Creates all components and makes menu and sets ActionListeners.

Definition at line 73 of file MainMenuBar.java.

References ikayaki.gui.MainMenuBar.abort, ikayaki.gui.MainMenuBar.about, ikayaki.gui.MainMenuBar.autoStep, ikayaki.gui.MainMenuBar.deviceSettings, ikayaki.gui.MainMenuBar.exit, ikayaki.gui.MainMenuBar.exportProjectMenu, ikayaki.gui.MainMenuBar.exportProjectToDAT, ikayaki.gui.MainMenuBar.exportProjectToDTD, ikayaki.gui.MainMenuBar.exportProjectToSRM, ikayaki.gui.MainMenuBar.fileMenu, ikayaki.gui.MainMenuBar.help, ikayaki.gui.MainMenuBar.helpMenu, ikayaki.gui.MainMenuBar.initialize(), ikayaki.gui.MainMenuBar.measurementMenu, ikayaki.gui.MainMenuBar.newProject, ikayaki.gui.MainMenuBar.openProject, ikayaki.gui.MainMenuBar.openRecentProjectMenu, ikayaki.gui.MainMenuBar.pause, ikayaki.gui.MainMenuBar.print, ikayaki.gui.MainMenuBar.printPreview, ikayaki.gui.MainMenuBar.programSettings, ikayaki.gui.MainMenuBar.singleStep, and ikayaki.gui.MainMenuBar.toolsMenu.

Here is the call graph for this function:

9.22.3 Member Function Documentation

9.22.3.1 void ikayaki.gui.MainMenuBar.initialize () [private]

Initializes the private action fields of the class.

Definition at line 173 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4 Member Data Documentation

9.22.4.1 Action ikayaki.gui.MainMenuBar.abort [private]

Definition at line 60 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.2 Action ikayaki.gui.MainMenuBar.about [private]

Definition at line 68 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.3 Action ikayaki.gui.MainMenuBar.autoStep [private]

Definition at line 57 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.4 Action ikayaki.gui.MainMenuBar.deviceSettings [private]

Definition at line 64 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.5 Action ikayaki.gui.MainMenuBar.exit [private]

Definition at line 54 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.6 JMenu ikayaki.gui.MainMenuBar.exportProjectMenu [private]

Definition at line 48 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.7 Action ikayaki.gui.MainMenuBar.exportProjectToDAT [private]

Definition at line 49 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.8 Action ikayaki.gui.MainMenuBar.exportProjectToDTD [private]

Definition at line 50 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.9 Action ikayaki.gui.MainMenuBar.exportProjectToSRM [private]

Definition at line 51 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.10 JMenu ikayaki.gui.MainMenuBar.fileMenu [private]

Definition at line 44 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.11 Action ikayaki.gui.MainMenuBar.help [private]

Definition at line 67 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.12 JMenu ikayaki.gui.MainMenuBar.helpMenu [private]

Definition at line 66 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.13 `MainViewPanel ikayaki.gui.MainMenuBar.main` [private]

Definition at line 42 of file MainMenuBar.java.

9.22.4.14 `JMenu ikayaki.gui.MainMenuBar.measurementMenu` [private]

Definition at line 56 of file MainMenuBar.java.

Referenced by `ikayaki.gui.MainMenuBar.MainMenuBar()`.

9.22.4.15 `Action ikayaki.gui.MainMenuBar.newProject` [private]

Definition at line 45 of file MainMenuBar.java.

Referenced by `ikayaki.gui.MainMenuBar.MainMenuBar()`.

9.22.4.16 `Action ikayaki.gui.MainMenuBar.openProject` [private]

Definition at line 46 of file MainMenuBar.java.

Referenced by `ikayaki.gui.MainMenuBar.MainMenuBar()`.

9.22.4.17 `JMenu ikayaki.gui.MainMenuBar.openRecentProjectMenu` [private]

Definition at line 47 of file MainMenuBar.java.

Referenced by `ikayaki.gui.MainMenuBar.MainMenuBar()`.

9.22.4.18 `Action ikayaki.gui.MainMenuBar.pause` [private]

Definition at line 59 of file MainMenuBar.java.

Referenced by `ikayaki.gui.MainMenuBar.MainMenuBar()`.

9.22.4.19 `Action ikayaki.gui.MainMenuBar.print` [private]

Definition at line 52 of file MainMenuBar.java.

Referenced by `ikayaki.gui.MainMenuBar.MainMenuBar()`.

9.22.4.20 `Action ikayaki.gui.MainMenuBar.printPreview` [private]

Definition at line 53 of file MainMenuBar.java.

Referenced by `ikayaki.gui.MainMenuBar.MainMenuBar()`.

9.22.4.21 `Action ikayaki.gui.MainMenuBar.programSettings` [private]

Definition at line 63 of file MainMenuBar.java.

Referenced by `ikayaki.gui.MainMenuBar.MainMenuBar()`.

9.22.4.22 Action ikayaki.gui.MainMenuBar.singleStep [private]

Definition at line 58 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

9.22.4.23 JMenu ikayaki.gui.MainMenuBar.toolsMenu [private]

Definition at line 62 of file MainMenuBar.java.

Referenced by ikayaki.gui.MainMenuBar.MainMenuBar().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MainMenuBar.java

9.23 ikayaki.gui.MainStatusBar Class Reference

Inherits **ikayaki.gui.ProjectComponent**.

Inheritance diagram for ikayaki.gui.MainStatusBar: Collaboration diagram for ikayaki.gui.MainStatusBar:

Public Member Functions

- **MainStatusBar** ()

Private Member Functions

- void **calculateStatus** (String *phase*, int *sequenceStep*, int *currentStep*)
- void **setMeasurement** (int **projectType**, int[] *sequence*)

Private Attributes

- JLabel **measurementStatus**
- JProgressBar **measurementProgress**
- int[] **currentSequence**
- int **projectType**

9.23.1 Detailed Description

Creates its components and listens project events on status change and calculates estimated time for measurement

Author:

Definition at line 32 of file MainStatusBar.java.

9.23.2 Constructor & Destructor Documentation

9.23.2.1 ikayaki.gui.MainStatusBar.MainStatusBar ()

Creates all components with default settings and sets Listener for **MeasurementEvent**(p.188).

Definition at line 61 of file MainStatusBar.java.

9.23.3 Member Function Documentation

9.23.3.1 void ikayaki.gui.MainStatusBar.calculateStatus (String *phase*, int *sequenceStep*, int *currentStep*) [private]

Recalculates current progress and updates status.

Definition at line 69 of file MainStatusBar.java.

9.23.3.2 void ikayaki.gui.MainStatusBar.setMeasurement (int *projectType*, int[] *sequence*) [private]

Formats status and creates new measurement status values.

Definition at line 76 of file MainStatusBar.java.

9.23.4 Member Data Documentation**9.23.4.1 int [] ikayaki.gui.MainStatusBar.currentSequence [private]**

current projects sequence

Definition at line 51 of file MainStatusBar.java.

9.23.4.2 JProgressBar ikayaki.gui.MainStatusBar.measurementProgress [private]

progress of sequence/measurement as per cent of whole process

Definition at line 46 of file MainStatusBar.java.

9.23.4.3 JLabel ikayaki.gui.MainStatusBar.measurementStatus [private]

text comment of current status(moving,measurement,demagnetization)

Definition at line 41 of file MainStatusBar.java.

9.23.4.4 int ikayaki.gui.MainStatusBar.projectType [private]

current projects type (we know if we are doing demagnetization or not)

Definition at line 56 of file MainStatusBar.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MainStatusBar.java

9.24 ikayaki.gui.MainViewPanel Class Reference

Inherits `ikayaki.gui.ProjectComponent`.

Inheritance diagram for `ikayaki.gui.MainViewPanel`: Collaboration diagram for `ikayaki.gui.MainViewPanel`:

Public Member Functions

- `MainViewPanel (Project project)`
- `Squid getSquid ()`
- `void setSquid (Squid squid)`
- Override `Project getProject ()`
- Override `void setProject (Project project)`
- Override `void projectUpdated (ProjectEvent event)`
- `void exitProgram ()`
- `void loadProject (File file)`
- `void createProject (File file, Project.Type type)`
- `void exportProject (Project project, String type, File output)`
- `MainMenuBar getMenuBar ()`
- `MainStatusBar getStatusBar ()`
- `MeasurementGraphsPanel getMeasurementGraphsPanel ()`
- `MeasurementDetailsPanel getMeasurementDetailsPanel ()`
- `MeasurementControlsPanel getMeasurementControlsPanel ()`
- `MeasurementSequencePanel getMeasurementSequencePanel ()`
- `ProjectInformationPanel getProjectInformationPanel ()`
- `CalibrationPanel getCalibrationPanel ()`
- `ProjectExplorerPanel getProjectExplorerPanel ()`
- `Action getNewProjectAction ()`
- `Action getOpenProjectAction ()`
- `Action getExportProjectToDATAAction ()`
- `Action getExportProjectToTDTAction ()`
- `Action getExportProjectToSRMAAction ()`
- `Action getPrintAction ()`
- `Action getPrintPreviewAction ()`
- `Action getExitAction ()`
- `Action getProgramSettingsAction ()`
- `Action getDeviceSettingsAction ()`
- `Action getHelpAction ()`
- `Action getAboutAction ()`

Private Attributes

- `Squid squid`
- `Project project = null`
- `Project latestMeasuringProject = null`
- `MainMenuBar menuBar`
- `MainStatusBar statusBar`
- `JSplitPane splitPane`
- `ProjectExplorerPanel projectExplorerPanel`

- **CalibrationPanel** calibrationPanel
- **ProjectInformationPanel** projectInformationPanel
- **MeasurementSequencePanel** measurementSequencePanel
- **MeasurementControlsPanel** measurementControlsPanel
- **MeasurementDetailsPanel** measurementDetailsPanel
- **MeasurementGraphsPanel** measurementGraphsPanel
- Action **newProjectAction**
- Action **openProjectAction**
- Action **exportProjectToDATAAction**
- Action **exportProjectToDTDAAction**
- Action **exportProjectToSRMAAction**
- Action **printAction**
- Action **printPreviewAction**
- Action **exitAction**
- Action **programSettingsAction**
- Action **deviceSettingsAction**
- Action **helpAction**
- Action **aboutAction**

Static Private Attributes

- static final int **DIVIDER_DEFAULT_LOCATION** = 300
- static final int **DIVIDER_SIZE** = 5

Classes

- class **NewProjectFileChooser**

9.24.1 Detailed Description

Creates the main view panels (split panels) and Squid and **Project**(p.264) components. It also tells everybody if the current project is changed.

Author:

Esko Luontola

Definition at line 48 of file MainViewPanel.java.

9.24.2 Constructor & Destructor Documentation

9.24.2.1 ikayaki.gui.MainViewPanel.MainViewPanel (Project *project*)

Loads default view and creates all components and panels. Splitpanel between Calibration, Explorer, Information and rest.

Parameters:

project the project to be opened, or null to open the last known project.

Definition at line 102 of file MainViewPanel.java.

References ikayaki.gui.MainViewPanel.DIVIDER_DEFAULT_LOCATION, ikayaki.gui.MainViewPanel.DIVIDER_SIZE, ikayaki.gui.MainViewPanel.getCalibrationPanel(), ikayaki.gui.MainViewPanel.getMeasurementControlsPanel(), ikayaki.gui.MainViewPanel.getMeasurementDetailsPanel(), ikayaki.gui.MainViewPanel.getMeasurementGraphsPanel(), ikayaki.gui.MainViewPanel.getMeasurementSequencePanel(), ikayaki.gui.ProjectComponent.getParentFrame(), ikayaki.gui.MainViewPanel.getProjectExplorerPanel(), ikayaki.gui.MainViewPanel.getProjectInformationPanel(), ikayaki.squid.Squid.instance, ikayaki.squid.Squid.isOK(), ikayaki.Project.loadProject(), ikayaki.gui.null, ikayaki.gui.MainViewPanel.setSquid(), ikayaki.gui.MainViewPanel.splitPane, and ikayaki.gui.MainViewPanel.squid.

Here is the call graph for this function:

9.24.3 Member Function Documentation

9.24.3.1 void ikayaki.gui.MainViewPanel.createProject (File *file*, Project.Type *type*)

Creates a project file and tries to set it as the active project. Will show an error dialog if operation failed.

Parameters:

file the project file to be created.

type the type of the project.

Exceptions:

NullPointerException if file or type is null.

Definition at line 466 of file MainViewPanel.java.

References ikayaki.gui.null, and ikayaki.gui.project.

9.24.3.2 void ikayaki.gui.MainViewPanel.exitProgram ()

Tries to exit the program. Will do nothing if a measurement is running. Saves all settings and project files before exiting.

Definition at line 389 of file MainViewPanel.java.

References ikayaki.gui.null.

9.24.3.3 void ikayaki.gui.MainViewPanel.exportProject (Project *project*, String *type*, File *output*)

Opens a file chooser and exports the project to a different file format.

Parameters:

project the project to be exported.

type the type of file to export from the current project.

output the file to write to, or null to open a file chooser.

Exceptions:

NullPointerException if type or the current project is null.

IllegalArgumentException if type is not "dat", "tdt" or "srm".

Definition at line 489 of file MainViewPanel.java.

References `ikayaki.Project.exportToDAT()`, `ikayaki.Project.exportToSRM()`,
`ikayaki.Project.exportToTDT()`, and `ikayaki.gui.null`.

Here is the call graph for this function:

9.24.3.4 Action `ikayaki.gui.MainViewPanel.getAboutAction()`

Definition at line 819 of file MainViewPanel.java.

References `ikayaki.gui.null`.

9.24.3.5 CalibrationPanel `ikayaki.gui.MainViewPanel.getCalibrationPanel()`

Definition at line 604 of file MainViewPanel.java.

References `ikayaki.gui.null`.

Referenced by `ikayaki.gui.MainViewPanel.MainViewPanel()`.

9.24.3.6 Action `ikayaki.gui.MainViewPanel.getDeviceSettingsAction()`

Definition at line 769 of file MainViewPanel.java.

References `ikayaki.gui.null`.

9.24.3.7 Action `ikayaki.gui.MainViewPanel.getExitAction()`

Definition at line 741 of file MainViewPanel.java.

References `ikayaki.gui.null`.

9.24.3.8 Action `ikayaki.gui.MainViewPanel.getExportProjectToDATAAction()`

Definition at line 670 of file MainViewPanel.java.

References `ikayaki.gui.null`.

9.24.3.9 Action `ikayaki.gui.MainViewPanel.getExportProjectToSRMAAction()`

Definition at line 696 of file MainViewPanel.java.

References `ikayaki.gui.null`.

9.24.3.10 Action `ikayaki.gui.MainViewPanel.getExportProjectToTDTAction()`

Definition at line 683 of file MainViewPanel.java.

References `ikayaki.gui.null`.

9.24.3.11 Action ikayaki.gui.MainViewPanel.getHelpAction ()

Definition at line 783 of file MainViewPanel.java.

References ikayaki.gui.null.

9.24.3.12 MeasurementControlsPanel ikayaki.gui.MainViewPanel.getMeasurementControlsPanel ()

Definition at line 580 of file MainViewPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.3.13 MeasurementDetailsPanel ikayaki.gui.MainViewPanel.getMeasurementDetailsPanel ()

Definition at line 572 of file MainViewPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.3.14 MeasurementGraphsPanel ikayaki.gui.MainViewPanel.getMeasurementGraphsPanel ()

Definition at line 564 of file MainViewPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.3.15 MeasurementSequencePanel ikayaki.gui.MainViewPanel.getMeasurementSequencePanel ()

Definition at line 588 of file MainViewPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.3.16 MainMenuBar ikayaki.gui.MainViewPanel.getMenuBar ()

Definition at line 550 of file MainViewPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.Ikayaki.Ikayaki().

9.24.3.17 Action ikayaki.gui.MainViewPanel.getNewProjectAction ()

Definition at line 622 of file MainViewPanel.java.

References ikayaki.gui.MainViewPanel.NewProjectFileChooser.getProjectType(), and ikayaki.gui.null.

Here is the call graph for this function:

9.24.3.18 Action ikayaki.gui.MainViewPanel.getOpenProjectAction ()

Definition at line 649 of file MainViewPanel.java.

References ikayaki.gui.null.

9.24.3.19 Action ikayaki.gui.MainViewPanel.getPrintAction ()

Definition at line 710 of file MainViewPanel.java.

References ikayaki.gui.null.

9.24.3.20 Action ikayaki.gui.MainViewPanel.getPrintPreviewAction ()

Definition at line 727 of file MainViewPanel.java.

References ikayaki.gui.null.

9.24.3.21 Action ikayaki.gui.MainViewPanel.getProgramSettingsAction ()

Definition at line 755 of file MainViewPanel.java.

References ikayaki.gui.null.

9.24.3.22 Override Project ikayaki.gui.MainViewPanel.getProject ()

Returns the active project, or null if no project is active.

Reimplemented from **ikayaki.gui.ProjectComponent** (p. 308).

Definition at line 283 of file MainViewPanel.java.

References ikayaki.gui.project.

9.24.3.23 ProjectExplorerPanel ikayaki.gui.MainViewPanel.getProjectExplorerPanel ()

Definition at line 612 of file MainViewPanel.java.

References ikayaki.gui.null, and ikayaki.gui.project.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.3.24 ProjectInformationPanel ikayaki.gui.MainViewPanel.getProjectInformationPanel ()

Definition at line 596 of file MainViewPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.3.25 Squid ikayaki.gui.MainViewPanel.getSquid ()

Returns the Squid instance used for communicating with the hardware, or null if the connection has not yet been fully initialized.

Definition at line 257 of file MainViewPanel.java.

9.24.3.26 MainStatusBar ikayaki.gui.MainViewPanel.getStatusBar ()

Definition at line 557 of file MainViewPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.Ikayaki.Ikayaki().

9.24.3.27 void ikayaki.gui.MainViewPanel.loadProject (File *file*)

Loads a project file and tries to set it as the active project. Will show an error dialog if operation failed.

Parameters:

file the project file to be loaded.

Exceptions:

NullPointerException if file is null.

Definition at line 445 of file MainViewPanel.java.

References ikayaki.gui.null, and ikayaki.gui.project.

9.24.3.28 Override void ikayaki.gui.MainViewPanel.projectUpdated (ProjectEvent *event*)

Keeps track of which project has a measurement running.

Reimplemented from ikayaki.gui.ProjectComponent (p. 308).

Definition at line 363 of file MainViewPanel.java.

References ikayaki.ProjectEvent.getProject(), ikayaki.ProjectEvent.getType(), ikayaki.gui.null, and ikayaki.gui.project.

Here is the call graph for this function:

9.24.3.29 Override void ikayaki.gui.MainViewPanel.setProject (Project *project*)

Loads a new project to all GUI components. This method will be called by the **Project**(p.264) Explorer and Calibration panels. It is possible to reopen the same project, in which case all GUI components will as well be updated.

Parameters:

project the project to be opened, or null to close the previous one.

Reimplemented from ikayaki.gui.ProjectComponent (p. 309).

Definition at line 293 of file MainViewPanel.java.

References ikayaki.Project.addProjectListener(), ikayaki.Project.getFile(), ikayaki.Project.getName(), ikayaki.Project.getType(), ikayaki.gui.null, and ikayaki.Project.setSquid().

Here is the call graph for this function:

9.24.3.30 void ikayaki.gui.MainViewPanel.setSquid (Squid *squid*)

Sets the fully initialized Squid interface for the use of the program. Sets the active project the owner of the squid by re-setting the active project.

Parameters:

squid an instance of the Squid.

Exceptions:

NullPointerException if squid is null.

IllegalStateException if the squid has already been set.

Definition at line 269 of file MainViewPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.4 Member Data Documentation

9.24.4.1 Action ikayaki.gui.MainViewPanel.aboutAction [private]

Definition at line 94 of file MainViewPanel.java.

9.24.4.2 CalibrationPanel ikayaki.gui.MainViewPanel.calibrationPanel [private]

Definition at line 74 of file MainViewPanel.java.

9.24.4.3 Action ikayaki.gui.MainViewPanel.deviceSettingsAction [private]

Definition at line 92 of file MainViewPanel.java.

9.24.4.4 final int ikayaki.gui.MainViewPanel.DIVIDER_DEFAULT_LOCATION = 300 [static, private]

Definition at line 50 of file MainViewPanel.java.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.4.5 final int ikayaki.gui.MainViewPanel.DIVIDER_SIZE = 5 [static, private]

Definition at line 51 of file MainViewPanel.java.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.4.6 Action ikayaki.gui.MainViewPanel.exitAction [private]

Definition at line 90 of file MainViewPanel.java.

9.24.4.7 Action ikayaki.gui.MainViewPanel.exportProjectToDATAAction [private]

Definition at line 85 of file MainViewPanel.java.

9.24.4.8 Action ikayaki.gui.MainViewPanel.exportProjectToDTDAction [private]

Definition at line 86 of file MainViewPanel.java.

9.24.4.9 Action ikayaki.gui.MainViewPanel.exportProjectToSRMAction [private]

Definition at line 87 of file MainViewPanel.java.

9.24.4.10 Action ikayaki.gui.MainViewPanel.helpAction [private]

Definition at line 93 of file MainViewPanel.java.

9.24.4.11 Project ikayaki.gui.MainViewPanel.latestMeasuringProject = null [private]

Project(p.264) which has had the latest measurement, or null if no measurements have been made..

Definition at line 66 of file MainViewPanel.java.

9.24.4.12 MeasurementControlsPanel ikayaki.gui.MainViewPanel.measurement-ControlsPanel [private]

Definition at line 78 of file MainViewPanel.java.

9.24.4.13 MeasurementDetailsPanel ikayaki.gui.MainViewPanel.measurement-DetailsPanel [private]

Definition at line 79 of file MainViewPanel.java.

9.24.4.14 MeasurementGraphsPanel ikayaki.gui.MainViewPanel.measurement-GraphsPanel [private]

Definition at line 80 of file MainViewPanel.java.

9.24.4.15 MeasurementSequencePanel ikayaki.gui.MainViewPanel.measurement-SequencePanel [private]

Definition at line 77 of file MainViewPanel.java.

9.24.4.16 MainMenuBar ikayaki.gui.MainViewPanel.menuBar [private]

Definition at line 69 of file MainViewPanel.java.

9.24.4.17 Action ikayaki.gui.MainViewPanel.newProjectAction [private]

Definition at line 83 of file MainViewPanel.java.

9.24.4.18 Action ikayaki.gui.MainViewPanel.openProjectAction [private]

Definition at line 84 of file MainViewPanel.java.

9.24.4.19 Action ikayaki.gui.MainViewPanel.printAction [private]

Definition at line 88 of file MainViewPanel.java.

9.24.4.20 Action ikayaki.gui.MainViewPanel.printPreviewAction [private]

Definition at line 89 of file MainViewPanel.java.

9.24.4.21 Action ikayaki.gui.MainViewPanel.programSettingsAction [private]

Definition at line 91 of file MainViewPanel.java.

9.24.4.22 Project ikayaki.gui.MainViewPanel.project = null [private]

Currently opened project, or null if no project is open.

Reimplemented from [ikayaki.gui.ProjectComponent](#) (p. 309).

Definition at line 61 of file MainViewPanel.java.

9.24.4.23 ProjectExplorerPanel ikayaki.gui.MainViewPanel.projectExplorerPanel [private]

Definition at line 73 of file MainViewPanel.java.

9.24.4.24 ProjectInformationPanel ikayaki.gui.MainViewPanel.projectInformation-Panel [private]

Definition at line 76 of file MainViewPanel.java.

9.24.4.25 JSplitPane ikayaki.gui.MainViewPanel.splitPane [private]

Definition at line 72 of file MainViewPanel.java.

Referenced by [ikayaki.gui.MainViewPanel.MainViewPanel\(\)](#).

9.24.4.26 Squid ikayaki.gui.MainViewPanel.squid [private]

Front-end for controlling the SQUID. Only one project at a time may have access to the SQUID.

Definition at line 56 of file MainViewPanel.java.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel().

9.24.4.27 MainStatusBar ikayaki.gui.MainViewPanel.statusBar [private]

Definition at line 70 of file MainViewPanel.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MainViewPanel.java

9.25 ikayaki.gui.MainViewPanel.NewProjectFileChooser Class Reference

Public Member Functions

- `NewProjectFileChooser` (File `currentDirectory`)
- `Project.Type` `getProjectType` ()

Protected Member Functions

- `JDialog` `createDialog` (Component `parent`) throws `HeadlessException`

Private Member Functions

- Component `createExtraButtons` ()

Private Attributes

- `JComboBox` `projectType`

9.25.1 Detailed Description

Customized `JFileChooser` for the use of `getNewProjectAction()`(p.161). Has controls for selecting the project's type.

Author:

Esko Luontola

Definition at line 845 of file `MainViewPanel.java`.

9.25.2 Constructor & Destructor Documentation

9.25.2.1 ikayaki.gui.MainViewPanel.NewProjectFileChooser.NewProjectFileChooser (File *currentDirectory*)

Definition at line 849 of file `MainViewPanel.java`.

References `ikayaki.gui.MainViewPanel.NewProjectFileChooser.projectType`.

9.25.3 Member Function Documentation

9.25.3.1 `JDialog` `ikayaki.gui.MainViewPanel.NewProjectFileChooser.createDialog` (Component *parent*) throws `HeadlessException` [protected]

Definition at line 855 of file `MainViewPanel.java`.

References `ikayaki.gui.MainViewPanel.NewProjectFileChooser.createExtraButtons()`.

Here is the call graph for this function:

9.25.3.2 Component `ikayaki.gui.MainViewPanel.NewProjectFileChooser.createExtraButtons ()` [private]

Definition at line 870 of file `MainViewPanel.java`.

References `ikayaki.gui.MainViewPanel.NewProjectFileChooser.projectType`.

Referenced by `ikayaki.gui.MainViewPanel.NewProjectFileChooser.createDialog()`.

9.25.3.3 Project.Type `ikayaki.gui.MainViewPanel.NewProjectFileChooser.getProjectType ()`

Definition at line 878 of file `MainViewPanel.java`.

Referenced by `ikayaki.gui.MainViewPanel.getNewProjectAction()`.

9.25.4 Member Data Documentation

9.25.4.1 JComboBox `ikayaki.gui.MainViewPanel.NewProjectFileChooser.projectType` [private]

Definition at line 847 of file `MainViewPanel.java`.

Referenced by `ikayaki.gui.MainViewPanel.NewProjectFileChooser.createExtraButtons()`, and `ikayaki.gui.MainViewPanel.NewProjectFileChooser.NewProjectFileChooser()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/MainViewPanel.java`

9.26 ikayaki.gui.MeasurementControlsPanel Class Reference

Inherits `ikayaki.gui.ProjectComponent`.

Inheritance diagram for `ikayaki.gui.MeasurementControlsPanel`:
 Collaboration diagram for `ikayaki.gui.MeasurementControlsPanel`:

Public Member Functions

- `MeasurementControlsPanel ()`
- Override void `setProject (Project project)`
- Override void `projectUpdated (ProjectEvent event)`
- Override void `measurementUpdated (MeasurementEvent event)`
- Action `getAutoStepAction ()`
- Action `getSingleStepAction ()`
- Action `getCalibrateAction ()`
- Action `getPauseAction ()`
- Action `getAbortAction ()`

Private Member Functions

- void `setOrientation (Project.Orientation orientation)`
- void `updateActions ()`

Private Attributes

- final JButton `measureButton`
- final JButton `pauseButton`
- final JButton `stepButton`
- final JButton `abortButton`
- final ComponentFlasher `measureButtonFlasher`
- final ComponentFlasher `pauseButtonFlasher`
- final ComponentFlasher `stepButtonFlasher`
- final ComponentFlasher `abortButtonFlasher`
- final ButtonGroup `zButtonGroup`
- final JRadioButton `zPlusRadioButton`
- final JRadioButton `zMinusRadioButton`
- final JPanel `sampleInsertPanel`
- final JLabel `sampleInsertTextLabel`
- final Icon `sampleInsertZPlusIcon`
- final Icon `sampleInsertZMinusIcon`
- final JLabel `sampleInsertIconLabel`
- final MagnetometerStatusPanel.ManualControlsPanel `manualControlsPanel`
- final MagnetometerStatusPanel `magnetometerStatusPanel`
- Action `autoStepAction`
- Action `singleStepAction`
- Action `calibrateAction`
- Action `pauseAction`
- Action `abortAction`

9.26.1 Detailed Description

Has "Measure"/"Pause", "Single step" and "Stop now!" buttons for controlling measurements; "+z/-z" radiobuttons for changing sample orientation used in calculations, help picture for inserting sample, picture of current magnetometer status, and, manual controls. `<p/>` Listens MeasurementEvents and ProjectEvents, and updates buttons and magnetometer status accordingly.

Author:

Samuli Kaipainen

Definition at line 44 of file MeasurementControlsPanel.java.

9.26.2 Constructor & Destructor Documentation

9.26.2.1 ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel ()

Event D: On zPlus/MinusRadioButton click - call `project.setOrientation(boolean)` where Plus is true and Minus is false.

Definition at line 90 of file MeasurementControlsPanel.java.

References `ikayaki.gui.MeasurementControlsPanel.abortButton`, `ikayaki.gui.MeasurementControlsPanel.abortButtonFlasher`, `ikayaki.gui.MeasurementControlsPanel.getAbortAction()`, `ikayaki.gui.MeasurementControlsPanel.getAutoStepAction()`, `ikayaki.gui.MeasurementControlsPanel.getPauseAction()`, `ikayaki.gui.ProjectComponent.getProject()`, `ikayaki.gui.MeasurementControlsPanel.getSingleStepAction()`, `ikayaki.gui.MeasurementControlsPanel.magnetometerStatusPanel`, `ikayaki.gui.MagnetometerStatusPanel.manualControlsPanel`, `ikayaki.gui.MeasurementControlsPanel.measureButton`, `ikayaki.gui.MeasurementControlsPanel.measureButtonFlasher`, `ikayaki.gui.MeasurementControlsPanel.pauseButton`, `ikayaki.gui.MeasurementControlsPanel.pauseButtonFlasher`, `ikayaki.gui.MeasurementControlsPanel.sampleInsertIconLabel`, `ikayaki.gui.MeasurementControlsPanel.sampleInsertPanel`, `ikayaki.gui.MeasurementControlsPanel.sampleInsertTextLabel`, `ikayaki.gui.MeasurementControlsPanel.sampleInsertZMinusIcon`, `ikayaki.gui.MeasurementControlsPanel.sampleInsertZPlusIcon`, `ikayaki.gui.MeasurementControlsPanel.setOrientation()`, `ikayaki.gui.MeasurementControlsPanel.stepButton`, `ikayaki.gui.MeasurementControlsPanel.stepButtonFlasher`, `ikayaki.gui.MeasurementControlsPanel.zButtonGroup`, `ikayaki.gui.MeasurementControlsPanel.zMinusRadioButton`, and `ikayaki.gui.MeasurementControlsPanel.zPlusRadioButton`.

Here is the call graph for this function:

9.26.3 Member Function Documentation

9.26.3.1 Action ikayaki.gui.MeasurementControlsPanel.getAbortAction ()

Event C: On stopButton click - call `project.doAbort()`; show critical error message if false is returned.

Definition at line 351 of file MeasurementControlsPanel.java.

References `ikayaki.gui.null`.

Referenced by `ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel()`.

9.26.3.2 Action `ikayaki.gui.MeasurementControlsPanel.getAutoStepAction ()`

Event A: On `measureButton` click - call `project.doAutoStep()` or `project.doPause()`, depending on current button status. Show error message if false is returned.

Definition at line 249 of file `MeasurementControlsPanel.java`.

References `ikayaki.gui.null`.

Referenced by `ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel()`.

9.26.3.3 Action `ikayaki.gui.MeasurementControlsPanel.getCalibrateAction ()`

Definition at line 299 of file `MeasurementControlsPanel.java`.

References `ikayaki.gui.null`.

9.26.3.4 Action `ikayaki.gui.MeasurementControlsPanel.getPauseAction ()`

Definition at line 323 of file `MeasurementControlsPanel.java`.

References `ikayaki.gui.null`.

Referenced by `ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel()`.

9.26.3.5 Action `ikayaki.gui.MeasurementControlsPanel.getSingleStepAction ()`

Event B: On `stepButton` click - call `project.doSingleStep()`; show error message if false is returned.

Definition at line 275 of file `MeasurementControlsPanel.java`.

References `ikayaki.gui.null`.

Referenced by `ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel()`.

9.26.3.6 Override `void ikayaki.gui.MeasurementControlsPanel.measurementUpdated (MeasurementEvent event)`

Event F: On `MeasurementEvent`(p. 188) - call `magnetometerStatusPanel.measurementUpdated(MeasurementEvent)`.

Parameters:

event `MeasurementEvent`(p. 188) received.

Reimplemented from `ikayaki.gui.ProjectComponent` (p. 308).

Definition at line 196 of file `MeasurementControlsPanel.java`.

9.26.3.7 Override `void ikayaki.gui.MeasurementControlsPanel.projectUpdated (ProjectEvent event)`

Event E: On `ProjectEvent`(p. 310) - update buttons and manual controls according to `project.isXXXEnabled()`.

Parameters:

event `ProjectEvent`(p. 310) received.

Reimplemented from **ikayaki.gui.ProjectComponent** (p. 308).

Definition at line 186 of file MeasurementControlsPanel.java.

9.26.3.8 void ikayaki.gui.MeasurementControlsPanel.setOrientation (Project.Orientation *orientation*) [private]

Sets zPlus/Minus radiobutton enabled, and the corresponding image as sample inserting help image.

Definition at line 203 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.3.9 Override void ikayaki.gui.MeasurementControlsPanel.setProject (Project *project*)

Call super.setProject(project), update buttons and manual controls according to project.is-XXXEnabled().

Parameters:

project project opened, or null to open no project.

Reimplemented from **ikayaki.gui.ProjectComponent** (p. 309).

Definition at line 169 of file MeasurementControlsPanel.java.

References ikayaki.Project.getOrientation(), ikayaki.Project.getSquid(), and ikayaki.gui.null.

Here is the call graph for this function:

9.26.3.10 void ikayaki.gui.MeasurementControlsPanel.updateActions () [private]

Checks the current state of the active project and enables/disables the measurement controls accordingly.

Definition at line 216 of file MeasurementControlsPanel.java.

References ikayaki.gui.null.

9.26.4 Member Data Documentation

9.26.4.1 Action ikayaki.gui.MeasurementControlsPanel.abortAction [private]

Definition at line 88 of file MeasurementControlsPanel.java.

9.26.4.2 final JButton ikayaki.gui.MeasurementControlsPanel.abortButton [private]

Definition at line 49 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.3 final ComponentFlasher ikayaki.gui.MeasurementControlsPanel.abort-ButtonFlasher [private]

Definition at line 55 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.4 Action ikayaki.gui.MeasurementControlsPanel.autoStepAction [private]

Definition at line 84 of file MeasurementControlsPanel.java.

9.26.4.5 Action ikayaki.gui.MeasurementControlsPanel.calibrateAction [private]

Definition at line 86 of file MeasurementControlsPanel.java.

9.26.4.6 final MagnetometerStatusPanel ikayaki.gui.MeasurementControlsPanel.magnetometerStatusPanel [private]

Magnetometer status panel; also holds move-radiobuttons from ManualControlsPanel.

Definition at line 81 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.7 final MagnetometerStatusPanel.ManualControlsPanel ikayaki.gui.MeasurementControlsPanel.manualControlsPanel [private]

Magnetometer manual controls.

Definition at line 76 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.8 final JButton ikayaki.gui.MeasurementControlsPanel.measureButton [private]

Definition at line 46 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.9 final ComponentFlasher ikayaki.gui.MeasurementControlsPanel.measure-ButtonFlasher [private]

Definition at line 52 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.10 Action ikayaki.gui.MeasurementControlsPanel.pauseAction [private]

Definition at line 87 of file MeasurementControlsPanel.java.

9.26.4.11 final JButton ikayaki.gui.MeasurementControlsPanel.pauseButton
[private]

Definition at line 47 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.12 final ComponentFlasher ikayaki.gui.MeasurementControlsPanel.pause-ButtonFlasher [private]

Definition at line 53 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.13 final JLabel ikayaki.gui.MeasurementControlsPanel.sampleInsertIcon-Label [private]

Definition at line 71 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.14 final JPanel ikayaki.gui.MeasurementControlsPanel.sampleInsertPanel
[private]

Draws a help image and text for sample inserting: "Put sample in holder arrow up."

Definition at line 67 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.15 final JLabel ikayaki.gui.MeasurementControlsPanel.sampleInsertText-Label [private]

Definition at line 68 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.16 final Icon ikayaki.gui.MeasurementControlsPanel.sampleInsertZMinus-Icon [private]

Definition at line 70 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.17 final Icon ikayaki.gui.MeasurementControlsPanel.sampleInsertZPlusIcon
[private]

Definition at line 69 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.18 Action ikayaki.gui.MeasurementControlsPanel.singleStepAction
[private]

Definition at line 85 of file MeasurementControlsPanel.java.

9.26.4.19 final JButton ikayaki.gui.MeasurementControlsPanel.stepButton
[private]

Definition at line 48 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

**9.26.4.20 final ComponentFlasher ikayaki.gui.MeasurementControlsPanel.step-
ButtonFlasher** [private]

Definition at line 54 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

9.26.4.21 final ButtonGroup ikayaki.gui.MeasurementControlsPanel.zButtonGroup
[private]

Groups together +z and -z RadioButtons.

Definition at line 60 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

**9.26.4.22 final JRadioButton ikayaki.gui.MeasurementControlsPanel.zMinusRadio-
Button** [private]

Definition at line 62 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

**9.26.4.23 final JRadioButton ikayaki.gui.MeasurementControlsPanel.zPlusRadio-
Button** [private]

Definition at line 61 of file MeasurementControlsPanel.java.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MeasurementControlsPanel.java

9.27 ikayaki.gui.MeasurementDetailsPanel Class Reference

Inherits **ikayaki.gui.ProjectComponent**.

Inheritance diagram for ikayaki.gui.MeasurementDetailsPanel: Collaboration diagram for ikayaki.gui.MeasurementDetailsPanel:

Public Member Functions

- **MeasurementDetailsPanel** ()
- Override void **setProject** (**Project** project)
- **MeasurementStep** **getStep** ()
- void **setStep** (**MeasurementStep** step)
- Override void **measurementUpdated** (**MeasurementEvent** event)

Private Attributes

- **JTable** **detailsTable**
- **DetailsTableModel** **detailsTableModel**
- **JTable** **errorsTable**
- **ErrorsTableModel** **errorsTableModel**
- **MeasurementStep** **step**

Classes

- class **DetailsTableModel**
- class **ErrorsTableModel**

9.27.1 Detailed Description

Shows the details of the active measurement step.

Author:

Esko Luontola

Definition at line 38 of file MeasurementDetailsPanel.java.

9.27.2 Constructor & Destructor Documentation

9.27.2.1 ikayaki.gui.MeasurementDetailsPanel.MeasurementDetailsPanel ()

Definition at line 51 of file MeasurementDetailsPanel.java.

References `ikayaki.gui.MeasurementDetailsPanel.detailsTable`, `ikayaki.gui.MeasurementDetailsPanel.detailsTableModel`, `ikayaki.gui.MeasurementDetailsPanel.errorsTable`, `ikayaki.gui.MeasurementDetailsPanel.errorsTableModel`, and `ikayaki.gui.null`.

9.27.3 Member Function Documentation

9.27.3.1 MeasurementStep ikayaki.gui.MeasurementDetailsPanel.getStep ()

Definition at line 114 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.step.

9.27.3.2 Override void ikayaki.gui.MeasurementDetailsPanel.measurementUpdated (MeasurementEvent event)

Does nothing; subclasses override this if they want to listen MeasurementEvents.

Parameters:

event MeasurementEvent (p. 188) received.

Reimplemented from ikayaki.gui.ProjectComponent (p. 308).

Definition at line 124 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.detailsTableModel, ikayaki.gui.MeasurementDetailsPanel.errorsTableModel, and ikayaki.gui.MeasurementDetailsPanel.step.

9.27.3.3 Override void ikayaki.gui.MeasurementDetailsPanel.setProject (Project project)

Sets the project for this **ProjectComponent**(p.307). Unregisters **MeasurementListener**(p.194) and **ProjectListener**(p.343) from the old project, and registers them to the new project.

Parameters:

project new active project, or null to make no project active.

Reimplemented from ikayaki.gui.ProjectComponent (p. 309).

Definition at line 109 of file MeasurementDetailsPanel.java.

References ikayaki.gui.null, and ikayaki.gui.MeasurementDetailsPanel.setStep().

Here is the call graph for this function:

9.27.3.4 void ikayaki.gui.MeasurementDetailsPanel.setStep (MeasurementStep step)

Definition at line 118 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.setProject().

9.27.4 Member Data Documentation

9.27.4.1 JTable ikayaki.gui.MeasurementDetailsPanel.detailsTable [private]

Definition at line 40 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.MeasurementDetailsPanel().

9.27.4.2 DetailsTableModel ikayaki.gui.MeasurementDetailsPanel.detailsTableModel [private]

Definition at line 41 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.MeasurementDetailsPanel(), and ikayaki.gui.MeasurementDetailsPanel.measurementUpdated().

9.27.4.3 JTable ikayaki.gui.MeasurementDetailsPanel.errorsTable [private]

Definition at line 43 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.MeasurementDetailsPanel().

9.27.4.4 ErrorsTableModel ikayaki.gui.MeasurementDetailsPanel.errorsTableModel [private]

Definition at line 44 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.MeasurementDetailsPanel(), and ikayaki.gui.MeasurementDetailsPanel.measurementUpdated().

9.27.4.5 MeasurementStep ikayaki.gui.MeasurementDetailsPanel.step [private]

The measurement step whose details are being shown or null to show a blank table.

Definition at line 49 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.getStep(), and ikayaki.gui.MeasurementDetailsPanel.measurementUpdated().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MeasurementDetailsPanel.java

9.28 ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel Class Reference

Collaboration diagram for ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel:

Public Member Functions

- **DetailsTableModel** ()
- **MeasurementStep** **getStep** ()
- void **setStep** (**MeasurementStep** step)
- int **getRowCount** ()
- int **getColumnCount** ()
- Override String **getColumnName** (int column)
- Override Class<?> **getColumnClass** (int columnIndex)
- Object **getValueAt** (int rowIndex, int columnIndex)
- **StyledWrapper** **wrap** (Object value, int rowIndex, int columnIndex)

Private Attributes

- **MeasurementStep** **step**
- final String[] **COLUMNS** = new String[]{" ", "X", "Y", "Z"}
- final int **HEADER_COLUMN** = 0
- final int **X_COLUMN** = 1
- final int **Y_COLUMN** = 2
- final int **Z_COLUMN** = 3
- NumberFormat **numberFormat** = new DecimalFormat("0.000000E0")
- **StyledWrapper** **defaultWrapper** = new **StyledWrapper**()
- **StyledWrapper** **headerWrapper** = new **StyledWrapper**()

9.28.1 Detailed Description

Table model for the details table.

Author:

Esko Luontola

Definition at line 136 of file MeasurementDetailsPanel.java.

9.28.2 Constructor & Destructor Documentation

9.28.2.1 ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.DetailsTableModel ()

Definition at line 151 of file MeasurementDetailsPanel.java.

References [ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.defaultWrapper](#), [ikayaki.gui.StyledWrapper.font](#), [ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.headerWrapper](#), and [ikayaki.gui.StyledWrapper.horizontalAlignment](#).

9.28.3 Member Function Documentation

9.28.3.1 Override Class<?> ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getColumnClass (int *columnIndex*)

Definition at line 203 of file MeasurementDetailsPanel.java.

9.28.3.2 int ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getColumnCount ()

Definition at line 195 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.COLUMNS.

9.28.3.3 Override String ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getColumnName (int *column*)

Definition at line 199 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.COLUMNS.

9.28.3.4 int ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getRowCount ()

Definition at line 166 of file MeasurementDetailsPanel.java.

References ikayaki.MeasurementStep.getProject(), ikayaki.MeasurementStep.getResult(), ikayaki.MeasurementStep.getResults(), ikayaki.MeasurementStep.getState(), ikayaki.gui.null, and ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.step.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt().

Here is the call graph for this function:

9.28.3.5 MeasurementStep ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getStep ()

Definition at line 157 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.step.

9.28.3.6 Object ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt (int *rowIndex*, int *columnIndex*)

Definition at line 207 of file MeasurementDetailsPanel.java.

References ikayaki.MeasurementStep.getProject(), ikayaki.MeasurementStep.getResult(), ikayaki.MeasurementStep.getResults(), ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getRowCount(), ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.HEADER_COLUMN, ikayaki.gui.null, ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.numberFormat, ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.step, ikayaki.gui.value, ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.wrap(), ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.X_COLUMN, ikayaki.gui.MeasurementDetailsPanel.Details-

TableModel.Y_COLUMN, and ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.Z_COLUMN.

Here is the call graph for this function:

9.28.3.7 void ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.setStep (MeasurementStep *step*)

Definition at line 161 of file MeasurementDetailsPanel.java.

9.28.3.8 StyledWrapper ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.wrap (Object *value*, int *rowIndex*, int *columnIndex*)

Definition at line 285 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.defaultWrapper, ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.HEADER_COLUMN, ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.headerWrapper, and ikayaki.gui.StyledWrapper.value.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt().

9.28.4 Member Data Documentation

9.28.4.1 final String [] ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.COLUMNS = new String[] {" ", "X", "Y", "Z"} [private]

Definition at line 140 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getColumnCount(), and ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel洗.getColumnName().

9.28.4.2 StyledWrapper ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.defaultWrapper = new StyledWrapper() [private]

Definition at line 148 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.DetailsTableModel(), and ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.wrap().

9.28.4.3 final int ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.HEADER_COLUMN = 0 [private]

Definition at line 141 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt(), and ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.wrap().

**9.28.4.4 StyledWrapper ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.headerWrapper = new StyledWrapper()
[private]**

Definition at line 149 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.DetailsTableModel(), and ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.wrap().

**9.28.4.5 NumberFormat ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.numberFormat = new DecimalFormat("0.000000E0")
[private]**

Definition at line 146 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt().

9.28.4.6 MeasurementStep ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.step [private]

Definition at line 138 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getRowCount(), ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getStep(), and ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt().

9.28.4.7 final int ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.X_-COLUMN = 1 [private]

Definition at line 142 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt().

9.28.4.8 final int ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.Y_-COLUMN = 2 [private]

Definition at line 143 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt().

9.28.4.9 final int ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.Z_-COLUMN = 3 [private]

Definition at line 144 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MeasurementDetailsPanel.java

9.29 ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel Class Reference

Collaboration diagram for ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel:

Public Member Functions

- **ErrorsTableModel** ()
- **MeasurementStep** **getStep** ()
- void **setStep** (**MeasurementStep** step)
- int **getRowCount** ()
- int **getColumnCount** ()
- Override String **getColumnName** (int column)
- Override Class<?> **getColumnClass** (int columnIndex)
- Object **getValueAt** (int rowIndex, int columnIndex)
- **StyledWrapper** **wrap** (Object value, int rowIndex, int columnIndex)

Private Attributes

- **MeasurementStep** step
- final String[] **COLUMNS** = new String[]{" ", "Signal/Noise", "Signal/Drift", "Signal/Holder"}
- final int **HEADER_COLUMN** = 0
- final int **SIGNAL_NOISE_COLUMN** = 1
- final int **SIGNAL_DRIFT_COLUMN** = 2
- final int **SIGNAL_HOLDER_COLUMN** = 3
- **StyledWrapper** **defaultWrapper** = new **StyledWrapper**()
- **StyledWrapper** **headerWrapper** = new **StyledWrapper**()
- **DecimalFormat** **numberFormat** = new **DecimalFormat**()

9.29.1 Detailed Description

Table model for the error table.

Author:

Esko Luontola

Definition at line 306 of file MeasurementDetailsPanel.java.

9.29.2 Constructor & Destructor Documentation

9.29.2.1 ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.ErrorsTableModel ()

Definition at line 320 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.defaultWrapper, ikayaki.gui.StyledWrapper.font, ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.headerWrapper, ikayaki.gui.StyledWrapper.horizontalAlignment, and ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.numberFormat.

9.29.3 Member Function Documentation

9.29.3.1 Override Class<?> ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getColumnClass (int *columnIndex*)

Definition at line 349 of file MeasurementDetailsPanel.java.

9.29.3.2 int ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getColumnCount ()

Definition at line 341 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.COLUMNS.

9.29.3.3 Override String ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getColumnName (int *column*)

Definition at line 345 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.COLUMNS.

9.29.3.4 int ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getRowCount ()

Definition at line 337 of file MeasurementDetailsPanel.java.

9.29.3.5 MeasurementStep ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getStep ()

Definition at line 328 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.step.

9.29.3.6 Object ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getValueAt (int *rowIndex*, int *columnIndex*)

Definition at line 353 of file MeasurementDetailsPanel.java.

References ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.HEADER_COLUMN, ikayaki.gui.null, ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.numberFormat, ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.SIGNAL_DRIFT_COLUMN, ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.SIGNAL_HOLDER_COLUMN, ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.SIGNAL_NOISE_COLUMN, ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.step, ikayaki.gui.value, and ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.wrap().

Here is the call graph for this function:

9.29.3.7 void ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.setStep (MeasurementStep *step*)

Definition at line 332 of file MeasurementDetailsPanel.java.

9.29.3.8 **StyledWrapper** `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.wrap (Object value, int rowIndex, int columnIndex)`

Definition at line 379 of file `MeasurementDetailsPanel.java`.

References `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.defaultWrapper`, `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.HEADER_COLUMN`, `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.headerWrapper`, and `ikayaki.gui.StyledWrapper.value`.

Referenced by `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getValueAt()`.

9.29.4 Member Data Documentation

9.29.4.1 `final String [] ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.COLUMNS = new String[]{" ", "Signal/Noise", "Signal/Drift", "Signal/Holder"} [private]`

Definition at line 310 of file `MeasurementDetailsPanel.java`.

Referenced by `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getColumnCount()`, and `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel洗getColumnName()`.

9.29.4.2 **StyledWrapper** `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.defaultWrapper = new StyledWrapper() [private]`

Definition at line 316 of file `MeasurementDetailsPanel.java`.

Referenced by `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.ErrorsTableModel()`, and `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.wrap()`.

9.29.4.3 `final int ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.HEADER_COLUMN = 0 [private]`

Definition at line 311 of file `MeasurementDetailsPanel.java`.

Referenced by `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getValueAt()`, and `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.wrap()`.

9.29.4.4 **StyledWrapper** `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.headerWrapper = new StyledWrapper() [private]`

Definition at line 317 of file `MeasurementDetailsPanel.java`.

Referenced by `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.ErrorsTableModel()`, and `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.wrap()`.

**9.29.4.5 DecimalFormat ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.numberFormat = new DecimalFormat()
[private]**

Definition at line 318 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.ErrorsTableModel(), and ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getValueAt().

9.29.4.6 final int ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.SIGNAL_DRIFT_COLUMN = 2 [private]

Definition at line 313 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getValueAt().

9.29.4.7 final int ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.SIGNAL_HOLDER_COLUMN = 3 [private]

Definition at line 314 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getValueAt().

9.29.4.8 final int ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.SIGNAL_NOISE_COLUMN = 1 [private]

Definition at line 312 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getValueAt().

9.29.4.9 MeasurementStep ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.step [private]

Definition at line 308 of file MeasurementDetailsPanel.java.

Referenced by ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getStep(), and ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.getValueAt().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MeasurementDetailsPanel.java

9.30 ikayaki.MeasurementEvent Class Reference

Collaboration diagram for ikayaki.MeasurementEvent:

Public Types

- enum `Type` {
`STEP_START`, `STEP_END`, `STEP_ABORTED`, `HANDLER_MOVE`,
`HANDLER_ROTATE`, `HANDLER_STOP`, `DEMAGNETIZE_START`,
`DEMAGNETIZE_END`,
`VALUE_MEASURED` }

Public Member Functions

- `MeasurementEvent` (`Project project`, `MeasurementStep step`, `Type type`)
- `Project` `getProject` ()
- `MeasurementStep` `getStep` ()
- `Type` `getType` ()

Private Attributes

- `Project` `project`
- `MeasurementStep` `step`
- `Type` `type`

9.30.1 Detailed Description

`MeasurementEvent`(p.188) is used to notify listeners about the stages of an ongoing measurement.

Author:

Esko Luontola

Definition at line 32 of file `MeasurementEvent.java`.

9.30.2 Member Enumeration Documentation

9.30.2.1 enum ikayaki::MeasurementEvent::Type

The type of a measurement event.

Enumeration values:

STEP_START

STEP_END

STEP_ABORTED

HANDLER_MOVE

HANDLER_ROTATE

HANDLER_STOP
DEMAGNETIZE_START
DEMAGNETIZE_END
VALUE_MEASURED

Definition at line 91 of file MeasurementEvent.java.

9.30.3 Constructor & Destructor Documentation

9.30.3.1 ikayaki.MeasurementEvent.MeasurementEvent (Project *project*, MeasurementStep *step*, Type *type*)

Creates a new measurement event.

Parameters:

project the project whose measurement sent this event.

step the measurement that sent this event.

type the type of event this is.

Exceptions:

NullPointerException if project or type is null.

Definition at line 57 of file MeasurementEvent.java.

References ikayaki.gui.null.

9.30.4 Member Function Documentation

9.30.4.1 Project ikayaki.MeasurementEvent.getProject ()

Returns the project whose measurement sent this event.

Definition at line 70 of file MeasurementEvent.java.

References ikayaki.MeasurementEvent.project.

9.30.4.2 MeasurementStep ikayaki.MeasurementEvent.getStep ()

Returns the measurement that sent this event. Can be null, if this event was sent by a manual command.

Definition at line 77 of file MeasurementEvent.java.

References ikayaki.MeasurementEvent.step.

Referenced by ikayaki.gui.MeasurementSequenceTableModel.measurementUpdated().

9.30.4.3 Type ikayaki.MeasurementEvent.getType ()

Returns the type of event this is.

Definition at line 84 of file MeasurementEvent.java.

References `ikayaki.MeasurementEvent.type`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.measurementUpdated()`, and `ikayaki.gui.MeasurementGraphsPanel.measurementUpdated()`.

9.30.5 Member Data Documentation

9.30.5.1 Project `ikayaki.MeasurementEvent.project` [private]

The project whose measurement sent this event.

Definition at line 37 of file `MeasurementEvent.java`.

Referenced by `ikayaki.MeasurementEvent.getProject()`.

9.30.5.2 MeasurementStep `ikayaki.MeasurementEvent.step` [private]

The measurement that sent this event.

Definition at line 42 of file `MeasurementEvent.java`.

Referenced by `ikayaki.MeasurementEvent.getStep()`.

9.30.5.3 Type `ikayaki.MeasurementEvent.type` [private]

The type of event this is.

Definition at line 47 of file `MeasurementEvent.java`.

Referenced by `ikayaki.MeasurementEvent.getType()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/MeasurementEvent.java`

9.31 ikayaki.gui.MeasurementGraphsPanel Class Reference

Inherits `ikayaki.gui.ProjectComponent`, and `ikayaki.ProjectListener`.

Inheritance diagram for `ikayaki.gui.MeasurementGraphsPanel`: Collaboration diagram for `ikayaki.gui.MeasurementGraphsPanel`:

Public Member Functions

- `MeasurementGraphsPanel ()`
- `void projectUpdated (ProjectEvent event)`
- `void measurementUpdated (MeasurementEvent event)`
- Override `void setProject (Project project)`

Static Public Member Functions

- `static void main (String args[])`

Private Member Functions

- `void updatePlots ()`

Private Attributes

- `Vector< Plot > plots = new Vector<Plot>()`

9.31.1 Detailed Description

Author:

Aki Sysmäläinen

Definition at line 40 of file `MeasurementGraphsPanel.java`.

9.31.2 Constructor & Destructor Documentation

9.31.2.1 `ikayaki.gui.MeasurementGraphsPanel.MeasurementGraphsPanel ()`

Creates new panel for plots

Definition at line 49 of file `MeasurementGraphsPanel.java`.

References `ikayaki.gui.ProjectComponent.getParentFrame()`, `ikayaki.gui.ProjectComponent.getProject()`, `ikayaki.gui.null`, `ikayaki.gui.MeasurementGraphsPanel.plots`, and `ikayaki.gui.MeasurementGraphsPanel.setProject()`.

Here is the call graph for this function:

9.31.3 Member Function Documentation

9.31.3.1 static void ikayaki.gui.MeasurementGraphsPanel.main (String args[]) [static]

Definition at line 143 of file MeasurementGraphsPanel.java.

9.31.3.2 void ikayaki.gui.MeasurementGraphsPanel.measurementUpdated (MeasurementEvent event)

Parameters:

event MeasurementEvent(p.188) received.

Reimplemented from ikayaki.gui.ProjectComponent (p.308).

Definition at line 125 of file MeasurementGraphsPanel.java.

References ikayaki.MeasurementEvent.getType().

Here is the call graph for this function:

9.31.3.3 void ikayaki.gui.MeasurementGraphsPanel.projectUpdated (ProjectEvent event)

Listener to listen events if projects state is changed.

Reimplemented from ikayaki.gui.ProjectComponent (p.308).

Definition at line 116 of file MeasurementGraphsPanel.java.

9.31.3.4 Override void ikayaki.gui.MeasurementGraphsPanel.setProject (Project project)

Sets the project for this ProjectComponent(p.307). Unregisters MeasurementListener(p.194) and ProjectListener(p.343) from the old project, and registers them to the new project.

Parameters:

project new active project, or null to make no project active.

Reimplemented from ikayaki.gui.ProjectComponent (p.309).

Definition at line 137 of file MeasurementGraphsPanel.java.

Referenced by ikayaki.gui.MeasurementGraphsPanel.MeasurementGraphsPanel().

9.31.3.5 void ikayaki.gui.MeasurementGraphsPanel.updatePlots () [private]

Updates plots when additional measurements are done or the data has changed.

Definition at line 101 of file MeasurementGraphsPanel.java.

References ikayaki.gui.null.

9.31.4 Member Data Documentation

9.31.4.1 `Vector<Plot> ikayaki.gui.MeasurementGraphsPanel.plots = new Vector<Plot>()` [private]

All plots in this panel

Definition at line 44 of file `MeasurementGraphsPanel.java`.

Referenced by `ikayaki.gui.MeasurementGraphsPanel.MeasurementGraphsPanel()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/MeasurementGraphsPanel.java`

9.32 ikayaki.MeasurementListener Interface Reference

Inherited by `ikayaki.gui.MagnetometerStatusPanel`, `ikayaki.gui.MeasurementSequenceTableModel`, and `ikayaki.gui.ProjectComponent`.

Inheritance diagram for `ikayaki.MeasurementListener`:

Public Member Functions

- void `measurementUpdated` (`MeasurementEvent` *event*)

9.32.1 Detailed Description

Defines a listener for measurement events.

Author:

Esko Luontola

Definition at line 32 of file `MeasurementListener.java`.

9.32.2 Member Function Documentation

9.32.2.1 void `ikayaki.MeasurementListener.measurementUpdated` (`MeasurementEvent` *event*)

Will be invoked whenever a measurement event happens.

Parameters:

event the event that happened.

Implemented in `ikayaki.gui.MagnetometerStatusPanel` (p. 128), `ikayaki.gui.MeasurementControlsPanel` (p. 172), `ikayaki.gui.MeasurementDetailsPanel` (p. 178), `ikayaki.gui.MeasurementGraphsPanel` (p. 192), `ikayaki.gui.MeasurementSequencePanel` (p. 210), `ikayaki.gui.MeasurementSequenceTableModel` (p. 224), and `ikayaki.gui.ProjectComponent` (p. 308).

The documentation for this interface was generated from the following file:

- `My Documents/squid/src/ikayaki/MeasurementListener.java`

9.33 ikayaki.MeasurementResult Class Reference

Public Types

- enum **Type** { **SAMPLE**, **HOLDER**, **NOISE** }

Public Member Functions

- **MeasurementResult** (**Type** type, int rotation, double x, double y, double z)
- **MeasurementResult** (Element element)
- Element **getElement** (Document document)
- **Type** **getType** ()
- int **getRotation** ()
- double **getGeographicX** ()
- double **getGeographicY** ()
- double **getGeographicZ** ()
- double **getSampleX** ()
- double **getSampleY** ()
- double **getSampleZ** ()
- double **getRawX** ()
- double **getRawY** ()
- double **getRawZ** ()

Protected Member Functions

- void **applyFixes** (**MeasurementStep** step)
- void **setTransform** (**Matrix3d** transform)
- **Vector3d** **getGeographicVector** ()
- **Vector3d** **getSampleVector** ()
- **Vector3d** **getRawVector** ()

Private Attributes

- final **Type** type
- final int rotation
- final **Vector3d** rawVector = new **Vector3d**()
- final **Vector3d** sampleVector = new **Vector3d**()
- final **Vector3d** geographicVector = new **Vector3d**()

9.33.1 Detailed Description

A set of X, Y and Z values measured by the magnetometer. The raw XYZ values will be rotated in 3D space by using a transformation matrix. The project will set and update the transformation whenever its parameters are changed. <p/> All units are mA/m.

Author:

Esko Luontola

Definition at line 39 of file MeasurementResult.java.

9.33.2 Member Enumeration Documentation

9.33.2.1 enum ikayaki::MeasurementResult::Type

Enumeration values:

SAMPLE

HOLDER

NOISE

Definition at line 363 of file MeasurementResult.java.

9.33.3 Constructor & Destructor Documentation

9.33.3.1 ikayaki.MeasurementResult.MeasurementResult (Type *type*, int *rotation*, double *x*, double *y*, double *z*)

Creates a new measurement result. All units are mA/m. <p/> The sample and geographic coordinates are NOT set when a **MeasurementResult**(p.195) is created.

Parameters:

type the type (background or rotation) of this result.

rotation the rotation of the sample holder in degrees (0..360).

x the measured X coordinate value.

y the measured Y coordinate value.

z the measured Z coordinate value.

Exceptions:

NullPointerException if type is null.

IllegalArgumentException if the type is NOISE or HOLDER, but rotation is non-zero.

Definition at line 80 of file MeasurementResult.java.

References ikayaki.MeasurementResult.applyFixes(), ikayaki.gui.null, ikayaki.MeasurementResult.rawQueryVector, and ikayaki.MeasurementResult.setTransform().

Here is the call graph for this function:

9.33.3.2 ikayaki.MeasurementResult.MeasurementResult (Element *element*)

Creates a measurement result from the specified element. <p/> The sample and geographic coordinates are NOT set when a **MeasurementResult**(p.195) is created.

Parameters:

element the element from which this result will be created.

Exceptions:

NullPointerException if element is null.

IllegalArgumentException if the element was not in the right format.

Definition at line 103 of file MeasurementResult.java.

References `ikayaki.MeasurementResult.applyFixes()`, `ikayaki.gui.null`, `ikayaki.MeasurementResult.rawQuery`, `ikayaki.MeasurementResult.rotation`, `ikayaki.MeasurementResult.setTransform()`, and `ikayaki.MeasurementResult.type`.

Here is the call graph for this function:

9.33.4 Member Function Documentation

9.33.4.1 void ikayaki.MeasurementResult.applyFixes (MeasurementStep *step*) [protected]

Applies the holder, noise and rotation fixes and saves the results as the sample vector. Resets the geographic vector to a copy of the sample vector. This method must be called before `setTransform()` (p. 200).

Parameters:

step the measurement step that includes the holder and noise calibration values. If null, the holder and noise fixes are not applied.

Definition at line 176 of file MeasurementResult.java.

References `ikayaki.MeasurementStep.getHolder()`, `ikayaki.MeasurementStep.getNoise()`, `ikayaki.MeasurementStep.getProject()`, `ikayaki.gui.null`, `ikayaki.MeasurementResult.rawQuery`, `ikayaki.MeasurementResult.rotation`, `ikayaki.MeasurementResult.sampleVector`, and `ikayaki.MeasurementResult.setTransform()`.

Referenced by `ikayaki.MeasurementResult.MeasurementResult()`.

Here is the call graph for this function:

9.33.4.2 Element ikayaki.MeasurementResult.getElement (Document *document*)

Exports this result to a DOM element.

Parameters:

document the document that will contain this element.

Definition at line 157 of file MeasurementResult.java.

References `ikayaki.MeasurementResult.rawQuery`, `ikayaki.MeasurementResult.rotation`, and `ikayaki.MeasurementResult.type`.

9.33.4.3 Vector3d ikayaki.MeasurementResult.getGeographicVector () [protected]

Returns a pointer to the geographic vector. WARNING! No modification to the returned object should be made. They should be done on a copy of the object than the object itself.

Definition at line 301 of file MeasurementResult.java.

References `ikayaki.MeasurementResult.geographicVector`.

9.33.4.4 double ikayaki.MeasurementResult.getGeographicX ()

Returns the noise fixed, rotated and transformed X coordinate of this result. The value is in geographic coordinates.

Exceptions:

IllegalStateException if this result's type is not SAMPLE, in which case it should make no sense to call this method.

Definition at line 262 of file MeasurementResult.java.

References ikayaki.MeasurementResult.geographicVector, and ikayaki.MeasurementResult.type.

9.33.4.5 double ikayaki.MeasurementResult.getGeographicY ()

Returns the noise fixed, rotated and transformed Y coordinate of this result. The value is in geographic coordinates.

Exceptions:

IllegalStateException if this result's type is not SAMPLE, in which case it should make no sense to call this method.

Definition at line 276 of file MeasurementResult.java.

References ikayaki.MeasurementResult.geographicVector, and ikayaki.MeasurementResult.type.

9.33.4.6 double ikayaki.MeasurementResult.getGeographicZ ()

Returns the noise fixed, rotated and transformed Z coordinate of this result. The value is in geographic coordinates.

Exceptions:

IllegalStateException if this result's type is not SAMPLE, in which case it should make no sense to call this method.

Definition at line 290 of file MeasurementResult.java.

References ikayaki.MeasurementResult.geographicVector, and ikayaki.MeasurementResult.type.

9.33.4.7 Vector3d ikayaki.MeasurementResult.getRawVector () [protected]

Returns a pointer to the raw vector. WARNING! No modification to the returned object should be made. They should be done on a copy of the object than the object itself.

Definition at line 359 of file MeasurementResult.java.

References ikayaki.MeasurementResult.rawVector.

9.33.4.8 double ikayaki.MeasurementResult.getRawX ()

Returns the unmodified X coordinate of this result. The value is in magnetometer coordinates.

Definition at line 337 of file MeasurementResult.java.

References ikayaki.MeasurementResult.rawVector.

9.33.4.9 double ikayaki.MeasurementResult.getRawY ()

Returns the unmodified Y coordinate of this result. The value is in magnetometer coordinates.

Definition at line 344 of file MeasurementResult.java.

References ikayaki.MeasurementResult.rawVector.

9.33.4.10 double ikayaki.MeasurementResult.getRawZ ()

Returns the unmodified Z coordinate of this result. The value is in magnetometer coordinates.

Definition at line 351 of file MeasurementResult.java.

References ikayaki.MeasurementResult.rawVector.

9.33.4.11 int ikayaki.MeasurementResult.getRotation ()

Returns the rotation of this result. The value is in range 0..360 degrees.

Definition at line 251 of file MeasurementResult.java.

References ikayaki.MeasurementResult.rotation.

9.33.4.12 Vector3d ikayaki.MeasurementResult.getSampleVector () [protected]

Returns a pointer to the sample vector. WARNING! No modification to the returned object should be made. They should be done on a copy of the object than the object itself.

Definition at line 330 of file MeasurementResult.java.

References ikayaki.MeasurementResult.sampleVector.

9.33.4.13 double ikayaki.MeasurementResult.getSampleX ()

Returns the noise fixed and rotated X coordinate of this result. The value is in sample coordinates.

Definition at line 308 of file MeasurementResult.java.

References ikayaki.MeasurementResult.sampleVector.

9.33.4.14 double ikayaki.MeasurementResult.getSampleY ()

Returns the noise fixed and rotated Y coordinate of this result. The value is in sample coordinates.

Definition at line 315 of file MeasurementResult.java.

References ikayaki.MeasurementResult.sampleVector.

9.33.4.15 double ikayaki.MeasurementResult.getSampleZ ()

Returns the noise fixed and rotated Z coordinate of this result. The value is in sample coordinates.

Definition at line 322 of file MeasurementResult.java.

References ikayaki.MeasurementResult.sampleVector.

9.33.4.16 Type `ikayaki.MeasurementResult.getType()`

Returns the type of this result.

Definition at line 244 of file `MeasurementResult.java`.

References `ikayaki.MeasurementResult.type`.

9.33.4.17 `void ikayaki.MeasurementResult.setTransform (Matrix3d transform)` [protected]

Applies a transformation matrix to the sample vector and saves the results as the geographic vector. This method must be called after `applyFixes()` (p.197).

Parameters:

transform the matrix to be applied. If null, will assume identity matrix.

Definition at line 233 of file `MeasurementResult.java`.

References `ikayaki.MeasurementResult.geographicVector`, `ikayaki.gui.null`, and `ikayaki.MeasurementResult.sampleVector`.

Referenced by `ikayaki.MeasurementResult.applyFixes()`, and `ikayaki.MeasurementResult.MeasurementResult()`.

9.33.5 Member Data Documentation

9.33.5.1 `final Vector3d ikayaki.MeasurementResult.geographicVector = new Vector3d()` [private]

The measurements in geographic coordinates. Equals the sample coordinates with the transformation matrix applied.

Definition at line 65 of file `MeasurementResult.java`.

Referenced by `ikayaki.MeasurementResult.getGeographicVector()`, `ikayaki.MeasurementResult.getGeographicX()`, `ikayaki.MeasurementResult.getGeographicY()`, `ikayaki.MeasurementResult.getGeographicZ()`, and `ikayaki.MeasurementResult.setTransform()`.

9.33.5.2 `final Vector3d ikayaki.MeasurementResult.rawVector = new Vector3d()` [private]

The unmodified measurements received from the squid. Will not change after it has been once set.

Definition at line 54 of file `MeasurementResult.java`.

Referenced by `ikayaki.MeasurementResult.applyFixes()`, `ikayaki.MeasurementResult.getElement()`, `ikayaki.MeasurementResult.getRawVector()`, `ikayaki.MeasurementResult.getRawX()`, `ikayaki.MeasurementResult.getRawY()`, `ikayaki.MeasurementResult.getRawZ()`, and `ikayaki.MeasurementResult.MeasurementResult()`.

9.33.5.3 `final int ikayaki.MeasurementResult.rotation` [private]

The rotation that the sample holder was in when this result was measured. The value is in range 0..360 degrees.

Definition at line 49 of file MeasurementResult.java.

Referenced by ikayaki.MeasurementResult.applyFixes(), ikayaki.MeasurementResult.getElement(), ikayaki.MeasurementResult.getRotation(), and ikayaki.MeasurementResult.MeasurementResult().

9.33.5.4 final Vector3d ikayaki.MeasurementResult.sampleVector = new Vector3d() [private]

The measurements in sample coordinates. Has the rotation, noise and holder fixes applied to itself.

Definition at line 59 of file MeasurementResult.java.

Referenced by ikayaki.MeasurementResult.applyFixes(), ikayaki.MeasurementResult.getSampleVector(), ikayaki.MeasurementResult.getSampleX(), ikayaki.MeasurementResult.getSampleY(), ikayaki.MeasurementResult.getSampleZ(), and ikayaki.MeasurementResult.setTransform().

9.33.5.5 final Type ikayaki.MeasurementResult.type [private]

The type of this result.

Definition at line 44 of file MeasurementResult.java.

Referenced by ikayaki.MeasurementResult.getElement(), ikayaki.MeasurementResult.getGeographicX(), ikayaki.MeasurementResult.getGeographicY(), ikayaki.MeasurementResult.getGeographicZ(), ikayaki.MeasurementResult.getType(), and ikayaki.MeasurementResult.MeasurementResult().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/MeasurementResult.java

9.34 ikayaki.MeasurementSequence Class Reference

Public Member Functions

- **MeasurementSequence** ()
- **MeasurementSequence** (String **name**)
- **MeasurementSequence** (Element **element**)
- **MeasurementSequence** (Element **element**, **Project** **project**)
- synchronized Element **getElement** (Document **document**)
- synchronized String **getName** ()
- synchronized void **setName** (String **name**)
- synchronized int **getSteps** ()
- synchronized **MeasurementStep** **getStep** (int **index**)
- synchronized void **addStep** (**MeasurementStep** **step**)
- synchronized void **addStep** (int **index**, **MeasurementStep** **step**)
- synchronized void **removeStep** (int **index**)
- int **compareTo** (**MeasurementSequence** **other**)
- Override String **toString** ()

Private Attributes

- String **name**
- final List< **MeasurementStep** > **steps** = new ArrayList<**MeasurementStep**>()

9.34.1 Detailed Description

A list of measurement steps. Steps can be added or removed from the sequence. <p/> All operations are thread-safe.

Author:

Esko Luontola

Definition at line 39 of file MeasurementSequence.java.

9.34.2 Constructor & Destructor Documentation

9.34.2.1 ikayaki.MeasurementSequence.MeasurementSequence ()

Creates an empty sequence with no name.

Definition at line 54 of file MeasurementSequence.java.

References ikayaki.MeasurementSequence.setName().

Here is the call graph for this function:

9.34.2.2 ikayaki.MeasurementSequence.MeasurementSequence (String *name*)

Creates an empty sequence with the specified name.

Parameters:

name name of the sequence.

Exceptions:

NullPointerException if name is null.

Definition at line 64 of file MeasurementSequence.java.

References ikayaki.MeasurementSequence.setName().

Here is the call graph for this function:

9.34.2.3 ikayaki.MeasurementSequence.MeasurementSequence (Element *element*)

Creates a sequence from the specified element.

Parameters:

element the element from which this sequence will be created.

Exceptions:

NullPointerException if element is null.

IllegalArgumentException if the element was not in the right format.

Definition at line 75 of file MeasurementSequence.java.

References ikayaki.gui.null.

9.34.2.4 ikayaki.MeasurementSequence.MeasurementSequence (Element *element*, Project *project*)

Creates a sequence from the specified element for a project.

Parameters:

element the element from which this sequence will be created.

project the project whose sequence this will be, or null if this is not owned by a project.
Needed for importing the measurement steps correctly.

Exceptions:

NullPointerException if element is null.

IllegalArgumentException if the element was not in the right format.

Definition at line 88 of file MeasurementSequence.java.

References ikayaki.gui.null, ikayaki.MeasurementSequence.setName(), and ikayaki.MeasurementSequence.steps.

Here is the call graph for this function:

9.34.3 Member Function Documentation

9.34.3.1 synchronized void ikayaki.MeasurementSequence.addStep (int *index*, MeasurementStep *step*)

Adds a step to the specified index of this sequence.

Parameters:

index the index to which the step will be added.

step the measurement step to be added.

Exceptions:

IndexOutOfBoundsException if the index is out of range (`index < 0 || index > getSteps()`(p. 205)).

NullPointerException if step is null.

Definition at line 181 of file MeasurementSequence.java.

References ikayaki.gui.null, and ikayaki.MeasurementSequence.steps.

9.34.3.2 synchronized void ikayaki.MeasurementSequence.addStep (MeasurementStep *step*)

Appends a step to this sequence.

Parameters:

step the measurement step to be added.

Exceptions:

NullPointerException if step is null.

Definition at line 166 of file MeasurementSequence.java.

References ikayaki.gui.null, and ikayaki.MeasurementSequence.steps.

Referenced by ikayaki.Project.copySequence(), and ikayaki.gui.MeasurementSequence-Panel.SequencePopupMenu.getSaveSelectedAsAction().

9.34.3.3 int ikayaki.MeasurementSequence.compareTo (MeasurementSequence *other*)

Orders the sequences by their name. If two different sequences have the same name, one of them if always greater than the other.

Parameters:

other the sequence to be compared to.

Returns:

less than 0 if this precedes other, or 0 if they are the same sequence, or else greater than 0.

Definition at line 205 of file MeasurementSequence.java.

9.34.3.4 synchronized Element ikayaki.MeasurementSequence.getElement (Document *document*)

Exports this sequence to a DOM element.

Parameters:

document the document that will contain this element.

Definition at line 114 of file MeasurementSequence.java.

References ikayaki.MeasurementSequence.name, and ikayaki.MeasurementSequence.steps.

Referenced by ikayaki.Project.getDocument().

9.34.3.5 synchronized String ikayaki.MeasurementSequence.getName ()

Returns the name of this sequence.

Definition at line 126 of file MeasurementSequence.java.

References ikayaki.MeasurementSequence.name.

Referenced by ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.setValueAt(), and ikayaki.MeasurementSequence.toString().

9.34.3.6 synchronized MeasurementStep ikayaki.MeasurementSequence.getStep (int *index*)

Returns the specified step from this sequence.

Parameters:

index the index of the step.

Returns:

the specified step.

Exceptions:

IndexOutOfBoundsException if the index is out of range ($index < 0 \parallel index \geq \text{getSteps}()$ (p. 205)).

Definition at line 156 of file MeasurementSequence.java.

References ikayaki.MeasurementSequence.steps.

Referenced by ikayaki.Project.getTimestamp(), ikayaki.Project.Project(), and ikayaki.Project.updateTransforms().

9.34.3.7 synchronized int ikayaki.MeasurementSequence.getSteps ()

Returns the number of steps in this sequence.

Definition at line 145 of file MeasurementSequence.java.

References ikayaki.MeasurementSequence.steps.

Referenced by ikayaki.Project.getTimestamp(), ikayaki.Project.Project(), and ikayaki.Project.updateTransforms().

9.34.3.8 `synchronized void ikayaki.MeasurementSequence.removeStep (int index)`

Removes a step from this sequence.

Parameters:

index the index of the step to be removed.

Exceptions:

IndexOutOfBoundsException if the index is out of range (`index < 0 || index >= getSteps()`(p. 205)).

Definition at line 194 of file MeasurementSequence.java.

References ikayaki.MeasurementSequence.steps.

9.34.3.9 `synchronized void ikayaki.MeasurementSequence.setName (String name)`

Sets the name of this sequence.

Exceptions:

NullPointerException if name is null.

Definition at line 135 of file MeasurementSequence.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.getSaveAllAsAction(), ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.getSaveSelectedAsAction(), ikayaki.MeasurementSequence.MeasurementSequence(), and ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.setValueAt().

9.34.3.10 `Override String ikayaki.MeasurementSequence.toString ()`

Definition at line 214 of file MeasurementSequence.java.

References ikayaki.MeasurementSequence.getName().

Here is the call graph for this function:

9.34.4 Member Data Documentation**9.34.4.1** `String ikayaki.MeasurementSequence.name [private]`

Name of the sequence. Empty string if it has no name.

Definition at line 44 of file MeasurementSequence.java.

Referenced by ikayaki.MeasurementSequence.getElement(), and ikayaki.MeasurementSequence.getName().

9.34.4.2 `final List<MeasurementStep> ikayaki.MeasurementSequence.steps = new ArrayList<MeasurementStep>() [private]`

The measurement steps of this sequence.

Definition at line 49 of file MeasurementSequence.java.

Referenced by `ikayaki.MeasurementSequence.addStep()`, `ikayaki.MeasurementSequence.getElement()`, `ikayaki.MeasurementSequence.getStep()`, `ikayaki.MeasurementSequence.getSteps()`, `ikayaki.MeasurementSequence.MeasurementSequence()`, and `ikayaki.MeasurementSequence.removeStep()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/MeasurementSequence.java`

9.35 ikayaki.gui.MeasurementSequencePanel Class Reference

Inherits `ikayaki.gui.ProjectComponent`.

Inheritance diagram for `ikayaki.gui.MeasurementSequencePanel`:
Collaboration diagram for `ikayaki.gui.MeasurementSequencePanel`:

Public Member Functions

- `MeasurementSequencePanel ()`
- `MeasurementDetailsPanel getDetailsPanel ()`
- `JTable getSequenceTable ()`
- Override `void setEnabled (boolean enabled)`
- `void setProject (final Project project)`
- `void projectUpdated (ProjectEvent event)`
- `void measurementUpdated (MeasurementEvent event)`

Package Functions

- `[instance initializer]`

Private Member Functions

- `void resetLoadSequenceBox ()`
- `void updateColumns ()`
- `double getLastPositiveStepValue ()`
- `double getLastStepValue ()`
- `void resetAddSequence ()`
- `void addSequence ()`
- `void scrollToRow (int rowIndex)`
- `void $$setupUI ()`

Private Attributes

- `JTable sequenceTable`
- `MeasurementSequenceTableModel sequenceTableModel`
- `JFormattedTextField sequenceStartField`
- `JFormattedTextField sequenceStepField`
- `JFormattedTextField sequenceStopField`
- `ComponentFlasher sequenceStartFieldFlasher`
- `ComponentFlasher sequenceStepFieldFlasher`
- `ComponentFlasher sequenceStopFieldFlasher`
- `JButton addSequenceButton`
- `JComboBox loadSequenceBox`
- `JLabel stepValueTypeLabel`
- `JLabel sequenceStartLabel`
- `JLabel sequenceStepLabel`
- `JLabel sequenceStopLabel`

- JLabel `loadSequenceLabel`
- JPanel `controlsPane`
- MeasurementDetailsPanel `detailsPanel`

Classes

- class `HeaderPopupMenu`
- class `MyFormatterFactory`
- class `SequencePopupMenu`

9.35.1 Detailed Description

Shows the measurements of a project and provides controls for modifying the sequence.

Author:

Esko Luontola

Definition at line 47 of file `MeasurementSequencePanel.java`.

9.35.2 Constructor & Destructor Documentation

9.35.2.1 `ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel ()`

Creates default `MeasurementSequencePanel`(p. 208).

Definition at line 78 of file `MeasurementSequencePanel.java`.

References `ikayaki.gui.MeasurementSequencePanel.controlsPane`, `ikayaki.gui.MeasurementSequenceTableModel.getColumnToolTip()`, `ikayaki.gui.MeasurementSequencePanel.sequenceStartField`, `ikayaki.gui.MeasurementSequencePanel.sequenceStartFieldFlasher`, `ikayaki.gui.MeasurementSequencePanel.sequenceStepField`, `ikayaki.gui.MeasurementSequencePanel.sequenceStepFieldFlasher`, `ikayaki.gui.MeasurementSequencePanel.sequenceStopField`, `ikayaki.gui.MeasurementSequencePanel.sequenceStopFieldFlasher`, `ikayaki.gui.MeasurementSequencePanel.sequenceTable`, `ikayaki.gui.MeasurementSequencePanel.sequenceTableModel`, and `ikayaki.gui.MeasurementSequencePanel.updateColumns()`.

Here is the call graph for this function:

9.35.3 Member Function Documentation

9.35.3.1 `void ikayaki.gui.MeasurementSequencePanel.$setupUI () [private]`

Method generated by IntelliJ IDEA GUI Designer !!! IMPORTANT !!! DO NOT edit this method OR call it in your code!

Definition at line 607 of file `MeasurementSequencePanel.java`.

References `ikayaki.gui.null`.

9.35.3.2 `ikayaki.gui.MeasurementSequencePanel.[instance initializer] ()` [package]

9.35.3.3 `void ikayaki.gui.MeasurementSequencePanel.addSequence ()` [private]

Adds sequence determined by textfields to end of table. If successful, resets the values for the Start-Step-Stop fields and moves the focus to the Start field. If unsuccessful, indicates the invalid text fields by blinking.

Definition at line 375 of file MeasurementSequencePanel.java.

References `ikayaki.gui.null`.

9.35.3.4 `MeasurementDetailsPanel ikayaki.gui.MeasurementSequencePanel.getDetailsPanel ()`

Returns the component that will show the details of the active measurement step.

Definition at line 278 of file MeasurementSequencePanel.java.

References `ikayaki.gui.null`.

9.35.3.5 `double ikayaki.gui.MeasurementSequencePanel.getLastPositiveStepValue ()` [private]

Returns the latest stepValue which is greater than 0. If none is found, returns 0.

Definition at line 334 of file MeasurementSequencePanel.java.

9.35.3.6 `double ikayaki.gui.MeasurementSequencePanel.getLastStepValue ()` [private]

Returns the stepValue of the last step. The returned value is 0 or greater. If there are no steps, returns 0.

Definition at line 347 of file MeasurementSequencePanel.java.

9.35.3.7 `JTable ikayaki.gui.MeasurementSequencePanel.getSequenceTable ()`

Returns the table containing all displayed measurement sequence data.

Definition at line 288 of file MeasurementSequencePanel.java.

9.35.3.8 `void ikayaki.gui.MeasurementSequencePanel.measurementUpdated (MeasurementEvent event)`

Does nothing; subclasses override this if they want to listen MeasurementEvents.

Parameters:

event `MeasurementEvent`(p. 188) received.

Reimplemented from `ikayaki.gui.ProjectComponent` (p. 308).

Definition at line 577 of file MeasurementSequencePanel.java.

9.35.3.9 void ikayaki.gui.MeasurementSequencePanel.projectUpdated (ProjectEvent *event*)

Updates the sequence table on project data change. The TableModel does not need to listen to ProjectEvents.

Reimplemented from **ikayaki.gui.ProjectComponent** (p. 308).

Definition at line 559 of file MeasurementSequencePanel.java.

9.35.3.10 void ikayaki.gui.MeasurementSequencePanel.resetAddSequence () [private]

Resets the values for the Start-Step-Stop fields.

Definition at line 358 of file MeasurementSequencePanel.java.

References ikayaki.gui.null.

9.35.3.11 void ikayaki.gui.MeasurementSequencePanel.resetLoadSequenceBox () [private]

Rebuilds the contents of the loadSequenceBox combobox by getting the saved sequences from the settings.

Definition at line 295 of file MeasurementSequencePanel.java.

References ikayaki.gui.null.

9.35.3.12 void ikayaki.gui.MeasurementSequencePanel.scrollToRow (int *rowIndex*) [private]

Scrolls the table to show the specified row.

Definition at line 552 of file MeasurementSequencePanel.java.

9.35.3.13 Override void ikayaki.gui.MeasurementSequencePanel.setEnabled (boolean *enabled*)

Sets whether or not this component is enabled. Affects all measurement sequence controls.

Parameters:

enabled true if this component should be enabled, false otherwise

Definition at line 481 of file MeasurementSequencePanel.java.

9.35.3.14 void ikayaki.gui.MeasurementSequencePanel.setProject (final Project *project*)

Sets the project whose sequence is shown in the table. Sets project listeners, enables or disables the sequence edit controls and updates the table data.

Definition at line 501 of file MeasurementSequencePanel.java.

References ikayaki.gui.null.

9.35.3.15 void ikayaki.gui.MeasurementSequencePanel.updateColumns () [private]

Resize the table's columns to fit the content.

Definition at line 310 of file MeasurementSequencePanel.java.

References ikayaki.gui.COUNT, and ikayaki.gui.null.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4 Member Data Documentation

9.35.4.1 JButton ikayaki.gui.MeasurementSequencePanel.addSequenceButton [private]

Definition at line 60 of file MeasurementSequencePanel.java.

9.35.4.2 JPanel ikayaki.gui.MeasurementSequencePanel.controlsPane [private]

Definition at line 69 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.3 MeasurementDetailsPanel ikayaki.gui.MeasurementSequencePanel.details- Panel [private]

Definition at line 72 of file MeasurementSequencePanel.java.

9.35.4.4 JComboBox ikayaki.gui.MeasurementSequencePanel.loadSequenceBox [private]

Definition at line 61 of file MeasurementSequencePanel.java.

9.35.4.5 JLabel ikayaki.gui.MeasurementSequencePanel.loadSequenceLabel [private]

Definition at line 67 of file MeasurementSequencePanel.java.

9.35.4.6 JFormattedTextField ikayaki.gui.MeasurementSequencePanel.sequence- StartField [private]

Definition at line 54 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.7 ComponentFlasher ikayaki.gui.MeasurementSequencePanel.sequenceStart- FieldFlasher [private]

Definition at line 57 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.8 JLabel ikayaki.gui.MeasurementSequencePanel.sequenceStartLabel
[private]

Definition at line 64 of file MeasurementSequencePanel.java.

9.35.4.9 JFormattedTextField ikayaki.gui.MeasurementSequencePanel.sequenceStepField [private]

Definition at line 55 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.10 ComponentFlasher ikayaki.gui.MeasurementSequencePanel.sequenceStepFieldFlasher [private]

Definition at line 58 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.11 JLabel ikayaki.gui.MeasurementSequencePanel.sequenceStepLabel
[private]

Definition at line 65 of file MeasurementSequencePanel.java.

9.35.4.12 JFormattedTextField ikayaki.gui.MeasurementSequencePanel.sequenceStopField [private]

Definition at line 56 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.13 ComponentFlasher ikayaki.gui.MeasurementSequencePanel.sequenceStopFieldFlasher [private]

Definition at line 59 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.14 JLabel ikayaki.gui.MeasurementSequencePanel.sequenceStopLabel
[private]

Definition at line 66 of file MeasurementSequencePanel.java.

9.35.4.15 JTable ikayaki.gui.MeasurementSequencePanel.sequenceTable [private]

Definition at line 50 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.16 MeasurementSequenceTableModel ikayaki.gui.MeasurementSequencePanel.sequenceTableModel [private]

Definition at line 51 of file MeasurementSequencePanel.java.

Referenced by ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel().

9.35.4.17 JLabel ikayaki.gui.MeasurementSequencePanel.stepValueTypeLabel [private]

Definition at line 63 of file MeasurementSequencePanel.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MeasurementSequencePanel.java

9.36 ikayaki.gui.MeasurementSequencePanel.HeaderPopupMenu Class Reference

Public Member Functions

- `HeaderPopupMenu ()`

9.36.1 Detailed Description

PopupMenu for selecting which columns to show in the sequence table. This popup will assume that there is an open project while this popup is visible.

Author:

Esko Luontola

Definition at line 952 of file `MeasurementSequencePanel.java`.

9.36.2 Constructor & Destructor Documentation

9.36.2.1 ikayaki.gui.MeasurementSequencePanel.HeaderPopupMenu.HeaderPopupMenu ()

Definition at line 954 of file `MeasurementSequencePanel.java`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/MeasurementSequencePanel.java`

9.37 ikayaki.gui.MeasurementSequencePanel.MyFormatterFactory Class Reference

Public Member Functions

- `JFormattedTextField.AbstractFormatter` **getFormatter** (`JFormattedTextField` *tf*)

9.37.1 Detailed Description

Sets the format for the `JFormattedTextFields` of this panel.

Author:

Esko Luontola

Definition at line 674 of file `MeasurementSequencePanel.java`.

9.37.2 Member Function Documentation

9.37.2.1 `JFormattedTextField.AbstractFormatter` `ikayaki.gui.MeasurementSequencePanel.MyFormatterFactory.getFormatter` (`JFormattedTextField` *tf*)

Definition at line 675 of file `MeasurementSequencePanel.java`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/MeasurementSequencePanel.java`

9.38 ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu Class Reference

Collaboration diagram for ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu:

Public Member Functions

- `SequencePopupMenu (MeasurementStep[] steps)`

Private Member Functions

- Action `getInsertBeforeAction ()`
- Action `getInsertAfterAction ()`
- Action `getDeleteSelectedAction ()`
- Action `getSaveSelectedAsAction ()`
- Action `getSaveAllAsAction ()`
- String `showSequenceNameDialog (String message, String title)`
- int `getFirstIndex ()`
- int `getLastIndex ()`

Private Attributes

- `MeasurementStep[] steps`

9.38.1 Detailed Description

PopupMenu for removing and adding steps from the sequence, and saving steps as a preset sequence. This popup will assume that there is an open project while this popup is visible.

Author:

Esko Luontola

Definition at line 697 of file MeasurementSequencePanel.java.

9.38.2 Constructor & Destructor Documentation

9.38.2.1 ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.SequencePopupMenu (MeasurementStep[] steps)

Creates a new `SequencePopupMenu`(p. 217).

Parameters:

steps the currently selected steps from the sequence, or an empty array if no steps are selected.

Exceptions:

NullPointerException if steps is null.

Definition at line 710 of file MeasurementSequencePanel.java.

References `ikayaki.gui.null`.

9.38.3 Member Function Documentation

9.38.3.1 Action ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.deleteSelectedAction () [private]

Definition at line 775 of file MeasurementSequencePanel.java.

References ikayaki.gui.null.

9.38.3.2 int ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.getFirstIndex () [private]

Returns the index of the first step, or -1 if there are no steps.

Definition at line 918 of file MeasurementSequencePanel.java.

9.38.3.3 Action ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.insertAfterAction () [private]

Definition at line 750 of file MeasurementSequencePanel.java.

References ikayaki.gui.null.

9.38.3.4 Action ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.insertBeforeAction () [private]

Definition at line 726 of file MeasurementSequencePanel.java.

References ikayaki.gui.null.

9.38.3.5 int ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.getLastIndex () [private]

Returns the index of the last step, or -1 if there are no steps.

Definition at line 933 of file MeasurementSequencePanel.java.

9.38.3.6 Action ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.saveAllAsAction () [private]

Definition at line 834 of file MeasurementSequencePanel.java.

References ikayaki.gui.null, and ikayaki.MeasurementSequence.setName().

Here is the call graph for this function:

9.38.3.7 Action ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.saveSelectedAsAction () [private]

Definition at line 799 of file MeasurementSequencePanel.java.

References ikayaki.MeasurementSequence.addStep(), ikayaki.gui.null, ikayaki.MeasurementSequence.setName(), and ikayaki.MeasurementStep.setStepValue().

Here is the call graph for this function:

9.38 ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu Class Reference 219

9.38.3.8 String ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.showSequenceNameDialog (String *message*, String *title*) [private]

Definition at line 864 of file MeasurementSequencePanel.java.

References ikayaki.gui.null.

9.38.4 Member Data Documentation

9.38.4.1 MeasurementStep [] ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.steps [private]

The currently selected steps from the sequence, or an empty array if no steps are selected.

Definition at line 702 of file MeasurementSequencePanel.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/MeasurementSequencePanel.java

9.39 ikayaki.gui.MeasurementSequenceTableModel Class Reference

Inherits `ikayaki.ProjectListener`, and `ikayaki.MeasurementListener`.

Inheritance diagram for `ikayaki.gui.MeasurementSequenceTableModel`: Collaboration diagram for `ikayaki.gui.MeasurementSequenceTableModel`:

Public Member Functions

- `MeasurementSequenceTableModel ()`
- `Project getProject ()`
- `void setProject (Project project)`
- `void projectUpdated (ProjectEvent event)`
- `void measurementUpdated (MeasurementEvent event)`
- `SequenceColumn[] getPossibleColumns ()`
- `boolean isColumnVisible (SequenceColumn column)`
- `void setColumnVisible (SequenceColumn column, boolean visible)`
- `int getRowCount ()`
- `int getColumnCount ()`
- `Object getValueAt (int rowIndex, int columnIndex)`
- `void setValueAt (Object data, int rowIndex, int columnIndex)`
- `Override boolean isCellEditable (int rowIndex, int columnIndex)`
- `Override String getColumnName (int column)`
- `String getColumnToolTip (int column)`
- `Override Class<?> getColumnClass (int columnIndex)`

Private Member Functions

- `void showColumn (SequenceColumn column, boolean save)`
- `void hideColumn (SequenceColumn column, boolean save)`
- `void saveColumn (SequenceColumn column, boolean visible)`

Private Attributes

- `Project project = null`
- `List< SequenceColumn > visibleColumns = new ArrayList<SequenceColumn>()`
- `List< SequenceColumn > possibleColumns = new ArrayList<SequenceColumn>()`

Static Private Attributes

- `static final String VISIBLE_COLUMNS_PROPERTY = "visibleColumns"`

9.39.1 Detailed Description

Handles the showing and editing of a project's measurement sequence. The columns that are being shown can be selected on a per project basis, and the selections are remembered even after the project has been closed.

Author:

Esko Luontola

Definition at line 37 of file MeasurementSequenceTableModel.java.

9.39.2 Constructor & Destructor Documentation

9.39.2.1 ikayaki.gui.MeasurementSequenceTableModel.MeasurementSequenceTableModel ()

Creates a new `MeasurementSequenceTableModel`(p. 220) with no active project.

Definition at line 49 of file MeasurementSequenceTableModel.java.

References `ikayaki.gui.null`, and `ikayaki.gui.MeasurementSequenceTableModel.setProject()`.

Here is the call graph for this function:

9.39.3 Member Function Documentation

9.39.3.1 Override `Class<?> ikayaki.gui.MeasurementSequenceTableModel.getColumnClass (int columnIndex)`

Returns `Object.class` regardless of `columnIndex`.

Parameters:

columnIndex the column being queried

Returns:

the `Object.class`

Definition at line 371 of file MeasurementSequenceTableModel.java.

References `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

9.39.3.2 `int ikayaki.gui.MeasurementSequenceTableModel.getColumnCount ()`

Returns the number of columns in the model. A `JTable` uses this method to determine how many columns it should create and display by default.

Returns:

the number of columns in the model

See also:

`getRowCount`(p. 222)

Definition at line 305 of file MeasurementSequenceTableModel.java.

References `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

9.39.3.3 Override String `ikayaki.gui.MeasurementSequenceTableModel.getColumn-Name (int column)`

Returns a name for the column. If `column` cannot be found, returns an empty string.

Parameters:

column the column being queried.

Returns:

a string containing the default name of column.

Definition at line 348 of file `MeasurementSequenceTableModel.java`.

References `ikayaki.gui.MeasurementSequenceTableModel.project`, and `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

9.39.3.4 String `ikayaki.gui.MeasurementSequenceTableModel.getColumnToolTip (int column)`

Returns the tooltip text for the specified column. Will be shown in the table header.

Definition at line 358 of file `MeasurementSequenceTableModel.java`.

References `ikayaki.gui.null`, `ikayaki.gui.MeasurementSequenceTableModel.project`, and `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

Referenced by `ikayaki.gui.MeasurementSequencePanel.MeasurementSequencePanel()`.

9.39.3.5 SequenceColumn [] `ikayaki.gui.MeasurementSequenceTableModel.getPossibleColumns ()`

Returns an array of columns that the current project can show. They are in the order of appearance.

Definition at line 159 of file `MeasurementSequenceTableModel.java`.

References `ikayaki.gui.MeasurementSequenceTableModel.possibleColumns`.

9.39.3.6 Project `ikayaki.gui.MeasurementSequenceTableModel.getProject ()`

Returns the active project, or null if no project is active.

Definition at line 57 of file `MeasurementSequenceTableModel.java`.

References `ikayaki.gui.MeasurementSequenceTableModel.project`.

9.39.3.7 int `ikayaki.gui.MeasurementSequenceTableModel.getRowCount ()`

Returns the number of rows in the model. A `JTable` uses this method to determine how many rows it should display. This method should be quick, as it is called frequently during rendering.

Returns:

the number of rows in the model

See also:

`getColumnCount`(p. 221)

Definition at line 286 of file MeasurementSequenceTableModel.java.

References `ikayaki.Project.getSteps()`, `ikayaki.Project.isSequenceEditEnabled()`, `ikayaki.gui.null`, `ikayaki.gui.MeasurementSequenceTableModel.project`, and `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

Here is the call graph for this function:

9.39.3.8 Object `ikayaki.gui.MeasurementSequenceTableModel.getValueAt (int rowIndex, int columnIndex)`

Returns the value for the cell at `columnIndex` and `rowIndex`.

Parameters:

rowIndex the row whose value is to be queried

columnIndex the column whose value is to be queried

Returns:

the value Object at the specified cell

Definition at line 316 of file MeasurementSequenceTableModel.java.

References `ikayaki.gui.MeasurementSequenceTableModel.project`, and `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

9.39.3.9 void `ikayaki.gui.MeasurementSequenceTableModel.hideColumn (SequenceColumn column, boolean save)` [private]

Hides the specified column.

Parameters:

column the column to be hidden.

save should this column change be saved to the project or not.

Definition at line 199 of file MeasurementSequenceTableModel.java.

References `ikayaki.gui.MeasurementSequenceTableModel.saveColumn()`, and `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.setColumnVisible()`, and `ikayaki.gui.MeasurementSequenceTableModel.setProject()`.

Here is the call graph for this function:

9.39.3.10 Override boolean `ikayaki.gui.MeasurementSequenceTableModel.isCellEditable (int rowIndex, int columnIndex)`

Returns false. This is the default implementation for all cells.

Parameters:

rowIndex the row being queried

columnIndex the column being queried

Returns:

false

Definition at line 338 of file MeasurementSequenceTableModel.java.

References ikayaki.gui.MeasurementSequenceTableModel.project, and ikayaki.gui.MeasurementSequenceTableModel.visibleColumns.

9.39.3.11 boolean ikayaki.gui.MeasurementSequenceTableModel.isColumnVisible (SequenceColumn *column*)

Tells if specified column is currently visible.

Parameters:

column the column to be queried.

Returns:

true if the column is visible, otherwise false.

Exceptions:

NullPointerException if column is null.

Definition at line 215 of file MeasurementSequenceTableModel.java.

References ikayaki.gui.null, and ikayaki.gui.MeasurementSequenceTableModel.visibleColumns.

Referenced by ikayaki.gui.MeasurementSequenceTableModel.setColumnVisible().

9.39.3.12 void ikayaki.gui.MeasurementSequenceTableModel.measurementUpdated (MeasurementEvent *event*)

Refreshes the table to reflect the changes in the measurement steps.

Implements **ikayaki.MeasurementListener** (p. 194).

Definition at line 141 of file MeasurementSequenceTableModel.java.

References ikayaki.Project.getStep(), ikayaki.MeasurementEvent.getStep(), ikayaki.Project.getSteps(), ikayaki.MeasurementEvent.getType(), and ikayaki.gui.MeasurementSequenceTableModel.project.

Here is the call graph for this function:

9.39.3.13 void ikayaki.gui.MeasurementSequenceTableModel.projectUpdated (ProjectEvent *event*)

Refreshes the table to reflect the changes in the project's data.

Deprecated

The selected rows need to be saved before updating the table data, and that can only be done with access to the JTable. That's why it is on MeasurementSequencePanel's responsibility is to react to ProjectEvents.

Implements **ikayaki.ProjectListener** (p. 343).

Definition at line 132 of file MeasurementSequenceTableModel.java.

9.39.3.14 void ikayaki.gui.MeasurementSequenceTableModel.saveColumn
(SequenceColumn *column*, boolean *visible*) [private]

Saves to the project's properties, whether the specified column should be shown or not. Will do nothing if the current project is null.

Parameters:

column the column whose property is changed.

visible true to show the column, false to hide it.

Definition at line 251 of file MeasurementSequenceTableModel.java.

References ikayaki.Project.getProperty(), ikayaki.gui.null, ikayaki.gui.MeasurementSequenceTableModel.project, ikayaki.Project.setProperty(), and ikayaki.gui.MeasurementSequenceTableModel.VISIBLE_COLUMNS_PROPERTY.

Referenced by ikayaki.gui.MeasurementSequenceTableModel.hideColumn(), and ikayaki.gui.MeasurementSequenceTableModel.showColumn().

Here is the call graph for this function:

9.39.3.15 void ikayaki.gui.MeasurementSequenceTableModel.setColumnVisible
(SequenceColumn *column*, boolean *visible*)

Sets visibility of the specified column. Makes sure that the columns are always in the same order. Saves the visible columns to the project's properties.

Parameters:

column the column to be changed.

visible true if the column should be visible, otherwise false.

Exceptions:

NullPointerException if column is null.

Definition at line 230 of file MeasurementSequenceTableModel.java.

References ikayaki.gui.MeasurementSequenceTableModel.hideColumn(), ikayaki.gui.MeasurementSequenceTableModel.isColumnVisible(), ikayaki.gui.null, and ikayaki.gui.MeasurementSequenceTableModel.showColumn().

Here is the call graph for this function:

9.39.3.16 void ikayaki.gui.MeasurementSequenceTableModel.setProject (Project
project)

Sets the project for this model. Unregisters **MeasurementListener**(p.194) and **ProjectListener**(p.343) from the old project, and registers them to the new project. Decides which columns to show in the table.

Parameters:

project new active project, or null to make no project active.

Definition at line 67 of file MeasurementSequenceTableModel.java.

References `ikayaki.Project.addMeasurementListener()`, `ikayaki.Project.addProjectListener()`, `ikayaki.Project.getProperty()`, `ikayaki.gui.MeasurementSequenceTableModel.hideColumn()`, `ikayaki.gui.null`, `ikayaki.gui.MeasurementSequenceTableModel.possibleColumns`, `ikayaki.gui.MeasurementSequenceTableModel.showColumn()`, `ikayaki.gui.MeasurementSequenceTableModel.VISIBLE_COLUMNS_PROPERTY`, and `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.MeasurementSequenceTableModel()`.

Here is the call graph for this function:

9.39.3.17 `void ikayaki.gui.MeasurementSequenceTableModel.setValueAt (Object data, int rowIndex, int columnIndex)`

Sets the value for the cell at `columnIndex` and `rowIndex`.

Parameters:

data new value of the cell

rowIndex the row whose value is to be queried

columnIndex the column whose value is to be queried

Definition at line 327 of file `MeasurementSequenceTableModel.java`.

References `ikayaki.gui.MeasurementSequenceTableModel.project`, and `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

9.39.3.18 `void ikayaki.gui.MeasurementSequenceTableModel.showColumn (SequenceColumn column, boolean save) [private]`

Shows the specified column. Makes sure that the columns are always in the same order.

Parameters:

column the column to be shown.

save should this column change be saved to the project or not.

Definition at line 169 of file `MeasurementSequenceTableModel.java`.

References `ikayaki.gui.MeasurementSequenceTableModel.possibleColumns`, `ikayaki.gui.MeasurementSequenceTableModel.saveColumn()`, and `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.setColumnVisible()`, and `ikayaki.gui.MeasurementSequenceTableModel.setProject()`.

Here is the call graph for this function:

9.39.4 Member Data Documentation

9.39.4.1 `List<SequenceColumn> ikayaki.gui.MeasurementSequenceTableModel.possibleColumns = new ArrayList<SequenceColumn>() [private]`

Definition at line 44 of file `MeasurementSequenceTableModel.java`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.getPossibleColumns()`, `ikayaki.gui.MeasurementSequenceTableModel.setProject()`, and `ikayaki.gui.MeasurementSequenceTableModel.showColumn()`.

9.39.4.2 Project `ikayaki.gui.MeasurementSequenceTableModel.project = null` [private]

Definition at line 41 of file `MeasurementSequenceTableModel.java`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.getColumnName()`, `ikayaki.gui.MeasurementSequenceTableModel.getColumnToolTip()`, `ikayaki.gui.MeasurementSequenceTableModel.getProject()`, `ikayaki.gui.MeasurementSequenceTableModel.getRowCount()`, `ikayaki.gui.MeasurementSequenceTableModel.getValueAt()`, `ikayaki.gui.MeasurementSequenceTableModel.isCellEditable()`, `ikayaki.gui.MeasurementSequenceTableModel.measurementUpdated()`, `ikayaki.gui.MeasurementSequenceTableModel.saveColumn()`, and `ikayaki.gui.MeasurementSequenceTableModel.setValueAt()`.

9.39.4.3 final String `ikayaki.gui.MeasurementSequenceTableModel.VISIBLE_COLUMNS_PROPERTY = "visibleColumns"` [static, private]

Definition at line 39 of file `MeasurementSequenceTableModel.java`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.saveColumn()`, and `ikayaki.gui.MeasurementSequenceTableModel.setProject()`.

9.39.4.4 List<SequenceColumn> `ikayaki.gui.MeasurementSequenceTableModel.visibleColumns = new ArrayList<SequenceColumn>()` [private]

Definition at line 43 of file `MeasurementSequenceTableModel.java`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.getColumnClass()`, `ikayaki.gui.MeasurementSequenceTableModel.getColumnCount()`, `ikayaki.gui.MeasurementSequenceTableModel.getColumnName()`, `ikayaki.gui.MeasurementSequenceTableModel.getColumnToolTip()`, `ikayaki.gui.MeasurementSequenceTableModel.getRowCount()`, `ikayaki.gui.MeasurementSequenceTableModel.getValueAt()`, `ikayaki.gui.MeasurementSequenceTableModel.hideColumn()`, `ikayaki.gui.MeasurementSequenceTableModel.isCellEditable()`, `ikayaki.gui.MeasurementSequenceTableModel.isColumnVisible()`, `ikayaki.gui.MeasurementSequenceTableModel.setProject()`, `ikayaki.gui.MeasurementSequenceTableModel.setValueAt()`, and `ikayaki.gui.MeasurementSequenceTableModel.showColumn()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/MeasurementSequenceTableModel.java`

9.40 ikayaki.MeasurementStep Class Reference

Collaboration diagram for ikayaki.MeasurementStep:

Public Types

- enum **State** { **false**, **false**, **true**, **done** = **done** }

Public Member Functions

- **MeasurementStep** ()
- **MeasurementStep** (**Project** **project**)
- **MeasurementStep** (**Element** **element**)
- **MeasurementStep** (**Element** **element**, **Project** **project**)
- synchronized **Element** **getElement** (**Document** **document**)
- void **save** ()
- synchronized **Project** **getProject** ()
- synchronized **State** **getState** ()
- synchronized **Date** **getTimestamp** ()
- synchronized double **getStepValue** ()
- synchronized void **setStepValue** (double **stepValue**)
- synchronized double **getMass** ()
- synchronized void **setMass** (double **mass**)
- synchronized double **getVolume** ()
- synchronized void **setVolume** (double **volume**)
- synchronized double **getSusceptibility** ()
- synchronized void **setSusceptibility** (double **susceptibility**)
- synchronized int **getResults** ()
- synchronized **MeasurementResult** **getResult** (int **index**)
- synchronized void **addResult** (**MeasurementResult** **result**)
- synchronized void **setMeasuring** ()
- synchronized void **setDone** ()
- synchronized **Vector3d** **getHolder** ()
- synchronized **Vector3d** **getNoise** ()
- **Iterator**< **MeasurementResult** > **iterator** ()

Protected Member Functions

- synchronized void **updateTransforms** ()

Private Attributes

- final **Project** **project**
- **State** **state** = **State**.**READY**
- **Date** **timestamp** = **null**
- double **stepValue** = -1.0
- double **mass** = -1.0
- double **volume** = -1.0
- double **susceptibility** = -1.0
- final **List**< **MeasurementResult** > **results** = **new** **ArrayList**<**MeasurementResult**>()

9.40.1 Detailed Description

A single step in a measurement sequence. Each step can include multiple measurements for improved precision. A step can have a different volume and mass than the related project, but by default the volume and mass of the project will be used. Any changes made to the measurement step will invoke the project's autosaving. Only the project may change the state and results of a measurement step. All operations are thread-safe.

Author:

Esko Luontola

Definition at line 48 of file MeasurementStep.java.

9.40.2 Member Enumeration Documentation

9.40.2.1 enum ikayaki::MeasurementStep::State

The state of a measurement step.

Enumeration values:

false

false

true

done When the step's state is "done", no changes to the measurements are any more allowed.

Definition at line 537 of file MeasurementStep.java.

9.40.3 Constructor & Destructor Documentation

9.40.3.1 ikayaki.MeasurementStep.MeasurementStep ()

Creates a blank measurement step.

Definition at line 96 of file MeasurementStep.java.

References ikayaki.gui.null, and ikayaki.MeasurementStep.project.

9.40.3.2 ikayaki.MeasurementStep.MeasurementStep (Project *project*)

Creates a blank measurement step for a project.

Parameters:

project the project who is the owner of this step.

Definition at line 105 of file MeasurementStep.java.

9.40.3.3 ikayaki.MeasurementStep.MeasurementStep (Element *element*)

Creates a measurement step from the specified element. Will update the transformation matrices.

Parameters:

element the element from which this step will be created.

Exceptions:

NullPointerException if element is null.

IllegalArgumentException if the element was not in the right format.

Definition at line 116 of file MeasurementStep.java.

References ikayaki.gui.null.

9.40.3.4 ikayaki.MeasurementStep.MeasurementStep (Element *element*, Project *project*)

Creates a measurement step from the specified element for a project. Will update the transformation matrices.

Parameters:

element the element from which this step will be created.

project the project who is the owner of this step.

Exceptions:

NullPointerException if element is null.

IllegalArgumentException if the element was not in the right format.

Definition at line 128 of file MeasurementStep.java.

References ikayaki.gui.null, ikayaki.MeasurementStep.results, ikayaki.MeasurementStep.setMass(), ikayaki.MeasurementStep.setStepValue(), ikayaki.MeasurementStep.setSusceptibility(), ikayaki.MeasurementStep.setVolume(), ikayaki.MeasurementStep.state, ikayaki.MeasurementStep.stepValue, ikayaki.MeasurementStep.timestamp, and ikayaki.MeasurementStep.updateTransforms().

Here is the call graph for this function:

9.40.4 Member Function Documentation

9.40.4.1 synchronized void ikayaki.MeasurementStep.addResult (MeasurementResult *result*)

Appends a measurement result to this step. This method may be called only for a steps whose state is READY or MEASURING. <p/> Sets the timestamp to the current time. Sets the state to MEASURING. The transformation matrix of the result will be updated automatically.

Parameters:

result the result to be added.

Exceptions:

NullPointerException if result is null.

IllegalStateException if this step's state is not READY or MEASURING.

Definition at line 411 of file MeasurementStep.java.

References `ikayaki.MeasurementStep.getProject()`, `ikayaki.gui.null`, `ikayaki.MeasurementStep.results`, `ikayaki.MeasurementStep.save()`, `ikayaki.MeasurementStep.setMeasuring()`, `ikayaki.MeasurementStep.state`, `ikayaki.MeasurementStep.timestamp`, and `ikayaki.MeasurementStep.updateTransforms()`.

Here is the call graph for this function:

9.40.4.2 synchronized Element `ikayaki.MeasurementStep.getElement (Document document)`

Exports this step to a DOM element.

Parameters:

document the document that will contain this element.

Definition at line 220 of file MeasurementStep.java.

References `ikayaki.MeasurementStep.mass`, `ikayaki.MeasurementStep.results`, `ikayaki.MeasurementStep.stepValue`, `ikayaki.MeasurementStep.susceptibility`, `ikayaki.MeasurementStep.timestamp`, and `ikayaki.MeasurementStep.volume`.

9.40.4.3 synchronized Vector3d `ikayaki.MeasurementStep.getHolder ()`

Returns the average of the holder results (raw values). If there are no holder results or this is the holder calibration project itself, will return a zero-filled vector.

Definition at line 468 of file MeasurementStep.java.

References `ikayaki.MeasurementStep.getProject()`, `ikayaki.gui.null`, and `ikayaki.MeasurementStep.results`.

Referenced by `ikayaki.MeasurementResult.applyFixes()`.

Here is the call graph for this function:

9.40.4.4 synchronized double `ikayaki.MeasurementStep.getMass ()`

Returns the mass of this step's sample, or a negative number to use the project's default mass. The unit is gram.

Definition at line 314 of file MeasurementStep.java.

References `ikayaki.MeasurementStep.mass`.

9.40.4.5 synchronized Vector3d `ikayaki.MeasurementStep.getNoise ()`

Returns the average of the noise results (raw values). If there are no noise results, will return a zero-filled vector.

Definition at line 493 of file MeasurementStep.java.

References `ikayaki.MeasurementStep.results`.

Referenced by `ikayaki.MeasurementResult.applyFixes()`.

9.40.4.6 synchronized Project ikayaki.MeasurementStep.getProject ()

Returns the owner project of this step, or null if there is no owner.

Definition at line 254 of file MeasurementStep.java.

References ikayaki.MeasurementStep.project.

Referenced by ikayaki.gui.StereoPlot.add(), ikayaki.gui.IntensityPlot.add(), ikayaki.MeasurementStep.addResult(), ikayaki.MeasurementResult.applyFixes(), ikayaki.MeasurementStep.getHolder(), ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getRowCount(), ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt(), and ikayaki.MeasurementStep.setStepValue().

9.40.4.7 synchronized MeasurementResult ikayaki.MeasurementStep.getResult (int index)

Returns the specified result from this step.

Parameters:

index the index of the result.

Returns:

the specified result.

Exceptions:

IndexOutOfBoundsException if the index is out of range (`index < 0 || index >= getResults()` (p. 232)).

Definition at line 396 of file MeasurementStep.java.

References ikayaki.MeasurementStep.results.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getRowCount(), ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt(), and ikayaki.MeasurementStep.iterator().

9.40.4.8 synchronized int ikayaki.MeasurementStep.getResults ()

Returns the number of results in this step.

Definition at line 385 of file MeasurementStep.java.

References ikayaki.MeasurementStep.results.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getRowCount(), ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getValueAt(), ikayaki.MeasurementStep.iterator(), and ikayaki.MeasurementStep.setDone().

9.40.4.9 synchronized State ikayaki.MeasurementStep.getState ()

Tells if this step has been completed or not, or if a measurement is still running.

Definition at line 261 of file MeasurementStep.java.

References ikayaki.MeasurementStep.state.

Referenced by ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.getRowCount(), and ikayaki.Project.Project().

9.40.4.10 synchronized double ikayaki.MeasurementStep.getStepValue ()

Returns the AF/Thermal value of this step, or a negative number if it has not been specified. The unit is millitesla (when AF) or Celcius (when thermal).

Definition at line 283 of file MeasurementStep.java.

References ikayaki.MeasurementStep.stepValue.

Referenced by ikayaki.gui.IntensityPlot.add(), ikayaki.Project.addStep(), and ikayaki.Project.exportToDAT().

9.40.4.11 synchronized double ikayaki.MeasurementStep.getSusceptibility ()

Returns the susceptibility of this step's sample, or a negative number to use the project's default susceptibility. Susceptibility has no unit.

Definition at line 352 of file MeasurementStep.java.

References ikayaki.MeasurementStep.susceptibility.

Referenced by ikayaki.Project.exportToDAT().

9.40.4.12 synchronized Date ikayaki.MeasurementStep.getTimestamp ()

Returns the time the measurements were completed, or null if that has not yet happened.

Definition at line 268 of file MeasurementStep.java.

References ikayaki.gui.null, ikayaki.MeasurementStep.state, and ikayaki.MeasurementStep.timestamp.

Referenced by ikayaki.Project.Project().

9.40.4.13 synchronized double ikayaki.MeasurementStep.getVolume ()

Returns the volume of this step's sample, or a negative number to use the project's default volume. The unit is cm³.

Definition at line 333 of file MeasurementStep.java.

References ikayaki.MeasurementStep.volume.

9.40.4.14 Iterator<MeasurementResult> ikayaki.MeasurementStep.iterator ()

Returns an iterator for iterating through this step's measurement results.

Definition at line 513 of file MeasurementStep.java.

References ikayaki.MeasurementStep.getResult(), and ikayaki.MeasurementStep.getResults().

Here is the call graph for this function:

9.40.4.15 void ikayaki.MeasurementStep.save ()

Invokes the owner project's autosaving. If there is no owner, will do nothing.

Definition at line 245 of file MeasurementStep.java.

References `ikayaki.gui.null`, `ikayaki.MeasurementStep.project`, and `ikayaki.Project.save()`.

Referenced by `ikayaki.MeasurementStep.addResult()`, `ikayaki.MeasurementStep.setDone()`, `ikayaki.MeasurementStep.setMass()`, `ikayaki.MeasurementStep.setMeasuring()`, `ikayaki.MeasurementStep.setStepValue()`, `ikayaki.MeasurementStep.setSusceptibility()`, and `ikayaki.MeasurementStep.setVolume()`.

Here is the call graph for this function:

9.40.4.16 synchronized void `ikayaki.MeasurementStep.setDone ()`

Called after all results have been added. Sets the step's status to `DONE_RECENTLY` and prevents the adding of further results. If there are no results (maybe the measurement was cancelled), will set the state back to `READY`. If the state is already `DONE` or `DONE_RECENTLY`, then nothing will be changed.

Definition at line 451 of file `MeasurementStep.java`.

References `ikayaki.MeasurementStep.getResults()`, `ikayaki.MeasurementStep.save()`, `ikayaki.MeasurementStep.state`, and `ikayaki.MeasurementStep.updateTransforms()`.

Here is the call graph for this function:

9.40.4.17 synchronized void `ikayaki.MeasurementStep.setMass (double mass)`

Sets the mass of this step's sample. A negative value will clear it. The unit is gram.

Definition at line 321 of file `MeasurementStep.java`.

References `ikayaki.MeasurementStep.save()`.

Referenced by `ikayaki.MeasurementStep.MeasurementStep()`.

Here is the call graph for this function:

9.40.4.18 synchronized void `ikayaki.MeasurementStep.setMeasuring ()`

Called when the step's measurements are started. Sets the step's state to `MEASURING`.

Exceptions:

IllegalStateException if this method is called when the state is marked as `DONE`.

Definition at line 438 of file `MeasurementStep.java`.

References `ikayaki.MeasurementStep.save()`, and `ikayaki.MeasurementStep.state`.

Referenced by `ikayaki.MeasurementStep.addResult()`.

Here is the call graph for this function:

9.40.4.19 synchronized void `ikayaki.MeasurementStep.setStepValue (double stepValue)`

Sets the value of this step. A negative value will clear it. The unit is millitesla (when AF) or Celcius (when thermal).

Exceptions:

IllegalStateException if the step's state is not `READY`.

Definition at line 293 of file MeasurementStep.java.

References `ikayaki.MeasurementStep.getProject()`, `ikayaki.gui.null`, `ikayaki.MeasurementStep.save()`, and `ikayaki.MeasurementStep.state`.

Referenced by `ikayaki.Project.addSequence()`, `ikayaki.Project.addStep()`, `ikayaki.Project.copySequence()`, `ikayaki.gui.MeasurementSequencePanel.SequencePopupMenu.getSaveSelectedAsAction()`, and `ikayaki.MeasurementStep.MeasurementStep()`.

Here is the call graph for this function:

9.40.4.20 synchronized void ikayaki.MeasurementStep.setSusceptibility (double *susceptibility*)

Sets the susceptibility of this step's sample. A negative value will clear it. Susceptibility has no unit.

Definition at line 359 of file MeasurementStep.java.

References `ikayaki.MeasurementStep.save()`.

Referenced by `ikayaki.MeasurementStep.MeasurementStep()`.

Here is the call graph for this function:

9.40.4.21 synchronized void ikayaki.MeasurementStep.setVolume (double *volume*)

Sets the volume of this step's sample. A negative value will clear it. The unit is cm^3 .

Definition at line 340 of file MeasurementStep.java.

References `ikayaki.MeasurementStep.save()`.

Referenced by `ikayaki.MeasurementStep.MeasurementStep()`.

Here is the call graph for this function:

9.40.4.22 synchronized void ikayaki.MeasurementStep.updateTransforms () [protected]

Updates all of the measurement results with the owner project's transformation matrix and applies the noise and holder fixes. If there is no owner, an identity matrix will be used.

Definition at line 371 of file MeasurementStep.java.

References `ikayaki.Project.getTransform()`, `ikayaki.gui.null`, `ikayaki.MeasurementStep.project`, and `ikayaki.MeasurementStep.results`.

Referenced by `ikayaki.MeasurementStep.addResult()`, `ikayaki.MeasurementStep.MeasurementStep()`, and `ikayaki.MeasurementStep.setDone()`.

Here is the call graph for this function:

9.40.5 Member Data Documentation

9.40.5.1 double ikayaki.MeasurementStep.mass = -1.0 [private]

The mass of this step's sample, or a negative number to use the project's default mass. The unit is gram.

Definition at line 75 of file MeasurementStep.java.

Referenced by `ikayaki.MeasurementStep.getElement()`, and `ikayaki.MeasurementStep.getMass()`.

9.40.5.2 final Project ikayaki.MeasurementStep.project [private]

The project that owns this step, or null if there is no owner.

Definition at line 53 of file MeasurementStep.java.

Referenced by `ikayaki.MeasurementStep.getProject()`, `ikayaki.MeasurementStep.MeasurementStep()`, `ikayaki.MeasurementStep.save()`, and `ikayaki.MeasurementStep.updateTransforms()`.

9.40.5.3 final List<MeasurementResult> ikayaki.MeasurementStep.results = new ArrayList<MeasurementResult>() [private]

The individual measurement results that are part of this measurement step.

Definition at line 91 of file MeasurementStep.java.

Referenced by `ikayaki.MeasurementStep.addResult()`, `ikayaki.MeasurementStep.getElement()`, `ikayaki.MeasurementStep.getHolder()`, `ikayaki.MeasurementStep.getNoise()`, `ikayaki.MeasurementStep.getResult()`, `ikayaki.MeasurementStep.getResults()`, `ikayaki.MeasurementStep.MeasurementStep()`, and `ikayaki.MeasurementStep.updateTransforms()`.

9.40.5.4 State ikayaki.MeasurementStep.state = State.READY [private]

Tells if this step has been completed or not, or if a measurement is still running.

Definition at line 58 of file MeasurementStep.java.

Referenced by `ikayaki.MeasurementStep.addResult()`, `ikayaki.MeasurementStep.getState()`, `ikayaki.MeasurementStep.getTimestamp()`, `ikayaki.MeasurementStep.MeasurementStep()`, `ikayaki.MeasurementStep.setDone()`, `ikayaki.MeasurementStep.setMeasuring()`, and `ikayaki.MeasurementStep.setStepValue()`.

9.40.5.5 double ikayaki.MeasurementStep.stepValue = -1.0 [private]

The AF or Thermal value of this step, or a negative number if it has not been specified. The unit is millitesla (when AF) or Celcius (when thermal).

Definition at line 70 of file MeasurementStep.java.

Referenced by `ikayaki.MeasurementStep.getElement()`, `ikayaki.MeasurementStep.getStepValue()`, and `ikayaki.MeasurementStep.MeasurementStep()`.

9.40.5.6 double ikayaki.MeasurementStep.susceptibility = -1.0 [private]

The susceptibility of this step's sample, or a negative number to use the project's default volume. Susceptibility has no unit.

Definition at line 86 of file MeasurementStep.java.

Referenced by `ikayaki.MeasurementStep.getElement()`, and `ikayaki.MeasurementStep.getSusceptibility()`.

9.40.5.7 Date ikayaki.MeasurementStep.timestamp = null [private]

The time the measurements were completed, or null if that has not yet happened. This equals the time of the latest measurement result.

Definition at line 64 of file MeasurementStep.java.

Referenced by ikayaki.MeasurementStep.addResult(), ikayaki.MeasurementStep.getElement(), ikayaki.MeasurementStep.getTimestamp(), and ikayaki.MeasurementStep.MeasurementStep().

9.40.5.8 double ikayaki.MeasurementStep.volume = -1.0 [private]

The volume of this step's sample, or a negative number to use the project's default volume. The unit is cm³.

Definition at line 80 of file MeasurementStep.java.

Referenced by ikayaki.MeasurementStep.getElement(), and ikayaki.MeasurementStep.getVolume().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/MeasurementStep.java

9.41 ikayaki.MeasurementValue< T > Class Reference

Public Member Functions

- **MeasurementValue** (String **caption**, String **unit**, String **description**)
- abstract T **getValue** (MeasurementStep **step**)
- String **getCaption** ()
- String **getUnit** ()
- String **getDescription** ()

Static Public Attributes

- static final MeasurementValue< Double > **GEOGRAPHIC_X**
- static final MeasurementValue< Double > **GEOGRAPHIC_X_NORMALIZED**
- static final MeasurementValue< Double > **GEOGRAPHIC_Y**
- static final MeasurementValue< Double > **GEOGRAPHIC_Z**
- static final MeasurementValue< Double > **SAMPLE_X**
- static final MeasurementValue< Double > **SAMPLE_Y**
- static final MeasurementValue< Double > **SAMPLE_Z**
- static final MeasurementValue< Double > **DECLINATION**
- static final MeasurementValue< Double > **INCLINATION**
- static final MeasurementValue< Double > **MOMENT**
- static final MeasurementValue< Double > **MAGNETIZATION**
- static final MeasurementValue< Double > **RELATIVE_MAGNETIZATION**
- static final MeasurementValue< Double > **THETA63**
- static final MeasurementValue< Double > **SIGNAL_TO_NOISE**
- static final MeasurementValue< Double > **SIGNAL_TO_DRIFT**
- static final MeasurementValue< Double > **SIGNAL_TO_HOLDER**

Private Attributes

- final String **caption**
- final String **unit**
- final String **description**

9.41.1 Detailed Description

Algorithms for calculating values from the measurements. A MeasurementValue object will be passed to the **getValue()**(p.239) method of a project to retrieve the desired value.

Author:

Esko Luontola

Definition at line 38 of file MeasurementValue.java.

9.41.2 Member Function Documentation

9.41.2.1 String ikayaki.MeasurementValue< T >.getCaption ()

Returns a short name for the value.

Definition at line 509 of file MeasurementValue.java.

9.41.2.2 String ikayaki.MeasurementValue< T >.getDescription ()

Returns a long description of the value.

Definition at line 523 of file MeasurementValue.java.

9.41.2.3 String ikayaki.MeasurementValue< T >.getUnit ()

Returns the unit of the value.

Definition at line 516 of file MeasurementValue.java.

9.41.2.4 abstract T ikayaki.MeasurementValue< T >.getValue (MeasurementStep step) [pure virtual]

Calculates a specific value from a measurement step.

Parameters:

step the step from which the value will be calculated.

Returns:

the calculated value, or null if it was not possible to calculate it.

Exceptions:

NullPointerException if step is null.

9.41.2.5 ikayaki.MeasurementValue< T >.MeasurementValue (String caption, String unit, String description)

Creates a new measurement value.

Parameters:

caption a short name for the value.

unit the unit of the value.

description a long description of the value.

Exceptions:

NullPointerException if any of the arguments is null.

Definition at line 488 of file MeasurementValue.java.

References ikayaki.gui.null.

9.41.3 Member Data Documentation

9.41.3.1 `final String ikayaki.MeasurementValue< T >.caption` [private]

A short name for the value.

Definition at line 468 of file MeasurementValue.java.

9.41.3.2 `final MeasurementValue<Double> ikayaki.MeasurementValue< T >.DECLINATION` [static]

Initial value:

```
new MeasurementValue<Double>("D", "\u00b0", "Geographic declination") {
    public Double getValue(MeasurementStep step) {
        Double x = GEOGRAPHIC_X.getValue(step);
        Double y = GEOGRAPHIC_Y.getValue(step);
        if (x == null || y == null) {
            return null;
        } else {
            double d = atan2(y, x);
            if (d < 0.0) {
                d += PI * 2;
            }
            return Math.toDegrees(d);
        }
    }
}
```

Calculates the declination from the component averages in geographic coordinates.

Definition at line 230 of file MeasurementValue.java.

9.41.3.3 `final String ikayaki.MeasurementValue< T >.description` [private]

A long description of the value.

Definition at line 478 of file MeasurementValue.java.

9.41.3.4 `final MeasurementValue<Double> ikayaki.MeasurementValue< T >.GEOGRAPHIC_X` [static]

Initial value:

```
new MeasurementValue<Double>("X'", "Am\u00B2", "Mean X (geographic coordinates)") {
    public Double getValue(MeasurementStep step) {
        double sum = 0.0;
        int count = 0;
        for (int i = 0; i < step.getResults(); i++) {
            MeasurementResult r = step.getResult(i);
            if (r.getType() != SAMPLE) {
                continue;
            }
            sum += r.getGeographicX();
            count++;
        }
        if (count > 0) {
            return new Double(sum / count);
        } else {

```



```

        return null;
    }
}

```

Calculates the average of all X components in geographic coordinates.

Definition at line 43 of file MeasurementValue.java.

9.41.3.5 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.GEOGRAPHIC_X_NORMALIZED [static]

Calculates the average of all X components in geographic coordinates.

Definition at line 67 of file MeasurementValue.java.

9.41.3.6 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.GEOGRAPHIC_Y [static]

Initial value:

```

new MeasurementValue<Double>("Y", "Am\u00B2", "Mean Y (geographic coordinates)") {
    public Double getValue(MeasurementStep step) {
        double sum = 0.0;
        int count = 0;
        for (int i = 0; i < step.getResults(); i++) {
            MeasurementResult r = step.getResult(i);
            if (r.getType() != SAMPLE) {
                continue;
            }
            sum += r.getGeographicY();
            count++;
        }
        if (count > 0) {
            return new Double(sum / count);
        } else {
            return null;
        }
    }
}

```

Calculates the average of all Y components in geographic coordinates.

Definition at line 110 of file MeasurementValue.java.

9.41.3.7 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.GEOGRAPHIC_Z [static]

Initial value:

```

new MeasurementValue<Double>("Z", "Am\u00B2", "Mean Z (geographic coordinates)") {
    public Double getValue(MeasurementStep step) {
        double sum = 0.0;
        int count = 0;
        for (int i = 0; i < step.getResults(); i++) {
            MeasurementResult r = step.getResult(i);
            if (r.getType() != SAMPLE) {
                continue;
            }
        }
    }
}

```

```

        sum += r.getGeographicZ();
        count++;
    }
    if (count > 0) {
        return new Double(sum / count);
    } else {
        return null;
    }
}
}

```

Calculates the average of all Z components in geographic coordinates.

Definition at line 134 of file MeasurementValue.java.

9.41.3.8 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.INCLINATION [static]

Initial value:

```

new MeasurementValue<Double>("I", "\u00b0", "Geographic inclination") {
    public Double getValue(MeasurementStep step) {
        Double x = GEOGRAPHIC_X.getValue(step);
        Double y = GEOGRAPHIC_Y.getValue(step);
        Double z = GEOGRAPHIC_Z.getValue(step);
        if (x == null || y == null || z == null) {
            return null;
        } else {
            if (x == 0.0) {
                x = 0.000000000001;
            }
            if (y == 0.0) {
                y = 0.000000000001;
            }
            double d = atan(z / sqrt(pow(x, 2) + pow(y, 2)));
            return Math.toDegrees(d);
        }
    }
}

```

Calculates the inclination from the component averages in geographic coordinates.

Definition at line 250 of file MeasurementValue.java.

9.41.3.9 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.MAGNETIZATION [static]

Calculates the magnetic intensity (or remanence) from the moment and the sample's volume or mass (depending on the selected normalization).

Definition at line 292 of file MeasurementValue.java.

9.41.3.10 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.MOMENT [static]

Initial value:

```

new MeasurementValue<Double>("M", "Am\u00B2", "Magnetic moment") {
    public Double getValue(MeasurementStep step) {

```

```

        Double x = SAMPLE_X.getValue(step);
        Double y = SAMPLE_Y.getValue(step);
        Double z = SAMPLE_Z.getValue(step);
        if (x == null || y == null || z == null) {
            return null;
        } else {
            return sqrt(pow(x, 2) + pow(y, 2) + pow(z, 2));
        }
    }
}

```

Calculates the length of the vector from the component averages.

Definition at line 274 of file MeasurementValue.java.

9.41.3.11 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.RELATIVE_MAGNETIZATION [static]

Initial value:

```

new MeasurementValue<Double>("J/Jo", "", "Relative magnetic intensity") {
    public Double getValue(MeasurementStep step) {
        Project project = step.getProject();
        if (project == null) {
            return null;
        }
        Double j = MAGNETIZATION.getValue(step);
        Double j0 = MAGNETIZATION.getValue(project.getStep(0));
        if (j == null || j0 == null) {
            return null;
        } else {
            return j.doubleValue() / j0.doubleValue();
        }
    }
}

```

Calculates the magnetic intensity (or remanence) relative to the first measurement's magnetic intensity.

Definition at line 335 of file MeasurementValue.java.

9.41.3.12 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.SAMPLE_X [static]

Initial value:

```

new MeasurementValue<Double>("X", "Am\u00B2", "Mean X (sample coordinates)") {
    public Double getValue(MeasurementStep step) {
        double sum = 0.0;
        int count = 0;
        for (int i = 0; i < step.getResults(); i++) {
            MeasurementResult r = step.getResult(i);
            if (r.getType() != SAMPLE) {
                continue;
            }
            sum += r.getSampleX();
            count++;
        }
        if (count > 0) {
            return new Double(sum / count);
        } else {

```

```

        return null;
    }
}

```

Calculates the average of all X components in sample coordinates.

Definition at line 158 of file MeasurementValue.java.

9.41.3.13 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.SAMPLE_Y [static]

Initial value:

```

new MeasurementValue<Double>("Y", "Am\u00B2", "Mean Y (sample coordinates)") {
    public Double getValue(MeasurementStep step) {
        double sum = 0.0;
        int count = 0;
        for (int i = 0; i < step.getResults(); i++) {
            MeasurementResult r = step.getResult(i);
            if (r.getType() != SAMPLE) {
                continue;
            }
            sum += r.getSampleY();
            count++;
        }
        if (count > 0) {
            return new Double(sum / count);
        } else {
            return null;
        }
    }
}

```

Calculates the average of all Y components in sample coordinates.

Definition at line 182 of file MeasurementValue.java.

9.41.3.14 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.SAMPLE_Z [static]

Initial value:

```

new MeasurementValue<Double>("Z", "Am\u00B2", "Mean Z (sample coordinates)") {
    public Double getValue(MeasurementStep step) {
        double sum = 0.0;
        int count = 0;
        for (int i = 0; i < step.getResults(); i++) {
            MeasurementResult r = step.getResult(i);
            if (r.getType() != SAMPLE) {
                continue;
            }
            sum += r.getSampleZ();
            count++;
        }
        if (count > 0) {
            return new Double(sum / count);
        } else {
            return null;
        }
    }
}

```

Calculates the average of all Z components in sample coordinates.

Definition at line 206 of file MeasurementValue.java.

9.41.3.15 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.SIGNAL_TO_DRIFT [static]

Initial value:

```
new MeasurementValue<Double>("caption", "unit", "description") {
    public Double getValue(MeasurementStep step) {
        if (step == null) {
            return null;
        }
        Double signal = MOMENT.getValue(step);
        if (signal == null) {
            return null;
        }
        double d = step.getNoise().length();
        if (d == 0.0) {
            return null;
        }
        return signal.doubleValue() / d;
    }
}
```

TODO: enter description

Definition at line 425 of file MeasurementValue.java.

9.41.3.16 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.SIGNAL_TO_HOLDER [static]

Initial value:

```
new MeasurementValue<Double>("caption", "unit", "description") {
    public Double getValue(MeasurementStep step) {
        if (step == null) {
            return null;
        }
        Double signal = MOMENT.getValue(step);
        if (signal == null) {
            return null;
        }
        double d = step.getHolder().length();
        if (d == 0.0) {
            return null;
        }
        return signal.doubleValue() / d;
    }
}
```

TODO: enter description

Definition at line 446 of file MeasurementValue.java.

9.41.3.17 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.SIGNAL_TO_NOISE [static]

Initial value:

```

new MeasurementValue<Double>("caption", "unit", "description") {
    public Double getValue(MeasurementStep step) {
        if (step == null) {
            return null;
        }

        int count = 0;
        double lengthSum = 0.0;
        for (MeasurementResult r : step) {
            lengthSum += r.getSampleVector().length();
            count++;
        }
        if (count < 2) {
            return null;
        }
        double lengthAvg = lengthSum / count;

        double squareSum = 0.0;
        for (MeasurementResult r : step) {
            double d = r.getSampleVector().length() - lengthAvg;
            squareSum += (d * d);
        }
        double stdev = Math.sqrt(squareSum / (count - 1));

        return lengthAvg / stdev;
    }
}

```

TODO: enter description

Definition at line 391 of file MeasurementValue.java.

9.41.3.18 final MeasurementValue<Double> ikayaki.MeasurementValue< T >.THETA63 [static]

Calculates the angular standard deviation (Theta 63) from the measurement result set.

Definition at line 355 of file MeasurementValue.java.

9.41.3.19 final String ikayaki.MeasurementValue< T >.unit [private]

The unit of the value.

Definition at line 473 of file MeasurementValue.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/MeasurementValue.java

9.42 ikayaki.gui.NullableDecimalFormat Class Reference

Public Member Functions

- Override Object `parseObject` (String source) throws `ParseException`

9.42.1 Detailed Description

Decimal format that accepts an empty string. An empty string equals null. <p/> If this class is used, it is not possible to use `NumberFormatter`'s `setMinimum` and `setMaximum` values, because it will create a `NullPointerException`.

Author:

Esko Luontola

Definition at line 36 of file `NullableDecimalFormat.java`.

9.42.2 Member Function Documentation

9.42.2.1 Override Object `ikayaki.gui.NullableDecimalFormat.parseObject` (String *source*) throws `ParseException`

Definition at line 38 of file `NullableDecimalFormat.java`.

References `ikayaki.gui.null`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/NullableDecimalFormat.java`

9.43 ikayaki.gui.Plot Interface Reference

Inherited by `ikayaki.gui.AbstractPlot`.

Inheritance diagram for `ikayaki.gui.Plot`:

Public Member Functions

- void `add` (`MeasurementStep` measurement)
- void `reset` ()
- int `getNumMeasurements` ()

9.43.1 Detailed Description

Interface for all the plots to implement

Author:

Aki Sysmäläinen

Definition at line 33 of file `Plot.java`.

9.43.2 Member Function Documentation

9.43.2.1 void `ikayaki.gui.Plot.add` (`MeasurementStep` *measurement*)

Adds new measurement data to plot.

Parameters:

measurement `MeasurementStep`(p. 228) to be added to this graph

Implemented in `ikayaki.gui.IntensityPlot` (p. 106), and `ikayaki.gui.StereoPlot` (p. 411).

9.43.2.2 int `ikayaki.gui.Plot.getNumMeasurements` ()

Returns the number of measurements in this graph.

Returns:

Number of measurements.

Implemented in `ikayaki.gui.IntensityPlot` (p. 106), and `ikayaki.gui.StereoPlot` (p. 412).

9.43.2.3 void `ikayaki.gui.Plot.reset` ()

Removes all measurements from the graph.

Implemented in `ikayaki.gui.IntensityPlot` (p. 107), and `ikayaki.gui.StereoPlot` (p. 412).

The documentation for this interface was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/Plot.java`

9.44 ikayaki.gui.PositiveDecimalFormat Class Reference

Public Member Functions

- Override StringBuffer **format** (double number, StringBuffer result, FieldPosition fieldPosition)
- Override StringBuffer **format** (long number, StringBuffer result, FieldPosition fieldPosition)
- Override Object **parseObject** (String source) throws ParseException

9.44.1 Detailed Description

Decimal format for only positive decimal numbers. Will not show negative numbers. An empty string equals -1.

Author:

Esko Luontola

Definition at line 34 of file PositiveDecimalFormat.java.

9.44.2 Member Function Documentation

9.44.2.1 Override StringBuffer ikayaki.gui.PositiveDecimalFormat.format (long number, StringBuffer result, FieldPosition fieldPosition)

Definition at line 43 of file PositiveDecimalFormat.java.

9.44.2.2 Override StringBuffer ikayaki.gui.PositiveDecimalFormat.format (double number, StringBuffer result, FieldPosition fieldPosition)

Definition at line 36 of file PositiveDecimalFormat.java.

9.44.2.3 Override Object ikayaki.gui.PositiveDecimalFormat.parseObject (String source) throws ParseException

Definition at line 50 of file PositiveDecimalFormat.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/PositiveDecimalFormat.java

9.45 ikayaki.gui.PrintPanel Class Reference

Collaboration diagram for ikayaki.gui.PrintPanel:

Public Member Functions

- **PrintPanel** (JDialog creator, Project project, boolean printDirectly)
- JPanel **getPrintedDocument** ()

Package Functions

- [instance initializer]

Private Member Functions

- void **closeDialog** ()
- void **updateColumns** ()
- void **\$\$setupUI** ()

Static Private Member Functions

- static void **setOpaque** (JComponent container, boolean opaque)

Private Attributes

- JDialog creator
- Project project
- JPanel contentPane
- JPanel printedPanel
- JPanel controlPanel
- JPanel plot1Panel
- JPanel plot2Panel
- JPanel plot3Panel
- JPanel plot4Panel
- AbstractPlot plot1
- AbstractPlot plot2
- AbstractPlot plot3
- AbstractPlot plot4
- JTable sequenceTable
- TableModel sequenceTableModel
- JScrollPane scrollPane
- JLabel operator
- JLabel volume
- JLabel mass
- JLabel header
- JLabel latitude
- JLabel susceptibility
- JLabel longitude

- JLabel **strike**
- JLabel **dip**
- JLabel **qValue**
- JLabel **density**
- JButton **print**
- JButton **cancel**
- Vector< **AbstractPlot** > **plots** = new Vector<**AbstractPlot**>()

Classes

- class **PrintSequenceTableModel**

9.45.1 Detailed Description

Creates layout from **MeasurementSequence**(p.202) and Plots to be printed. PrintedPanel is preview of print and there is controls to print or cancel.

Author:

Aki Korpua

Definition at line 52 of file PrintPanel.java.

9.45.2 Constructor & Destructor Documentation

9.45.2.1 ikayaki.gui.PrintPanel.PrintPanel (JDialog *creator*, Project *project*, boolean *printDirectly*)

Definition at line 98 of file PrintPanel.java.

References ikayaki.gui.PrintPanel.`$$setupUI()`, ikayaki.gui.PrintPanel.`closeDialog()`, ikayaki.gui.PrintPanel.`contentPane`, ikayaki.gui.PrintPanel.`density`, ikayaki.gui.PrintPanel.`dip`, ikayaki.Project.`getDip()`, ikayaki.Project.`getMass()`, ikayaki.Project.`getName()`, ikayaki.gui.PrintPanel.`getPrintedDocument()`, ikayaki.Project.`getProperty()`, ikayaki.Project.`getStep()`, ikayaki.Project.`getSteps()`, ikayaki.Project.`getStrike()`, ikayaki.Project.`getSusceptibility()`, ikayaki.Project.`getType()`, ikayaki.Project.`getValue()`, ikayaki.Project.`getVolume()`, ikayaki.gui.PrintPanel.`header`, ikayaki.gui.PrintPanel.`latitude`, ikayaki.gui.PrintPanel.`longitude`, ikayaki.gui.PrintPanel.`mass`, ikayaki.gui.null, ikayaki.gui.PrintPanel.`plot1`, ikayaki.gui.PrintPanel.`plot1Panel`, ikayaki.gui.PrintPanel.`plot2`, ikayaki.gui.PrintPanel.`plot2Panel`, ikayaki.gui.PrintPanel.`plot3Panel`, ikayaki.gui.PrintPanel.`plot4Panel`, ikayaki.gui.PrintPanel.`plots`, ikayaki.gui.PrintPanel.`print`, ikayaki.gui.PrintPanel.`printedPanel`, ikayaki.gui.PrintPanel.`qValue`, ikayaki.gui.PrintPanel.`sequenceTable`, ikayaki.gui.PrintPanel.`sequenceTableModel`, ikayaki.gui.PrintPanel.`setOpaque()`, ikayaki.gui.PrintPanel.`strike`, ikayaki.gui.PrintPanel.`susceptibility`, ikayaki.gui.PrintPanel.`updateColumns()`, and ikayaki.gui.PrintPanel.`volume`.

Here is the call graph for this function:

9.45.3 Member Function Documentation

9.45.3.1 void ikayaki.gui.PrintPanel.`$$setupUI` () [private]

Method generated by IntelliJ IDEA GUI Designer !!! IMPORTANT !!! DO NOT edit this method OR call it in your code!

Definition at line 267 of file PrintPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.3.2 ikayaki.gui.PrintPanel.[instance initializer] () [package]

9.45.3.3 void ikayaki.gui.PrintPanel.closeDialog () [private]

Closes this window

Definition at line 232 of file PrintPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.3.4 JPanel ikayaki.gui.PrintPanel.getPrintedDocument ()

Gets container which is meant to be printed

Returns:

JPanel

Definition at line 225 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.3.5 static void ikayaki.gui.PrintPanel.setOpaque (JComponent *container*, boolean *opaque*) [static, private]

Recursively sets the opaque value of the specified JComponent and its subcomponents.

Definition at line 204 of file PrintPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.3.6 void ikayaki.gui.PrintPanel.updateColumns () [private]

Resize the table's columns to fit the content.

Definition at line 241 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4 Member Data Documentation

9.45.4.1 JButton ikayaki.gui.PrintPanel.cancel [private]

Definition at line 91 of file PrintPanel.java.

9.45.4.2 JPanel ikayaki.gui.PrintPanel.contentPane [private]

Definition at line 57 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.3 JPanel ikayaki.gui.PrintPanel.controlPanel [private]

Definition at line 64 of file PrintPanel.java.

9.45.4.4 JDialog ikayaki.gui.PrintPanel.creator [private]

Definition at line 54 of file PrintPanel.java.

9.45.4.5 JLabel ikayaki.gui.PrintPanel.density [private]

Definition at line 88 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.6 JLabel ikayaki.gui.PrintPanel.dip [private]

Definition at line 86 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.7 JLabel ikayaki.gui.PrintPanel.header [private]

Definition at line 81 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.8 JLabel ikayaki.gui.PrintPanel.latitude [private]

Definition at line 82 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.9 JLabel ikayaki.gui.PrintPanel.longitude [private]

Definition at line 84 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.10 JLabel ikayaki.gui.PrintPanel.mass [private]

Definition at line 80 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.11 JLabel ikayaki.gui.PrintPanel.operator [private]

Definition at line 78 of file PrintPanel.java.

9.45.4.12 AbstractPlot ikayaki.gui.PrintPanel.plot1 [private]

Definition at line 69 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.13 JPanel ikayaki.gui.PrintPanel.plot1Panel [private]

Definition at line 65 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.14 AbstractPlot ikayaki.gui.PrintPanel.plot2 [private]

Definition at line 70 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.15 JPanel ikayaki.gui.PrintPanel.plot2Panel [private]

Definition at line 66 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.16 AbstractPlot ikayaki.gui.PrintPanel.plot3 [private]

Definition at line 71 of file PrintPanel.java.

9.45.4.17 JPanel ikayaki.gui.PrintPanel.plot3Panel [private]

Definition at line 67 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.18 AbstractPlot ikayaki.gui.PrintPanel.plot4 [private]

Definition at line 72 of file PrintPanel.java.

9.45.4.19 JPanel ikayaki.gui.PrintPanel.plot4Panel [private]

Definition at line 68 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.20 `Vector<AbstractPlot> ikayaki.gui.PrintPanel.plots = new Vector<AbstractPlot>() [private]`

All plots in this panel

Definition at line 96 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.21 `JButton ikayaki.gui.PrintPanel.print [private]`

Definition at line 90 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.22 `JPanel ikayaki.gui.PrintPanel.printedPanel [private]`

Panel to be printed with ComponentPrinter

Definition at line 62 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.23 `Project ikayaki.gui.PrintPanel.project [private]`

Definition at line 55 of file PrintPanel.java.

9.45.4.24 `JLabel ikayaki.gui.PrintPanel.qValue [private]`

Definition at line 87 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.25 `JScrollPane ikayaki.gui.PrintPanel.scrollPane [private]`

Definition at line 76 of file PrintPanel.java.

9.45.4.26 `JTable ikayaki.gui.PrintPanel.sequenceTable [private]`

Definition at line 74 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.27 `TableModel ikayaki.gui.PrintPanel.sequenceTableModel [private]`

Definition at line 75 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.28 `JLabel ikayaki.gui.PrintPanel.strike [private]`

Definition at line 85 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.29 JLabel ikayaki.gui.PrintPanel.susceptibility [private]

Definition at line 83 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

9.45.4.30 JLabel ikayaki.gui.PrintPanel.volume [private]

Definition at line 79 of file PrintPanel.java.

Referenced by ikayaki.gui.PrintPanel.PrintPanel().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**PrintPanel.java**

9.46 ikayaki.gui.PrintPanel.PrintSequenceTableModel Class Reference

Collaboration diagram for ikayaki.gui.PrintPanel.PrintSequenceTableModel:

Public Member Functions

- **PrintSequenceTableModel** (**Project** *project*)
- **int** **getRowCount** ()
- **int** **getColumnCount** ()
- **Override Class<?>** **getColumnClass** (**int** *columnIndex*)
- **Object** **getValueAt** (**int** *rowIndex*, **int** *columnIndex*)

Private Attributes

- **StyledWrapper** **wrapper** = **new StyledWrapper**()
- **MeasurementSequenceTableModel** **model**

9.46.1 Detailed Description

Shows the the data of a project in printable version. Uses the contents of the **MeasurementSequenceTableModel**(p. 220).

Author:

Esko Luontola

Definition at line 459 of file `PrintPanel.java`.

9.46.2 Constructor & Destructor Documentation

9.46.2.1 ikayaki.gui.PrintPanel.PrintSequenceTableModel.PrintSequenceTableModel (**Project** *project*)

Definition at line 465 of file `PrintPanel.java`.

9.46.3 Member Function Documentation

9.46.3.1 **Override Class<?>** ikayaki.gui.PrintPanel.PrintSequenceTableModel.**getColumnClass** (**int** *columnIndex*)

Definition at line 483 of file `PrintPanel.java`.

9.46.3.2 **int** ikayaki.gui.PrintPanel.PrintSequenceTableModel.**getColumnCount** ()

Definition at line 479 of file `PrintPanel.java`.

9.46.3.3 `int ikayaki.gui.PrintPanel.PrintSequenceTableModel.getRowCount ()`

Definition at line 471 of file `PrintPanel.java`.

9.46.3.4 `Object ikayaki.gui.PrintPanel.PrintSequenceTableModel.getValueAt (int rowIndex, int columnIndex)`

Definition at line 487 of file `PrintPanel.java`.

References `ikayaki.gui.StyledWrapper.value`.

9.46.4 Member Data Documentation**9.46.4.1** `MeasurementSequenceTableModel ikayaki.gui.PrintPanel.PrintSequenceTableModel.model [private]`

Definition at line 463 of file `PrintPanel.java`.

9.46.4.2 `StyledWrapper ikayaki.gui.PrintPanel.PrintSequenceTableModel.wrapper = new StyledWrapper() [private]`

Definition at line 461 of file `PrintPanel.java`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/PrintPanel.java`

9.47 ikayaki.gui.ProgramSettingsPanel Class Reference

Public Member Functions

- **ProgramSettingsPanel** (JDialog dialog)

Package Functions

- [instance initializer]

Private Member Functions

- void **\$\$setupUI** ()

Private Attributes

- JDialog **creator**
- JFormattedTextField **measurementRotationsField**
- JComboBox **holderCalibrationCombo**
- JTable **sequencesTable**
- JButton **sequencesDeleteButton**
- JPanel **defaultColumnsPane**
- JButton **closeButton**
- JPanel **contentPane**

Classes

- class **EditSequencesTableModel**

9.47.1 Detailed Description

Controls for editing the program settings.

Author:

Esko Luontola

Definition at line 50 of file ProgramSettingsPanel.java.

9.47.2 Constructor & Destructor Documentation

9.47.2.1 ikayaki.gui.ProgramSettingsPanel.ProgramSettingsPanel (JDialog *dialog*)

Definition at line 62 of file ProgramSettingsPanel.java.

References `ikayaki.gui.ProgramSettingsPanel.$$setupUI()`, `ikayaki.gui.ProgramSettingsPanel.closeButton`, `ikayaki.gui.ProgramSettingsPanel.contentPane`, `ikayaki.gui.ProgramSettingsPanel.measurementRotationsField`, `ikayaki.gui.ProgramSettingsPanel.sequencesDeleteButton`, and `ikayaki.gui.value`.

Here is the call graph for this function:

9.47.3 Member Function Documentation

9.47.3.1 void ikayaki.gui.ProgramSettingsPanel.\$\$setupUI () [private]

Method generated by IntelliJ IDEA GUI Designer !!! IMPORTANT !!! DO NOT edit this method OR call it in your code!

Definition at line 231 of file ProgramSettingsPanel.java.

Referenced by ikayaki.gui.ProgramSettingsPanel.ProgramSettingsPanel().

9.47.3.2 ikayaki.gui.ProgramSettingsPanel.[instance initializer] () [package]

9.47.4 Member Data Documentation

9.47.4.1 JButton ikayaki.gui.ProgramSettingsPanel.closeButton [private]

Definition at line 59 of file ProgramSettingsPanel.java.

Referenced by ikayaki.gui.ProgramSettingsPanel.ProgramSettingsPanel().

9.47.4.2 JPanel ikayaki.gui.ProgramSettingsPanel.contentPane [private]

Definition at line 60 of file ProgramSettingsPanel.java.

Referenced by ikayaki.gui.ProgramSettingsPanel.ProgramSettingsPanel().

9.47.4.3 JDialog ikayaki.gui.ProgramSettingsPanel.creator [private]

Definition at line 52 of file ProgramSettingsPanel.java.

9.47.4.4 JPanel ikayaki.gui.ProgramSettingsPanel.defaultColumnsPane [private]

Definition at line 58 of file ProgramSettingsPanel.java.

9.47.4.5 JComboBox ikayaki.gui.ProgramSettingsPanel.holderCalibrationCombo [private]

Definition at line 55 of file ProgramSettingsPanel.java.

9.47.4.6 JFormattedTextField ikayaki.gui.ProgramSettingsPanel.measurementRotationsField [private]

Definition at line 54 of file ProgramSettingsPanel.java.

Referenced by ikayaki.gui.ProgramSettingsPanel.ProgramSettingsPanel().

9.47.4.7 JButton ikayaki.gui.ProgramSettingsPanel.sequencesDeleteButton [private]

Definition at line 57 of file ProgramSettingsPanel.java.

Referenced by ikayaki.gui.ProgramSettingsPanel.ProgramSettingsPanel().

9.47.4.8 JTable ikayaki.gui.ProgramSettingsPanel.sequencesTable [private]

Definition at line 56 of file ProgramSettingsPanel.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**ProgramSettingsPanel.java**

9.48 ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel Class Reference

Collaboration diagram for ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel:

Public Member Functions

- **EditSequencesTableModel** ()
- **int** **getRowCount** ()
- **int** **getColumnCount** ()
- Override **boolean** **isCellEditable** (int rowIndex, int columnIndex)
- **Object** **getValueAt** (int rowIndex, int columnIndex)
- Override **void** **setValueAt** (Object aValue, int rowIndex, int columnIndex)
- **void** **deleteSequence** (int rowIndex)

Private Member Functions

- **void** **updateSequences** ()

Private Attributes

- **MeasurementSequence[]** **sequences** = new **MeasurementSequence**[0]

9.48.1 Constructor & Destructor Documentation

9.48.1.1 ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.EditSequencesTableModel ()

Definition at line 340 of file ProgramSettingsPanel.java.

9.48.2 Member Function Documentation

9.48.2.1 void ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.deleteSequence (int *rowIndex*)

Deletes the saved sequence at the specified row index.

Definition at line 420 of file ProgramSettingsPanel.java.

9.48.2.2 int ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.getColumnCount ()

Definition at line 377 of file ProgramSettingsPanel.java.

9.48.2.3 int ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.getRowCount ()

Definition at line 373 of file ProgramSettingsPanel.java.

9.48.2.4 Object `ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.getValueAt (int rowIndex, int columnIndex)`

Definition at line 385 of file `ProgramSettingsPanel.java`.

9.48.2.5 Override boolean `ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.isCellEditable (int rowIndex, int columnIndex)`

Definition at line 381 of file `ProgramSettingsPanel.java`.

9.48.2.6 Override void `ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.setValueAt (Object aValue, int rowIndex, int columnIndex)`

Change the name of a saved sequence.

Parameters:

aValue a new name for the sequence.

rowIndex

columnIndex

Definition at line 396 of file `ProgramSettingsPanel.java`.

References `ikayaki.MeasurementSequence.getName()`, and `ikayaki.MeasurementSequence.setName()`.

Here is the call graph for this function:

9.48.2.7 void `ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.updateSequences ()` [private]

Reads the saved sequences from the settings and fills the table with them. Restores the selected `MeasurementSequence`(p. 202) if the table contents has changed.

Definition at line 348 of file `ProgramSettingsPanel.java`.

9.48.3 Member Data Documentation

9.48.3.1 `MeasurementSequence [] ikayaki.gui.ProgramSettingsPanel.EditSequencesTableModel.sequences = new MeasurementSequence[0]` [private]

Definition at line 338 of file `ProgramSettingsPanel.java`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/ProgramSettingsPanel.java`

9.49 ikayaki.Project Class Reference

Collaboration diagram for ikayaki.Project:

Public Types

- enum **Type** { **Calibration**, **AF**, **Thellier**, **name = name** }
- enum **State** { **IDLE**, **MEASURING**, **PAUSED**, **ABORTED** }
- enum **SampleType** { **CORE**, **HAND** }
- enum **Orientation** { **PLUS_Z**, **MINUS_Z** }
- enum **Normalization** { **VOLUME**, **MASS** }

Public Member Functions

- synchronized Document **getDocument** ()
- synchronized boolean **isModified** ()
- synchronized void **save** ()
- boolean **saveNow** ()
- boolean **exportToDAT** (File **file**)
- boolean **exportToSRM** (File **file**)
- boolean **exportToTDT** (File **file**)
- synchronized File **getFile** ()
- synchronized **Type** **getType** ()
- synchronized boolean **isHolderCalibration** ()
- synchronized **State** **getState** ()
- boolean **isClosed** ()
- synchronized String **getName** ()
- synchronized Date **getTimestamp** ()
- synchronized **Squid** **getSquid** ()
- synchronized boolean **setSquid** (**Squid squid**)
- synchronized String **getProperty** (String **key**)
- synchronized String **getProperty** (String **key**, String **defaultValue**)
- synchronized void **setProperty** (String **key**, String **value**)
- synchronized double **getStrike** ()
- synchronized void **setStrike** (double **strike**)
- synchronized double **getDip** ()
- synchronized void **setDip** (double **dip**)
- synchronized **SampleType** **getSampleType** ()
- synchronized void **setSampleType** (**SampleType sampleType**)
- synchronized **Orientation** **getOrientation** ()
- synchronized void **setOrientation** (**Orientation orientation**)
- **Normalization** **getNormalization** ()
- void **setNormalization** (**Normalization normalization**)
- synchronized double **getMass** ()
- synchronized void **setMass** (double **mass**)
- synchronized double **getVolume** ()
- synchronized void **setVolume** (double **volume**)
- synchronized double **getSusceptibility** ()
- synchronized void **setSusceptibility** (double **susceptibility**)

- synchronized void **addProjectListener** (**ProjectListener** l)
- synchronized void **removeProjectListener** (**ProjectListener** l)
- synchronized void **addMeasurementListener** (**MeasurementListener** l)
- synchronized void **removeMeasurementListener** (**MeasurementListener** l)
- synchronized boolean **addSequence** (**MeasurementSequence** append)
- synchronized **MeasurementSequence** **copySequence** (int start, int end)
- synchronized **MeasurementSequence** **copySequence** (int...indices)
- synchronized boolean **addStep** (**MeasurementStep** step)
- synchronized boolean **addStep** (int index, **MeasurementStep** step)
- synchronized boolean **removeStep** (int index)
- synchronized boolean **removeStep** (int start, int end)
- synchronized int **getSteps** ()
- synchronized int **getCompletedSteps** ()
- synchronized **MeasurementStep** **getStep** (int index)
- synchronized **MeasurementStep** **getCurrentStep** ()
- synchronized< A > A **getValue** (int index, MeasurementValue< A > algorithm)
- synchronized boolean **isDegaussingEnabled** ()
- synchronized boolean **isSequenceEditEnabled** ()
- synchronized boolean **isManualControlEnabled** ()
- synchronized boolean **isAutoStepEnabled** ()
- synchronized boolean **isSingleStepEnabled** ()
- synchronized boolean **isPauseEnabled** ()
- synchronized boolean **isAbortEnabled** ()
- synchronized boolean **doAutoStep** ()
- synchronized boolean **doSingleStep** ()
- synchronized boolean **doPause** ()
- synchronized boolean **doAbort** ()
- synchronized boolean **doManualMoveDegausserY** ()
- synchronized boolean **doManualMoveDegausserZ** ()
- synchronized boolean **doManualMoveBackground** ()
- synchronized boolean **doManualMoveMeasurement** ()
- synchronized boolean **doManualMoveHome** ()
- synchronized boolean **doManualMoveRightLimit** ()
- synchronized boolean **doManualMoveLeftLimit** ()
- synchronized boolean **doManualRotate** (int angle)
- synchronized boolean **doManualMeasure** ()
- synchronized boolean **doManualReset** ()
- synchronized boolean **doManualDemagZ** (double amplitude)
- synchronized boolean **doManualDemagY** (double amplitude)
- synchronized boolean **doManualStepDone** ()

Static Public Member Functions

- static **Project** **createCalibrationProject** (File file)
- static **Project** **createAFProject** (File file)
- static **Project** **createThellierProject** (File file)
- static **Project** **createThermalProject** (File file)
- static synchronized **Project** **createProject** (File file, **Type** type)
- static synchronized **Project** **loadProject** (File file)
- static synchronized boolean **closeProject** (**Project** project)
- static synchronized **Project**[] **getCachedProjects** ()
- static **Type** **getType** (File file)

Static Public Attributes

- static final String **MEASUREMENT_TYPE_PROPERTY** = "measurementType"
- static final String **MEASUREMENT_TYPE_AUTO_VALUE** = "AUTO"
- static final String **MEASUREMENT_TYPE_MANUAL_VALUE** = "MANUAL"
- static final String **OPERATOR_PROPERTY** = "operator"
- static final String **DATE_PROPERTY** = "date"
- static final String **ROCK_TYPE_PROPERTY** = "rockType"
- static final String **AREA_PROPERTY** = "area"
- static final String **SITE_PROPERTY** = "site"
- static final String **COMMENT_PROPERTY** = "comment"
- static final String **LATITUDE_PROPERTY** = "latitude"
- static final String **LONGITUDE_PROPERTY** = "longitude"

Protected Member Functions

- synchronized Matrix3d **getTransform** ()
- synchronized void **fireProjectEvent** (ProjectEvent.Type type)
- synchronized void **fireMeasurementEvent** (MeasurementStep step, MeasurementEvent.Type type)

Private Types

- enum ManualMovePosition {
DEGAUSSER_Y, DEGAUSSER_Z, BACKGROUND, MEASUREMENT,
HOME, RIGHT_LIMIT, LEFT_LIMIT }
- enum ManualDemagAxel { **Z, Y** }

Private Member Functions

- **Project** (File file, Type type)
- **Project** (File file, Document document)
- void **setState** (State state)
- synchronized void **updateTransforms** ()
- void **runMeasurement** ()
- synchronized boolean **doManualMove** (ManualMovePosition position)

Static Private Member Functions

- static String **pad** (String s, int length, int alignment)

Private Attributes

- final File **file**
- final Type **type**
- State **state** = IDLE
- boolean **closed** = false
- Squid **squid** = null

- final Properties **properties** = new Properties()
- MeasurementSequence **sequence** = new MeasurementSequence()
- double **strike** = 0.0
- double **dip** = 0.0
- SampleType **sampleType** = HAND
- Orientation **orientation** = MINUS_Z
- Normalization **normalization** = VOLUME
- Matrix3d **transform** = new Matrix3d()
- double **mass** = -1.0
- double **volume** = -1.0
- double **susceptibility** = -1.0
- MeasurementStep **currentStep** = null
- final EventListenerList **listenerList** = new EventListenerList()
- boolean **modified** = false
- final LastExecutor **autosaveQueue** = new LastExecutor(500, true)
- Runnable **autosaveRunnable**

Static Private Attributes

- static final boolean **DEBUG** = false
- static final Hashtable< File, Project > **projectCache** = new Hashtable<File, Project>()
- static final Hashtable< File, Object > **projectTypeCache** = new Hashtable<File, Object>()

Classes

- class **DummyMeasurement**
- class **ManualDemag**
- class **ManualMeasure**
- class **ManualMove**
- class **ManualRotate**
- class **Measurement**

9.49.1 Detailed Description

Represents a measurement project file. **Project**(p.264) is responsible for managing and storing the data that is recieved from the magnetometer measurements. Any changes made to the project will be written to file regularly (autosave). **Project**(p.264) is responsible for controlling the magnetometer through the SQUID API. Controlling the SQUID will be done in a private worker thread. Only one project at a time may access the SQUID. All operations are thread-safe.

Author:

Esko Luontola

Definition at line 66 of file Project.java.

9.49.2 Member Enumeration Documentation

9.49.2.1 enum ikayaki::Project::ManualDemagAxel [private]

Enumeration values:

Z
Y

Definition at line 2724 of file Project.java.

9.49.2.2 enum ikayaki::Project::ManualMovePosition [private]

Enumeration values:

DEGAUSSER_Y
DEGAUSSER_Z
BACKGROUND
MEASUREMENT
HOME
RIGHT_LIMIT
LEFT_LIMIT

Definition at line 2580 of file Project.java.

9.49.2.3 enum ikayaki::Project::Normalization

The type of normalization to use for the measurement values.

Enumeration values:

VOLUME
MASS

Definition at line 2244 of file Project.java.

9.49.2.4 enum ikayaki::Project::Orientation

The orientation of the sample in the measurements.

Enumeration values:

PLUS_Z
MINUS_Z

Definition at line 2237 of file Project.java.

9.49.2.5 enum ikayaki::Project::SampleType

The type of a measured sample.

Enumeration values:

CORE
HAND

Definition at line 2230 of file Project.java.

9.49.2.6 enum ikayaki::Project::State

The state of the project's measurements.

Enumeration values:

IDLE

MEASURING

PAUSED

ABORTED

Definition at line 2223 of file Project.java.

9.49.2.7 enum ikayaki::Project::Type

The type of the project.

Enumeration values:

Calibration

AF

Thellier

name

Definition at line 2206 of file Project.java.

9.49.3 Constructor & Destructor Documentation

9.49.3.1 ikayaki.Project.Project (File *file*, Type *type*) [private]

Creates a new project of the specified type. This constructor will not write to file, so the user of this method should call the `saveNow()` (p. 291) method after the project is initialized.

Parameters:

file path for this project file. The file should exist (may be empty) and be writable, but this constructor will not check it.

type type of the project.

Exceptions:

NullPointerException if any of the parameters is null.

Definition at line 480 of file Project.java.

References `ikayaki.Project.modified`, `ikayaki.gui.null`, and `ikayaki.Project.updateTransforms()`.

Referenced by `ikayaki.Project.createProject()`, and `ikayaki.Project.loadProject()`.

Here is the call graph for this function:

9.49.3.2 ikayaki.Project.Project (File *file*, Document *document*) [private]

Creates a new project from the specified document. This constructor will assume that the specified file is the same from which the document was read.

Parameters:

file path for this project file. The file should be the same from which document was read and be writable, but this constructor will not check it.

document the document from which this project will be created.

Exceptions:

NullPointerException if any of the parameters is null.

IllegalArgumentException if the document was not in the right format.

Definition at line 500 of file Project.java.

References ikayaki.Project.dip, ikayaki.MeasurementStep.getState(), ikayaki.MeasurementSequence.getStep(), ikayaki.MeasurementSequence.getSteps(), ikayaki.MeasurementStep.getTimestamp(), ikayaki.Project.mass, ikayaki.Project.MEASURING, ikayaki.Project.modified, ikayaki.Project.normalization, ikayaki.gui.null, ikayaki.Project.orientation, ikayaki.Project.properties, ikayaki.Project.sampleType, ikayaki.Project.sequence, ikayaki.Project.strike, ikayaki.Project.susceptibility, ikayaki.Project.type, ikayaki.Project.updateTransforms(), and ikayaki.Project.volume.

Here is the call graph for this function:

9.49.4 Member Function Documentation

9.49.4.1 synchronized void ikayaki.Project.addMeasurementListener (MeasurementListener l)

Adds a **MeasurementListener**(p. 194) to the project.

Parameters:

l the listener to be added.

Definition at line 1475 of file Project.java.

Referenced by ikayaki.gui.ProjectComponent.setProject(), and ikayaki.gui.MeasurementSequenceTableModel.setProject().

9.49.4.2 synchronized void ikayaki.Project.addProjectListener (ProjectListener l)

Adds a **ProjectListener**(p. 343) to the project.

Parameters:

l the listener to be added.

Definition at line 1436 of file Project.java.

References ikayaki.Project.listenerList.

Referenced by ikayaki.gui.ProjectComponent.setProject(), ikayaki.gui.MeasurementSequenceTableModel.setProject(), ikayaki.gui.MainViewPanel.setProject(), and ikayaki.gui.CalibrationPanel.setProject().

9.49.4.3 synchronized boolean ikayaki.Project.addSequence (MeasurementSequence *append*)

Appends a sequence to this project's sequence. Only the stepValues will be copied from the specified sequence and added as new steps to this project. <p/> If **isSequenceEditEnabled()**(p.289) is false, nothing will be done.

Parameters:

append the measurement sequence to be appended.

Returns:

true if the steps were added, or false if **isSequenceEditEnabled()**(p.289) was false.

Exceptions:

NullPointerException if sequence is null.

Definition at line 1520 of file Project.java.

References ikayaki.gui.null, and ikayaki.MeasurementStep.setStepValue().

Here is the call graph for this function:

9.49.4.4 synchronized boolean ikayaki.Project.addStep (int *index*, MeasurementStep *step*)

Adds a step to the specified index of this project's sequence. Only the stepValue will be copied from the specified step and added as a new step to this project. <p/> The index must be such, that the indices of the completed measurements will not change. <p/> If **isSequenceEditEnabled()**(p.289) is false, nothing will be done.

Parameters:

index the index to which the step will be added.

step the measurement step to be added.

Returns:

true if the step was added, or false if **isSequenceEditEnabled()**(p.289) was false.

Exceptions:

*IndexOutOfBounds*Exception if the index is out of range (index < **getCompletedSteps()**(p.281) || index > **getSteps()**(p.285)).

NullPointerException if step is null.

Definition at line 1615 of file Project.java.

References ikayaki.MeasurementStep.getStepValue(), ikayaki.gui.null, and ikayaki.MeasurementStep.setStepValue().

Here is the call graph for this function:

9.49.4.5 synchronized boolean ikayaki.Project.addStep (MeasurementStep *step*)

Appends a step to this project's sequence. Only the stepValue will be copied from the specified step and added as a new step to this project.

Parameters:

step the measurement step to be added.

Returns:

true, it is always possible to append a step.

Exceptions:

NullPointerException if step is null.

Definition at line 1586 of file Project.java.

References ikayaki.gui.null.

9.49.4.6 static synchronized boolean ikayaki.Project.closeProject (Project *project*) [static]

Ensures that the project file is saved and frees the resources taken by the project. The closed project will automatically detach itself from the Squid. The closed project is removed from the projectCache. A project should not be used after it has been closed 150 any further use of the object is undefined (will create an *IllegalStateException* if somebody tries to modify it). A project can not be closed if it has a measurement running.

Parameters:

project project to be closed.

Returns:

true if the project has been closed, false if a measurement is running and the project can not be closed.

Exceptions:

NullPointerException if the project is null.

Definition at line 352 of file Project.java.

References ikayaki.Project.IDLE, ikayaki.gui.null, and ikayaki.Project.projectCache.

9.49.4.7 synchronized MeasurementSequence ikayaki.Project.copySequence (int... *indices*)

Returns a copy of this project's sequence. Only the stepValues will be copied from this project's sequence. The returned sequence will have no name.

Parameters:

indices indices of the steps to be included in the sequence. The steps will be included in the same order as their indices are listed.

Returns:

copy of the sequence with only stepValues and no results.

Exceptions:

*IndexOutOfBounds*Exception if any of the indices is out of range (index < 0 || index >= getSteps()(p. 285)).

Definition at line 1568 of file Project.java.

References `ikayaki.MeasurementSequence.addStep()`, and `ikayaki.MeasurementStep.setStepValue()`.

Here is the call graph for this function:

9.49.4.8 synchronized MeasurementSequence `ikayaki.Project.copySequence (int start, int end)`

Returns a copy of this project's sequence. Only the `stepValues` will be copied from this project's sequence. The returned sequence will have no name.

Parameters:

start index of the first step in the sequence.

end index of the last step in the sequence. If $end < start$, then an empty sequence will be returned.

Returns:

copy of the sequence with only `stepValues` and no results.

Exceptions:

IndexOutOfBoundsException if the index is out of range ($start < 0 \parallel end \geq getSteps()$ (p.285)).

Definition at line 1546 of file Project.java.

References `ikayaki.MeasurementSequence.addStep()`, and `ikayaki.MeasurementStep.setStepValue()`.

Here is the call graph for this function:

9.49.4.9 static Project `ikayaki.Project.createAFProject (File file) [static]`

Creates an AF project file.

Parameters:

file path for the new project file.

Returns:

the created project, or null if file was not writable or it already existed.

Exceptions:

NullPointerException if file is null.

Definition at line 225 of file Project.java.

References `ikayaki.Project.AF`, and `ikayaki.Project.createProject()`.

Here is the call graph for this function:

9.49.4.10 static Project `ikayaki.Project.createCalibrationProject (File file) [static]`

Creates a calibration project file.

Parameters:

file path for the new project file.

Returns:

the created project, or null if file was not writable or it already existed.

Exceptions:

NullPointerException if file is null.

Definition at line 214 of file Project.java.

References ikayaki.Project.createProject().

Here is the call graph for this function:

9.49.4.11 static synchronized Project ikayaki.Project.createProject (File *file*, Type *type*) [static]

Creates a project file of the specified type. Ensures that the project file has been written to disk. Adds the created **Project**(p. 264) object to projectCache.

Parameters:

file path for the new project file.

type type of the project.

Returns:

the created project, or null if file was not writable or it already existed.

Exceptions:

NullPointerException if file or type is null.

Definition at line 260 of file Project.java.

References ikayaki.Project.getType(), ikayaki.gui.null, ikayaki.Project.Project(), ikayaki.gui.project, ikayaki.Project.projectCache, ikayaki.Project.projectTypeCache, and ikayaki.Project.saveNow().

Referenced by ikayaki.Project.createAFProject(), ikayaki.Project.createCalibrationProject(), ikayaki.Project.createThellierProject(), and ikayaki.Project.createThermalProject().

Here is the call graph for this function:

9.49.4.12 static Project ikayaki.Project.createThellierProject (File *file*) [static]

Creates a thellier project file.

Parameters:

file path for the new project file.

Returns:

the created project, or null if file was not writable or it already existed.

Exceptions:

NullPointerException if file is null.

Definition at line 236 of file Project.java.

References ikayaki.Project.createProject().

Here is the call graph for this function:

9.49.4.13 static Project ikayaki.Project.createThermalProject (File *file*) [static]

Creates a thermal project file.

Parameters:

file path for the new project file.

Returns:

the created project, or null if file was not writable or it already existed.

Exceptions:

NullPointerException if file is null.

Definition at line 247 of file Project.java.

References ikayaki.Project.createProject().

Here is the call graph for this function:

9.49.4.14 synchronized boolean ikayaki.Project.doAbort ()

Aborts the currently running measurement. An aborted measurement will halt immediately and leave the handler where it was (enables manual control). Will do nothing if **isAbortEnabled()**(p.287) is false. <p/> This method will notify the measurement thread to abort, but will not wait for it to finish.

Returns:

true if the measurement will abort, otherwise false.

Definition at line 1977 of file Project.java.

9.49.4.15 synchronized boolean ikayaki.Project.doAutoStep ()

Starts an auto step measurement. If **isAutoStepEnabled()**(p.287) is false but is **isSingleStepEnabled()**(p.289) is true, will start a single step measurement. Will do nothing if both are false. If there are no unmeasured steps in the sequence, will add one for a measurement without demagnetization. <p/> The measurement will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the measurement was started, otherwise false.

Definition at line 1896 of file Project.java.

References ikayaki.gui.null.

9.49.4.16 `synchronized boolean ikayaki.Project.doManualDemagY (double amplitude)`

Demagnetizes the sample in Y direction with the specified amplitude. Will do nothing if `isManualControlEnabled()`(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Parameters:

amplitude the amplitude to demagnetize in mT.

Returns:

true if the operation was started, otherwise false.

Definition at line 2175 of file Project.java.

9.49.4.17 `synchronized boolean ikayaki.Project.doManualDemagZ (double amplitude)`

Demagnetizes the sample in Z direction with the specified amplitude. Will do nothing if `isManualControlEnabled()`(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Parameters:

amplitude the amplitude to demagnetize in mT.

Returns:

true if the operation was started, otherwise false.

Definition at line 2157 of file Project.java.

9.49.4.18 `synchronized boolean ikayaki.Project.doManualMeasure ()`

Measures the X, Y and Z of the sample. Adds the results as a new measurement step to the project. Will do nothing if `isManualControlEnabled()`(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2112 of file Project.java.

9.49.4.19 `synchronized boolean ikayaki.Project.doManualMove (ManualMovePosition position) [private]`

Moves the sample handler to the specified position. Will do nothing if `isManualControlEnabled()`(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Parameters:

position the position to move the handler to.

Returns:

true if the operation was started, otherwise false.

Definition at line 1997 of file Project.java.

9.49.4.20 synchronized boolean ikayaki.Project.doManualMoveBackground ()

Moves the sample handler to the Background position. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2035 of file Project.java.

9.49.4.21 synchronized boolean ikayaki.Project.doManualMoveDegausserY ()

Moves the sample handler to the DegausserY position. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2013 of file Project.java.

9.49.4.22 synchronized boolean ikayaki.Project.doManualMoveDegausserZ ()

Moves the sample handler to the DegausserZ position. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2024 of file Project.java.

9.49.4.23 synchronized boolean ikayaki.Project.doManualMoveHome ()

Moves the sample handler to the Home position. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2058 of file Project.java.

9.49.4.24 synchronized boolean ikayaki.Project.doManualMoveLeftLimit ()

Moves the sample handler to the LeftLimit position. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2082 of file Project.java.

Referenced by ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.ManualControlsPanel().

9.49.4.25 synchronized boolean ikayaki.Project.doManualMoveMeasurement ()

Moves the sample handler to the **Measurement**(p.306) position. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2046 of file Project.java.

9.49.4.26 synchronized boolean ikayaki.Project.doManualMoveRightLimit ()

Moves the sample handler to the **RightLimit** position. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2070 of file Project.java.

9.49.4.27 synchronized boolean ikayaki.Project.doManualReset ()

Resets the X, Y and Z of the sample. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the operation was started, otherwise false.

Definition at line 2129 of file Project.java.

References ikayaki.gui.null.

9.49.4.28 synchronized boolean ikayaki.Project.doManualRotate (int *angle*)

Rotates the sample handler to the specified angle. Will do nothing if **isManualControlEnabled()**(p.288) is false. <p/> The operation will run in its own thread, and this method will not wait for it to finish.

Parameters:

angle the angle to rotate the handler to.

Returns:

true if the operation was started, otherwise false.

Definition at line 2095 of file Project.java.

9.49.4.29 synchronized boolean ikayaki.Project.doManualStepDone ()

Marks the on-going manual measurement step as completed. If there is a manual measurement going on, the project has one on-going measurement step event though the project's state is IDLE. Calling this method when no other manual operation is active, will set that step completed.

Returns:

true if the operation was successful, in which case no measurement step is anymore on-going.

Definition at line 2191 of file Project.java.

References ikayaki.gui.null.

9.49.4.30 synchronized boolean ikayaki.Project.doPause ()

Pauses the currently running measurement. A paused measurement will halt after it finishes the current measurement step. *<s>*Will do nothing if **isPauseEnabled()**(p.288) is false.*</s>* Will work even if **isPauseEnabled()**(p.288) is false. *<p/>* This method will notify the measurement thread to pause, but will not wait for it to finish.

Returns:

true if the measurement will pause, otherwise false.

Definition at line 1953 of file Project.java.

9.49.4.31 synchronized boolean ikayaki.Project.doSingleStep ()

Starts a single step measurement. Will do nothing if **isSingleStepEnabled()**(p.289) is false. *<p/>* The measurement will run in its own thread, and this method will not wait for it to finish.

Returns:

true if the measurement was started, otherwise false.

Definition at line 1932 of file Project.java.

9.49.4.32 boolean ikayaki.Project.exportToDAT (File *file*)

Writes the project to a file in DAT format. Will overwrite the file if it already exists.

Parameters:

file the file to write to.

Returns:

true if the file was successfully written, otherwise false.

Exceptions:

NullPointerException if file is null.

Definition at line 783 of file Project.java.

References ikayaki.Project.AREA_PROPERTY, ikayaki.Project.COMMENT_PROPERTY, ikayaki.Project.CORE, ikayaki.Project.getCompletedSteps(), ikayaki.Project.getDip(), ikayaki.Project.getMass(), ikayaki.Project.getName(), ikayaki.Project.getProperty(), ikayaki.Project.getSampleType(), ikayaki.Project.getStep(), ikayaki.MeasurementStep.getStepValue(), ikayaki.Project.getStrike(), ikayaki.Project.getSusceptibility(), ikayaki.MeasurementStep.getSusceptibility(), ikayaki.Project.getType(), ikayaki.Project.getVolume(), ikayaki.Project.LATITUDE_PROPERTY, ikayaki.Project.LONGITUDE_PROPERTY, ikayaki.gui.null, ikayaki.Project.pad(), ikayaki.Project.ROCK_TYPE_PROPERTY, and ikayaki.Project.SITE_PROPERTY.

Referenced by ikayaki.gui.MainViewPanel.exportProject().

Here is the call graph for this function:

9.49.4.33 boolean ikayaki.Project.exportToSRM (File *file*)

Writes the project to a file in SRM format. Will overwrite the file if it already exists.

Parameters:

file the file to write to.

Returns:

true if the file was successfully written, otherwise false.

Exceptions:

NullPointerException if file is null.

Definition at line 1006 of file Project.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.exportProject().

9.49.4.34 boolean ikayaki.Project.exportToTDT (File *file*)

Writes the project to a file in TDT format. Will overwrite the file if it already exists.

Parameters:

file the file to write to.

Returns:

true if the file was successfully written, otherwise false.

Exceptions:

NullPointerException if file is null.

Definition at line 1020 of file Project.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.exportProject().

9.49.4.35 `synchronized void ikayaki.Project.fireMeasurementEvent (MeasurementStep step, MeasurementEvent.Type type)` [protected]

Notifies all listeners that have registered for MeasurementEvents.

Parameters:

step the measurement step that has generated the event.

type the type of the event.

Definition at line 1494 of file Project.java.

9.49.4.36 `synchronized void ikayaki.Project.fireProjectEvent (ProjectEvent.Type type)` [protected]

Notifies all listeners that have registered for ProjectEvents.

Parameters:

type type of the event.

Definition at line 1454 of file Project.java.

References ikayaki.Project.listenerList.

Referenced by ikayaki.Project.saveNow(), ikayaki.Project.setDip(), ikayaki.Project.setMass(), ikayaki.Project.setNormalization(), ikayaki.Project.setOrientation(), ikayaki.Project.setSampleType(), ikayaki.Project.setSquid(), ikayaki.Project.setState(), ikayaki.Project.setStrike(), ikayaki.Project.setSusceptibility(), and ikayaki.Project.setVolume().

9.49.4.37 `static synchronized Project [] ikayaki.Project.getCachedProjects ()` [static]

Returns an array containing all the projects that are in the project cache.

Definition at line 388 of file Project.java.

References ikayaki.Project.projectCache.

9.49.4.38 `synchronized int ikayaki.Project.getCompletedSteps ()`

Returns the number of completed steps in this project. Steps that are currently being measured, are included in this count. Completed steps are always first in the sequence.

Definition at line 1696 of file Project.java.

Referenced by ikayaki.Project.exportToDAT(), and ikayaki.Settings.getHolderCalibration().

9.49.4.39 `synchronized MeasurementStep ikayaki.Project.getCurrentStep ()`

Returns the step that is currently being measured.

Returns:

the currently measured step, or null if no measurement is active.

Definition at line 1725 of file Project.java.

9.49.4.40 synchronized double ikayaki.Project.getDip ()

Returns the dip of the sample. The unit is degrees (-90 to 90).

Definition at line 1211 of file Project.java.

References ikayaki.Project.dip.

Referenced by ikayaki.Project.exportToDAT(), ikayaki.gui.PrintPanel.PrintPanel(), and ikayaki.Project.updateTransforms().

9.49.4.41 synchronized Document ikayaki.Project.getDocument ()

Exports this project to a DOM document.

Returns:

the exported document, or null if there was a error.

Definition at line 677 of file Project.java.

References ikayaki.Project.dip, ikayaki.MeasurementSequence.getElement(), ikayaki.Project.mass, ikayaki.Project.normalization, ikayaki.gui.null, ikayaki.Project.orientation, ikayaki.Project.properties, ikayaki.Project.sampleType, ikayaki.Project.sequence, ikayaki.Project.strike, ikayaki.Project.susceptibility, ikayaki.Project.type, and ikayaki.Project.volume.

Referenced by ikayaki.Project.saveNow().

Here is the call graph for this function:

9.49.4.42 synchronized File ikayaki.Project.getFile ()

Returns the project file of this project.

Definition at line 1030 of file Project.java.

References ikayaki.Project.file.

Referenced by ikayaki.Project.getName(), ikayaki.Project.isHolderCalibration(), ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel(), ikayaki.Project.saveNow(), and ikayaki.gui.MainViewPanel.setProject().

9.49.4.43 synchronized double ikayaki.Project.getMass ()

Returns the mass of the sample. The unit is gram.

Returns:

mass of the sample, or a negative number if no mass is specified.

Definition at line 1367 of file Project.java.

References ikayaki.Project.mass.

Referenced by ikayaki.Project.exportToDAT(), and ikayaki.gui.PrintPanel.PrintPanel().

9.49.4.44 `synchronized String ikayaki.Project.getName ()`

Returns the name of this project. The name is equal to the name of the project file without the file extension.

Definition at line 1082 of file Project.java.

References `ikayaki.Project.getFile()`, and `ikayaki.Project.name`.

Referenced by `ikayaki.Project.exportToDAT()`, `ikayaki.gui.PrintPanel.PrintPanel()`, and `ikayaki.gui.MainViewPanel.setProject()`.

Here is the call graph for this function:

9.49.4.45 `Normalization ikayaki.Project.getNormalization ()`

Returns the normalization to be used for the measurement values.

Definition at line 1272 of file Project.java.

References `ikayaki.Project.normalization`.

9.49.4.46 `synchronized Orientation ikayaki.Project.getOrientation ()`

Returns the orientation of the sample.

Definition at line 1250 of file Project.java.

References `ikayaki.Project.orientation`.

Referenced by `ikayaki.gui.MeasurementControlsPanel.setProject()`.

9.49.4.47 `synchronized String ikayaki.Project.getProperty (String key, String default Value)`

Returns a project information property.

Parameters:

key the key which is associated with the property.

default Value a default value

Returns:

the specified property, or `default Value` if the property is not set.

Definition at line 1176 of file Project.java.

References `ikayaki.Project.properties`.

9.49.4.48 `synchronized String ikayaki.Project.getProperty (String key)`

Returns a project information property.

Parameters:

key the key which is associated with the property.

Returns:

the specified property, or null if the property is not set.

Definition at line 1165 of file Project.java.

References ikayaki.Project.properties.

Referenced by ikayaki.Project.exportToDAT(), ikayaki.gui.PrintPanel.PrintPanel(), ikayaki.gui.MeasurementSequenceTableModel.saveColumn(), and ikayaki.gui.MeasurementSequenceTableModel.setProject().

9.49.4.49 synchronized SampleType ikayaki.Project.getSampleType ()

Returns the type of the sample.

Definition at line 1228 of file Project.java.

References ikayaki.Project.sampleType.

Referenced by ikayaki.Project.exportToDAT().

9.49.4.50 synchronized Squid ikayaki.Project.getSquid ()

Returns the Squid if this project is its owner, otherwise returns null. <p/> (NOTE: Is public too unsafe? Maybe return a Proxy (see design patterns), so others can know where the handler is moving but not control it?)

Definition at line 1112 of file Project.java.

References ikayaki.Project.squid.

Referenced by ikayaki.gui.MeasurementControlsPanel.setProject(), and ikayaki.Project.setSquid().

9.49.4.51 synchronized State ikayaki.Project.getState ()

Returns the current measurement state of this project.

Returns:

the state of the project, or null if the project has been closed.

Definition at line 1057 of file Project.java.

References ikayaki.Project.state.

Referenced by ikayaki.Project.setSquid().

9.49.4.52 synchronized MeasurementStep ikayaki.Project.getStep (int *index*)

Returns a step from the sequence.

Parameters:

index the index of the step.

Returns:

the specified step.

Exceptions:

IndexOutOfBoundsException if the index is out of range (index < 0 || index >= `getSteps()`(p.285)).

Definition at line 1716 of file Project.java.

Referenced by `ikayaki.Project.exportToDAT()`, `ikayaki.gui.MeasurementSequenceTableModel.measurementUpdated()`, and `ikayaki.gui.PrintPanel.PrintPanel()`.

9.49.4.53 synchronized int ikayaki.Project.getSteps ()

Returns the number of steps in this project.

Definition at line 1688 of file Project.java.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.getRowCount()`, `ikayaki.gui.MeasurementSequenceTableModel.measurementUpdated()`, and `ikayaki.gui.PrintPanel.PrintPanel()`.

9.49.4.54 synchronized double ikayaki.Project.getStrike ()

Returns the strike of the sample. The unit is degrees (0 to 360).

Definition at line 1194 of file Project.java.

References `ikayaki.Project.strike`.

Referenced by `ikayaki.Project.exportToDAT()`, `ikayaki.gui.PrintPanel.PrintPanel()`, and `ikayaki.Project.updateTransforms()`.

9.49.4.55 synchronized double ikayaki.Project.getSusceptibility ()

Returns the susceptibility of the sample. Susceptibility has no unit.

Returns:

susceptibility of the sample, or a negative number if no susceptibility is specified.

Definition at line 1413 of file Project.java.

References `ikayaki.Project.susceptibility`.

Referenced by `ikayaki.Project.exportToDAT()`, and `ikayaki.gui.PrintPanel.PrintPanel()`.

9.49.4.56 synchronized Date ikayaki.Project.getTimestamp ()

Returns the timestamp of the last completed measurement. This is usually less than the last modified date of the file, because this is not affected by changing the project's properties.

Returns:

the timestamp of the last measurement, or null if no measurements are completed.

Definition at line 1096 of file Project.java.

References `ikayaki.MeasurementSequence.getStep()`, `ikayaki.MeasurementSequence.getSteps()`, `ikayaki.gui.null`, and `ikayaki.Project.sequence`.

Referenced by `ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableComparator.compareTimestamps()`, and `ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getValueAt()`.

Here is the call graph for this function:

9.49.4.57 synchronized Matrix3d `ikayaki.Project.getTransform ()` [protected]

Returns the current transformation matrix for the sample. For performance reasons, this method returns a reference to the internal data structure and not a copy of it. **WARNING!!!** Absolutely NO modification of the data contained in this matrix should be made 150 if any such manipulation is necessary, it should be done on a copy of the matrix returned rather than the matrix itself.

Returns:

reference to the transformation matrix.

Definition at line 1299 of file `Project.java`.

References `ikayaki.Project.transform`.

Referenced by `ikayaki.MeasurementStep.updateTransforms()`.

9.49.4.58 synchronized Type `ikayaki.Project.getType ()`

Returns the type of this project.

Definition at line 1037 of file `Project.java`.

References `ikayaki.Project.type`.

Referenced by `ikayaki.Project.exportToDAT()`, and `ikayaki.Project.isHolderCalibration()`.

9.49.4.59 static Type `ikayaki.Project.getType (File file)` [static]

Returns the type of a project file. Reads the type of the project from the specified file quickly, without fully loading the **Project**(p. 264). The first request for each file reads from the file system, but after that the results are cached for an unspecified time.

Parameters:

file the path of the project file.

Returns:

the type of the project, or null if the file was not a project file or it was not possible to read it.

Exceptions:

NullPointerException if file is null.

Definition at line 401 of file `Project.java`.

References `ikayaki.gui.null`, `ikayaki.Project.projectTypeCache`, `ikayaki.Project.type`, and `ikayaki.gui.value`.

Referenced by `ikayaki.Project.createProject()`, `ikayaki.Project.loadProject()`, `ikayaki.gui.PrintPanel.PrintPanel()`, and `ikayaki.gui.MainViewPanel.setProject()`.

9.49.4.60 `synchronized<A> A ikayaki.Project.getValue (int index, MeasurementValue< A > algorithm)`

Calculates and returns a value from a measurement step. The specified MeasurementValue's algorithm will be used and the results returned.

Parameters:

index the measurement step from which the value is calculated.

algorithm the algorithm for calculating the desired value.

Returns:

the value returned by the algorithm, or null if it was not possible to calculate it.

Exceptions:

NullPointerException if algorithm is null.

IndexOutOfBoundsException if the index is out of range (`index < 0 || index >= getSteps()`(p. 285)).

Definition at line 1739 of file Project.java.

Referenced by `ikayaki.Settings.getHolderCalibration()`, and `ikayaki.gui.PrintPanel.PrintPanel()`.

9.49.4.61 `synchronized double ikayaki.Project.getVolume ()`

Returns the volume of the sample. The unit is cm^3 .

Returns:

volume of the sample, or a negative number if no volume is specified.

Definition at line 1390 of file Project.java.

References `ikayaki.Project.volume`.

Referenced by `ikayaki.Project.exportToDAT()`, and `ikayaki.gui.PrintPanel.PrintPanel()`.

9.49.4.62 `synchronized boolean ikayaki.Project.isAbortEnabled ()`

Tells whether it is possible to abort the measurement. The returned value depends on the type and state of this project.

Definition at line 1879 of file Project.java.

9.49.4.63 `synchronized boolean ikayaki.Project.isAutoStepEnabled ()`

Tells whether it is allowed to do an auto step measurement. The returned value depends on the type and state of this project.

Definition at line 1821 of file Project.java.

References `ikayaki.gui.null`.

9.49.4.64 boolean ikayaki.Project.isClosed ()

Returns true if this project has been closed with `closeProject()` (p.272). If it has been closed, no modifications to the project will be allowed.

Definition at line 1075 of file `Project.java`.

References `ikayaki.Project.closed`.

Referenced by `ikayaki.Project.save()`, and `ikayaki.Project.saveNow()`.

9.49.4.65 synchronized boolean ikayaki.Project.isDegaussingEnabled ()

Tells whether it is allowed to use the degausser in this project. The returned value depends on the type and state of this project.

Definition at line 1778 of file `Project.java`.

9.49.4.66 synchronized boolean ikayaki.Project.isHolderCalibration ()

Returns true if this project file has been set as the Sample Holder Calibration project in the program settings.

Definition at line 1044 of file `Project.java`.

References `ikayaki.Project.getFile()`, and `ikayaki.Project.getType()`.

Referenced by `ikayaki.Settings.getHolderCalibration()`.

Here is the call graph for this function:

9.49.4.67 synchronized boolean ikayaki.Project.isManualControlEnabled ()

Tells whether it is allowed to control the Squid manually. The returned value depends on the type and state of this project.

Definition at line 1806 of file `Project.java`.

References `ikayaki.gui.null`.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.ManualControlsPanel.setProject()`.

9.49.4.68 synchronized boolean ikayaki.Project.isModified ()

Tells whether the project has been modified and it needs to be saved.

Definition at line 725 of file `Project.java`.

References `ikayaki.Project.modified`.

Referenced by `ikayaki.Project.saveNow()`.

9.49.4.69 synchronized boolean ikayaki.Project.isPauseEnabled ()

Tells whether it is possible to pause the measurement. The returned value depends on the type and state of this project.

Definition at line 1861 of file `Project.java`.

9.49.4.70 synchronized boolean ikayaki.Project.isSequenceEditEnabled ()

Tells whether it is allowed to edit the sequence. The returned value depends on the type and state of this project.

Definition at line 1792 of file Project.java.

Referenced by ikayaki.gui.MeasurementSequenceTableModel.getRowCount().

9.49.4.71 synchronized boolean ikayaki.Project.isSingleStepEnabled ()

Tells whether it is allowed to do a single step measurement. The returned value depends on the type and state of this project.

Definition at line 1842 of file Project.java.

References ikayaki.gui.null.

9.49.4.72 static synchronized Project ikayaki.Project.loadProject (File *file*)
[static]

Loads a saved project file. If the file has already been loaded, will return a reference to the existing **Project**(p. 264) object.

Parameters:

file project file to be loaded.

Returns:

the loaded project, or null if file is not a valid project file or it was not readable.

Exceptions:

NullPointerException if file is null.

Definition at line 300 of file Project.java.

References ikayaki.Project.getType(), ikayaki.gui.null, ikayaki.Project.Project(), ikayaki.gui.project, ikayaki.Project.projectCache, and ikayaki.Project.projectTypeCache.

Referenced by ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getValueAt(), ikayaki.Ikayaki.main(), and ikayaki.gui.MainViewPanel.MainViewPanel().

Here is the call graph for this function:

9.49.4.73 static String ikayaki.Project.pad (String *s*, int *length*, int *alignment*)
[static, private]

Adds spaces to a string until it is the right length.

Parameters:

s the string to be padded.

length the desired length for the result string.

alignment alignment of the text. -1 for left, 0 for center and 1 for right align.

Returns:

the input string appended with spaces. Its length is equal or greater to the specified length.

Definition at line 979 of file Project.java.

Referenced by `ikayaki.Project.exportToDAT()`.

9.49.4.74 `synchronized void ikayaki.Project.removeMeasurementListener (MeasurementListener l)`

Removes a `MeasurementListener`(p. 194) from the project.

Parameters:

l the listener to be removed

Definition at line 1484 of file Project.java.

9.49.4.75 `synchronized void ikayaki.Project.removeProjectListener (ProjectListener l)`

Removes a `ProjectListener`(p. 343) from the project.

Parameters:

l the listener to be removed

Definition at line 1445 of file Project.java.

References `ikayaki.Project.listenerList`.

9.49.4.76 `synchronized boolean ikayaki.Project.removeStep (int start, int end)`

Removes a series of steps from this project's sequence. Completed measurements can not be removed. `<p/>` If `isSequenceEditEnabled()`(p. 289) is false, nothing will be done.

Parameters:

start the first index to be removed.

end the last index to be removed. If `end < start`, no steps will be removed.

Returns:

true if the steps were removed, or false if `isSequenceEditEnabled()`(p. 289) was false.

Exceptions:

IndexOutOfBoundsException if the index is out of range (`start < getCompletedSteps()`(p. 281) || `end >= getSteps()`(p. 285)).

Definition at line 1670 of file Project.java.

9.49.4.77 `synchronized boolean ikayaki.Project.removeStep (int index)`

Removes a step from this project's sequence. Completed measurements can not be removed. `<p/>` If `isSequenceEditEnabled()`(p. 289) is false, nothing will be done.

Parameters:

index the index of the step to be removed.

Returns:

true if the step was removed, or false if `isSequenceEditEnabled()`(p. 289) was false.

Exceptions:

IndexOutOfBoundsException if the index is out of range (index < `getCompletedSteps()`(p. 281) || index >= `getSteps()`(p. 285)).

Definition at line 1645 of file Project.java.

9.49.4.78 void ikayaki.Project.runMeasurement () [private]

Runs a measurement sequence until it is paused, aborted or there are no more steps to measure. The project must be in a non-IDLE state before starting a measurement with this method. The measurement should be run in a worker thread and only one at a time.

Exceptions:

IllegalStateException if the project's state is IDLE or it has no Squid.

Definition at line 1750 of file Project.java.

References ikayaki.gui.null.

9.49.4.79 synchronized void ikayaki.Project.save ()

Invokes autosaving. This method will mark the project as modified and schedule a saving operation. After this method has not been called for a short while, the project will be written to file.

Exceptions:

IllegalStateException if this project has already been closed.

Definition at line 735 of file Project.java.

References ikayaki.Project.autosaveQueue, ikayaki.Project.autosaveRunnable, ikayaki.util.LastExecutor.execute(), ikayaki.Project.isClosed(), and ikayaki.Project.modified.

Referenced by ikayaki.MeasurementStep.save(), ikayaki.Project.setDip(), ikayaki.Project.setMass(), ikayaki.Project.setNormalization(), ikayaki.Project.setOrientation(), ikayaki.Project.setProperty(), ikayaki.Project.setSampleType(), ikayaki.Project.setStrike(), ikayaki.Project.setSusceptibility(), and ikayaki.Project.setVolume().

Here is the call graph for this function:

9.49.4.80 boolean ikayaki.Project.saveNow ()

Writes this project to its project file and waits for the operation to complete. Clears any delaying autosave operations. Will do nothing if the project file has already been saved.

Returns:

true if the file has been saved, otherwise false.

Exceptions:

IllegalStateException if this project has already been closed.

Definition at line 750 of file Project.java.

References `ikayaki.Project.autosaveQueue`, `ikayaki.util.LastExecutor.clear()`, `ikayaki.Project.file`, `ikayaki.Project.fireProjectEvent()`, `ikayaki.Project.getDocument()`, `ikayaki.Project.getFile()`, `ikayaki.Project.isClosed()`, `ikayaki.Project.isModified()`, and `ikayaki.Project.modified`.

Referenced by `ikayaki.Project.createProject()`.

Here is the call graph for this function:

9.49.4.81 synchronized void `ikayaki.Project.setDip` (double *dip*)

Sets the dip of the sample and calls `updateTransforms()`(p.295). The unit is degrees (-90 to 90).

Definition at line 1218 of file Project.java.

References `ikayaki.Project.fireProjectEvent()`, `ikayaki.Project.save()`, and `ikayaki.Project.updateTransforms()`.

Here is the call graph for this function:

9.49.4.82 synchronized void `ikayaki.Project.setMass` (double *mass*)

Sets the mass of the sample. The unit is gram.

Parameters:

mass mass of the sample, or a negative number to clear it.

Definition at line 1376 of file Project.java.

References `ikayaki.Project.fireProjectEvent()`, and `ikayaki.Project.save()`.

Here is the call graph for this function:

9.49.4.83 void `ikayaki.Project.setNormalization` (Normalization *normalization*)

Sets the normalization to be used for the measurement values.

Exceptions:

NullPointerException if normalization is null.

Definition at line 1281 of file Project.java.

References `ikayaki.Project.fireProjectEvent()`, `ikayaki.gui.null`, and `ikayaki.Project.save()`.

Here is the call graph for this function:

9.49.4.84 synchronized void `ikayaki.Project.setOrientation` (Orientation *orientation*)

Sets the orientation of the sample and calls `updateTransforms()`(p.295).

Exceptions:

NullPointerException if orientation is null.

Definition at line 1259 of file Project.java.

References `ikayaki.Project.fireProjectEvent()`, `ikayaki.gui.null`, `ikayaki.Project.save()`, and `ikayaki.Project.updateTransforms()`.

Here is the call graph for this function:

9.49.4.85 `synchronized void ikayaki.Project.setProperty (String key, String value)`

Sets a project information property.

Parameters:

key the key which is associated with the property.

value new value for the property, or null to remove the property.

Definition at line 1186 of file Project.java.

References `ikayaki.Project.properties`, and `ikayaki.Project.save()`.

Referenced by `ikayaki.gui.MeasurementSequenceTableModel.saveColumn()`.

Here is the call graph for this function:

9.49.4.86 `synchronized void ikayaki.Project.setSampleType (SampleType sampleType)`

Sets the type of the sample and calls `updateTransforms()`(p. 295).

Exceptions:

NullPointerException if *sampleType* is null.

Definition at line 1237 of file Project.java.

References `ikayaki.Project.fireProjectEvent()`, `ikayaki.gui.null`, `ikayaki.Project.save()`, and `ikayaki.Project.updateTransforms()`.

Here is the call graph for this function:

9.49.4.87 `synchronized boolean ikayaki.Project.setSquid (Squid squid)`

Sets this project the owner of the Squid. Tries to detach the previous owner of the squid. Uses the `setOwner()` method of the specified Squid. <p/> Only one project may own the Squid at a time. The Squid must be first detached with "`setSquid(null)`" from its owner before it can be given to another project. Detaching the Squid is possible only when the project's state is IDLE.

Parameters:

squid pointer to the SQUID interface, or null to detach this project from it.

Returns:

true if the operation was completed, false if the Squid has another owner or a measurement is running (in which case nothing was changed).

Definition at line 1128 of file Project.java.

References `ikayaki.Project.fireProjectEvent()`, `ikayaki.squid.Squid.getOwner()`, `ikayaki.Project.getSquid()`, `ikayaki.Project.getState()`, `ikayaki.Project.IDLE`, `ikayaki.gui.null`, and `ikayaki.squid.Squid.setOwner()`.

Referenced by `ikayaki.gui.MainViewPanel.setProject()`.

Here is the call graph for this function:

9.49.4.88 `void ikayaki.Project.setState (State state) [private]`

Sets the state of this project. Fires state change events.

Parameters:

state the new state to change to.

Definition at line 1066 of file `Project.java`.

References `ikayaki.Project.fireProjectEvent()`.

Here is the call graph for this function:

9.49.4.89 `synchronized void ikayaki.Project.setStrike (double strike)`

Sets the strike of the sample and calls `updateTransforms()`(p.295). The unit is degrees (0 to 360).

Definition at line 1201 of file `Project.java`.

References `ikayaki.Project.fireProjectEvent()`, `ikayaki.Project.save()`, and `ikayaki.Project.updateTransforms()`.

Here is the call graph for this function:

9.49.4.90 `synchronized void ikayaki.Project.setSusceptibility (double susceptibility)`

Sets the susceptibility of the sample. Susceptibility has no unit.

Parameters:

susceptibility susceptibility of the sample, or a negative number to clear it.

Definition at line 1422 of file `Project.java`.

References `ikayaki.Project.fireProjectEvent()`, and `ikayaki.Project.save()`.

Here is the call graph for this function:

9.49.4.91 `synchronized void ikayaki.Project.setVolume (double volume)`

Sets the volume of the sample. The unit is cm^3 .

Parameters:

volume volume of the sample, or a negative number to clear it.

Definition at line 1399 of file `Project.java`.

References `ikayaki.Project.fireProjectEvent()`, and `ikayaki.Project.save()`.

Here is the call graph for this function:

9.49.4.92 synchronized void ikayaki.Project.updateTransforms () [private]

Recalculates the transformation matrix and updates all measurements. This method is called automatically by the **setStrike()**(p. 294), **setDip()**(p. 292) and **setSampleType()**(p. 293) methods.

Definition at line 1307 of file Project.java.

References `ikayaki.Project.CORE`, `ikayaki.Project.getDip()`, `ikayaki.MeasurementSequence.getStep()`, `ikayaki.MeasurementSequence.getSteps()`, `ikayaki.Project.getStrike()`, `ikayaki.Project.HAND`, `ikayaki.Project.sampleType`, `ikayaki.Project.sequence`, and `ikayaki.Project.transform`.

Referenced by `ikayaki.Project.Project()`, `ikayaki.Project.setDip()`, `ikayaki.Project.setOrientation()`, `ikayaki.Project.setSampleType()`, and `ikayaki.Project.setStrike()`.

Here is the call graph for this function:

9.49.5 Member Data Documentation**9.49.5.1 final String ikayaki.Project.AREA_PROPERTY = "area" [static]**

Definition at line 77 of file Project.java.

Referenced by `ikayaki.Project.exportToDAT()`.

9.49.5.2 final LastExecutor ikayaki.Project.autosaveQueue = new LastExecutor(500, true) [private]

Scheduler for automatically writing the modified project to file after a short delay.

Definition at line 196 of file Project.java.

Referenced by `ikayaki.Project.save()`, and `ikayaki.Project.saveNow()`.

9.49.5.3 Runnable ikayaki.Project.autosaveRunnable [private]

Initial value:

```
new Runnable() {
    public void run() {
        saveNow();
    }
}
```

Operation that will save the project to file.

Definition at line 201 of file Project.java.

Referenced by `ikayaki.Project.save()`.

9.49.5.4 boolean ikayaki.Project.closed = false [private]

Tells if this project been closed with **closeProject()**(p. 272).

Definition at line 113 of file Project.java.

Referenced by `ikayaki.Project.isClosed()`.

9.49.5.5 `final String ikayaki.Project.COMMENT_PROPERTY = "comment"`
[static]

Definition at line 79 of file Project.java.

Referenced by `ikayaki.Project.exportToDAT()`.

9.49.5.6 `MeasurementStep ikayaki.Project.currentStep = null` [private]

Current measurement step, or null if no measurement is running.

Definition at line 181 of file Project.java.

9.49.5.7 `final String ikayaki.Project.DATE_PROPERTY = "date"` [static]

Definition at line 75 of file Project.java.

9.49.5.8 `final boolean ikayaki.Project.DEBUG = false` [static, private]

Definition at line 68 of file Project.java.

9.49.5.9 `double ikayaki.Project.dip = 0.0` [private]

Dip of the sample. Will be used to create the transform matrix. The unit is degrees (-90 to 90).

Definition at line 140 of file Project.java.

Referenced by `ikayaki.Project.getDip()`, `ikayaki.Project.getDocument()`, and `ikayaki.Project.Project()`.

9.49.5.10 `final File ikayaki.Project.file` [private]

Location of the project file in the local file system. Autosaving will save the project to this file.

Definition at line 98 of file Project.java.

Referenced by `ikayaki.Project.getFile()`, and `ikayaki.Project.saveNow()`.

9.49.5.11 `final String ikayaki.Project.LATITUDE_PROPERTY = "latitude"`
[static]

Definition at line 80 of file Project.java.

Referenced by `ikayaki.Project.exportToDAT()`.

9.49.5.12 `final EventListenerList ikayaki.Project.listenerList = new
EventListenerList()` [private]

Listeners for this project.

Definition at line 186 of file Project.java.

Referenced by `ikayaki.Project.addProjectListener()`, `ikayaki.Project.fireProjectEvent()`, and `ikayaki.Project.removeProjectListener()`.

9.49.5.13 `final String ikayaki.Project.LONGITUDE_PROPERTY = "longitude"`
[static]

Definition at line 81 of file Project.java.

Referenced by `ikayaki.Project.exportToDAT()`.

9.49.5.14 `double ikayaki.Project.mass = -1.0` [private]

Mass of the sample, or a negative value if no mass is defined. The unit is gram.

Definition at line 166 of file Project.java.

Referenced by `ikayaki.Project.getDocument()`, `ikayaki.Project.getMass()`, and `ikayaki.Project.Project()`.

9.49.5.15 `final String ikayaki.Project.MEASUREMENT_TYPE_AUTO_VALUE = "AUTO"` [static]

Definition at line 72 of file Project.java.

9.49.5.16 `final String ikayaki.Project.MEASUREMENT_TYPE_MANUAL_VALUE = "MANUAL"` [static]

Definition at line 73 of file Project.java.

9.49.5.17 `final String ikayaki.Project.MEASUREMENT_TYPE_PROPERTY = "measurementType"` [static]

Definition at line 71 of file Project.java.

9.49.5.18 `boolean ikayaki.Project.modified = false` [private]

true if the project has been modified, otherwise false.

Definition at line 191 of file Project.java.

Referenced by `ikayaki.Project.isModified()`, `ikayaki.Project.Project()`, `ikayaki.Project.save()`, and `ikayaki.Project.saveNow()`.

9.49.5.19 `Normalization ikayaki.Project.normalization = VOLUME` [private]

The type of normalization to use.

Definition at line 155 of file Project.java.

Referenced by `ikayaki.Project.getDocument()`, `ikayaki.Project.getNormalization()`, and `ikayaki.Project.Project()`.

9.49.5.20 `final String ikayaki.Project.OPERATOR_PROPERTY = "operator"`
[static]

Definition at line 74 of file Project.java.

9.49.5.21 Orientation `ikayaki.Project.orientation = MINUS_Z` [private]

Orientation(p. 34) of the sample. Will be used to create the transform matrix.

Definition at line 150 of file `Project.java`.

Referenced by `ikayaki.Project.getDocument()`, `ikayaki.Project.getOrientation()`, and `ikayaki.Project.Project()`.

9.49.5.22 final Hashtable<File, Project> ikayaki.Project.projectCache = new Hashtable<File, Project>() [static, private]

Caches the created and loaded **Project**(p. 264) objects to make sure that no more than one object will be created for each physical file.

Definition at line 87 of file `Project.java`.

Referenced by `ikayaki.Project.closeProject()`, `ikayaki.Project.createProject()`, `ikayaki.Project.getCachedProjects()`, and `ikayaki.Project.loadProject()`.

9.49.5.23 final Hashtable<File, Object> ikayaki.Project.projectTypeCache = new Hashtable<File, Object>() [static, private]

Caches the types of the project files, as read by `getType(Project)`. The value is a **Type**(p. 37) for valid project files, or an `Object` for invalid or unknown files.

Definition at line 93 of file `Project.java`.

Referenced by `ikayaki.Project.createProject()`, `ikayaki.Project.getType()`, and `ikayaki.Project.loadProject()`.

9.49.5.24 final Properties ikayaki.Project.properties = new Properties() [private]

Custom properties of this project stored in a map. The project is not interested in what properties are stored; it only saves them.

Definition at line 124 of file `Project.java`.

Referenced by `ikayaki.Project.getDocument()`, `ikayaki.Project.getProperty()`, `ikayaki.Project.Project()`, and `ikayaki.Project.setProperty()`.

9.49.5.25 final String ikayaki.Project.ROCK_TYPE_PROPERTY = "rockType" [static]

Definition at line 76 of file `Project.java`.

Referenced by `ikayaki.Project.exportToDAT()`.

9.49.5.26 SampleType `ikayaki.Project.sampleType = HAND` [private]

Type(p. 37) of the sample. Will be used to create the transform matrix.

Definition at line 145 of file `Project.java`.

Referenced by `ikayaki.Project.getDocument()`, `ikayaki.Project.getSampleType()`, `ikayaki.Project.Project()`, and `ikayaki.Project.updateTransforms()`.

9.49.5.27 MeasurementSequence ikayaki.Project.sequence = new MeasurementSequence() [private]

Measurement(p. 306) sequence of this project. In the beginning are all completed measurement steps, and in the end are planned measurement steps. Completed measurements may NOT be deleted.

Definition at line 130 of file Project.java.

Referenced by ikayaki.Project.getDocument(), ikayaki.Project.getTimestamp(), ikayaki.Project.Project(), and ikayaki.Project.updateTransforms().

9.49.5.28 final String ikayaki.Project.SITE_PROPERTY = "site" [static]

Definition at line 78 of file Project.java.

Referenced by ikayaki.Project.exportToDAT().

9.49.5.29 Squid ikayaki.Project.squid = null [private]

Pointer to the SQUID device interface, or null if this project is not its owner.

Definition at line 118 of file Project.java.

Referenced by ikayaki.Project.getSquid().

9.49.5.30 State ikayaki.Project.state = IDLE [private]

Current state of the measurements. If no measurement is running, then state is IDLE. Only one measurement may be running at a time.

Definition at line 108 of file Project.java.

Referenced by ikayaki.Project.getState().

9.49.5.31 double ikayaki.Project.strike = 0.0 [private]

Strike of the sample. Will be used to create the transform matrix. The unit is degrees (0 to 360).

Definition at line 135 of file Project.java.

Referenced by ikayaki.Project.getDocument(), ikayaki.Project.getStrike(), and ikayaki.Project.Project().

9.49.5.32 double ikayaki.Project.susceptibility = -1.0 [private]

Susceptibility of the sample, or a negative value if no susceptibility is defined. Susceptibility has no unit.

Definition at line 176 of file Project.java.

Referenced by ikayaki.Project.getDocument(), ikayaki.Project.getSusceptibility(), and ikayaki.Project.Project().

9.49.5.33 `Matrix3d ikayaki.Project.transform = new Matrix3d()` [private]

Matrix for correcting the sample's orientation. The matrix will be updated whenever the strike, dip, sampleType or orientation is changed. After that the updated matrix will be applied to all measurements.

Definition at line 161 of file Project.java.

Referenced by `ikayaki.Project.getTransform()`, and `ikayaki.Project.updateTransforms()`.

9.49.5.34 `final Type ikayaki.Project.type` [private]

Type(p. 37) of the measurement project. This will affect which features of the project are enabled and disabled.

Definition at line 102 of file Project.java.

Referenced by `ikayaki.Project.getDocument()`, `ikayaki.Project.getType()`, `ikayaki.Project.Project()`, and `ikayaki.ProjectEvent.ProjectEvent()`.

9.49.5.35 `double ikayaki.Project.volume = -1.0` [private]

Volume of the sample, or a negative value if no volume is defined. The unit is cm^3 .

Definition at line 171 of file Project.java.

Referenced by `ikayaki.Project.getDocument()`, `ikayaki.Project.getVolume()`, and `ikayaki.Project.Project()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/Project.java`

9.50 ikayaki.Project.DummyMeasurement Class Reference

Public Member Functions

- void run ()

9.50.1 Detailed Description

A measurement that gives random data for testing purposes. The project's state must be non-IDLE before starting this thread.

Definition at line 2467 of file Project.java.

9.50.2 Member Function Documentation

9.50.2.1 void ikayaki.Project.DummyMeasurement.run ()

Definition at line 2468 of file Project.java.

References ikayaki.gui.null.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/**Project.java**

9.51 ikayaki.Project.ManualDemag Class Reference

Public Member Functions

- **ManualDemag** (**ManualDemagAxel** *axel*, double **amplitude**)
- void **run** ()

Private Attributes

- **ManualDemagAxel** *axel*
- double **amplitude**

9.51.1 Detailed Description

Runs a manual demag command and adds a new step to this project with the demag value. The project's state must be non-IDLE before starting this thread.

Definition at line 2733 of file Project.java.

9.51.2 Constructor & Destructor Documentation

9.51.2.1 ikayaki.Project.ManualDemag.ManualDemag (**ManualDemagAxel** *axel*, double *amplitude*)

Definition at line 2738 of file Project.java.

References ikayaki.gui.null.

9.51.3 Member Function Documentation

9.51.3.1 void ikayaki.Project.ManualDemag.run ()

Definition at line 2746 of file Project.java.

References ikayaki.gui.null.

9.51.4 Member Data Documentation

9.51.4.1 double ikayaki.Project.ManualDemag.amplitude [private]

Definition at line 2736 of file Project.java.

9.51.4.2 **ManualDemagAxel** ikayaki.Project.ManualDemag.axel [private]

Definition at line 2735 of file Project.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/**Project.java**

9.52 ikayaki.Project.ManualMeasure Class Reference

Public Member Functions

- void run ()

9.52.1 Detailed Description

Runs a manual measure command and adds a new step to this project with the measurement data. The project's state must be non-IDLE before starting this thread.

Definition at line 2685 of file Project.java.

9.52.2 Member Function Documentation

9.52.2.1 void ikayaki.Project.ManualMeasure.run ()

Definition at line 2686 of file Project.java.

References ikayaki.gui.null.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/**Project.java**

9.53 ikayaki.Project.ManualMove Class Reference

Public Member Functions

- **ManualMove** (**ManualMovePosition** pos)
- **void run** ()

Private Attributes

- **ManualMovePosition** pos

9.53.1 Detailed Description

Runs a manual move command. The project's state must be non-IDLE before starting this thread.
Definition at line 2593 of file Project.java.

9.53.2 Constructor & Destructor Documentation

9.53.2.1 ikayaki.Project.ManualMove.ManualMove (**ManualMovePosition** pos)

Definition at line 2597 of file Project.java.

9.53.3 Member Function Documentation

9.53.3.1 void ikayaki.Project.ManualMove.run ()

Definition at line 2601 of file Project.java.

References ikayaki.gui.null.

9.53.4 Member Data Documentation

9.53.4.1 ManualMovePosition ikayaki.Project.ManualMove.pos [private]

Definition at line 2595 of file Project.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/**Project.java**

9.54 ikayaki.Project.ManualRotate Class Reference

Public Member Functions

- `ManualRotate` (int *angle*)
- `void run` ()

Private Attributes

- int *angle*

9.54.1 Detailed Description

Runs a manual rotate command. The project's state must be non-IDLE before starting this thread.

Definition at line 2651 of file `Project.java`.

9.54.2 Constructor & Destructor Documentation

9.54.2.1 `ikayaki.Project.ManualRotate.ManualRotate` (int *angle*)

Definition at line 2655 of file `Project.java`.

9.54.3 Member Function Documentation

9.54.3.1 `void ikayaki.Project.ManualRotate.run` ()

Definition at line 2659 of file `Project.java`.

References `ikayaki.gui.null`.

9.54.4 Member Data Documentation

9.54.4.1 `int ikayaki.Project.ManualRotate.angle` [private]

Definition at line 2653 of file `Project.java`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/Project.java`

9.55 ikayaki.Project.Measurement Class Reference

Public Member Functions

- void `run ()`

Private Member Functions

- void `checkAborted ()` throws `InterruptedException`

9.55.1 Detailed Description

Runs the measurements and adds the measurement data to this project. The project's state must be non-IDLE before starting this thread.

Definition at line 2252 of file `Project.java`.

9.55.2 Member Function Documentation

9.55.2.1 void ikayaki.Project.Measurement.checkAborted () throws `InterruptedException` [private]

Checks whether the measurement has been aborted. Will throw an exception if the measurement has been aborted, otherwise will do nothing.

Exceptions:

`InterruptedException` if the measurement has been aborted.

Definition at line 2455 of file `Project.java`.

9.55.2.2 void ikayaki.Project.Measurement.run ()

Definition at line 2253 of file `Project.java`.

References `ikayaki.gui.null`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/Project.java`

9.56 ikayaki.gui.ProjectComponent Class Reference

Inherits `ikayaki.ProjectListener`, and `ikayaki.MeasurementListener`.

Inherited by `ikayaki.gui.CalibrationPanel`, `ikayaki.gui.MainStatusBar`, `ikayaki.gui.MainViewPanel`, `ikayaki.gui.MeasurementControlsPanel`, `ikayaki.gui.MeasurementDetailsPanel`, `ikayaki.gui.MeasurementGraphsPanel`, `ikayaki.gui.MeasurementSequencePanel`, `ikayaki.gui.ProjectExplorerPanel`, and `ikayaki.gui.ProjectInformationPanel`.

Inheritance diagram for `ikayaki.gui.ProjectComponent`:
Collaboration diagram for `ikayaki.gui.ProjectComponent`:

Public Member Functions

- `ProjectComponent ()`
- `Project getProject ()`
- `void setProject (Project project)`
- `Frame getParentFrame ()`
- `void projectUpdated (ProjectEvent event)`
- `void measurementUpdated (MeasurementEvent event)`

Private Attributes

- `Project project`

9.56.1 Detailed Description

Common superclass for components which use a `Project`(p. 264) and listen to `MeasurementEvents` and `ProjectEvents`.

Author:

Esko Luontola

Definition at line 35 of file `ProjectComponent.java`.

9.56.2 Constructor & Destructor Documentation

9.56.2.1 `ikayaki.gui.ProjectComponent.ProjectComponent ()`

Initializes this `ProjectComponent`(p. 307) with no project.

Definition at line 45 of file `ProjectComponent.java`.

References `ikayaki.gui.null`, and `ikayaki.gui.ProjectComponent.project`.

9.56.3 Member Function Documentation

9.56.3.1 Frame `ikayaki.gui.ProjectComponent.getParentFrame ()`

Returns the parent Frame of this component.

Returns:

the parent frame, or null if this component had not been laid in a frame.

Definition at line 80 of file ProjectComponent.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel(), and ikayaki.gui.MeasurementGraphsPanel.MeasurementGraphsPanel().

9.56.3.2 Project ikayaki.gui.ProjectComponent.getProject ()

Returns the active project, or null if no project is active.

Reimplemented in **ikayaki.gui.MainViewPanel** (p. 162).

Definition at line 53 of file ProjectComponent.java.

References ikayaki.gui.ProjectComponent.project.

Referenced by ikayaki.gui.MeasurementControlsPanel.MeasurementControlsPanel(), ikayaki.gui.MeasurementGraphsPanel.MeasurementGraphsPanel(), ikayaki.gui.ProjectInformationPanel.saveParameters(), and ikayaki.gui.ProjectInformationPanel.saveProperties().

9.56.3.3 void ikayaki.gui.ProjectComponent.measurementUpdated (MeasurementEvent event)

Does nothing; subclasses override this if they want to listen MeasurementEvents.

Parameters:

event MeasurementEvent (p. 188) received.

Implements **ikayaki.MeasurementListener** (p. 194).

Reimplemented in **ikayaki.gui.MeasurementControlsPanel** (p. 172), **ikayaki.gui.MeasurementDetailsPanel** (p. 178), **ikayaki.gui.MeasurementGraphsPanel** (p. 192), and **ikayaki.gui.MeasurementSequencePanel** (p. 210).

Definition at line 106 of file ProjectComponent.java.

9.56.3.4 void ikayaki.gui.ProjectComponent.projectUpdated (ProjectEvent event)

Does nothing; subclasses override this if they want to listen ProjectEvents.

Parameters:

event ProjectEvent (p. 310) received.

Implements **ikayaki.ProjectListener** (p. 343).

Reimplemented in **ikayaki.gui.MainViewPanel** (p. 163), **ikayaki.gui.MeasurementControlsPanel** (p. 172), **ikayaki.gui.MeasurementGraphsPanel** (p. 192), and **ikayaki.gui.MeasurementSequencePanel** (p. 211).

Definition at line 97 of file ProjectComponent.java.

9.56.3.5 void ikayaki.gui.ProjectComponent.setProject (Project *project*)

Sets the project for this **ProjectComponent**(p.307). Unregisters **MeasurementListener**(p.194) and **ProjectListener**(p.343) from the old project, and registers them to the new project.

Parameters:

project new active project, or null to make no project active.

Reimplemented in **ikayaki.gui.CalibrationPanel** (p.52), **ikayaki.gui.MainViewPanel** (p.163), **ikayaki.gui.MeasurementControlsPanel** (p.173), **ikayaki.gui.MeasurementDetailsPanel** (p.178), **ikayaki.gui.MeasurementGraphsPanel** (p.192), **ikayaki.gui.ProjectExplorerPanel** (p.315), and **ikayaki.gui.ProjectInformationPanel** (p.336).

Definition at line 63 of file ProjectComponent.java.

References **ikayaki.Project.addMeasurementListener()**, **ikayaki.Project.addProjectListener()**, and **ikayaki.gui.null**.

Here is the call graph for this function:

9.56.4 Member Data Documentation

9.56.4.1 Project ikayaki.gui.ProjectComponent.project [private]

The active project.

Reimplemented in **ikayaki.gui.MainViewPanel** (p.166).

Definition at line 40 of file ProjectComponent.java.

Referenced by **ikayaki.gui.ProjectComponent.getProject()**, and **ikayaki.gui.ProjectComponent.ProjectComponent()**.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**ProjectComponent.java**

9.57 ikayaki.ProjectEvent Class Reference

Collaboration diagram for ikayaki.ProjectEvent:

Public Types

- enum `Type` { `STATE_CHANGED`, `DATA_CHANGED`, `FILE_SAVED` }

Public Member Functions

- `ProjectEvent` (`Project project`, `Type type`)
- `Project` `getProject` ()
- `Type` `getType` ()

Private Attributes

- `Project` `project`
- `Type` `type`

9.57.1 Detailed Description

`ProjectEvent`(p. 310) is used to notify others about the state change of a project.

Author:

Esko Luontola

Definition at line 31 of file `ProjectEvent.java`.

9.57.2 Member Enumeration Documentation

9.57.2.1 enum ikayaki::ProjectEvent::Type

The type of a project event.

Enumeration values:

STATE_CHANGED

DATA_CHANGED

FILE_SAVED

Definition at line 76 of file `ProjectEvent.java`.

9.57.3 Constructor & Destructor Documentation

9.57.3.1 ikayaki.ProjectEvent.ProjectEvent (`Project project`, `Type type`)

Creates a new project event.

Parameters:

project the project that sends this event.

type the type of the event.

Exceptions:

NullPointerException if any of the arguments is null.

Definition at line 50 of file ProjectEvent.java.

References ikayaki.gui.null, and ikayaki.Project.type.

9.57.4 Member Function Documentation

9.57.4.1 Project ikayaki.ProjectEvent.getProject ()

Returns the project that sent this event.

Definition at line 62 of file ProjectEvent.java.

References ikayaki.ProjectEvent.project.

Referenced by ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.projectUpdated(), and ikayaki.gui.MainViewPanel.projectUpdated().

9.57.4.2 Type ikayaki.ProjectEvent.getType ()

Returns the type of this event.

Definition at line 69 of file ProjectEvent.java.

References ikayaki.ProjectEvent.type.

Referenced by ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.projectUpdated(), and ikayaki.gui.MainViewPanel.projectUpdated().

9.57.5 Member Data Documentation

9.57.5.1 Project ikayaki.ProjectEvent.project [private]

The project that sent this event.

Definition at line 36 of file ProjectEvent.java.

Referenced by ikayaki.ProjectEvent.getProject().

9.57.5.2 Type ikayaki.ProjectEvent.type [private]

The type of event this is.

Definition at line 41 of file ProjectEvent.java.

Referenced by ikayaki.ProjectEvent.getType().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/**ProjectEvent.java**

9.58 ikayaki.gui.ProjectExplorerPanel Class Reference

Inherits **ikayaki.gui.ProjectComponent**.

Inheritance diagram for ikayaki.gui.ProjectExplorerPanel: Collaboration diagram for ikayaki.gui.ProjectExplorerPanel:

Public Member Functions

- **ProjectExplorerPanel** (**ProjectComponent** parent)
- **ProjectExplorerPanel** (**ProjectComponent** parent, **Project** project)
- void **setProject** (**Project** project)

Package Attributes

- boolean **browserFieldPopupIsAutocomplete** = false
- boolean **browserFieldUpdatingPopup** = false

Private Member Functions

- boolean **setDirectory** (**File** directory)
- **File**[] **getDirectoryHistory** ()
- **File**[] **getAutocompleteFiles** (**String** dirmatch)
- void **doAutoComplete** ()
- void **setBrowserFieldPopup** (**File**[] files, boolean uniformFit)
- void **setBrowserFieldCursorToEnd** ()

Private Attributes

- final **ProjectComponent** parent
- final **JPanel** **browsePanel** = new **JPanel**()
- final **JComboBox** **browserField**
- final **FittedComboBoxRenderer** **browserFieldRenderer**
- final **JTextField** **browserFieldEditor**
- final **ComponentFlasher** **browserFieldFlasher**
- final **JButton** **browseButton**
- final **ProjectExplorerTable** **explorerTable**
- final **JScrollPane** **explorerTableScrollPane**
- **NewProjectPanel** **newProjectPanel**
- final **LastExecutor** **autocompleteExecutor** = new **LastExecutor**(100, true)
- **File** **directory** = null

Classes

- class **NewProjectPanel**

9.58.1 Detailed Description

Creates a history/autocomplete field (`browserField`) for choosing the project directory, a listing of project files in that directory (`explorerTable`) and in that listing a line for creating new project, which has a textbox for project name, an AF/TH ComboBox and a "Create new" button (`createNewProjectButton`) for actuating the creation. Also has a right-click popup menu for exporting project files.

Author:

Samuli Kaipiainen

Definition at line 50 of file `ProjectExplorerPanel.java`.

9.58.2 Constructor & Destructor Documentation

9.58.2.1 `ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel` (`ProjectComponent parent`)

Call next constructor...

Parameters:

parent the component whose `setProject()`(p.315) method will be called on opening a new project file.

Definition at line 108 of file `ProjectExplorerPanel.java`.

References `ikayaki.gui.null`.

9.58.2.2 `ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel` (`ProjectComponent parent`, `Project project`)

Creates all components, sets directory as the last open directory or opened project's directory, initializes files with files from that directory.

Parameters:

parent the component whose `setProject()`(p.315) method will be called on opening a new project file.

project project to load and whose directory to set as current directory.

Event D: On `browseButton` click - open a FileChooser dialog for choosing new directory, set it to directory, update files listing, update `explorerTable` and `browserField`.

Event C: On `browserField` popup window click - set clicked line as directory, update files listing, update `explorerTable` and `browserField`.

Event B: On `browserField` down-arrow-click - show directory history in `browserField`'s popup window.

Event A: On `browserField` change - send `autocomplete-results-finder` with `browserField`'s text to `LastExecutor` via `autocompleteExecutor.execute(Runnable)`, which schedules disk access and displaying autocomplete results in `browserField`'s popup window.

Definition at line 119 of file `ProjectExplorerPanel.java`.

References `ikayaki.gui.ProjectExplorerPanel.browseButton`, `ikayaki.gui.ProjectExplorerPanel.browsePanel`, `ikayaki.gui.ProjectExplorerPanel.browserField`, `ikayaki.gui.ProjectExplorerPanel.browserFieldEditor`, `ikayaki.gui.ProjectExplorerPanel.browserFieldFlasher`, `ikayaki.gui.ProjectExplorerPanel.browserFieldRenderer`, `ikayaki.gui.ProjectExplorerPanel.directory`, `ikayaki.gui.ProjectExplorerPanel.explorerTable`, `ikayaki.gui.ProjectExplorerPanel.explorerTableScrollPane`, `ikayaki.gui.ProjectExplorerPanel.getDirectoryHistory()`, `ikayaki.Project.getFile()`, `ikayaki.gui.ProjectExplorerPanel.newProjectPanel`, `ikayaki.gui.null`, and `ikayaki.gui.ProjectExplorerPanel.setDirectory()`.

Here is the call graph for this function:

9.58.3 Member Function Documentation

9.58.3.1 `void ikayaki.gui.ProjectExplorerPanel.doAutoComplete ()` [private]

Updates autocomplete popup-menu.

Definition at line 372 of file `ProjectExplorerPanel.java`.

9.58.3.2 `File [] ikayaki.gui.ProjectExplorerPanel.getAutocompleteFiles (String dirmatch)` [private]

Reads matching directories from given directory name's parent.

Parameters:

dirmatch beginning of directory to which match the directories in its parent directory...

Returns:

matching directories.

Definition at line 346 of file `ProjectExplorerPanel.java`.

References `ikayaki.gui.null`.

9.58.3.3 `File [] ikayaki.gui.ProjectExplorerPanel.getDirectoryHistory ()` [private]

Reads current directory history from `Settings`(p. 361).

Returns:

current directory history. Should never return null.

Definition at line 336 of file `ProjectExplorerPanel.java`.

Referenced by `ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel()`.

9.58.3.4 `void ikayaki.gui.ProjectExplorerPanel.setBrowserFieldCursorToEnd ()` [private]

Sets `browserField`'s cursor to text field's (right) end.

Deprecated

not needed anymore; cursor seems to be there anyway?

Definition at line 431 of file `ProjectExplorerPanel.java`.

9.58.3.5 void ikayaki.gui.ProjectExplorerPanel.setBrowserFieldPopup (File[] *files*, boolean *uniformFit*) [private]

Sets browserField popup-menu-list as given files; also clears any selection.

Parameters:

files list of files to set the list to.

uniformFit true if all the file paths should be cut short from the same directory, false otherwise.

Definition at line 396 of file ProjectExplorerPanel.java.

9.58.3.6 boolean ikayaki.gui.ProjectExplorerPanel.setDirectory (File *directory*) [private]

Attempts to change to the given directory. Updates browserField and explorerTable with new directory.

Parameters:

directory directory to change to.

Returns:

true if succesful, false otherwise.

Definition at line 319 of file ProjectExplorerPanel.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.3.7 void ikayaki.gui.ProjectExplorerPanel.setProject (Project *project*)

Call super.setProject(project), highlight selected project, or unhighlight unselected project.

Parameters:

project project opened, or null to open no project.

Reimplemented from ikayaki.gui.ProjectComponent (p. 309).

Definition at line 295 of file ProjectExplorerPanel.java.

References ikayaki.gui.null.

9.58.4 Member Data Documentation

9.58.4.1 final LastExecutor ikayaki.gui.ProjectExplorerPanel.autocomplete-Executor = new LastExecutor(100, true) [private]

LastExecutor for scheduling autocomplete results to separate thread (disk access and displaying).

Definition at line 96 of file ProjectExplorerPanel.java.

9.58.4.2 final JButton ikayaki.gui.ProjectExplorerPanel.browseButton [private]

Definition at line 86 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.3 final JPanel ikayaki.gui.ProjectExplorerPanel.browsePanel = new JPanel() [private]

Holds browserField and browseButton

Definition at line 59 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.4 final JComboBox ikayaki.gui.ProjectExplorerPanel.browserField [private]

Text field for writing directory to change to. Autocomplete results appear to Combo Box' popup window, scheduled by LastExecutor. Directory history appears to the same popup window when the down-arrow right to text field is clicked.

Definition at line 66 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.5 final JTextField ikayaki.gui.ProjectExplorerPanel.browserFieldEditor [private]

Definition at line 68 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.6 final ComponentFlasher ikayaki.gui.ProjectExplorerPanel.browserFieldFlasher [private]

Definition at line 69 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.7 boolean ikayaki.gui.ProjectExplorerPanel.browserFieldPopupIsAutocomplete = false [package]

Tells whether current popup menu is autocomplete list (and not directory history).

Definition at line 74 of file ProjectExplorerPanel.java.

9.58.4.8 final FittedComboBoxRenderer ikayaki.gui.ProjectExplorerPanel.browserFieldRenderer [private]

Definition at line 67 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.9 `boolean ikayaki.gui.ProjectExplorerPanel.browserFieldUpdatingPopup = false` [package]

Tells whether browserField's popup menu list is being updated, and we don't want those Action-Events.

Definition at line 84 of file ProjectExplorerPanel.java.

9.58.4.10 `File ikayaki.gui.ProjectExplorerPanel.directory = null` [private]

Currently open directory.

Definition at line 101 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.11 `final ProjectExplorerTable ikayaki.gui.ProjectExplorerPanel.explorerTable` [private]

Definition at line 88 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.12 `final JScrollPane ikayaki.gui.ProjectExplorerPanel.explorerTableScrollPane` [private]

Definition at line 89 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.13 `NewProjectPanel ikayaki.gui.ProjectExplorerPanel.newProjectPanel` [private]

Definition at line 91 of file ProjectExplorerPanel.java.

Referenced by ikayaki.gui.ProjectExplorerPanel.ProjectExplorerPanel().

9.58.4.14 `final ProjectComponent ikayaki.gui.ProjectExplorerPanel.parent` [private]

The component (`MainViewPanel`(p. 157)) whose `setProject()`(p. 315) method will be called on opening a new project file.

Definition at line 54 of file ProjectExplorerPanel.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**ProjectExplorerPanel.java**

9.59 ikayaki.gui.ProjectExplorerPanel.NewProjectPanel Class Reference

Collaboration diagram for ikayaki.gui.ProjectExplorerPanel.NewProjectPanel:

Public Member Functions

- **NewProjectPanel** ()

Private Attributes

- final JTextField **newProjectName**
- final JComboBox **newProjectType**
- final JButton **createNewProjectButton**
- final JPanel **flowPanel**
- final ComponentFlasher **newProjectNameFlasher**

9.59.1 Detailed Description

Panel with components for creating a new project. This Panel will be somewhere below the project file listing...

Definition at line 438 of file ProjectExplorerPanel.java.

9.59.2 Constructor & Destructor Documentation

9.59.2.1 ikayaki.gui.ProjectExplorerPanel.NewProjectPanel.NewProjectPanel ()

Event A: On createNewProjectButton click - call **Project.createProject(File, Type)**(p.274) with filename from newProjectField; if returns null, show error message and do nothing. Otherwise, update file listing, set new project active, tell explorerTable to reset newProjectField and newProjectType and call (**MainViewPanel**(p.157)) parent.setProject(Project) with returned **Project**(p.264).

Pressing enter in newProjectName text field.

Definition at line 446 of file ProjectExplorerPanel.java.

References ikayaki.gui.null.

9.59.3 Member Data Documentation

9.59.3.1 final JButton ikayaki.gui.ProjectExplorerPanel.NewProjectPanel.createNewProjectButton [private]

Definition at line 442 of file ProjectExplorerPanel.java.

9.59.3.2 final JPanel ikayaki.gui.ProjectExplorerPanel.NewProjectPanel.flowPanel [private]

Definition at line 443 of file ProjectExplorerPanel.java.

9.59.3.3 final JTextField ikayaki.gui.ProjectExplorerPanel.NewProjectPanel.newProjectName [private]

Definition at line 440 of file ProjectExplorerPanel.java.

9.59.3.4 final ComponentFlasher ikayaki.gui.ProjectExplorerPanel.NewProjectPanel.newProjectNameFlasher [private]

Definition at line 444 of file ProjectExplorerPanel.java.

9.59.3.5 final JComboBox ikayaki.gui.ProjectExplorerPanel.NewProjectPanel.newProjectType [private]

Definition at line 441 of file ProjectExplorerPanel.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**ProjectExplorerPanel.java**

9.60 ikayaki.gui.ProjectExplorerTable Class Reference

Inherits **ikayaki.ProjectListener**.

Inheritance diagram for ikayaki.gui.ProjectExplorerTable: Collaboration diagram for ikayaki.gui.ProjectExplorerTable:

Public Member Functions

- **ProjectExplorerTable** (**ProjectComponent** parent)
- **ProjectExplorerTable** (**ProjectComponent** parent, boolean isCalibration)
- void **setColumns** (int[] columns)
- void **fitColumnWidths** ()
- void **setDirectory** (File directory)
- void **projectUpdated** (**ProjectEvent** event)

Static Public Attributes

- static final int **COLUMN_FILENAME** = 0
- static final int **COLUMN_TYPE** = 1
- static final int **COLUMN_LASTMOD** = 2
- static final int **COLUMN_LASTMEASURE** = 3
- static final int **COLUMN_UNMEASURED** = 4
- static final String[] **column_name** = {"Name", "Type", "Modified", "Measured", "Elapsed"}
- static final int[] **default_columns** = {**COLUMN_FILENAME**, **COLUMN_TYPE**, **COLUMN_LASTMOD**}
- static final int[] **calibration_columns** = {**COLUMN_FILENAME**, **COLUMN_LASTMEASURE**, **COLUMN_UNMEASURED**}

Private Member Functions

- void **scrollToRow** (int rowIndex)
- File[] **getProjectFiles** (File directory)

Private Attributes

- final **ProjectComponent** parent
- boolean isCalibration
- final **ProjectExplorerTableModel** explorerTableModel
- final Comparator< File > **explorerTableComparator** = new **ProjectExplorerTableComparator**()
- Thread **projectTypeCacher** = new Thread()
- File **directory**
- File[] **files** = new File[0]
- int **selectedFile** = -1
- int **explorerTableSortColumn** = 0
- int[] **columns** = new int[0]

Static Private Attributes

- static final int **COLUMN_UNDEFINED** = -1

Classes

- class **ProjectExplorerPopupMenu**
- class **ProjectExplorerTableComparator**
- class **ProjectExplorerTableModel**

9.60.1 Detailed Description

Creates a list of project files in directory. Handles loading selected projects and showing export popup menu.

Author:

Samuli Kaipiainen

Definition at line 51 of file ProjectExplorerTable.java.

9.60.2 Constructor & Destructor Documentation

9.60.2.1 ikayaki.gui.ProjectExplorerTable.ProjectExplorerTable (ProjectComponent *parent*)

Builds **ProjectExplorerTable**(p. 320) for displaying all project files.

Parameters:

parent the component whose setProject() method will be called on opening a new project file.

Definition at line 117 of file ProjectExplorerTable.java.

9.60.2.2 ikayaki.gui.ProjectExplorerTable.ProjectExplorerTable (ProjectComponent *parent*, boolean *isCalibration*)

Builds **ProjectExplorerTable**(p. 320).

Parameters:

parent the component whose setProject() method will be called on opening a new project file.

isCalibration if true, this table will display only calibration projects and related columns.

Event A: On table click - call **Project.loadProject(File)**(p. 289) with clicked project file, call (**MainViewPanel**(p. 157)) parent.setProject(Project) with returned **Project**(p. 264) unless null, on which case show error message and revert explorerTable selection to old project, if any.

Event B: On table mouse right-click - create a **ProjectExplorerPopupMenu**(p. 327) for rightclicked project file.

ExplorerTable sorting.

Definition at line 127 of file ProjectExplorerTable.java.

References `ikayaki.gui.ProjectExplorerTable.calibration_columns`, `ikayaki.gui.ProjectExplorerTable.default_columns`, `ikayaki.gui.ProjectExplorerTable.explorerTableModel`, `ikayaki.gui.ProjectExplorerTable.files`, `ikayaki.gui.null`, `ikayaki.gui.project`, `ikayaki.gui.ProjectExplorerTable.selectedFile`, and `ikayaki.gui.ProjectExplorerTable.setColumns()`.

Here is the call graph for this function:

9.60.3 Member Function Documentation

9.60.3.1 `void ikayaki.gui.ProjectExplorerTable.fitColumnWidths ()`

Makes sure that all data fits in their columns (excluding the `COLUMN_FILENAME` column). Renders every cell of the table to find out their preferred width, and makes the column wider if the contents does not fit the column.
 If rendering all cells in the table (such as the project type) will take a long time, it might be good to run this in a separate thread.

Definition at line 287 of file ProjectExplorerTable.java.

9.60.3.2 `File [] ikayaki.gui.ProjectExplorerTable.getProjectFiles (File directory) [private]`

Reads project file listing from given directory.

Parameters:

directory directory whose project file listing to read.

Returns:

project files in that directory; new `File[0]` if directory is null or invalid.

Definition at line 362 of file ProjectExplorerTable.java.

References `ikayaki.gui.null`.

9.60.3.3 `void ikayaki.gui.ProjectExplorerTable.projectUpdated (ProjectEvent event)`

Forwards ProjectEvents to the table model.

Parameters:

event `ProjectEvent`(p. 310) received.

Implements `ikayaki.ProjectListener` (p. 343).

Definition at line 411 of file ProjectExplorerTable.java.

9.60.3.4 `void ikayaki.gui.ProjectExplorerTable.scrollToRow (int rowIndex) [private]`

Scrolls the table to show the specified row.

Parameters:

rowIndex row to scroll to.

Definition at line 352 of file ProjectExplorerTable.java.

9.60.3.5 void ikayaki.gui.ProjectExplorerTable.setColumns (int[] *columns*)

Sets the columns displayed in this table.

Parameters:

columns int-table with COLUMN_XXX values, or null to just update table.

Definition at line 247 of file ProjectExplorerTable.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.ProjectExplorerTable.ProjectExplorerTable().

9.60.3.6 void ikayaki.gui.ProjectExplorerTable.setDirectory (File *directory*)

Updates table contents, sets selectedFile index and table selection to selected project file, or -1.

Parameters:

directory directory whose project files to display, or null to just update the table.

Definition at line 320 of file ProjectExplorerTable.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.CalibrationPanel.setProject().

9.60.4 Member Data Documentation

9.60.4.1 final int [] ikayaki.gui.ProjectExplorerTable.calibration_columns = {COLUMN_FILENAME, COLUMN_LASTMEASURE, COLUMN_UNMEASURED} [static]

Definition at line 104 of file ProjectExplorerTable.java.

Referenced by ikayaki.gui.ProjectExplorerTable.ProjectExplorerTable().

9.60.4.2 final int ikayaki.gui.ProjectExplorerTable.COLUMN_FILENAME = 0 [static]

Definition at line 95 of file ProjectExplorerTable.java.

9.60.4.3 final int ikayaki.gui.ProjectExplorerTable.COLUMN_LASTMEASURE = 3 [static]

Definition at line 98 of file ProjectExplorerTable.java.

9.60.4.4 final int ikayaki.gui.ProjectExplorerTable.COLUMN_LASTMOD = 2 [static]

Definition at line 97 of file ProjectExplorerTable.java.

```
9.60.4.5 final String [] ikayaki.gui.ProjectExplorerTable.column_name =  
    {"Name", "Type", "Modified", "Measured", "Elapsed"} [static]
```

Definition at line 100 of file ProjectExplorerTable.java.

```
9.60.4.6 final int ikayaki.gui.ProjectExplorerTable.COLUMN_TYPE = 1  
    [static]
```

Definition at line 96 of file ProjectExplorerTable.java.

```
9.60.4.7 final int ikayaki.gui.ProjectExplorerTable.COLUMN_UNDEFINED = -1  
    [static, private]
```

Definition at line 94 of file ProjectExplorerTable.java.

```
9.60.4.8 final int ikayaki.gui.ProjectExplorerTable.COLUMN_UNMEASURED =  
    4 [static]
```

Definition at line 99 of file ProjectExplorerTable.java.

```
9.60.4.9 int [] ikayaki.gui.ProjectExplorerTable.columns = new int[0] [private]
```

Visible columns in this table (as in column translation table); can be set with `setColumns(int[])`.
Initialized to `new int[0]` so that `ProjectExplorerTableModel`(p. 330) can be created.

Definition at line 110 of file ProjectExplorerTable.java.

```
9.60.4.10 final int [] ikayaki.gui.ProjectExplorerTable.default_columns =  
    {COLUMN_FILENAME, COLUMN_TYPE, COLUMN_LASTMOD}  
    [static]
```

Definition at line 103 of file ProjectExplorerTable.java.

Referenced by `ikayaki.gui.ProjectExplorerTable.ProjectExplorerTable()`.

```
9.60.4.11 File ikayaki.gui.ProjectExplorerTable.directory [private]
```

Currently open directory.

Definition at line 76 of file ProjectExplorerTable.java.

```
9.60.4.12 final Comparator<File> ikayaki.gui.ProjectExplorerTable.explorer-  
    TableComparator = new ProjectExplorerTableComparator()  
    [private]
```

Definition at line 65 of file ProjectExplorerTable.java.

9.60.4.13 final ProjectExplorerTableModel ikayaki.gui.ProjectExplorerTable.explorerTableModel [private]

Definition at line 63 of file ProjectExplorerTable.java.

Referenced by ikayaki.gui.ProjectExplorerTable.ProjectExplorerTable().

9.60.4.14 int ikayaki.gui.ProjectExplorerTable.explorerTableSortColumn = 0 [private]

Current sort column; must be set to an untranslated column index.

Definition at line 91 of file ProjectExplorerTable.java.

9.60.4.15 File [] ikayaki.gui.ProjectExplorerTable.files = new File[0] [private]

Project(p. 264) files to in current directory. Set to new File[0] so that **ProjectExplorerTableModel**(p. 330) can be created.

Definition at line 81 of file ProjectExplorerTable.java.

Referenced by ikayaki.gui.ProjectExplorerTable.ProjectExplorerTable().

9.60.4.16 boolean ikayaki.gui.ProjectExplorerTable.isCalibration [private]

Tells whether this table is calibration project table or all-project table.

Definition at line 61 of file ProjectExplorerTable.java.

9.60.4.17 final ProjectComponent ikayaki.gui.ProjectExplorerTable.parent [private]

The component (**MainViewPanel**(p. 157)) whose setProject() method will be called on opening a new project file.

Definition at line 56 of file ProjectExplorerTable.java.

9.60.4.18 Thread ikayaki.gui.ProjectExplorerTable.projectTypeCacher = new Thread() [private]

Builds the project type cache for each directory. If the thread is still working when a new request arrives, the old thread should be interrupted.

Definition at line 71 of file ProjectExplorerTable.java.

9.60.4.19 int ikayaki.gui.ProjectExplorerTable.selectedFile = -1 [private]

Selected project file index, or -1 if none selected in current directory.

Definition at line 86 of file ProjectExplorerTable.java.

Referenced by ikayaki.gui.ProjectExplorerTable.ProjectExplorerTable().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**ProjectExplorerTable.java**

9.61 ikayaki.gui.ProjectExplorerTable.ProjectExplorerPopupMenu Class Reference

Public Member Functions

- **ProjectExplorerPopupMenu** (File[] xfiles)

Private Attributes

- File[] files
- File directory

9.61.1 Detailed Description

Shows popup menu with export choices: AF (.dat), Thellier (.tdt) and Thermal (.tdt), and for each, "to current directory", "to disk drive A:" and "...", which opens a standard file chooser for selecting dir and file to export to. Executes selected export command.

Definition at line 680 of file ProjectExplorerTable.java.

9.61.2 Constructor & Destructor Documentation

9.61.2.1 ikayaki.gui.ProjectExplorerTable.ProjectExplorerPopupMenu.ProjectExplorerPopupMenu (File[] xfiles)

Builds the popup menu, but doesn't show it; use show(...) to do that.

Parameters:

xfiles file(s) to show export menu for.

Event A: On menu click - call project.exportToXXX(File) according to selected menu item; if false is returned, show error message.

Definition at line 697 of file ProjectExplorerTable.java.

References ikayaki.gui.null.

9.61.3 Member Data Documentation

9.61.3.1 File ikayaki.gui.ProjectExplorerTable.ProjectExplorerPopupMenu.directory [private]

directory where to export by default

Definition at line 690 of file ProjectExplorerTable.java.

9.61.3.2 File [] ikayaki.gui.ProjectExplorerTable.ProjectExplorerPopupMenu.files [private]

files to export

Definition at line 685 of file ProjectExplorerTable.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**ProjectExplorerTable.java**

9.62 ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableComparator Class Reference

Public Member Functions

- `int compare` (File *a*, File *b*)

Private Member Functions

- `int compareTimestamps` (File *a*, File *b*)

9.62.1 Detailed Description

Comparator used for `ProjectExplorerTable`(p. 320) sorting.

Definition at line 631 of file `ProjectExplorerTable.java`.

9.62.2 Member Function Documentation

9.62.2.1 `int ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableComparator.compare` (File *a*, File *b*)

Definition at line 632 of file `ProjectExplorerTable.java`.

References `ikayaki.gui.null`.

9.62.2.2 `int ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableComparator.compareTimestamps` (File *a*, File *b*) [private]

Helper method for comparing project timestamps.

Parameters:

a project file *a*

b project file *b*

Returns:

<0 if *a*'s timestamp < *b*'s timestamp, 0 if the same, >0 if *a*'s timestamp > *b*'s timestamp

Definition at line 663 of file `ProjectExplorerTable.java`.

References `ikayaki.Project.getTimestamp()`, and `ikayaki.gui.null`.

Here is the call graph for this function:

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/ProjectExplorerTable.java`

9.63 ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel Class Reference

Inherits **ikayaki.ProjectListener**.

Inheritance diagram for ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel: Collaboration diagram for ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel:

Public Member Functions

- **ProjectExplorerTableModel** ()
- String **getColumnName** (int column)
- int **getRowCount** ()
- int **getColumnCount** ()
- Object **getValueAt** (int row, int column)
- Override Class<?> **getColumnClass** (int columnIndex)
- void **projectUpdated** (**ProjectEvent** event)

Private Attributes

- final **StyledWrapper defaultWrapper** = Settings.getDefaultWrapperInstance()
- final **StyledWrapper measuringWrapper** = Settings.getMeasuringWrapperInstance()
- final **StyledWrapper doneRecentlyWrapper** = Settings.getDoneRecentlyWrapperInstance()
- final **Font calibrationNoticeFont** = ProjectExplorerTable.this.getFont().deriveFont(Font.BOLD)
- File **measuringProjectFile**
- File **doneRecentlyProjectFile**

9.63.1 Detailed Description

TableModel which handles data from files (in upper-class **ProjectExplorerTable**(p. 320)).

Definition at line 418 of file ProjectExplorerTable.java.

9.63.2 Constructor & Destructor Documentation

9.63.2.1 ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.ProjectExplorerTableModel ()

Definition at line 435 of file ProjectExplorerTable.java.

9.63.3 Member Function Documentation

9.63.3.1 Override Class<?> ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getColumnClass (int *columnIndex*)

Definition at line 561 of file ProjectExplorerTable.java.

9.63.3.2 `int ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getColumnCount ()`

Definition at line 477 of file ProjectExplorerTable.java.

9.63.3.3 `String ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getColumnName (int column)`

Definition at line 466 of file ProjectExplorerTable.java.

9.63.3.4 `int ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getRowCount ()`

Definition at line 473 of file ProjectExplorerTable.java.

9.63.3.5 `Object ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getValueAt (int row, int column)`

Definition at line 481 of file ProjectExplorerTable.java.

References `ikayaki.gui.StyledWrapper.font`, `ikayaki.Project.getTimestamp()`, `ikayaki.Project.loadProject()`, `ikayaki.gui.null`, `ikayaki.gui.StyledWrapper.value`, and `ikayaki.gui.value`.

Here is the call graph for this function:

9.63.3.6 `void ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.projectUpdated (ProjectEvent event)`

Updates the file list when a project file has been saved and which project has a measurement running.

Parameters:

event `ProjectEvent`(p. 310) received.

Implements `ikayaki.ProjectListener` (p. 343).

Definition at line 575 of file ProjectExplorerTable.java.

References `ikayaki.ProjectEvent.getProject()`, `ikayaki.ProjectEvent.getType()`, and `ikayaki.gui.null`.

Here is the call graph for this function:

9.63.4 Member Data Documentation

9.63.4.1 `final Font ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.calibrationNoticeFont = ProjectExplorerTable.this.getFont().deriveFont(Font.BOLD) [private]`

Definition at line 423 of file ProjectExplorerTable.java.

9.63.4.2 `final StyledWrapper ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.defaultWrapper = Settings.getDefaultWrapperInstance() [private]`

Definition at line 420 of file ProjectExplorerTable.java.

9.63.4.3 `File ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.doneRecentlyProjectFile [private]`

The project's file who last completed a measurement, or null if no recent measurements exists.

Definition at line 433 of file ProjectExplorerTable.java.

9.63.4.4 `final StyledWrapper ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.doneRecentlyWrapper = Settings.getDoneRecentlyWrapperInstance() [private]`

Definition at line 422 of file ProjectExplorerTable.java.

9.63.4.5 `File ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.measuringProjectFile [private]`

The project's file who currently has a measurement running, or null if no measurements are active

Definition at line 428 of file ProjectExplorerTable.java.

9.63.4.6 `final StyledWrapper ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.measuringWrapper = Settings.getMeasuringWrapperInstance() [private]`

Definition at line 421 of file ProjectExplorerTable.java.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/ProjectExplorerTable.java`

9.64 ikayaki.gui.ProjectInformationPanel Class Reference

Inherits `ikayaki.gui.ProjectComponent`.

Inheritance diagram for `ikayaki.gui.ProjectInformationPanel`:
Collaboration diagram for `ikayaki.gui.ProjectInformationPanel`:

Public Member Functions

- `ProjectInformationPanel ()`
- Override void `setEnabled (boolean enabled)`
- void `setProject (Project project)`

Package Functions

- [instance initializer]

Private Member Functions

- void `initSaveProperties ()`
- void `initSaveParameters ()`
- void `saveProperties ()`
- void `saveParameters ()`
- void `$$setupUI ()`

Private Attributes

- ButtonGroup `measurementType`
- JRadioButton `measurementTypeAuto`
- JRadioButton `measurementTypeManual`
- ButtonGroup `sampleType`
- JRadioButton `sampleTypeHand`
- JRadioButton `sampleTypeCore`
- ButtonGroup `normalization`
- JRadioButton `normalizationVolume`
- JRadioButton `normalizationMass`
- JTextField `operatorField`
- JTextField `dateField`
- JTextField `rockTypeField`
- JTextField `areaField`
- JTextField `siteField`
- JTextArea `commentArea`
- JFormattedTextField `latitudeField`
- JFormattedTextField `longitudeField`
- JFormattedTextField `strikeField`
- JFormattedTextField `dipField`
- JFormattedTextField `massField`
- JFormattedTextField `volumeField`
- JFormattedTextField `susceptibilityField`

- JPanel `contentPane`
- boolean `propertiesModified` = false
- boolean `parametersModified` = false

Classes

- class `MyFormatterFactory`

9.64.1 Detailed Description

Allows inserting and editing project information.

Author:

Esko Luontola

Definition at line 51 of file `ProjectInformationPanel.java`.

9.64.2 Constructor & Destructor Documentation

9.64.2.1 `ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel ()`

Creates default `ProjectInformationPanel`(p. 333) with no current project. Starts an autosaving thread.

Definition at line 91 of file `ProjectInformationPanel.java`.

References `ikayaki.gui.ProjectInformationPanel.areaField`, `ikayaki.gui.ProjectInformationPanel.commentArea`, `ikayaki.gui.ProjectInformationPanel.contentPane`, `ikayaki.gui.ProjectInformationPanel.dateField`, `ikayaki.gui.ProjectInformationPanel.dipField`, `ikayaki.gui.ProjectInformationPanel.initSaveParameters()`, `ikayaki.gui.ProjectInformationPanel.initSaveProperties()`, `ikayaki.gui.ProjectInformationPanel.latitudeField`, `ikayaki.gui.ProjectInformationPanel.longitudeField`, `ikayaki.gui.ProjectInformationPanel.massField`, `ikayaki.gui.ProjectInformationPanel.measurementType`, `ikayaki.gui.ProjectInformationPanel.measurementTypeAuto`, `ikayaki.gui.ProjectInformationPanel.measurementTypeManual`, `ikayaki.gui.ProjectInformationPanel.normalization`, `ikayaki.gui.ProjectInformationPanel.normalizationMass`, `ikayaki.gui.ProjectInformationPanel.normalizationVolume`, `ikayaki.gui.null`, `ikayaki.gui.ProjectInformationPanel.rockTypeField`, `ikayaki.gui.ProjectInformationPanel.sampleType`, `ikayaki.gui.ProjectInformationPanel.sampleTypeCore`, `ikayaki.gui.ProjectInformationPanel.sampleTypeHand`, `ikayaki.gui.ProjectInformationPanel.saveParameters()`, `ikayaki.gui.ProjectInformationPanel.saveProperties()`, `ikayaki.gui.ProjectInformationPanel.setProject()`, `ikayaki.gui.ProjectInformationPanel.siteField`, `ikayaki.gui.ProjectInformationPanel.strikeField`, `ikayaki.gui.ProjectInformationPanel.susceptibilityField`, and `ikayaki.gui.ProjectInformationPanel.volumeField`.

Here is the call graph for this function:

9.64.3 Member Function Documentation

9.64.3.1 `void ikayaki.gui.ProjectInformationPanel.$$setupUI () [private]`

Method generated by IntelliJ IDEA GUI Designer !!! IMPORTANT !!! DO NOT edit this method OR call it in your code!

Definition at line 392 of file ProjectInformationPanel.java.

References ikayaki.gui.ProjectInformationPanel.areaField, ikayaki.gui.ProjectInformationPanel.commentArea, ikayaki.gui.ProjectInformationPanel.contentPane, ikayaki.gui.ProjectInformationPanel.dateField, ikayaki.gui.ProjectInformationPanel.dipField, ikayaki.gui.ProjectInformationPanel.latitudeField, ikayaki.gui.ProjectInformationPanel.longitudeField, ikayaki.gui.ProjectInformationPanel.massField, ikayaki.gui.ProjectInformationPanel.measurementTypeAuto, ikayaki.gui.ProjectInformationPanel.measurementTypeManual, ikayaki.gui.ProjectInformationPanel.normalizationMass, ikayaki.gui.ProjectInformationPanel.normalizationVolume, ikayaki.gui.null, ikayaki.gui.ProjectInformationPanel.operatorField, ikayaki.gui.ProjectInformationPanel.rockTypeField, ikayaki.gui.ProjectInformationPanel.sampleTypeCore, ikayaki.gui.ProjectInformationPanel.sampleTypeHand, ikayaki.gui.ProjectInformationPanel.siteField, ikayaki.gui.ProjectInformationPanel.strikeField, ikayaki.gui.ProjectInformationPanel.susceptibilityField, and ikayaki.gui.ProjectInformationPanel.volumeField.

9.64.3.2 ikayaki.gui.ProjectInformationPanel.[instance initializer] () [package]

9.64.3.3 void ikayaki.gui.ProjectInformationPanel.initSaveParameters () [private]

Schedules the running of `saveParameters()`(p. 335).

Definition at line 302 of file ProjectInformationPanel.java.

References ikayaki.gui.ProjectInformationPanel.parametersModified.

Referenced by ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel().

9.64.3.4 void ikayaki.gui.ProjectInformationPanel.initSaveProperties () [private]

Schedules the running of `saveProperties()`(p. 336).

Definition at line 295 of file ProjectInformationPanel.java.

References ikayaki.gui.ProjectInformationPanel.propertiesModified.

Referenced by ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel().

9.64.3.5 void ikayaki.gui.ProjectInformationPanel.saveParameters () [private]

Saves to the project file those parameters, that affect the measurement calculations. Will do nothing if parametersModified is false.

Exceptions:

NullPointerException if the current project is null.

Definition at line 346 of file ProjectInformationPanel.java.

References ikayaki.gui.ProjectInformationPanel.dipField, ikayaki.gui.ProjectComponent.getProject(), ikayaki.gui.ProjectInformationPanel.massField, ikayaki.gui.ProjectInformationPanel.normalizationMass, ikayaki.gui.ProjectInformationPanel.normalizationVolume, ikayaki.gui.ProjectInformationPanel.parametersModified, ikayaki.gui.ProjectInformationPanel.sampleTypeCore, ikayaki.gui.ProjectInformationPanel.sampleTypeHand, ikayaki.gui.ProjectInformationPanel.strikeField, ikayaki.gui.ProjectInformationPanel.susceptibilityField, ikayaki.gui.value, and ikayaki.gui.ProjectInformationPanel.volumeField.

Referenced by `ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel()`, and `ikayaki.gui.ProjectInformationPanel.setProject()`.

Here is the call graph for this function:

9.64.3.6 void `ikayaki.gui.ProjectInformationPanel.saveProperties ()` [private]

Saves to the project file those properties, that do not affect the measurement calculations. Will do nothing if `propertiesModified` is false.

Exceptions:

NullPointerException if the current project is null.

Definition at line 312 of file `ProjectInformationPanel.java`.

References `ikayaki.gui.ProjectInformationPanel.areaField`, `ikayaki.gui.ProjectInformationPanel.commentArea`, `ikayaki.gui.ProjectInformationPanel.dateField`, `ikayaki.gui.ProjectComponent.getProject()`, `ikayaki.gui.ProjectInformationPanel.latitudeField`, `ikayaki.gui.ProjectInformationPanel.longitudeField`, `ikayaki.gui.ProjectInformationPanel.measurementTypeAuto`, `ikayaki.gui.ProjectInformationPanel.measurementTypeManual`, `ikayaki.gui.ProjectInformationPanel.operatorField`, `ikayaki.gui.ProjectInformationPanel.propertiesModified`, `ikayaki.gui.ProjectInformationPanel.rockTypeField`, and `ikayaki.gui.ProjectInformationPanel.siteField`.

Referenced by `ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel()`, and `ikayaki.gui.ProjectInformationPanel.setProject()`.

Here is the call graph for this function:

9.64.3.7 Override void `ikayaki.gui.ProjectInformationPanel.setEnabled (boolean enabled)`

Sets whether or not this component is enabled. Affects all project information form fields.

Parameters:

enabled true if this component should be enabled, false otherwise

Definition at line 198 of file `ProjectInformationPanel.java`.

References `ikayaki.gui.null`.

Referenced by `ikayaki.gui.ProjectInformationPanel.setProject()`.

9.64.3.8 void `ikayaki.gui.ProjectInformationPanel.setProject (Project project)`

Calls `super.setProject(project)` and updates textfield with new projects data.

Reimplemented from `ikayaki.gui.ProjectComponent` (p. 309).

Definition at line 218 of file `ProjectInformationPanel.java`.

References `ikayaki.gui.ProjectInformationPanel.areaField`, `ikayaki.gui.ProjectInformationPanel.commentArea`, `ikayaki.gui.ProjectInformationPanel.dateField`, `ikayaki.gui.ProjectInformationPanel.dipField`, `ikayaki.gui.ProjectInformationPanel.latitudeField`, `ikayaki.gui.ProjectInformationPanel.longitudeField`, `ikayaki.gui.ProjectInformationPanel.massField`, `ikayaki.gui.ProjectInformationPanel.measurementTypeAuto`, `ikayaki.gui.ProjectInformationPanel.measurementTypeManual`, and `ikayaki.gui.Project`.

InformationPanel.normalizationMass, ikayaki.gui.ProjectInformationPanel.normalizationVolume, ikayaki.gui.null, ikayaki.gui.ProjectInformationPanel.parametersModified, ikayaki.gui.ProjectInformationPanel.propertiesModified, ikayaki.gui.ProjectInformationPanel.rockTypeField, ikayaki.gui.ProjectInformationPanel.sampleTypeCore, ikayaki.gui.ProjectInformationPanel.sampleTypeHand, ikayaki.gui.ProjectInformationPanel.saveParameters(), ikayaki.gui.ProjectInformationPanel.saveProperties(), ikayaki.gui.ProjectInformationPanel.setEnabled(), ikayaki.gui.ProjectInformationPanel.siteField, ikayaki.gui.ProjectInformationPanel.strikeField, ikayaki.gui.ProjectInformationPanel.susceptibilityField, and ikayaki.gui.ProjectInformationPanel.volumeField.

Referenced by ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel().

Here is the call graph for this function:

9.64.4 Member Data Documentation

9.64.4.1 JTextField ikayaki.gui.ProjectInformationPanel.areaField [private]

Definition at line 70 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveProperties(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.2 JTextArea ikayaki.gui.ProjectInformationPanel.commentArea [private]

Definition at line 72 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveProperties(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.3 JPanel ikayaki.gui.ProjectInformationPanel.contentPane [private]

Definition at line 83 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), and ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel().

9.64.4.4 JTextField ikayaki.gui.ProjectInformationPanel.dateField [private]

Definition at line 68 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveProperties(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.5 JFormattedTextField ikayaki.gui.ProjectInformationPanel.dipField [private]

Definition at line 78 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.MyFormatterFactory.getFormatter(), and ikayaki.gui.ProjectInformationPanel.setProject().

Panel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveParameters(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.6 **JFormattedTextField** ikayaki.gui.ProjectInformationPanel.latitudeField [private]

Definition at line 75 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setUpUI(), ikayaki.gui.ProjectInformationPanel.MyFormatterFactory.getFormatter(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveProperties(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.7 **JFormattedTextField** ikayaki.gui.ProjectInformationPanel.longitudeField [private]

Definition at line 76 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setUpUI(), ikayaki.gui.ProjectInformationPanel.MyFormatterFactory.getFormatter(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveProperties(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.8 **JFormattedTextField** ikayaki.gui.ProjectInformationPanel.massField [private]

Definition at line 79 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setUpUI(), ikayaki.gui.ProjectInformationPanel.MyFormatterFactory.getFormatter(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveParameters(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.9 **ButtonGroup** ikayaki.gui.ProjectInformationPanel.measurementType [private]

Definition at line 54 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel().

9.64.4.10 **JRadioButton** ikayaki.gui.ProjectInformationPanel.measurementType- Auto [private]

Definition at line 55 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setUpUI(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveProperties(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.11 **JRadioButton** ikayaki.gui.ProjectInformationPanel.measurementType- Manual [private]

Definition at line 56 of file ProjectInformationPanel.java.

Referenced by `ikayaki.gui.ProjectInformationPanel.$setupUI()`, `ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel()`, `ikayaki.gui.ProjectInformationPanel.saveProperties()`, and `ikayaki.gui.ProjectInformationPanel.setProject()`.

9.64.4.12 ButtonGroup `ikayaki.gui.ProjectInformationPanel.normalization` [private]

Definition at line 62 of file `ProjectInformationPanel.java`.

Referenced by `ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel()`.

9.64.4.13 JRadioButton `ikayaki.gui.ProjectInformationPanel.normalizationMass` [private]

Definition at line 64 of file `ProjectInformationPanel.java`.

Referenced by `ikayaki.gui.ProjectInformationPanel.$setupUI()`, `ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel()`, `ikayaki.gui.ProjectInformationPanel.saveParameters()`, and `ikayaki.gui.ProjectInformationPanel.setProject()`.

9.64.4.14 JRadioButton `ikayaki.gui.ProjectInformationPanel.normalizationVolume` [private]

Definition at line 63 of file `ProjectInformationPanel.java`.

Referenced by `ikayaki.gui.ProjectInformationPanel.$setupUI()`, `ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel()`, `ikayaki.gui.ProjectInformationPanel.saveParameters()`, and `ikayaki.gui.ProjectInformationPanel.setProject()`.

9.64.4.15 JTextField `ikayaki.gui.ProjectInformationPanel.operatorField` [private]

Definition at line 67 of file `ProjectInformationPanel.java`.

Referenced by `ikayaki.gui.ProjectInformationPanel.$setupUI()`, and `ikayaki.gui.ProjectInformationPanel.saveProperties()`.

9.64.4.16 boolean `ikayaki.gui.ProjectInformationPanel.parametersModified = false` [private]

Definition at line 86 of file `ProjectInformationPanel.java`.

Referenced by `ikayaki.gui.ProjectInformationPanel.initSaveParameters()`, `ikayaki.gui.ProjectInformationPanel.saveParameters()`, and `ikayaki.gui.ProjectInformationPanel.setProject()`.

9.64.4.17 boolean `ikayaki.gui.ProjectInformationPanel.propertiesModified = false` [private]

Definition at line 85 of file `ProjectInformationPanel.java`.

Referenced by `ikayaki.gui.ProjectInformationPanel.initSaveProperties()`, `ikayaki.gui.ProjectInformationPanel.saveProperties()`, and `ikayaki.gui.ProjectInformationPanel.setProject()`.

9.64.4.18 JTextField ikayaki.gui.ProjectInformationPanel.rockTypeField
[private]

Definition at line 69 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveProperties(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.19 ButtonGroup ikayaki.gui.ProjectInformationPanel.sampleType
[private]

Definition at line 58 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel().

9.64.4.20 JRadioButton ikayaki.gui.ProjectInformationPanel.sampleTypeCore
[private]

Definition at line 60 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveParameters(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.21 JRadioButton ikayaki.gui.ProjectInformationPanel.sampleTypeHand
[private]

Definition at line 59 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveParameters(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.22 JTextField ikayaki.gui.ProjectInformationPanel.siteField [private]

Definition at line 71 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveProperties(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.23 JFormattedTextField ikayaki.gui.ProjectInformationPanel.strikeField
[private]

Definition at line 77 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setupUI(), ikayaki.gui.ProjectInformationPanel.MyFormatterFactory.getFormatter(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveParameters(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.24 JFormattedTextField ikayaki.gui.ProjectInformationPanel.susceptibilityField [private]

Definition at line 81 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setUpUI(), ikayaki.gui.ProjectInformationPanel.MyFormatterFactory.getFormatter(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveParameters(), and ikayaki.gui.ProjectInformationPanel.setProject().

9.64.4.25 JFormattedTextField ikayaki.gui.ProjectInformationPanel.volumeField [private]

Definition at line 80 of file ProjectInformationPanel.java.

Referenced by ikayaki.gui.ProjectInformationPanel.\$\$setUpUI(), ikayaki.gui.ProjectInformationPanel.MyFormatterFactory.getFormatter(), ikayaki.gui.ProjectInformationPanel.ProjectInformationPanel(), ikayaki.gui.ProjectInformationPanel.saveParameters(), and ikayaki.gui.ProjectInformationPanel.setProject().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**ProjectInformationPanel.java**

9.65 ikayaki.gui.ProjectInformationPanel.MyFormatterFactory Class Reference

Public Member Functions

- `JFormattedTextField.AbstractFormatter` **getFormatter** (final `JFormattedTextField` *tf*)

9.65.1 Detailed Description

Custom formatter factory for the `JFormattedTextFields` in this class.

Author:

Esko Luontola

Definition at line 638 of file `ProjectInformationPanel.java`.

9.65.2 Member Function Documentation

9.65.2.1 `JFormattedTextField.AbstractFormatter` `ikayaki.gui.ProjectInformationPanel.MyFormatterFactory.getFormatter` (final `JFormattedTextField` *tf*)

Returns an `AbstractFormatter` that can handle formatting of the passed in `JFormattedTextField`.

Parameters:

tf `JFormattedTextField` requesting `AbstractFormatter`

Returns:

`AbstractFormatter` to handle formatting duties, a null return value implies the `JFormattedTextField` should behave like a normal `JTextField`

Definition at line 647 of file `ProjectInformationPanel.java`.

References `ikayaki.gui.ProjectInformationPanel.dipField`, `ikayaki.gui.ProjectInformationPanel.latitudeField`, `ikayaki.gui.ProjectInformationPanel.longitudeField`, `ikayaki.gui.ProjectInformationPanel.massField`, `ikayaki.gui.ProjectInformationPanel.strikeField`, `ikayaki.gui.ProjectInformationPanel.susceptibilityField`, and `ikayaki.gui.ProjectInformationPanel.volumeField`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/ProjectInformationPanel.java`

9.66 ikayaki.ProjectListener Interface Reference

Inherited by `ikayaki.gui.MeasurementGraphsPanel`, `ikayaki.gui.MeasurementSequenceTableModel`, `ikayaki.gui.ProjectComponent`, `ikayaki.gui.ProjectExplorerTable`, and `ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel`.

Inheritance diagram for `ikayaki.ProjectListener`:

Public Member Functions

- `void projectUpdated (ProjectEvent event)`

9.66.1 Detailed Description

Defines a listener for project events.

Author:

Esko Luontola

Definition at line 32 of file `ProjectListener.java`.

9.66.2 Member Function Documentation

9.66.2.1 `void ikayaki.ProjectListener.projectUpdated (ProjectEvent event)`

Will be invoked whenever a project event happens.

Parameters:

event the event that happened.

Implemented in `ikayaki.gui.MainViewPanel` (p. 163), `ikayaki.gui.MeasurementControlsPanel` (p. 172), `ikayaki.gui.MeasurementGraphsPanel` (p. 192), `ikayaki.gui.MeasurementSequencePanel` (p. 211), `ikayaki.gui.MeasurementSequenceTableModel` (p. 224), `ikayaki.gui.ProjectComponent` (p. 308), `ikayaki.gui.ProjectExplorerTable` (p. 322), and `ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel` (p. 331).

The documentation for this interface was generated from the following file:

- `My Documents/squid/src/ikayaki/ProjectListener.java`

9.67 ikayaki.squid.SerialIO Class Reference

Public Member Functions

- void **writeMessage** (String message) throws SerialIOException
- void **closePort** ()
- void **serialEvent** (SerialPortEvent event)
- synchronized void **addSerialIOListener** (SerialIOListener l)
- synchronized void **removeSerialIOListener** (SerialIOListener l)
- String **getPortName** ()

Static Public Member Functions

- static **SerialIO** **openPort** (SerialParameters parameters) throws SerialIOException
- static void **closeAllPorts** ()

Private Types

- enum **LogEvent** { **SESSION_START**, **SEND**, **REVEIVE** }

Private Member Functions

- **SerialIO** (SerialParameters parameters) throws SerialIOException
- synchronized void **fireSerialIOEvent** (String message)
- void **debug** (LogEvent e, String message)
- String **padn** (int n)

Private Attributes

- EventListenerList **listenerList** = new EventListenerList()
- SerialPort **sPort**
- OutputStream **os**
- InputStream **is**
- String **portName**
- BufferedWriter **logWriter**
- boolean **logWriterTriedCreate** = false

Static Private Attributes

- static final boolean **DEBUG** = true
- static final DateFormat **dateFormat** = new SimpleDateFormat("HH:mm:ss.SSS")
- static Vector< **SerialIO** > **openPorts** = new Vector<**SerialIO**>()

9.67.1 Detailed Description

This class represents hardware layer to serial port communications.

Author:

Aki Sysmäläinen, Aki Korpua (co)

Definition at line 43 of file SerialIO.java.

9.67.2 Member Enumeration Documentation

9.67.2.1 enum ikayaki::squid::SerialIO::LogEvent [private]

Logwriter event type

Enumeration values:

SESSION_START

SEND

REVEIVE

Definition at line 95 of file SerialIO.java.

9.67.3 Constructor & Destructor Documentation

9.67.3.1 ikayaki.squid.SerialIO.SerialIO (SerialParameters *parameters*) throws SerialIOException [private]

Creates an instance of **SerialIO**(p. 344) which represents one serial port.

Parameters:

parameters parameters for the serial port being opened.

Exceptions:

SerialIOException(p. 352) if something goes wrong.

Definition at line 105 of file SerialIO.java.

References ikayaki.squid.SerialIO.debug(), and ikayaki.squid.SerialIO.sPort.

Referenced by ikayaki.squid.SerialIO.openPort().

Here is the call graph for this function:

9.67.4 Member Function Documentation

9.67.4.1 synchronized void ikayaki.squid.SerialIO.addSerialIOListener (SerialIOListener *l*)

Adds a **MeasurementListener**(p. 194) to the project.

Parameters:

l the listener to be added.

Definition at line 316 of file SerialIO.java.

References ikayaki.squid.SerialIO.listenerList.

Referenced by ikayaki.squid.Degausser.Degausser(), ikayaki.squid.SquidEmulator.DegausserEmu.DegausserEmu(), ikayaki.util.SerialProxy.Forwarder.Forwarder(), ikayaki.squid.Handler.Handler(), ikayaki.squid.SquidEmulator.HandlerEmu.HandlerEmu(), ikayaki.squid.Magnetometer.Magnetometer(), and ikayaki.squid.SquidEmulator.MagnetometerEmu.MagnetometerEmu().

9.67.4.2 static void ikayaki.squid.SerialIO.closeAllPorts () [static]

Closes all open serialports and their streams

Definition at line 256 of file SerialIO.java.

References ikayaki.squid.SerialIO.openPorts.

9.67.4.3 void ikayaki.squid.SerialIO.closePort ()

Closes this serial port and it's streams

Definition at line 237 of file SerialIO.java.

References ikayaki.gui.null, and ikayaki.squid.SerialIO.sPort.

9.67.4.4 void ikayaki.squid.SerialIO.debug (LogEvent e, String message) [private]

Debug logger.

Parameters:

e LogEvent type.

message String to write; portname if e==SESSION_START.

Definition at line 356 of file SerialIO.java.

References ikayaki.gui.null.

Referenced by ikayaki.squid.SerialIO.serialEvent(), ikayaki.squid.SerialIO.SerialIO(), and ikayaki.squid.SerialIO.writeMessage().

9.67.4.5 synchronized void ikayaki.squid.SerialIO.fireSerialIOEvent (String message) [private]

Notifies all listeners that have registered for MeasurementEvents.

Parameters:

message

Definition at line 334 of file SerialIO.java.

References ikayaki.squid.SerialIO.listenerList.

Referenced by ikayaki.squid.SerialIO.serialEvent().

9.67.4.6 String ikayaki.squid.SerialIO.getPortName ()

Definition at line 405 of file SerialIO.java.

Referenced by ikayaki.util.SerialProxy.Forwarder.serialIOEvent().

9.67.4.7 static SerialIO ikayaki.squid.SerialIO.openPort (SerialParameters parameters) throws SerialIOException [static]

Definition at line 181 of file SerialIO.java.

References ikayaki.gui.null, ikayaki.squid.SerialIO.openPorts, and ikayaki.squid.SerialIO.SerialIO().

Referenced by ikayaki.squid.Handler.Handler(), ikayaki.util.SerialProxy.main(), and ikayaki.squid.SquidEmulator.main().

Here is the call graph for this function:

9.67.4.8 String ikayaki.squid.SerialIO.padn (int n) [private]

Zero-paddes a number if it's <10.

Parameters:

n int to pad.

Returns:

padded String.

Definition at line 401 of file SerialIO.java.

9.67.4.9 synchronized void ikayaki.squid.SerialIO.removeSerialIOListener (SerialIOListener l)

Removes a **MeasurementListener**(p.194) from the project.

Parameters:

l the listener to be removed

Definition at line 325 of file SerialIO.java.

References ikayaki.squid.SerialIO.listenerList.

9.67.4.10 void ikayaki.squid.SerialIO.serialEvent (SerialPortEvent event)

This method is run when a serial message is received from serial port. It generates a new **SerialIOEvent**(p.350).

Definition at line 265 of file SerialIO.java.

References ikayaki.squid.SerialIO.debug(), ikayaki.squid.SerialIO.fireSerialIOEvent(), and ikayaki.squid.SerialIO.is.

Here is the call graph for this function:

9.67.4.11 void ikayaki.squid.SerialIO.sendMessage (String *message*) throws SerialIOException

Writes an ASCII format message to serial port.

Parameters:

message a message to be send

Exceptions:

[SerialIOException](#)(p. 352) if exception occurs.

Definition at line 206 of file SerialIO.java.

References [ikayaki.squid.SerialIO.debug\(\)](#), [ikayaki.squid.SerialIO.os](#), and [ikayaki.squid.SerialIO.portName](#).

Referenced by [ikayaki.squid.Degausser.blockingWrite\(\)](#), [ikayaki.squid.Magnetometer.Magnetometer\(\)](#), [ikayaki.squid.Handler.seekHome\(\)](#), [ikayaki.util.SerialProxy.Forwarder.serialIOEvent\(\)](#), and [ikayaki.squid.SquidEmulator.sendMessage\(\)](#).

Here is the call graph for this function:

9.67.5 Member Data Documentation

9.67.5.1 final DateFormat ikayaki.squid.SerialIO.dateFormat = new SimpleDateFormat("HH:mm:ss.SSS") [static, private]

Definition at line 50 of file SerialIO.java.

9.67.5.2 final boolean ikayaki.squid.SerialIO.DEBUG = true [static, private]

Definition at line 49 of file SerialIO.java.

9.67.5.3 InputStream ikayaki.squid.SerialIO.is [private]

Inputstream of this port

Definition at line 75 of file SerialIO.java.

Referenced by [ikayaki.squid.SerialIO.serialEvent\(\)](#).

9.67.5.4 EventListenerList ikayaki.squid.SerialIO.listenerList = new EventListenerList() [private]

Listeners for this port.

Definition at line 60 of file SerialIO.java.

Referenced by [ikayaki.squid.SerialIO.addSerialIOListener\(\)](#), [ikayaki.squid.SerialIO.fireSerialIOEvent\(\)](#), and [ikayaki.squid.SerialIO.removeSerialIOListener\(\)](#).

9.67.5.5 BufferedWriter ikayaki.squid.SerialIO.logWriter [private]

Logwriter buffer

Definition at line 85 of file SerialIO.java.

9.67.5.6 `boolean ikayaki.squid.SerialIO.logWriterTriedCreate = false` [private]

Have we tried to create the log writer? (Don't want to try again if it didn't work.)

Definition at line 90 of file SerialIO.java.

9.67.5.7 `Vector<SerialIO> ikayaki.squid.SerialIO.openPorts = new Vector<SerialIO>()` [static, private]

All opened serial ports

Definition at line 55 of file SerialIO.java.

Referenced by `ikayaki.squid.SerialIO.closeAllPorts()`, and `ikayaki.squid.SerialIO.openPort()`.

9.67.5.8 `OutputStream ikayaki.squid.SerialIO.os` [private]

Outputstream of this port

Definition at line 70 of file SerialIO.java.

Referenced by `ikayaki.squid.SerialIO.writeMessage()`.

9.67.5.9 `String ikayaki.squid.SerialIO.portName` [private]

Name of this port

Definition at line 80 of file SerialIO.java.

Referenced by `ikayaki.squid.SerialIO.writeMessage()`.

9.67.5.10 `SerialPort ikayaki.squid.SerialIO.sPort` [private]

This serial port

Definition at line 65 of file SerialIO.java.

Referenced by `ikayaki.squid.SerialIO.closePort()`, and `ikayaki.squid.SerialIO.SerialIO()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/squid/SerialIO.java`

9.68 ikayaki.squid.SerialIOEvent Class Reference

Public Member Functions

- **SerialIOEvent** (Object *source*, String *message*)
- String **getMessage** ()
- String **getCleanMessage** ()
- String **getLogMessage** ()

Private Attributes

- String **message**

9.68.1 Detailed Description

An event that is generated when **SerialIO**(p.344) receives data from serial port.

Author:

Aki Sysmäläinen

Definition at line 32 of file SerialIOEvent.java.

9.68.2 Constructor & Destructor Documentation

9.68.2.1 ikayaki.squid.SerialIOEvent.SerialIOEvent (Object *source*, String *message*)

Definition at line 39 of file SerialIOEvent.java.

9.68.3 Member Function Documentation

9.68.3.1 String ikayaki.squid.SerialIOEvent.getCleanMessage ()

Returns received serial message with all " characters removed and trimmed.

Returns:

The message in ASCII form that was received from serial port.

Definition at line 58 of file SerialIOEvent.java.

References ikayaki.squid.SerialIOEvent.message.

9.68.3.2 String ikayaki.squid.SerialIOEvent.getLogMessage ()

Returns received serial message with all " characters replaced with the string "\r" and ' with "\n".

Returns:

The message in ASCII form that was received from serial port.

Definition at line 74 of file SerialIOEvent.java.

References ikayaki.squid.SerialIOEvent.message.

9.68.3.3 String ikayaki.squid.SerialIOEvent.getMessage ()

Returns received serial message.

Returns:

The message in ASCII form that was received from serial port.

Definition at line 49 of file SerialIOEvent.java.

9.68.4 Member Data Documentation

9.68.4.1 String ikayaki.squid.SerialIOEvent.message [private]

ASCII message recieved from serial port.

Definition at line 37 of file SerialIOEvent.java.

Referenced by ikayaki.squid.SerialIOEvent.getCleanMessage(), and ikayaki.squid.SerialIOEvent.getLogMessage().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/squid/**SerialIOEvent.java**

9.69 ikayaki.squid.SerialIOException Class Reference

Public Member Functions

- `SerialIOException` (String *str*)

9.69.1 Detailed Description

Generic SerialIO exception

Author:

Aki Sysmäläinen

Definition at line 30 of file `SerialIOException.java`.

9.69.2 Constructor & Destructor Documentation

9.69.2.1 `ikayaki.squid.SerialIOException.SerialIOException` (String *str*)

Constructs a `SerialIOException`(p. 352) with the specified detail message.

Parameters:

str the detail message.

Definition at line 37 of file `SerialIOException.java`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/squid/SerialIOException.java`

9.70 ikayaki.squid.SerialIOListener Interface Reference

Inherited by `ikayaki.squid.Degausser`, `ikayaki.squid.Handler`, `ikayaki.squid.Magnetometer`, `ikayaki.squid.SquidEmulator.DegausserEmu`, `ikayaki.squid.SquidEmulator.HandlerEmu`, `ikayaki.squid.SquidEmulator.MagnetometerEmu`, and `ikayaki.util.SerialProxy.Forwarder`.

Inheritance diagram for `ikayaki.squid.SerialIOListener`:

Public Member Functions

- `void serialIOEvent (SerialIOEvent event)`

9.70.1 Detailed Description

If a class wants to receive `SerialIOEvents` it must implement this interface.

Author:

Aki Sysmäläinen

Definition at line 30 of file `SerialIOListener.java`.

9.70.2 Member Function Documentation

9.70.2.1 `void ikayaki.squid.SerialIOListener.serialIOEvent (SerialIOEvent event)`

Propagates serial port message event.

Parameters:

event the event that happened.

Implemented in `ikayaki.squid.Degausser` (p. 63), `ikayaki.squid.Handler` (p. 92), `ikayaki.squid.Magnetometer` (p. 124), `ikayaki.squid.SquidEmulator.HandlerEmu` (p. 397), `ikayaki.squid.SquidEmulator.MagnetometerEmu` (p. 399), `ikayaki.squid.SquidEmulator.DegausserEmu` (p. 394), and `ikayaki.util.SerialProxy.Forwarder` (p. 359).

The documentation for this interface was generated from the following file:

- `My Documents/squid/src/ikayaki/squid/SerialIOListener.java`

9.71 ikayaki.squid.SerialParameters Class Reference

Public Member Functions

- **SerialParameters** (String *portName*, int *baudRate*, int *flowControlIn*, int *flowControlOut*, int *databits*, int *stopbits*, int *parity*)
- **SerialParameters** (String *portName*)
- String **getPortName** ()
- int **getBaudRate** ()
- int **getFlowControlIn** ()
- int **getFlowControlOut** ()
- int **getDatabits** ()
- int **getStopbits** ()
- int **getParity** ()

Private Attributes

- String *portName*
- int *baudRate*
- int *flowControlIn*
- int *flowControlOut*
- int *databits*
- int *stopbits*
- int *parity*

9.71.1 Detailed Description

Contains all the serial communication parameters which **SerialIO**(p. 344) uses when opening the port.

Author:

Definition at line 32 of file `SerialParameters.java`.

9.71.2 Constructor & Destructor Documentation

9.71.2.1 ikayaki.squid.SerialParameters.SerialParameters (String *portName*, int *baudRate*, int *flowControlIn*, int *flowControlOut*, int *databits*, int *stopbits*, int *parity*)

Creates a `SerialParameter` object containing settings for serial port communication.

Parameters:

portName The name of the serial port.

baudRate The baud rate.

flowControlIn Type of flow control for receiving.

flowControlOut Type of flow control for sending.

databits The number of data bits.

stopbits The number of stop bits.

parity The type of parity.

Definition at line 80 of file SerialParameters.java.

9.71.2.2 ikayaki.squid.SerialParameters.SerialParameters (String *portName*)

Creates a SerialParameter object with default Serial settings for serial port communication. Default settings are: Baudrate: 1200 Flowcontrol in: None Flowcontrol out: None Databits: 8 Stopbits: 1 Parity: None

Parameters:

portName The name of the serial port.

Definition at line 97 of file SerialParameters.java.

9.71.3 Member Function Documentation

9.71.3.1 int ikayaki.squid.SerialParameters.getBaudRate ()

Definition at line 111 of file SerialParameters.java.

References ikayaki.squid.SerialParameters.baudRate.

9.71.3.2 int ikayaki.squid.SerialParameters.getDatabits ()

Definition at line 123 of file SerialParameters.java.

References ikayaki.squid.SerialParameters.databits.

9.71.3.3 int ikayaki.squid.SerialParameters.getFlowControlIn ()

Definition at line 115 of file SerialParameters.java.

References ikayaki.squid.SerialParameters.flowControlIn.

9.71.3.4 int ikayaki.squid.SerialParameters.getFlowControlOut ()

Definition at line 119 of file SerialParameters.java.

References ikayaki.squid.SerialParameters.flowControlOut.

9.71.3.5 int ikayaki.squid.SerialParameters.getParity ()

Definition at line 131 of file SerialParameters.java.

References ikayaki.squid.SerialParameters.parity.

9.71.3.6 String ikayaki.squid.SerialParameters.getPortName ()

Definition at line 107 of file SerialParameters.java.

References ikayaki.squid.SerialParameters.portName.

9.71.3.7 int ikayaki.squid.SerialParameters.getStopbits ()

Definition at line 127 of file SerialParameters.java.

References ikayaki.squid.SerialParameters.stopbits.

9.71.4 Member Data Documentation**9.71.4.1 int ikayaki.squid.SerialParameters.baudRate [private]**

The baud rate.

Definition at line 42 of file SerialParameters.java.

Referenced by ikayaki.squid.SerialParameters.getBaudRate().

9.71.4.2 int ikayaki.squid.SerialParameters.databits [private]

The number of data bits.

Definition at line 57 of file SerialParameters.java.

Referenced by ikayaki.squid.SerialParameters.getDatabits().

9.71.4.3 int ikayaki.squid.SerialParameters.flowControlIn [private]

Type of flow control for receiving.

Definition at line 47 of file SerialParameters.java.

Referenced by ikayaki.squid.SerialParameters.getFlowControlIn().

9.71.4.4 int ikayaki.squid.SerialParameters.flowControlOut [private]

Type of flow control for sending.

Definition at line 52 of file SerialParameters.java.

Referenced by ikayaki.squid.SerialParameters.getFlowControlOut().

9.71.4.5 int ikayaki.squid.SerialParameters.parity [private]

The type of parity.

Definition at line 67 of file SerialParameters.java.

Referenced by ikayaki.squid.SerialParameters.getParity().

9.71.4.6 String ikayaki.squid.SerialParameters.portName [private]

The name of the serial port.

Definition at line 37 of file SerialParameters.java.

Referenced by ikayaki.squid.SerialParameters.getPortName().

9.71.4.7 int ikayaki.squid.SerialParameters.stopbits [private]

The number of stop bits.

Definition at line 62 of file SerialParameters.java.

Referenced by ikayaki.squid.SerialParameters.getStopbits().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/squid/**SerialParameters.java**

9.72 ikayaki.util.SerialProxy Class Reference

Static Public Member Functions

- static void **main** (String[] args)

Static Private Attributes

- static DateFormat **dateFormat** = new SimpleDateFormat("HH:mm:ss.SSS")

Classes

- class **Forwarder**

9.72.1 Detailed Description

Forwards commands sent between two serial ports and logs them.

Author:

Aki Korpua, Esko Luontola

Definition at line 38 of file SerialProxy.java.

9.72.2 Member Function Documentation

9.72.2.1 static void ikayaki.util.SerialProxy.main (String[] args) [static]

Definition at line 42 of file SerialProxy.java.

References ikayaki.squid.SerialIO.openPort().

Here is the call graph for this function:

9.72.3 Member Data Documentation

9.72.3.1 DateFormat ikayaki.util.SerialProxy.dateFormat = new SimpleDateFormat("HH:mm:ss.SSS") [static, private]

Definition at line 40 of file SerialProxy.java.

Referenced by ikayaki.util.SerialProxy.Forwarder.serialIOEvent().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/util/**SerialProxy.java**

9.73 ikayaki.util.SerialProxy.Forwarder Class Reference

Inherits `ikayaki.squid.SerialIOListener`.

Inheritance diagram for `ikayaki.util.SerialProxy.Forwarder`: Collaboration diagram for `ikayaki.util.SerialProxy.Forwarder`:

Public Member Functions

- `Forwarder (SerialIO in, SerialIO out)`
- `Forwarder (SerialIO in, SerialIO out, PrintStream log)`
- `void serialIOEvent (SerialIOEvent event)`

Private Attributes

- `SerialIO in`
- `SerialIO out`
- `PrintStream log`

9.73.1 Constructor & Destructor Documentation

9.73.1.1 `ikayaki.util.SerialProxy.Forwarder.Forwarder (SerialIO in, SerialIO out)`

Definition at line 76 of file `SerialProxy.java`.

References `ikayaki.gui.null`.

9.73.1.2 `ikayaki.util.SerialProxy.Forwarder.Forwarder (SerialIO in, SerialIO out, PrintStream log)`

Definition at line 80 of file `SerialProxy.java`.

References `ikayaki.squid.SerialIO.addSerialIOListener()`.

Here is the call graph for this function:

9.73.2 Member Function Documentation

9.73.2.1 `void ikayaki.util.SerialProxy.Forwarder.serialIOEvent (SerialIOEvent event)`

Propagates serial port message event.

Parameters:

event the event that happened.

Implements `ikayaki.squid.SerialIOListener` (p. 353).

Definition at line 87 of file `SerialProxy.java`.

References `ikayaki.util.SerialProxy.dateFormat`, `ikayaki.squid.SerialIO.getPortName()`, `ikayaki.util.SerialProxy.Forwarder.in`, `ikayaki.util.SerialProxy.Forwarder.log`, `ikayaki.gui.null`, `ikayaki.util.SerialProxy.Forwarder.out`, and `ikayaki.squid.SerialIO.writeMessage()`.

Here is the call graph for this function:

9.73.3 Member Data Documentation

9.73.3.1 SerialIO ikayaki.util.SerialProxy.Forwarder.in [private]

Definition at line 72 of file SerialProxy.java.

Referenced by ikayaki.util.SerialProxy.Forwarder.serialIOEvent().

9.73.3.2 PrintStream ikayaki.util.SerialProxy.Forwarder.log [private]

Definition at line 74 of file SerialProxy.java.

Referenced by ikayaki.util.SerialProxy.Forwarder.serialIOEvent().

9.73.3.3 SerialIO ikayaki.util.SerialProxy.Forwarder.out [private]

Definition at line 73 of file SerialProxy.java.

Referenced by ikayaki.util.SerialProxy.Forwarder.serialIOEvent().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/util/**SerialProxy.java**

9.74 ikayaki.Settings Class Reference

Collaboration diagram for ikayaki.Settings:

Static Public Member Functions

- static synchronized void **firePropertiesModified** ()
- static synchronized void **fireSequencesModified** ()
- static synchronized void **save** ()
- static synchronized boolean **saveNow** ()
- static synchronized Object **getXXX** ()
- static synchronized boolean **setXXX** (Object value)
- static synchronized String **getMagnetometerPort** ()
- static synchronized boolean **setMagnetometerPort** (String value)
- static synchronized String **getHandlerPort** ()
- static synchronized boolean **setHandlerPort** (String value)
- static synchronized String **getDegausserPort** ()
- static synchronized boolean **setDegausserPort** (String value)
- static synchronized double **getMagnetometerXAxisCalibration** ()
- static synchronized boolean **setMagnetometerXAxisCalibration** (double value)
- static synchronized double **getMagnetometerYAxisCalibration** ()
- static synchronized boolean **setMagnetometerYAxisCalibration** (double value)
- static synchronized double **getMagnetometerZAxisCalibration** ()
- static synchronized boolean **setMagnetometerZAxisCalibration** (double value)
- static synchronized int **getDegausserRamp** ()
- static synchronized boolean **setDegausserRamp** (int value)
- static synchronized int **getDegausserDelay** ()
- static synchronized boolean **setDegausserDelay** (int value)
- static synchronized boolean **setDegausserMaximumField** (double value)
- static synchronized double **getDegausserMaximumField** ()
- static synchronized double **getDegausserMinimumField** ()
- static synchronized double **getDegausserMinimumFieldIncrement** ()
- static synchronized int **getHandlerAcceleration** ()
- static synchronized boolean **setHandlerAcceleration** (int value)
- static synchronized int **getHandlerDeceleration** ()
- static synchronized boolean **setHandlerDeceleration** (int value)
- static synchronized int **getHandlerVelocity** ()
- static synchronized boolean **setHandlerVelocity** (int value)
- static synchronized int **getHandlerMeasurementVelocity** ()
- static synchronized boolean **setHandlerMeasurementVelocity** (int value)
- static synchronized int **getHandlerRotationVelocity** ()
- static synchronized boolean **setHandlerRotationVelocity** (int value)
- static synchronized int **getHandlerRotationAcceleration** ()
- static synchronized boolean **setHandlerRotationAcceleration** (int value)
- static synchronized int **getHandlerRotationDeceleration** ()
- static synchronized boolean **setHandlerRotationDeceleration** (int value)
- static synchronized int **getHandlerTransverseYAFPosition** ()
- static synchronized boolean **setHandlerTransverseYAFPosition** (int value)
- static synchronized int **getHandlerAxialAFPosition** ()
- static synchronized boolean **setHandlerAxialAFPosition** (int value)

- static synchronized int **getHandlerSampleLoadPosition** ()
- static synchronized boolean **setHandlerSampleLoadPosition** (int value)
- static synchronized int **getHandlerBackgroundPosition** ()
- static synchronized boolean **setHandlerBackgroundPosition** (int value)
- static synchronized int **getHandlerMeasurementPosition** ()
- static synchronized boolean **setHandlerMeasurementPosition** (int value)
- static synchronized int **getHandlerRightLimit** ()
- static synchronized boolean **setHandlerRightLimit** (int value)
- static synchronized int **getHandlerRotation** ()
- static synchronized boolean **setHandlerRotation** (int value)
- static synchronized int **getMeasurementRotations** ()
- static synchronized boolean **setMeasurementRotations** (int value)
- static synchronized int **getWindowWidth** ()
- static synchronized boolean **setWindowWidth** (int value)
- static synchronized int **getWindowHeight** ()
- static synchronized boolean **setWindowHeight** (int value)
- static synchronized boolean **getWindowMaximized** ()
- static synchronized boolean **setWindowMaximized** (boolean value)
- static synchronized File **getLastDirectory** ()
- static synchronized File[] **getDirectoryHistory** ()
- static synchronized boolean **updateDirectoryHistory** (File visited)
- static synchronized File[] **getProjectHistory** ()
- static synchronized boolean **updateProjectHistory** (File visited)
- static synchronized **MeasurementSequence**[] **getSequences** ()
- static synchronized void **addSequence** (**MeasurementSequence** sequence)
- static synchronized void **removeSequence** (**MeasurementSequence** sequence)
- static synchronized List< **SequenceColumn** > **getDefaultColumns** ()
- static synchronized void **setDefaultColumn** (**SequenceColumn** column, boolean enabled)
- static synchronized File[] **getCalibrationProjectFiles** ()
- static synchronized File **getHolderCalibrationFile** ()
- static synchronized void **setHolderCalibrationFile** (File file)
- static synchronized **MeasurementResult** **getHolderCalibration** ()
- static **StyledWrapper** **getDefaultWrapperInstance** ()
- static **StyledWrapper** **getMeasuringWrapperInstance** ()
- static **StyledWrapper** **getDoneRecentlyWrapperInstance** ()

Static Package Functions

- [static initializer]

Static Private Member Functions

- static synchronized String **getProperty** (String key)
- static synchronized String **getProperty** (String key, String default Value)
- static synchronized void **setProperty** (String key, String value)
- static synchronized void **loadDirectoryHistory** ()
- static synchronized void **loadProjectHistory** ()

Static Private Attributes

- static final int **DIRECTORY_HISTORY_SIZE** = 30
- static final int **PROJECT_HISTORY_SIZE** = 10
- static final **StyledWrapper** **defaultWrapper** = new **StyledWrapper**()
- static final **StyledWrapper** **measuringWrapper** = new **StyledWrapper**()
- static final **StyledWrapper** **doneRecentlyWrapper** = new **StyledWrapper**()
- static **Properties** **properties** = new **Properties**()
- static **File** **propertiesFile** = **Ikayaki.PROPERTIES_FILE**
- static boolean **propertiesModified** = false
- static **List**< **MeasurementSequence** > **sequences** = new **ArrayList**<**MeasurementSequence**>()
- static **File** **sequencesFile** = **Ikayaki.SEQUENCES_FILE**
- static boolean **sequencesModified** = false
- static **List**< **File** > **directoryHistory** = new **LinkedList**<**File**>()
- static **List**< **File** > **projectHistory** = new **LinkedList**<**File**>()
- static **LastExecutor** **autosaveQueue** = new **LastExecutor**(500, true)
- static **Runnable** **autosaveRunnable**

9.74.1 Detailed Description

Singleton class for holding all global settings. All changes are automatically written to file after a short delay.

Author:

Esko Luontola

Definition at line 47 of file Settings.java.

9.74.2 Member Function Documentation

9.74.2.1 **ikayaki.Settings**.**[static initializer]** () **[static, package]**

9.74.2.2 **static synchronized void** **ikayaki.Settings.addSequence** (**MeasurementSequence** *sequence*) **[static]**

Adds a sequence to the sequence list. Each sequence may be added only once.

Definition at line 784 of file Settings.java.

References [ikayaki.Settings.fireSequencesModified\(\)](#), [ikayaki.gui.null](#), and [ikayaki.Settings.sequences](#).

Here is the call graph for this function:

9.74.2.3 **static synchronized void** **ikayaki.Settings.firePropertiesModified** () **[static]**

Invokes autosaving for the properties.

Definition at line 188 of file Settings.java.

References [ikayaki.Settings.propertiesModified](#), and [ikayaki.Settings.save\(\)](#).

Referenced by `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.4 static synchronized void ikayaki.Settings.fireSequencesModified ()
[static]

Invokes autosaving for the sequences.

Definition at line 196 of file `Settings.java`.

References `ikayaki.Settings.save()`, and `ikayaki.Settings.sequencesModified`.

Referenced by `ikayaki.Settings.addSequence()`, and `ikayaki.Settings.removeSequence()`.

Here is the call graph for this function:

9.74.2.5 static synchronized File [] ikayaki.Settings.getCalibrationProjectFiles ()
[static]

Definition at line 840 of file `Settings.java`.

9.74.2.6 static synchronized List<SequenceColumn> ikayaki.Settings.getDefaultColumns () [static]

Definition at line 803 of file `Settings.java`.

References `ikayaki.Settings.getProperty()`.

Referenced by `ikayaki.Settings.setDefaultColumn()`.

Here is the call graph for this function:

9.74.2.7 static StyledWrapper ikayaki.Settings.getDefaultWrapperInstance ()
[static]

Returns a copy of the default `StyledWrapper`.

Definition at line 910 of file `Settings.java`.

9.74.2.8 static synchronized int ikayaki.Settings.getDegausserDelay () [static]

Definition at line 385 of file `Settings.java`.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.9 static synchronized double ikayaki.Settings.getDegausserMaximumField ()
[static]

Definition at line 407 of file `Settings.java`.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

**9.74.2.10 static synchronized double ikayaki.Settings.getDegausserMinimumField
() [static]**

Definition at line 411 of file Settings.java.

**9.74.2.11 static synchronized double ikayaki.Settings.getDegausserMinimumField-
Increment () [static]**

Definition at line 415 of file Settings.java.

9.74.2.12 static synchronized String ikayaki.Settings.getDegausserPort () [static]

Definition at line 332 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.13 static synchronized int ikayaki.Settings.getDegausserRamp () [static]

Definition at line 372 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

**9.74.2.14 static synchronized File [] ikayaki.Settings.getDirectoryHistory ()
[static]**

Definition at line 671 of file Settings.java.

References ikayaki.Settings.directoryHistory.

Referenced by ikayaki.Settings.getLastDirectory().

**9.74.2.15 static StyledWrapper ikayaki.Settings.getDoneRecentlyWrapperInstance
() [static]**

Returns a copy of the StyledWrapper for recently measured projects.

Definition at line 924 of file Settings.java.

**9.74.2.16 static synchronized int ikayaki.Settings.getHandlerAcceleration ()
[static]**

Definition at line 421 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.17 `static synchronized int ikayaki.Settings.getHandlerAxialAFPosition ()`
[static]

Definition at line 525 of file Settings.java.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.18 `static synchronized int ikayaki.Settings.getHandlerBackgroundPosition ()`
[static]

Definition at line 551 of file Settings.java.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.19 `static synchronized int ikayaki.Settings.getHandlerDeceleration ()`
[static]

Definition at line 434 of file Settings.java.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.20 `static synchronized int ikayaki.Settings.getHandlerMeasurementPosition ()`
[static]

Definition at line 564 of file Settings.java.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.21 `static synchronized int ikayaki.Settings.getHandlerMeasurementVelocity ()`
[static]

Definition at line 460 of file Settings.java.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.22 `static synchronized String ikayaki.Settings.getHandlerPort ()` [static]

Definition at line 323 of file Settings.java.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.23 static synchronized int ikayaki.Settings.getHandlerRightLimit ()
[static]

Definition at line 577 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.24 static synchronized int ikayaki.Settings.getHandlerRotation () [static]

Definition at line 590 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.25 static synchronized int ikayaki.Settings.getHandlerRotationAcceleration ()
[static]

Definition at line 486 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.26 static synchronized int ikayaki.Settings.getHandlerRotationDeceleration ()
[static]

Definition at line 499 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.27 static synchronized int ikayaki.Settings.getHandlerRotationVelocity ()
[static]

Definition at line 473 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.28 static synchronized int ikayaki.Settings.getHandlerSampleLoadPosition ()
[static]

Definition at line 538 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.29 static synchronized int ikayaki.Settings.getHandlerTransverseYAFPosition () [static]

Definition at line 512 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.30 static synchronized int ikayaki.Settings.getHandlerVelocity () [static]

Definition at line 447 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.31 static synchronized MeasurementResult ikayaki.Settings.getHolderCalibration () [static]

Definition at line 882 of file Settings.java.

References ikayaki.Project.getCompletedSteps(), ikayaki.Project.getValue(), ikayaki.Project.isHolderCalibration(), ikayaki.gui.null, and ikayaki.gui.project.

Here is the call graph for this function:

9.74.2.32 static synchronized File ikayaki.Settings.getHolderCalibrationFile () [static]

Definition at line 856 of file Settings.java.

References ikayaki.gui.null.

9.74.2.33 static synchronized File ikayaki.Settings.getLastDirectory () [static]

Definition at line 662 of file Settings.java.

References ikayaki.Settings.getDirectoryHistory().

Here is the call graph for this function:

9.74.2.34 static synchronized String ikayaki.Settings.getMagnetometerPort () [static]

Definition at line 314 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.35 static synchronized double ikayaki.Settings.getMagnetometerXAxisCalibration () [static]

Definition at line 343 of file Settings.java.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.36 static synchronized double `ikayaki.Settings.getMagnetometerYAxisCalibration ()` [static]

Definition at line 352 of file `Settings.java`.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.37 static synchronized double `ikayaki.Settings.getMagnetometerZAxisCalibration ()` [static]

Definition at line 361 of file `Settings.java`.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.38 static synchronized int `ikayaki.Settings.getMeasurementRotations ()` [static]

How many times the handler should rotate itself when taking the measurements. Possible values are 0, 1 or more.

Definition at line 604 of file `Settings.java`.

References `ikayaki.Settings.getProperty()`.

Here is the call graph for this function:

9.74.2.39 static `StyledWrapper` `ikayaki.Settings.getMeasuringWrapperInstance ()` [static]

Returns a copy of the `StyledWrapper` for measuring projects.

Definition at line 917 of file `Settings.java`.

9.74.2.40 static synchronized `File []` `ikayaki.Settings.getProjectHistory ()` [static]

Definition at line 720 of file `Settings.java`.

References `ikayaki.Settings.projectHistory`.

9.74.2.41 static synchronized `String` `ikayaki.Settings.getProperty (String key, String default Value)` [static, private]

Returns the value that maps to the specified key.

Parameters:

key key whose associated value is to be returned.

default Value a default value

Returns:

the value associated with key, or defaultValue if none exists.

Definition at line 273 of file Settings.java.

References ikayaki.Settings.properties.

9.74.2.42 static synchronized String ikayaki.Settings.getProperty (String key) [static, private]

Returns the value that maps to the specified key.

Parameters:

key key whose associated value is to be returned.

Returns:

the value associated with key, or null if none exists.

Definition at line 262 of file Settings.java.

References ikayaki.Settings.properties.

Referenced by ikayaki.Settings.getDefaultColumns(), ikayaki.Settings.getDegausserDelay(), ikayaki.Settings.getDegausserMaximumField(), ikayaki.Settings.getDegausserPort(), ikayaki.Settings.getDegausserRamp(), ikayaki.Settings.getHandlerAcceleration(), ikayaki.Settings.getHandlerAxialAFPPosition(), ikayaki.Settings.getHandlerBackgroundPosition(), ikayaki.Settings.getHandlerDeceleration(), ikayaki.Settings.getHandlerMeasurementPosition(), ikayaki.Settings.getHandlerMeasurementVelocity(), ikayaki.Settings.getHandlerPort(), ikayaki.Settings.getHandlerRightLimit(), ikayaki.Settings.getHandlerRotation(), ikayaki.Settings.getHandlerRotationAcceleration(), ikayaki.Settings.getHandlerRotationDeceleration(), ikayaki.Settings.getHandlerRotationVelocity(), ikayaki.Settings.getHandlerSampleLoadPosition(), ikayaki.Settings.getHandlerTransverseYAFPPosition(), ikayaki.Settings.getHandlerVelocity(), ikayaki.Settings.getMagnetometerPort(), ikayaki.Settings.getMagnetometerXAxisCalibration(), ikayaki.Settings.getMagnetometerYAxisCalibration(), ikayaki.Settings.getMagnetometerZAxisCalibration(), ikayaki.Settings.getMeasurementRotations(), ikayaki.Settings.getWindowHeight(), ikayaki.Settings.getWindowMaximized(), ikayaki.Settings.getWindowWidth(), ikayaki.Settings.loadDirectoryHistory(), and ikayaki.Settings.loadProjectHistory().

9.74.2.43 static synchronized MeasurementSequence [] ikayaki.Settings.getSequences () [static]

Returns all saved sequences in sorted order.

Definition at line 775 of file Settings.java.

References ikayaki.Settings.sequences.

9.74.2.44 static synchronized int ikayaki.Settings.getWindowHeight () [static]

Definition at line 635 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.45 static synchronized boolean ikayaki.Settings.getWindowMaximized ()
[static]

Definition at line 651 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.46 static synchronized int ikayaki.Settings.getWindowWidth () [static]

Definition at line 619 of file Settings.java.

References ikayaki.Settings.getProperty().

Here is the call graph for this function:

9.74.2.47 static synchronized Object ikayaki.Settings.getXXX () [static]

Generic accessor for all properties. Returns the value from Properties in appropriate type.

Returns:

Value associated with key

Definition at line 298 of file Settings.java.

References ikayaki.gui.null.

9.74.2.48 static synchronized void ikayaki.Settings.loadDirectoryHistory ()
[static, private]

Definition at line 698 of file Settings.java.

References ikayaki.Settings.directoryHistory, ikayaki.Settings.getProperty(), and ikayaki.gui.null.

Here is the call graph for this function:

9.74.2.49 static synchronized void ikayaki.Settings.loadProjectHistory () [static,
private]

Definition at line 750 of file Settings.java.

References ikayaki.Settings.getProperty(), ikayaki.gui.null, and ikayaki.Settings.projectHistory.

Here is the call graph for this function:

9.74.2.50 static synchronized void ikayaki.Settings.removeSequence
(MeasurementSequence *sequence*) [static]

Removes a sequence from the sequence list. If the specified sequence is not in the list, it will be ignored.

Definition at line 794 of file Settings.java.

References ikayaki.Settings.fireSequencesModified(), ikayaki.gui.null, and ikayaki.Settings.sequences.

Here is the call graph for this function:

9.74.2.51 `static synchronized void ikayaki.Settings.save () [static]`

Saves the settings after a while when no changes have come. The method call will return immediately and will not wait for the file to be written.

Definition at line 205 of file Settings.java.

References `ikayaki.Settings.autosaveQueue`, `ikayaki.Settings.autosaveRunnable`, and `ikayaki.util.LastExecutor.execute()`.

Referenced by `ikayaki.Settings.firePropertiesModified()`, and `ikayaki.Settings.fireSequencesModified()`.

Here is the call graph for this function:

9.74.2.52 `static synchronized boolean ikayaki.Settings.saveNow () [static]`

Saves the settings and keeps waiting until its done. If no settings have been modified, will do nothing.

Returns:

true if there were no errors in writing the files or everything was already saved. Otherwise false.

Definition at line 214 of file Settings.java.

References `ikayaki.gui.null`, `ikayaki.Settings.properties`, `ikayaki.Settings.propertiesFile`, `ikayaki.Settings.propertiesModified`, `ikayaki.Settings.sequences`, `ikayaki.Settings.sequencesFile`, and `ikayaki.Settings.sequencesModified`.

9.74.2.53 `static synchronized void ikayaki.Settings.setDefaultColumn (SequenceColumn column, boolean enabled) [static]`

Definition at line 818 of file Settings.java.

References `ikayaki.Settings.getDefaultColumns()`, `ikayaki.gui.null`, and `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.54 `static synchronized boolean ikayaki.Settings.setDegausserDelay (int value) [static]`

Definition at line 389 of file Settings.java.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.55 `static synchronized boolean ikayaki.Settings.setDegausserMaximumField (double value) [static]`

Definition at line 398 of file Settings.java.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.56 `static synchronized boolean ikayaki.Settings.setDegausserPort (String value) [static]`

Definition at line 336 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.57 `static synchronized boolean ikayaki.Settings.setDegausserRamp (int value) [static]`

Definition at line 376 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.58 `static synchronized boolean ikayaki.Settings.setHandlerAcceleration (int value) [static]`

Definition at line 425 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.59 `static synchronized boolean ikayaki.Settings.setHandlerAxialAFPosition (int value) [static]`

Definition at line 529 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.60 `static synchronized boolean ikayaki.Settings.setHandlerBackground-Position (int value) [static]`

Definition at line 555 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.61 `static synchronized boolean ikayaki.Settings.setHandlerDeceleration (int value) [static]`

Definition at line 438 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.62 static synchronized boolean ikayaki.Settings.setHandlerMeasurement-Position (int *value*) [static]

Definition at line 568 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.63 static synchronized boolean ikayaki.Settings.setHandlerMeasurement-Velocity (int *value*) [static]

Definition at line 464 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.64 static synchronized boolean ikayaki.Settings.setHandlerPort (String *value*) [static]

Definition at line 327 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.65 static synchronized boolean ikayaki.Settings.setHandlerRightLimit (int *value*) [static]

Definition at line 581 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.66 static synchronized boolean ikayaki.Settings.setHandlerRotation (int *value*) [static]

Definition at line 594 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.67 static synchronized boolean ikayaki.Settings.setHandlerRotation-Acceleration (int *value*) [static]

Definition at line 490 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.68 static synchronized boolean ikayaki.Settings.setHandlerRotationDeceleration (int *value*) [static]

Definition at line 503 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.69 static synchronized boolean ikayaki.Settings.setHandlerRotationVelocity (int *value*) [static]

Definition at line 477 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.70 static synchronized boolean ikayaki.Settings.setHandlerSampleLoadPosition (int *value*) [static]

Definition at line 542 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.71 static synchronized boolean ikayaki.Settings.setHandlerTransverseYAFPosition (int *value*) [static]

Definition at line 516 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.72 static synchronized boolean ikayaki.Settings.setHandlerVelocity (int *value*) [static]

Definition at line 451 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.73 static synchronized void ikayaki.Settings.setHolderCalibrationFile (File *file*) [static]

Definition at line 864 of file Settings.java.

References ikayaki.gui.null.

9.74.2.74 static synchronized boolean ikayaki.Settings.setMagnetometerPort (String *value*) [static]

Definition at line 318 of file Settings.java.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.75 `static synchronized boolean ikayaki.Settings.setMagnetometerXAxis-Calibration (double value) [static]`

Definition at line 347 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.76 `static synchronized boolean ikayaki.Settings.setMagnetometerYAxis-Calibration (double value) [static]`

Definition at line 356 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.77 `static synchronized boolean ikayaki.Settings.setMagnetometerZAxis-Calibration (double value) [static]`

Definition at line 365 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.78 `static synchronized boolean ikayaki.Settings.setMeasurementRotations (int value) [static]`

Definition at line 608 of file `Settings.java`.

References `ikayaki.Settings.setProperty()`.

Here is the call graph for this function:

9.74.2.79 `static synchronized void ikayaki.Settings.setProperty (String key, String value) [static, private]`

Associates the specified value with the specified key. Will invoke autosaving.

Parameters:

key key with which the specified value is to be associated.

value value to be associated with the specified key, or null to remove the value.

Exceptions:

NullPointerException if key is null.

Definition at line 284 of file `Settings.java`.

References `ikayaki.Settings.firePropertiesModified()`, `ikayaki.gui.null`, and `ikayaki.Settings.properties`.

Referenced by ikayaki.Settings.setDefaultColumn(), ikayaki.Settings.setDegausserDelay(), ikayaki.Settings.setDegausserMaximumField(), ikayaki.Settings.setDegausserPort(), ikayaki.Settings.setDegausserRamp(), ikayaki.Settings.setHandlerAcceleration(), ikayaki.Settings.setHandlerAxialAFPosition(), ikayaki.Settings.setHandlerBackgroundPosition(), ikayaki.Settings.setHandlerDeceleration(), ikayaki.Settings.setHandlerMeasurementPosition(), ikayaki.Settings.setHandlerMeasurementVelocity(), ikayaki.Settings.setHandlerPort(), ikayaki.Settings.setHandlerRightLimit(), ikayaki.Settings.setHandlerRotation(), ikayaki.Settings.setHandlerRotationAcceleration(), ikayaki.Settings.setHandlerRotationDeceleration(), ikayaki.Settings.setHandlerRotationVelocity(), ikayaki.Settings.setHandlerSampleLoadPosition(), ikayaki.Settings.setHandlerTransverseYAFPosition(), ikayaki.Settings.setHandlerVelocity(), ikayaki.Settings.setMagnetometerPort(), ikayaki.Settings.setMagnetometerXAxisCalibration(), ikayaki.Settings.setMagnetometerYAxisCalibration(), ikayaki.Settings.setMagnetometerZAxisCalibration(), ikayaki.Settings.setMeasurementRotations(), ikayaki.Settings.setWindowHeight(), ikayaki.Settings.setWindowMaximized(), ikayaki.Settings.setWindowWidth(), ikayaki.Settings.updateDirectoryHistory(), and ikayaki.Settings.updateProjectHistory().

Here is the call graph for this function:

9.74.2.80 static synchronized boolean ikayaki.Settings.setWindowHeight (int *value*) [static]

Definition at line 646 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.81 static synchronized boolean ikayaki.Settings.setWindowMaximized (boolean *value*) [static]

Definition at line 655 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.82 static synchronized boolean ikayaki.Settings.setWindowWidth (int *value*) [static]

Definition at line 630 of file Settings.java.

References ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.83 static synchronized boolean ikayaki.Settings.setXXX (Object *value*) [static]

Generic accessor for all properties. Checks whether the value is ok and sets it. Will invoke autosaving.

Returns:

true if value was correct, otherwise false.

Definition at line 307 of file Settings.java.

References ikayaki.gui.null.

9.74.2.84 static synchronized boolean ikayaki.Settings.updateDirectoryHistory (File *visited*) [static]

Definition at line 675 of file Settings.java.

References ikayaki.Settings.DIRECTORY_HISTORY_SIZE, ikayaki.Settings.directoryHistory, ikayaki.gui.null, and ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.2.85 static synchronized boolean ikayaki.Settings.updateProjectHistory (File *visited*) [static]

Definition at line 724 of file Settings.java.

References ikayaki.gui.null, ikayaki.Settings.PROJECT_HISTORY_SIZE, ikayaki.Settings.projectHistory, and ikayaki.Settings.setProperty().

Here is the call graph for this function:

9.74.3 Member Data Documentation

9.74.3.1 LastExecutor ikayaki.Settings.autosaveQueue = new LastExecutor(500, true) [static, private]

Queue for scheduling save operations after properties/sequences have been changed

Definition at line 99 of file Settings.java.

Referenced by ikayaki.Settings.save().

9.74.3.2 Runnable ikayaki.Settings.autosaveRunnable [static, private]

Initial value:

```
new Runnable() {
    public void run() {
        saveNow();
    }
}
```

Operation that will save the properties/sequences.

Definition at line 104 of file Settings.java.

Referenced by ikayaki.Settings.save().

9.74.3.3 final StyledWrapper ikayaki.Settings.defaultWrapper = new StyledWrapper() [static, private]

Definition at line 52 of file Settings.java.

9.74.3.4 `final int ikayaki.Settings.DIRECTORY_HISTORY_SIZE = 30` [static, private]

Definition at line 49 of file Settings.java.

Referenced by `ikayaki.Settings.updateDirectoryHistory()`.

9.74.3.5 `List<File> ikayaki.Settings.directoryHistory = new LinkedList<File>()` [static, private]

List for holding the recently used directories. Used to cache the values read from the properties.

Definition at line 89 of file Settings.java.

Referenced by `ikayaki.Settings.getDirectoryHistory()`, `ikayaki.Settings.loadDirectoryHistory()`, and `ikayaki.Settings.updateDirectoryHistory()`.

9.74.3.6 `final StyledWrapper ikayaki.Settings.doneRecentlyWrapper = new StyledWrapper()` [static, private]

Definition at line 54 of file Settings.java.

9.74.3.7 `final StyledWrapper ikayaki.Settings.measuringWrapper = new StyledWrapper()` [static, private]

Definition at line 53 of file Settings.java.

9.74.3.8 `final int ikayaki.Settings.PROJECT_HISTORY_SIZE = 10` [static, private]

Definition at line 50 of file Settings.java.

Referenced by `ikayaki.Settings.updateProjectHistory()`.

9.74.3.9 `List<File> ikayaki.Settings.projectHistory = new LinkedList<File>()` [static, private]

List for holding the recently used project files. Used to cache the values read from the properties.

Definition at line 94 of file Settings.java.

Referenced by `ikayaki.Settings.getProjectHistory()`, `ikayaki.Settings.loadProjectHistory()`, and `ikayaki.Settings.updateProjectHistory()`.

9.74.3.10 `Properties ikayaki.Settings.properties = new Properties()` [static, private]

All properties in a map.

Definition at line 59 of file Settings.java.

Referenced by `ikayaki.Settings.getProperty()`, `ikayaki.Settings.saveNow()`, and `ikayaki.Settings.setProperty()`.

9.74.3.11 File `ikayaki.Settings.propertiesFile = Ikayaki.PROPERTIES_FILE`
[static, private]

File where the properties will be saved in XML format

Definition at line 64 of file `Settings.java`.

Referenced by `ikayaki.Settings.saveNow()`.

9.74.3.12 boolean `ikayaki.Settings.propertiesModified = false` [static, private]

true if the properties have been modified, otherwise false

Definition at line 69 of file `Settings.java`.

Referenced by `ikayaki.Settings.firePropertiesModified()`, and `ikayaki.Settings.saveNow()`.

9.74.3.13 `List<MeasurementSequence> ikayaki.Settings.sequences = new ArrayList<MeasurementSequence>()` [static, private]

All saved sequences

Definition at line 74 of file `Settings.java`.

Referenced by `ikayaki.Settings.addSequence()`, `ikayaki.Settings.getSequences()`, `ikayaki.Settings.removeSequence()`, and `ikayaki.Settings.saveNow()`.

9.74.3.14 File `ikayaki.Settings.sequencesFile = Ikayaki.SEQUENCES_FILE`
[static, private]

File where the sequences will be saved in XML format

Definition at line 79 of file `Settings.java`.

Referenced by `ikayaki.Settings.saveNow()`.

9.74.3.15 boolean `ikayaki.Settings.sequencesModified = false` [static, private]

true if the sequences have been modified, otherwise false

Definition at line 84 of file `Settings.java`.

Referenced by `ikayaki.Settings.fireSequencesModified()`, and `ikayaki.Settings.saveNow()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/Settings.java`

9.75 ikayaki.gui.SettingsDialog Class Reference

Collaboration diagram for ikayaki.gui.SettingsDialog:

Static Public Member Functions

- static void **showDeviceSettingsDialog** (Frame owner, String message)
- static void **showProgramSettingsDialog** (Frame owner, String message)
- static void **showPrintPreview** (Frame owner, String message, **Project project**, boolean **printDirectly**)

Protected Member Functions

- void **dialogInit** ()

Private Member Functions

- **SettingsDialog** (Frame owner, String message)

Static Private Attributes

- static final int **DEVICE_SETTINGS** = 1
- static final int **PROGRAM_SETTINGS** = 2
- static final int **PRINT_PREVIEW** = 3
- static int **dialogType**
- static **Project project**
- static boolean **printDirectly**

9.75.1 Detailed Description

Opens dialog and creates **DeviceSettingsPanel**(p. 67)

Author:

Aki Korpua

Definition at line 35 of file SettingsDialog.java.

9.75.2 Constructor & Destructor Documentation

9.75.2.1 ikayaki.gui.SettingsDialog.SettingsDialog (Frame *owner*, String *message*) [private]

Definition at line 45 of file SettingsDialog.java.

References ikayaki.gui.null.

Referenced by ikayaki.gui.SettingsDialog.showDeviceSettingsDialog(), ikayaki.gui.SettingsDialog.showPrintPreview(), and ikayaki.gui.SettingsDialog.showProgramSettingsDialog().

9.75.3 Member Function Documentation

9.75.3.1 void ikayaki.gui.SettingsDialog.dialogInit () [protected]

Creates all components and puts them in right places. Labels are created only here (no global fields). Creates ActionListeners for buttons.

Definition at line 56 of file SettingsDialog.java.

References ikayaki.gui.SettingsDialog.DEVICE_SETTINGS, ikayaki.gui.SettingsDialog.dialogType, ikayaki.gui.SettingsDialog.PRINT_PREVIEW, ikayaki.gui.SettingsDialog.printDirectly, ikayaki.gui.SettingsDialog.PROGRAM_SETTINGS, and ikayaki.gui.SettingsDialog.project.

9.75.3.2 static void ikayaki.gui.SettingsDialog.showDeviceSettingsDialog (Frame owner, String message) [static]

Definition at line 78 of file SettingsDialog.java.

References ikayaki.gui.SettingsDialog.DEVICE_SETTINGS, ikayaki.gui.SettingsDialog.dialogType, and ikayaki.gui.SettingsDialog.SettingsDialog().

Here is the call graph for this function:

9.75.3.3 static void ikayaki.gui.SettingsDialog.showPrintPreview (Frame owner, String message, Project project, boolean printDirectly) [static]

Definition at line 90 of file SettingsDialog.java.

References ikayaki.gui.SettingsDialog.dialogType, ikayaki.gui.SettingsDialog.PRINT_PREVIEW, and ikayaki.gui.SettingsDialog.SettingsDialog().

Here is the call graph for this function:

9.75.3.4 static void ikayaki.gui.SettingsDialog.showProgramSettingsDialog (Frame owner, String message) [static]

Definition at line 84 of file SettingsDialog.java.

References ikayaki.gui.SettingsDialog.dialogType, ikayaki.gui.SettingsDialog.PROGRAM_SETTINGS, and ikayaki.gui.SettingsDialog.SettingsDialog().

Here is the call graph for this function:

9.75.4 Member Data Documentation

9.75.4.1 final int ikayaki.gui.SettingsDialog.DEVICE_SETTINGS = 1 [static, private]

Definition at line 37 of file SettingsDialog.java.

Referenced by ikayaki.gui.SettingsDialog.dialogInit(), and ikayaki.gui.SettingsDialog.showDeviceSettingsDialog().

9.75.4.2 int ikayaki.gui.SettingsDialog.dialogType [static, private]

Definition at line 41 of file SettingsDialog.java.

Referenced by ikayaki.gui.SettingsDialog.dialogInit(), ikayaki.gui.SettingsDialog.showDeviceSettingsDialog(), ikayaki.gui.SettingsDialog.showPrintPreview(), and ikayaki.gui.SettingsDialog.showProgramSettingsDialog().

9.75.4.3 final int ikayaki.gui.SettingsDialog.PRINT_PREVIEW = 3 [static, private]

Definition at line 39 of file SettingsDialog.java.

Referenced by ikayaki.gui.SettingsDialog.dialogInit(), and ikayaki.gui.SettingsDialog.showPrintPreview().

9.75.4.4 boolean ikayaki.gui.SettingsDialog.printDirectly [static, private]

Definition at line 43 of file SettingsDialog.java.

Referenced by ikayaki.gui.SettingsDialog.dialogInit().

9.75.4.5 final int ikayaki.gui.SettingsDialog.PROGRAM_SETTINGS = 2 [static, private]

Definition at line 38 of file SettingsDialog.java.

Referenced by ikayaki.gui.SettingsDialog.dialogInit(), and ikayaki.gui.SettingsDialog.showProgramSettingsDialog().

9.75.4.6 Project ikayaki.gui.SettingsDialog.project [static, private]

Definition at line 42 of file SettingsDialog.java.

Referenced by ikayaki.gui.SettingsDialog.dialogInit().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**SettingsDialog.java**

9.76 ikayaki.squid.Squid Class Reference

Collaboration diagram for ikayaki.squid.Squid:

Public Member Functions

- **Degausser** `getDegausser ()`
- **Handler** `getHandler ()`
- **Magnetometer** `getMagnetometer ()`
- synchronized void **updateSettings ()**
- synchronized boolean **isOK ()**
- synchronized boolean **setOwner (Project owner)**
- synchronized **Project** `getOwner ()`

Static Public Member Functions

- static synchronized **Squid** `instance ()` throws `IOException`

Private Member Functions

- **Squid ()** throws `IOException`

Private Attributes

- **Project** `owner`
- **Degausser** `degausser`
- **Handler** `handler`
- **Magnetometer** `magnetometer`

Static Private Attributes

- static **Squid** `instance`

9.76.1 Detailed Description

Offers an interface for controlling the SQUID system. Reads settings from the **Settings**(p.361) class. Creates instances of the degausser, handler and magnetometer classes and offers handles for them.

Author:

Aki Korpua

Definition at line 35 of file Squid.java.

9.76.2 Constructor & Destructor Documentation

9.76.2.1 ikayaki.squid.Squid.Squid () throws IOException [private]

Initializes the **Squid**(p. 384) interface. Creates instances of **Degausser**(p. 59), **Handler**(p. 85) and **Magnetometer**(p. 119).

Definition at line 73 of file Squid.java.

References `ikayaki.squid.Squid.degausser`, `ikayaki.squid.Squid.handler`, `ikayaki.squid.Squid.magnetometer`, `ikayaki.gui.null`, `ikayaki.squid.Squid.owner`, and `ikayaki.squid.Handler.setUp()`.

Referenced by `ikayaki.squid.Squid.instance()`.

Here is the call graph for this function:

9.76.3 Member Function Documentation

9.76.3.1 Degausser ikayaki.squid.Squid.getDegausser ()

Returns an interface for controlling the degausser.

Returns:

Handler(p. 85) for **Degausser**(p. 59) if available

Definition at line 101 of file Squid.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.76.3.2 Handler ikayaki.squid.Squid.getHandler ()

Returns an interface for controlling the handler.

Returns:

Handler(p. 85) for **Handler**(p. 85) if available

Definition at line 110 of file Squid.java.

Referenced by `ikayaki.squid.SquidFront.initRawActions()`, `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator.run()`, and `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.76.3.3 Magnetometer ikayaki.squid.Squid.getMagnetometer ()

Returns an interface for controlling the magnetometer.

Returns:

Handler(p. 85) for **Magnetometer**(p. 119) if available

Definition at line 119 of file Squid.java.

Referenced by `ikayaki.gui.MagnetometerStatusPanel.updateStatus()`.

9.76.3.4 synchronized Project ikayaki.squid.Squid.getOwner ()

Returns project that is currently using the **Squid**(p. 384).

Returns:

the project, or null if none is using the **Squid**(p. 384).

Definition at line 170 of file Squid.java.

Referenced by ikayaki.Project.setSquid().

9.76.3.5 static synchronized Squid ikayaki.squid.Squid.instance () throws IOException [static]

Returns a reference to the **Squid**(p. 384). If it has not yet been created, will create one.

Definition at line 65 of file Squid.java.

References ikayaki.gui.null, and ikayaki.squid.Squid.Squid().

Here is the call graph for this function:

9.76.3.6 synchronized boolean ikayaki.squid.Squid.isOK ()

Checks whether all devices are working correctly.

Returns:

true if everything is correct, otherwise false.

Definition at line 140 of file Squid.java.

References ikayaki.squid.Squid.degausser, ikayaki.squid.Squid.handler, ikayaki.squid.Degausser.isOK(), ikayaki.squid.Squid.magnetometer, and ikayaki.gui.null.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel(), and ikayaki.squid.SquidFront.SquidFront().

Here is the call graph for this function:

9.76.3.7 synchronized boolean ikayaki.squid.Squid.setOwner (Project owner)

Sets the owner of the **Squid**(p. 384). Only one project may have access to the **Squid**(p. 384) at a time. This method may be called only from the **Project**(p. 264) class.

Parameters:

owner the project that will have exclusive access to the **Squid**(p. 384). May be null.

Returns:

true if successful, false if the existing owner had a running measurement.

Definition at line 156 of file Squid.java.

References ikayaki.gui.null.

Referenced by ikayaki.Project.setSquid().

9.76.3.8 synchronized void ikayaki.squid.Squid.updateSettings ()

Checks which settings have changed and updates all the device interfaces. This method should be called when changes are made to the device parameters. <p/> This method starts a worker thread that will update the settings. If the current project has a measurement running, the thread will keep on retrying until the measurement is finished. Multiple calls to this method within a short period of time will update the settings only once.

Definition at line 131 of file Squid.java.

9.76.4 Member Data Documentation

9.76.4.1 Degausser ikayaki.squid.Squid.degausser [private]

Instance of the degausser interface.

Definition at line 50 of file Squid.java.

Referenced by ikayaki.squid.Squid.isOK(), and ikayaki.squid.Squid.Squid().

9.76.4.2 Handler ikayaki.squid.Squid.handler [private]

Instance of the handler interface.

Definition at line 55 of file Squid.java.

Referenced by ikayaki.squid.Squid.isOK(), and ikayaki.squid.Squid.Squid().

9.76.4.3 Squid ikayaki.squid.Squid.instance [static, private]

Instance of the **Squid**(p. 384) interface.

Definition at line 40 of file Squid.java.

Referenced by ikayaki.gui.MainViewPanel.MainViewPanel(), and ikayaki.squid.SquidFront.SquidFront().

9.76.4.4 Magnetometer ikayaki.squid.Squid.magnetometer [private]

Instance of the magnetometer interface.

Definition at line 60 of file Squid.java.

Referenced by ikayaki.squid.Squid.isOK(), and ikayaki.squid.Squid.Squid().

9.76.4.5 Project ikayaki.squid.Squid.owner [private]

The project that is currently using the **Squid**(p. 384), or null if no project is using it.

Definition at line 45 of file Squid.java.

Referenced by ikayaki.squid.Squid.Squid().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/squid/**Squid.java**

9.77 ikayaki.squid.SquidEmulator Class Reference

Collaboration diagram for ikayaki.squid.SquidEmulator:

Public Member Functions

- **SquidEmulator** ()

Static Public Member Functions

- static void **writeMessage** (String message, **SerialIO** port)
- static void **main** (String[] args)

Private Member Functions

- void **jbInit** () throws **Exception**

Static Private Attributes

- static boolean **online**
- static File **logFile**
- static boolean **usingOldLog**
- static int **acceleration**
- static int **deceleration**
- static int **velocity**
- static String **handlerStatus**
- static int **commandedDistance**
- static int **currentPosition**
- static int **homePosition**
- static int **commandedRotation**
- static int **currentRotation**
- static int **degausserCoil**
- static int **degausserAmplitude**
- static int **degausserDelay**
- static int **degausserRamp**
- static char **degausserStatus**
- static **SerialIO** **handlerPort**
- static **SerialIO** **magnetometerPort**
- static **SerialIO** **degausserPort**
- static **FileWriter** **logWriter** = null
- static **HandlerEmu** **handler**
- static **MagnetometerEmu** **magnetometer**
- static **DegausserEmu** **degausser**
- static boolean **running**

Classes

- class **DegausserEmu**
- class **HandlerEmu**
- class **MagnetometerEmu**

9.77.1 Detailed Description

This class tries to emulate behavior of real squid-system. It starts 3 threads (handler,magnetometer,degausser), opens COM-ports for them and adds **SerialIO**(p.344) Listeners. Threads generates random data values or loaded values as results and generates random error situations to see that program using real squid system does survive those. Uses 2-3 COM ports. Usage **SquidEmulator**(p.388) x z.. filename where x is 0 or 1 and indicates if **Magnetometer**(p.119) and Demagnetizer are on same COM port. z... values are COM ports (**Handler**(p.85),**Magnetometer**(p.119),**Degausser**(p.59)). filename is name of log file we are using or it is existing log file, which is used to generate same sequence used to verify that old and new program behaves same way.

Author:

Aki Korpua

Definition at line 41 of file SquidEmulator.java.

9.77.2 Constructor & Destructor Documentation

9.77.2.1 ikayaki.squid.SquidEmulator.SquidEmulator ()

Definition at line 42 of file SquidEmulator.java.

References ikayaki.squid.SquidEmulator.jbInit().

Here is the call graph for this function:

9.77.3 Member Function Documentation

9.77.3.1 void ikayaki.squid.SquidEmulator.jbInit () throws Exception [private]

Definition at line 245 of file SquidEmulator.java.

Referenced by ikayaki.squid.SquidEmulator.SquidEmulator().

9.77.3.2 static void ikayaki.squid.SquidEmulator.main (String[] args) [static]

First creates or loads log file and sets settings. Runs sequence where read data from buffer and run cheduled actions (move, rotate, demag, measure) and send feedback to COM ports.

Definition at line 184 of file SquidEmulator.java.

References ikayaki.squid.SquidEmulator.degausser, ikayaki.squid.SquidEmulator.degausserPort, ikayaki.squid.SquidEmulator.handler, ikayaki.squid.SquidEmulator.handlerPort, ikayaki.squid.SquidEmulator.logFile, ikayaki.squid.SquidEmulator.logWriter, ikayaki.squid.SquidEmulator.magnetometer, ikayaki.squid.SquidEmulator.magnetometerPort, ikayaki.squid.SerialIO.openPort(), and ikayaki.squid.SquidEmulator.running.

Here is the call graph for this function:

9.77.3.3 static void ikayaki.squid.SquidEmulator.sendMessage (String message, SerialIO port) [static]

send message to **SerialIO**(p.344) to be sented.

Parameters:

message any message reply we are sending back

port port number to be sent

Definition at line 164 of file SquidEmulator.java.

References ikayaki.squid.SquidEmulator.logWriter, and ikayaki.squid.SerialIO.sendMessage().

Referenced by ikayaki.squid.SquidEmulator.DegausserEmu.run(), ikayaki.squid.SquidEmulator.MagnetometerEmu.run(), and ikayaki.squid.SquidEmulator.HandlerEmu.run().

Here is the call graph for this function:

9.77.4 Member Data Documentation

9.77.4.1 int ikayaki.squid.SquidEmulator.acceleration [static, private]

value between 0 and 127 default 5. **Settings**(p. 361) in the 20-50 range are usually employed.

Definition at line 72 of file SquidEmulator.java.

9.77.4.2 int ikayaki.squid.SquidEmulator.commandedDistance [static, private]

value between 1 and 16,777,215

Definition at line 96 of file SquidEmulator.java.

9.77.4.3 int ikayaki.squid.SquidEmulator.commandedRotation [static, private]

angles are between 0 (0) and 2000 (360)

Definition at line 111 of file SquidEmulator.java.

9.77.4.4 int ikayaki.squid.SquidEmulator.currentPosition [static, private]

value between 1 and 16,777,215

Definition at line 101 of file SquidEmulator.java.

9.77.4.5 int ikayaki.squid.SquidEmulator.currentRotation [static, private]

angles are between 0 (0) and 2000 (360)

Definition at line 116 of file SquidEmulator.java.

9.77.4.6 int ikayaki.squid.SquidEmulator.deceleration [static, private]

value between 0 and 127 default 10. **Settings**(p. 361) in the 20-50 range are usually employed.

Definition at line 77 of file SquidEmulator.java.

9.77.4.7 DegausserEmu `ikayaki.squid.SquidEmulator.degausser` [static, private]

Definition at line 155 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.main()`.

9.77.4.8 int `ikayaki.squid.SquidEmulator.degausserAmplitude` [static, private]

0->3000 default amp 0

Definition at line 126 of file SquidEmulator.java.

9.77.4.9 int `ikayaki.squid.SquidEmulator.degausserCoil` [static, private]

(X, Y, Z) = (0,1,2) default axis Z

Definition at line 121 of file SquidEmulator.java.

9.77.4.10 int `ikayaki.squid.SquidEmulator.degausserDelay` [static, private]

1-9 seconds default delay 1 second

Definition at line 131 of file SquidEmulator.java.

9.77.4.11 SerialIO `ikayaki.squid.SquidEmulator.degausserPort` [static, private]

Definition at line 149 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.DegausserEmu.DegausserEmu()`, `ikayaki.squid.SquidEmulator.main()`, and `ikayaki.squid.SquidEmulator.DegausserEmu.run()`.

9.77.4.12 int `ikayaki.squid.SquidEmulator.degausserRamp` [static, private]

(3, 5, 7, 9) default 3

Definition at line 136 of file SquidEmulator.java.

9.77.4.13 char `ikayaki.squid.SquidEmulator.degausserStatus` [static, private]

Z=Zero, T=Tracking, ?=Unknown

Definition at line 141 of file SquidEmulator.java.

9.77.4.14 HandlerEmu `ikayaki.squid.SquidEmulator.handler` [static, private]

Definition at line 153 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.main()`.

9.77.4.15 SerialIO `ikayaki.squid.SquidEmulator.handlerPort` [static, private]

starts Threads which reads messages from selected COM port. Own listener for each. Offers write commads to port too.

Definition at line 147 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.HandlerEmu.HandlerEmu()`, `ikayaki.squid.SquidEmulator.main()`, and `ikayaki.squid.SquidEmulator.HandlerEmu.run()`.

9.77.4.16 String `ikayaki.squid.SquidEmulator.handlerStatus` [static, private]

5 end of move, previous G command complete, 7 hard limit stop, G motor is currently indexing

Definition at line 91 of file SquidEmulator.java.

9.77.4.17 int `ikayaki.squid.SquidEmulator.homePosition` [static, private]

value between 1 and 16,777,215

Definition at line 106 of file SquidEmulator.java.

9.77.4.18 File `ikayaki.squid.SquidEmulator.logFile` [static, private]

log file we are using read or write

Definition at line 62 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.main()`.

9.77.4.19 FileWriter `ikayaki.squid.SquidEmulator.logWriter = null` [static, private]

Definition at line 151 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.main()`, `ikayaki.squid.SquidEmulator.DegausserEmu.serialIOEvent()`, `ikayaki.squid.SquidEmulator.MagnetometerEmu.serialIOEvent()`, `ikayaki.squid.SquidEmulator.HandlerEmu.serialIOEvent()`, and `ikayaki.squid.SquidEmulator.sendMessage()`.

9.77.4.20 MagnetometerEmu `ikayaki.squid.SquidEmulator.magnetometer` [static, private]

Definition at line 154 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.main()`.

9.77.4.21 SerialIO `ikayaki.squid.SquidEmulator.magnetometerPort` [static, private]

Definition at line 148 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.MagnetometerEmu.MagnetometerEmu()`, `ikayaki.squid.SquidEmulator.main()`, and `ikayaki.squid.SquidEmulator.MagnetometerEmu.run()`.

9.77.4.22 boolean `ikayaki.squid.SquidEmulator.online` [static, private]

indicates if system have been started

Definition at line 57 of file SquidEmulator.java.

9.77.4.23 boolean ikayaki.squid.SquidEmulator.running [static, private]

Definition at line 156 of file SquidEmulator.java.

Referenced by ikayaki.squid.SquidEmulator.main(), ikayaki.squid.SquidEmulator.DegausserEmu.run(), ikayaki.squid.SquidEmulator.MagnetometerEmu.run(), and ikayaki.squid.SquidEmulator.HandlerEmu.run().

9.77.4.24 boolean ikayaki.squid.SquidEmulator.usingOldLog [static, private]

indicates have we loaded log file for using or are we writing it

Definition at line 67 of file SquidEmulator.java.

9.77.4.25 int ikayaki.squid.SquidEmulator.velocity [static, private]

value between 50 and 12 000. The decimal number issued is 10 times the actual pulse rate to the motor. Since the motor requires 200 pulses (full step) or 400 pulses (half step) per revolution, a speed setting of M10000 sets the motor to revolve at 5 revolutions per second in full step or 2.5 revolutions in half step. This rate is one-half the sample rate rotation due to the pulley ratios. The sample handler is set up at the factory for half stepping.

Definition at line 86 of file SquidEmulator.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/squid/**SquidEmulator.java**

9.78 ikayaki.squid.SquidEmulator.DegausserEmu Class Reference

Inherits `ikayaki.squid.SerialIOListener`.

Inheritance diagram for `ikayaki.squid.SquidEmulator.DegausserEmu`: Collaboration diagram for `ikayaki.squid.SquidEmulator.DegausserEmu`:

Public Member Functions

- `DegausserEmu ()`
- `void run ()`
- `void serialIOEvent (SerialIOEvent event)`

Private Attributes

- `Stack< String > commandStack`

9.78.1 Detailed Description

Runs degausser emulation process. Process incoming messages and sends data back. When message comes, process it (wait if needed for a while), updates own status and sends result back.

Definition at line 376 of file `SquidEmulator.java`.

9.78.2 Constructor & Destructor Documentation

9.78.2.1 `ikayaki.squid.SquidEmulator.DegausserEmu.DegausserEmu ()`

Definition at line 382 of file `SquidEmulator.java`.

References `ikayaki.squid.SerialIO.addSerialIOListener()`, `ikayaki.squid.SquidEmulator.DegausserEmu.commandStack`, and `ikayaki.squid.SquidEmulator.degausserPort`.

Here is the call graph for this function:

9.78.3 Member Function Documentation

9.78.3.1 `void ikayaki.squid.SquidEmulator.DegausserEmu.run ()`

Definition at line 389 of file `SquidEmulator.java`.

References `ikayaki.squid.SquidEmulator.DegausserEmu.commandStack`, `ikayaki.squid.SquidEmulator.degausserPort`, `ikayaki.squid.SquidEmulator.running`, and `ikayaki.squid.SquidEmulator.writeMessage()`.

Here is the call graph for this function:

9.78.3.2 `void ikayaki.squid.SquidEmulator.DegausserEmu.serialIOEvent (SerialIOEvent event)`

Propagates serial port message event.

Parameters:

event the event that happened.

Implements `ikayaki.squid.SerialIOListener` (p. 353).

Definition at line 406 of file `SquidEmulator.java`.

References `ikayaki.squid.SquidEmulator.DegausserEmu.commandStack`, and `ikayaki.squid.SquidEmulator.logWriter`.

9.78.4 Member Data Documentation

9.78.4.1 `Stack<String> ikayaki.squid.SquidEmulator.DegausserEmu.commandStack` [private]

Definition at line 380 of file `SquidEmulator.java`.

Referenced by `ikayaki.squid.SquidEmulator.DegausserEmu.DegausserEmu()`, `ikayaki.squid.SquidEmulator.DegausserEmu.run()`, and `ikayaki.squid.SquidEmulator.DegausserEmu.serialIOEvent()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/squid/SquidEmulator.java`

9.79 ikayaki.squid.SquidEmulator.HandlerEmu Class Reference

Inherits `ikayaki.squid.SerialIOListener`.

Inheritance diagram for `ikayaki.squid.SquidEmulator.HandlerEmu`: Collaboration diagram for `ikayaki.squid.SquidEmulator.HandlerEmu`:

Public Member Functions

- `HandlerEmu ()`
- `void run ()`
- `void serialIOEvent (SerialIOEvent event)`

Private Attributes

- `Stack< String > commandStack`
- `String lastMessagePart = ""`

9.79.1 Detailed Description

Runs handler emulation process. Process incoming messages and sends data back. When message comes, process it (wait if needed for a while), updates own status and sends result back.

Definition at line 252 of file `SquidEmulator.java`.

9.79.2 Constructor & Destructor Documentation

9.79.2.1 `ikayaki.squid.SquidEmulator.HandlerEmu.HandlerEmu ()`

Definition at line 261 of file `SquidEmulator.java`.

References `ikayaki.squid.SerialIO.addSerialIOListener()`, `ikayaki.squid.SquidEmulator.HandlerEmu.commandStack`, and `ikayaki.squid.SquidEmulator.handlerPort`.

Here is the call graph for this function:

9.79.3 Member Function Documentation

9.79.3.1 `void ikayaki.squid.SquidEmulator.HandlerEmu.run ()`

Definition at line 267 of file `SquidEmulator.java`.

References `ikayaki.squid.SquidEmulator.HandlerEmu.commandStack`, `ikayaki.squid.SquidEmulator.handlerPort`, `ikayaki.squid.SquidEmulator.running`, and `ikayaki.squid.SquidEmulator.writeMessage()`.

Here is the call graph for this function:

9.79.3.2 void ikayaki.squid.SquidEmulator.HandlerEmu.serialIOEvent (SerialIOEvent *event*)

Propagates serial port message event.

Parameters:

event the event that happened.

Implements `ikayaki.squid.SerialIOListener` (p. 353).

Definition at line 289 of file SquidEmulator.java.

References `ikayaki.squid.SquidEmulator.HandlerEmu.commandStack`, and `ikayaki.squid.SquidEmulator.logWriter`.

9.79.4 Member Data Documentation

9.79.4.1 Stack<String> ikayaki.squid.SquidEmulator.HandlerEmu.commandStack [private]

Definition at line 256 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.HandlerEmu.HandlerEmu()`, `ikayaki.squid.SquidEmulator.HandlerEmu.run()`, and `ikayaki.squid.SquidEmulator.HandlerEmu.serialIOEvent()`.

9.79.4.2 String ikayaki.squid.SquidEmulator.HandlerEmu.lastMessagePart = "" [private]

Definition at line 259 of file SquidEmulator.java.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/squid/SquidEmulator.java

9.80 ikayaki.squid.SquidEmulator.MagnetometerEmu Class Reference

Inherits `ikayaki.squid.SerialIOListener`.

Inheritance diagram for `ikayaki.squid.SquidEmulator.MagnetometerEmu`: Collaboration diagram for `ikayaki.squid.SquidEmulator.MagnetometerEmu`:

Public Member Functions

- `MagnetometerEmu ()`
- `void run ()`
- `void serialIOEvent (SerialIOEvent event)`

Private Attributes

- `Stack< String > commandStack`

9.80.1 Detailed Description

Runs magnetometer emulation process. Process incoming messages and sends data back. When message comes, process it (wait if needed for a while), updates own status and sends result back.

Definition at line 315 of file `SquidEmulator.java`.

9.80.2 Constructor & Destructor Documentation

9.80.2.1 `ikayaki.squid.SquidEmulator.MagnetometerEmu.MagnetometerEmu ()`

Definition at line 319 of file `SquidEmulator.java`.

References `ikayaki.squid.SerialIO.addSerialIOListener()`, `ikayaki.squid.SquidEmulator.MagnetometerEmu.commandStack`, and `ikayaki.squid.SquidEmulator.magnetometerPort`.

Here is the call graph for this function:

9.80.3 Member Function Documentation

9.80.3.1 `void ikayaki.squid.SquidEmulator.MagnetometerEmu.run ()`

Definition at line 326 of file `SquidEmulator.java`.

References `ikayaki.squid.SquidEmulator.MagnetometerEmu.commandStack`, `ikayaki.squid.SquidEmulator.magnetometerPort`, `ikayaki.squid.SquidEmulator.running`, and `ikayaki.squid.SquidEmulator.writeMessage()`.

Here is the call graph for this function:

9.80.3.2 void ikayaki.squid.SquidEmulator.MagnetometerEmu.serialIOEvent (SerialIOEvent *event*)

Propagates serial port message event.

Parameters:

event the event that happened.

Implements `ikayaki.squid.SerialIOListener` (p. 353).

Definition at line 355 of file SquidEmulator.java.

References `ikayaki.squid.SquidEmulator.MagnetometerEmu.commandStack`, and `ikayaki.squid.SquidEmulator.logWriter`.

9.80.4 Member Data Documentation

9.80.4.1 Stack<String> ikayaki.squid.SquidEmulator.MagnetometerEmu.commandStack [private]

Definition at line 317 of file SquidEmulator.java.

Referenced by `ikayaki.squid.SquidEmulator.MagnetometerEmu.MagnetometerEmu()`, `ikayaki.squid.SquidEmulator.MagnetometerEmu.run()`, and `ikayaki.squid.SquidEmulator.MagnetometerEmu.serialIOEvent()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/squid/SquidEmulator.java`

9.81 ikayaki.squid.SquidFront Class Reference

Collaboration diagram for ikayaki.squid.SquidFront:

Public Member Functions

- **SquidFront** () throws `HeadlessException`
- `void setSquid (Squid squid)`

Static Public Member Functions

- `static void main (String[] args)`

Package Functions

- [instance initializer]

Private Member Functions

- `void initRawActions ()`
- `void initHandlerActions ()`
- `void initMagnetometerActions ()`
- `void initDegausserActions ()`
- `void initLogging ()`
- `void $$setupUI ()`

Private Attributes

- `JButton hupdateSettings`
- `JButton hgetStatus`
- `JButton hgetPosition`
- `JButton hgetRotation`
- `JButton hisOK`
- `JButton hmoveToHome`
- `JButton hmoveToDegausserZ`
- `JButton hmoveToDegausserY`
- `JButton hmoveToMeasurement`
- `JButton hmoveToBackground`
- `JButton hmoveToPos`
- `JButton hstop`
- `JButton hrotateTo`
- `JButton hsetOnline`
- `JButton hsetAcceleration`
- `JButton hsetDeceleration`
- `JButton hsetBaseSpeed`
- `JButton hsetVelocity`
- `JButton hsetHoldTime`
- `JButton hsetCrystalFrequency`

- JButton **hstopExecution**
- JButton **hperformSlew**
- JButton **hsetMotorPositive**
- JButton **hsetMotorNegative**
- JButton **hsetSteps**
- JButton **hsetPosition**
- JButton **hgo**
- JButton **hjoin**
- JButton **hverify**
- JButton **hsetPositionRegister**
- JButton **htakeMessage**
- JButton **mupdateSettings**
- JButton **mreset**
- JButton **mresetCounter**
- JButton **mconfigure**
- JButton **mlatchAnalog**
- JButton **mlatchCounter**
- JButton **mgetData**
- JButton **mopenLoop**
- JButton **mclearFlux**
- JButton **mjoin**
- JButton **mreadData**
- JButton **mgetFilters**
- JButton **mgetRange**
- JButton **mgetSlew**
- JButton **mgetLoop**
- JButton **misOK**
- JButton **dupdateSettings**
- JButton **dsetCoil**
- JButton **dsetAmplitude**
- JButton **dexecuteRampUp**
- JButton **dexecuteRampDown**
- JButton **dexecuteRampCycle**
- JButton **ddemagnetizeZ**
- JButton **ddemagnetizeY**
- JButton **dgetRampStatus**
- JButton **dgetRamp**
- JButton **dgetDelay**
- JButton **dgetCoil**
- JButton **dgetAmplitude**
- JButton **disOK**
- JTextField **param1**
- JTextField **param2**
- JTextField **param3**
- JTextArea **handlerLog**
- JTextArea **magnetometerLog**
- JTextArea **degausserLog**
- JPanel **contentPane**
- Squid **squid**
- JTextField **hRawCommand**

- JButton **hRawSend**
- JTextField **dRawCommand**
- JButton **dRawSend**
- JTextField **mRawCommand**
- JButton **mRawSend**

9.81.1 Detailed Description

Graphical front-end for using the SQUID Interface's protocol level commands.

Author:

Esko Luontola

Definition at line 43 of file SquidFront.java.

9.81.2 Constructor & Destructor Documentation

9.81.2.1 ikayaki.squid.SquidFront.SquidFront () throws HeadlessException

Definition at line 128 of file SquidFront.java.

References `ikayaki.squid.SquidFront.contentPane`, `ikayaki.squid.SquidFront.initDegausserActions()`, `ikayaki.squid.SquidFront.initHandlerActions()`, `ikayaki.squid.SquidFront.initLogging()`, `ikayaki.squid.SquidFront.initMagnetometerActions()`, `ikayaki.squid.SquidFront.initRawActions()`, `ikayaki.squid.Squid.instance`, `ikayaki.squid.Squid.isOK()`, `ikayaki.gui.null`, `ikayaki.squid.SquidFront.setSquid()`, and `ikayaki.squid.SquidFront.squid`.

Here is the call graph for this function:

9.81.3 Member Function Documentation

9.81.3.1 void ikayaki.squid.SquidFront.\$\$setupUI () [private]

Method generated by IntelliJ IDEA GUI Designer !!! IMPORTANT !!! DO NOT edit this method OR call it in your code!

Definition at line 803 of file SquidFront.java.

References `ikayaki.gui.null`.

9.81.3.2 ikayaki.squid.SquidFront.[instance initializer] () [package]

9.81.3.3 void ikayaki.squid.SquidFront.initDegausserActions () [private]

Sets ActionListeners for degausser's control buttons.

Definition at line 650 of file SquidFront.java.

Referenced by `ikayaki.squid.SquidFront.SquidFront()`.

9.81.3.4 void ikayaki.squid.SquidFront.initHandlerActions () [private]

Sets ActionListeners for handler's control buttons.

Definition at line 224 of file SquidFront.java.

Referenced by ikayaki.squid.SquidFront.SquidFront().

9.81.3.5 void ikayaki.squid.SquidFront.initLogging () [private]

Sets anything that is needed for logging to file and to screen.

Definition at line 777 of file SquidFront.java.

Referenced by ikayaki.squid.SquidFront.SquidFront().

9.81.3.6 void ikayaki.squid.SquidFront.initMagnetometerActions () [private]

Sets ActionListeners for magnetometer's control buttons.

Definition at line 472 of file SquidFront.java.

Referenced by ikayaki.squid.SquidFront.SquidFront().

9.81.3.7 void ikayaki.squid.SquidFront.initRawActions () [private]

Definition at line 187 of file SquidFront.java.

References ikayaki.squid.Squid.getHandler(), ikayaki.squid.SquidFront.hRawCommand, ikayaki.squid.SquidFront.hRawSend, and ikayaki.squid.SquidFront.squid.

Referenced by ikayaki.squid.SquidFront.SquidFront().

Here is the call graph for this function:

9.81.3.8 static void ikayaki.squid.SquidFront.main (String[] args) [static]

Definition at line 781 of file SquidFront.java.

9.81.3.9 void ikayaki.squid.SquidFront.setSquid (Squid squid)

Sets the fully initialized **Squid**(p. 384) interface for the use of the program. Sets the active project the owner of the squid by re-setting the active project.

Parameters:

squid an instance of the **Squid**(p. 384).

Exceptions:

NullPointerException if squid is null.

IllegalStateException if the squid has already been set.

Definition at line 177 of file SquidFront.java.

References ikayaki.gui.null.

Referenced by ikayaki.squid.SquidFront.SquidFront().

9.81.4 Member Data Documentation

9.81.4.1 JPanel ikayaki.squid.SquidFront.contentPane [private]

Definition at line 117 of file SquidFront.java.

Referenced by ikayaki.squid.SquidFront.SquidFront().

9.81.4.2 JButton ikayaki.squid.SquidFront.ddemagnetizeY [private]

Definition at line 101 of file SquidFront.java.

9.81.4.3 JButton ikayaki.squid.SquidFront.ddemagnetizeZ [private]

Definition at line 100 of file SquidFront.java.

9.81.4.4 JTextArea ikayaki.squid.SquidFront.degausserLog [private]

Definition at line 115 of file SquidFront.java.

9.81.4.5 JButton ikayaki.squid.SquidFront.dexecuteRampCycle [private]

Definition at line 99 of file SquidFront.java.

9.81.4.6 JButton ikayaki.squid.SquidFront.dexecuteRampDown [private]

Definition at line 98 of file SquidFront.java.

9.81.4.7 JButton ikayaki.squid.SquidFront.dexecuteRampUp [private]

Definition at line 97 of file SquidFront.java.

9.81.4.8 JButton ikayaki.squid.SquidFront.dgetAmplitude [private]

Definition at line 106 of file SquidFront.java.

9.81.4.9 JButton ikayaki.squid.SquidFront.dgetCoil [private]

Definition at line 105 of file SquidFront.java.

9.81.4.10 JButton ikayaki.squid.SquidFront.dgetDelay [private]

Definition at line 104 of file SquidFront.java.

9.81.4.11 JButton ikayaki.squid.SquidFront.dgetRamp [private]

Definition at line 103 of file SquidFront.java.

9.81.4.12 JButton ikayaki.squid.SquidFront.dgetRampStatus [private]

Definition at line 102 of file SquidFront.java.

9.81.4.13 JButton ikayaki.squid.SquidFront.disOK [private]

Definition at line 107 of file SquidFront.java.

9.81.4.14 JTextField ikayaki.squid.SquidFront.dRawCommand [private]

Definition at line 123 of file SquidFront.java.

9.81.4.15 JButton ikayaki.squid.SquidFront.dRawSend [private]

Definition at line 124 of file SquidFront.java.

9.81.4.16 JButton ikayaki.squid.SquidFront.dsetAmplitude [private]

Definition at line 96 of file SquidFront.java.

9.81.4.17 JButton ikayaki.squid.SquidFront.dsetCoil [private]

Definition at line 95 of file SquidFront.java.

9.81.4.18 JButton ikayaki.squid.SquidFront.dupdateSettings [private]

Definition at line 94 of file SquidFront.java.

9.81.4.19 JTextArea ikayaki.squid.SquidFront.handlerLog [private]

Definition at line 113 of file SquidFront.java.

9.81.4.20 JButton ikayaki.squid.SquidFront.hgetPosition [private]

Definition at line 47 of file SquidFront.java.

9.81.4.21 JButton ikayaki.squid.SquidFront.hgetRotation [private]

Definition at line 48 of file SquidFront.java.

9.81.4.22 JButton ikayaki.squid.SquidFront.hgetStatus [private]

Definition at line 46 of file SquidFront.java.

9.81.4.23 JButton ikayaki.squid.SquidFront.hgo [private]

Definition at line 71 of file SquidFront.java.

9.81.4.24 JButton ikayaki.squid.SquidFront.hisOK [private]

Definition at line 49 of file SquidFront.java.

9.81.4.25 JButton ikayaki.squid.SquidFront.hjoin [private]

Definition at line 72 of file SquidFront.java.

9.81.4.26 JButton ikayaki.squid.SquidFront.hmoveToBackground [private]

Definition at line 54 of file SquidFront.java.

9.81.4.27 JButton ikayaki.squid.SquidFront.hmoveToDegausserY [private]

Definition at line 52 of file SquidFront.java.

9.81.4.28 JButton ikayaki.squid.SquidFront.hmoveToDegausserZ [private]

Definition at line 51 of file SquidFront.java.

9.81.4.29 JButton ikayaki.squid.SquidFront.hmoveToHome [private]

Definition at line 50 of file SquidFront.java.

9.81.4.30 JButton ikayaki.squid.SquidFront.hmoveToMeasurement [private]

Definition at line 53 of file SquidFront.java.

9.81.4.31 JButton ikayaki.squid.SquidFront.hmoveToPos [private]

Definition at line 55 of file SquidFront.java.

9.81.4.32 JButton ikayaki.squid.SquidFront.hperformSlew [private]

Definition at line 66 of file SquidFront.java.

9.81.4.33 JTextField ikayaki.squid.SquidFront.hRawCommand [private]

Definition at line 121 of file SquidFront.java.

Referenced by ikayaki.squid.SquidFront.initRawActions().

9.81.4.34 JButton ikayaki.squid.SquidFront.hRawSend [private]

Definition at line 122 of file SquidFront.java.

Referenced by ikayaki.squid.SquidFront.initRawActions().

9.81.4.35 JButton ikayaki.squid.SquidFront.hrotateTo [private]

Definition at line 57 of file SquidFront.java.

9.81.4.36 JButton ikayaki.squid.SquidFront.hsetAcceleration [private]

Definition at line 59 of file SquidFront.java.

9.81.4.37 JButton ikayaki.squid.SquidFront.hsetBaseSpeed [private]

Definition at line 61 of file SquidFront.java.

9.81.4.38 JButton ikayaki.squid.SquidFront.hsetCrystalFrequence [private]

Definition at line 64 of file SquidFront.java.

9.81.4.39 JButton ikayaki.squid.SquidFront.hsetDeceleration [private]

Definition at line 60 of file SquidFront.java.

9.81.4.40 JButton ikayaki.squid.SquidFront.hsetHoldTime [private]

Definition at line 63 of file SquidFront.java.

9.81.4.41 JButton ikayaki.squid.SquidFront.hsetMotorNegative [private]

Definition at line 68 of file SquidFront.java.

9.81.4.42 JButton ikayaki.squid.SquidFront.hsetMotorPositive [private]

Definition at line 67 of file SquidFront.java.

9.81.4.43 JButton ikayaki.squid.SquidFront.hsetOnline [private]

Definition at line 58 of file SquidFront.java.

9.81.4.44 JButton ikayaki.squid.SquidFront.hsetPosition [private]

Definition at line 70 of file SquidFront.java.

9.81.4.45 JButton ikayaki.squid.SquidFront.hsetPositionRegister [private]

Definition at line 74 of file SquidFront.java.

9.81.4.46 JButton ikayaki.squid.SquidFront.hsetSteps [private]

Definition at line 69 of file SquidFront.java.

9.81.4.47 JButton ikayaki.squid.SquidFront.hsetVelocity [private]

Definition at line 62 of file SquidFront.java.

9.81.4.48 JButton ikayaki.squid.SquidFront.hstop [private]

Definition at line 56 of file SquidFront.java.

9.81.4.49 JButton ikayaki.squid.SquidFront.hstopExecution [private]

Definition at line 65 of file SquidFront.java.

9.81.4.50 JButton ikayaki.squid.SquidFront.htakeMessage [private]

Definition at line 75 of file SquidFront.java.

9.81.4.51 JButton ikayaki.squid.SquidFront.hupdateSettings [private]

Definition at line 45 of file SquidFront.java.

9.81.4.52 JButton ikayaki.squid.SquidFront.hverify [private]

Definition at line 73 of file SquidFront.java.

9.81.4.53 JTextArea ikayaki.squid.SquidFront.magnetometerLog [private]

Definition at line 114 of file SquidFront.java.

9.81.4.54 JButton ikayaki.squid.SquidFront.mclearFlux [private]

Definition at line 85 of file SquidFront.java.

9.81.4.55 JButton ikayaki.squid.SquidFront.mconfigure [private]

Definition at line 80 of file SquidFront.java.

9.81.4.56 JButton ikayaki.squid.SquidFront.mgetData [private]

Definition at line 83 of file SquidFront.java.

9.81.4.57 JButton ikayaki.squid.SquidFront.mgetFilters [private]

Definition at line 88 of file SquidFront.java.

9.81.4.58 JButton ikayaki.squid.SquidFront.mgetLoop [private]

Definition at line 91 of file SquidFront.java.

9.81.4.59 JButton ikayaki.squid.SquidFront.mgetRange [private]

Definition at line 89 of file SquidFront.java.

9.81.4.60 JButton ikayaki.squid.SquidFront.mgetSlew [private]

Definition at line 90 of file SquidFront.java.

9.81.4.61 JButton ikayaki.squid.SquidFront.misOK [private]

Definition at line 92 of file SquidFront.java.

9.81.4.62 JButton ikayaki.squid.SquidFront.mjoin [private]

Definition at line 86 of file SquidFront.java.

9.81.4.63 JButton ikayaki.squid.SquidFront.mlatchAnalog [private]

Definition at line 81 of file SquidFront.java.

9.81.4.64 JButton ikayaki.squid.SquidFront.mlatchCounter [private]

Definition at line 82 of file SquidFront.java.

9.81.4.65 JButton ikayaki.squid.SquidFront.mopenLoop [private]

Definition at line 84 of file SquidFront.java.

9.81.4.66 JTextField ikayaki.squid.SquidFront.mRawCommand [private]

Definition at line 125 of file SquidFront.java.

9.81.4.67 JButton ikayaki.squid.SquidFront.mRawSend [private]

Definition at line 126 of file SquidFront.java.

9.81.4.68 JButton ikayaki.squid.SquidFront.mreadData [private]

Definition at line 87 of file SquidFront.java.

9.81.4.69 JButton ikayaki.squid.SquidFront.mreset [private]

Definition at line 78 of file SquidFront.java.

9.81.4.70 JButton ikayaki.squid.SquidFront.mresetCounter [private]

Definition at line 79 of file SquidFront.java.

9.81.4.71 JButton ikayaki.squid.SquidFront.mupdateSettings [private]

Definition at line 77 of file SquidFront.java.

9.81.4.72 JTextField ikayaki.squid.SquidFront.param1 [private]

Definition at line 109 of file SquidFront.java.

9.81.4.73 JTextField ikayaki.squid.SquidFront.param2 [private]

Definition at line 110 of file SquidFront.java.

9.81.4.74 JTextField ikayaki.squid.SquidFront.param3 [private]

Definition at line 111 of file SquidFront.java.

9.81.4.75 Squid ikayaki.squid.SquidFront.squid [private]

Definition at line 119 of file SquidFront.java.

Referenced by `ikayaki.squid.SquidFront.initRawActions()`, and `ikayaki.squid.SquidFront.SquidFront()`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/squid/SquidFront.java`

9.82 ikayaki.gui.StereoPlot Class Reference

Inherits **ikayaki.gui.AbstractPlot**.

Inheritance diagram for ikayaki.gui.StereoPlot: Collaboration diagram for ikayaki.gui.StereoPlot:

Public Member Functions

- void **add** (**MeasurementStep** step)
- void **reset** ()
- int **getNumMeasurements** ()
- void **render** (int w, int h, **Graphics2D** g2)

Private Member Functions

- **Point2D.Double** **toXY** (**Double** decValue, **Double** incValue)

Private Attributes

- **Vector**< **Point2D** > **points** = new **Vector**<**Point2D**>()
- **Vector**< **Boolean** > **incSign** = new **Vector**<**Boolean**>()
- **Project** **project** = null

9.82.1 Detailed Description

Implements stereographic plot

Author:

Aki Sysmäläinen

Definition at line 39 of file StereoPlot.java.

9.82.2 Member Function Documentation

9.82.2.1 void ikayaki.gui.StereoPlot.add (**MeasurementStep** *step*)

Adds new measurement data to plot.

Parameters:

measurement **MeasurementStep**(p. 228) to be added to this graph

Implements **ikayaki.gui.Plot** (p. 248).

Definition at line 53 of file StereoPlot.java.

References **ikayaki.MeasurementStep.getProject()**, **ikayaki.gui.StereoPlot.incSign**, **ikayaki.gui.null**, **ikayaki.gui.StereoPlot.points**, **ikayaki.gui.StereoPlot.project**, and **ikayaki.gui.StereoPlot.toXY()**.

Here is the call graph for this function:

9.82.2.2 `int ikayaki.gui.StereoPlot.getNumMeasurements ()`

Returns the number of measurements in this graph.

Returns:

Number of measurements.

Implements `ikayaki.gui.Plot` (p. 248).

Definition at line 85 of file `StereoPlot.java`.

References `ikayaki.gui.StereoPlot.points`.

9.82.2.3 `void ikayaki.gui.StereoPlot.render (int w, int h, Graphics2D g2)` [virtual]

Classes extending this class must implement this

Parameters:

w

h

g2

Implements `ikayaki.gui.AbstractPlot` (p. 50).

Definition at line 89 of file `StereoPlot.java`.

References `ikayaki.gui.StereoPlot.incSign`, `ikayaki.gui.StereoPlot.points`, and `ikayaki.gui.StereoPlot.toXY()`.

Here is the call graph for this function:

9.82.2.4 `void ikayaki.gui.StereoPlot.reset ()`

Removes all measurements from the graph.

Implements `ikayaki.gui.Plot` (p. 248).

Definition at line 79 of file `StereoPlot.java`.

References `ikayaki.gui.StereoPlot.incSign`, and `ikayaki.gui.StereoPlot.points`.

9.82.2.5 `Point2D.Double ikayaki.gui.StereoPlot.toXY (Double dec Value, Double inc Value)` [private]

Definition at line 71 of file `StereoPlot.java`.

Referenced by `ikayaki.gui.StereoPlot.add()`, and `ikayaki.gui.StereoPlot.render()`.

9.82.3 Member Data Documentation**9.82.3.1** `Vector<Boolean> ikayaki.gui.StereoPlot.incSign = new Vector<Boolean>()` [private]

Contains information if inclination was positive or negative positive = true, negative = false; 0 is positive

Definition at line 49 of file StereoPlot.java.

Referenced by ikayaki.gui.StereoPlot.add(), ikayaki.gui.StereoPlot.render(), and ikayaki.gui.StereoPlot.reset().

9.82.3.2 `Vector<Point2D> ikayaki.gui.StereoPlot.points = new Vector<Point2D>()`
[private]

Contains all the data that is shown in this graph.

Definition at line 44 of file StereoPlot.java.

Referenced by ikayaki.gui.StereoPlot.add(), ikayaki.gui.StereoPlot.getNumMeasurements(), ikayaki.gui.StereoPlot.render(), and ikayaki.gui.StereoPlot.reset().

9.82.3.3 `Project ikayaki.gui.StereoPlot.project = null` [private]

Definition at line 51 of file StereoPlot.java.

Referenced by ikayaki.gui.StereoPlot.add().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**StereoPlot.java**

9.83 ikayaki.gui.StyledCellEditor Class Reference

Public Member Functions

- **StyledCellEditor** (final JTextField textField)
- **StyledCellEditor** (final JCheckBox checkBox)
- **StyledCellEditor** (final JComboBox comboBox)
- Override Component **getTreeCellEditorComponent** (JTree tree, Object value, boolean isSelected, boolean expanded, boolean leaf, int row)
- Override Component **getTableCellEditorComponent** (JTable table, Object value, boolean isSelected, int row, int column)

9.83.1 Detailed Description

CellEditor to compliment **StyledTableCellRenderer**(p. 416). Applies the horizontalAlignment, foreground and font styles to the component returned by another cell editor. Unless otherwise specified, uses a DefaultCellEditor.

Author:

Esko Luontola

Definition at line 34 of file StyledCellEditor.java.

9.83.2 Constructor & Destructor Documentation

9.83.2.1 ikayaki.gui.StyledCellEditor.StyledCellEditor (final JTextField *textField*)

Constructs a **StyledCellEditor**(p. 414) that uses a text field.

Parameters:

textField a JTextField object

Definition at line 41 of file StyledCellEditor.java.

9.83.2.2 ikayaki.gui.StyledCellEditor.StyledCellEditor (final JCheckBox *checkBox*)

Constructs a **StyledCellEditor**(p. 414) object that uses a check box.

Parameters:

checkBox a JCheckBox object

Definition at line 50 of file StyledCellEditor.java.

9.83.2.3 ikayaki.gui.StyledCellEditor.StyledCellEditor (final JComboBox *comboBox*)

Constructs a **StyledCellEditor**(p. 414) object that uses a combo box.

Parameters:

comboBox a JComboBox object

Definition at line 59 of file StyledCellEditor.java.

9.83.3 Member Function Documentation

9.83.3.1 Override Component `ikayaki.gui.StyledCellEditor.getTableCellEditorComponent` (`JTable table`, `Object value`, `boolean isSelected`, `int row`, `int column`)

Implements the `TableCellEditor` interface.

Definition at line 99 of file `StyledCellEditor.java`.

References `ikayaki.gui.StyledWrapper.font`, `ikayaki.gui.StyledWrapper.foreground`, `ikayaki.gui.StyledWrapper.horizontalAlignment`, `ikayaki.gui.null`, and `ikayaki.gui.StyledWrapper.value`.

9.83.3.2 Override Component `ikayaki.gui.StyledCellEditor.getTreeCellEditorComponent` (`JTree tree`, `Object value`, `boolean isSelected`, `boolean expanded`, `boolean leaf`, `int row`)

Implements the `TreeCellEditor` interface.

Definition at line 66 of file `StyledCellEditor.java`.

References `ikayaki.gui.StyledWrapper.font`, `ikayaki.gui.StyledWrapper.foreground`, `ikayaki.gui.StyledWrapper.horizontalAlignment`, `ikayaki.gui.null`, and `ikayaki.gui.StyledWrapper.value`.

The documentation for this class was generated from the following file:

- `My Documents/squid/src/ikayaki/gui/StyledCellEditor.java`

9.84 ikayaki.gui.StyledTableCellRenderer Class Reference

Public Member Functions

- Override Component **getTableCellRendererComponent** (JTable table, Object value, boolean isSelected, boolean hasFocus, int row, int column)

9.84.1 Detailed Description

Class for rendering individual cells in a JTable with customized colors and fonts. Applies the style to the JLabel returned by another cell renderer. Unless otherwise specified, uses a DefaultTableCellRenderer.

Author:

Esko Luontola

Definition at line 35 of file StyledTableCellRenderer.java.

9.84.2 Member Function Documentation

9.84.2.1 Override Component ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent (JTable *table*, Object *value*, boolean *isSelected*, boolean *hasFocus*, int *row*, int *column*)

Returns the styled table cell renderer.

Parameters:

- table* the JTable
- value* the value to assign to the cell at [row, column]
- isSelected* true if cell is selected
- hasFocus* true if cell has focus
- row* the row of the cell to render
- column* the column of the cell to render

Returns:

the styled table cell renderer

Definition at line 48 of file StyledTableCellRenderer.java.

References ikayaki.gui.StyledWrapper.background, ikayaki.gui.StyledWrapper.border, ikayaki.gui.StyledWrapper.focusBackground, ikayaki.gui.StyledWrapper.focusBorder, ikayaki.gui.StyledWrapper.font, ikayaki.gui.StyledWrapper.foreground, ikayaki.gui.StyledWrapper.horizontalAlignment, ikayaki.gui.null, ikayaki.gui.StyledWrapper.opaque, ikayaki.gui.StyledWrapper.selectedBackground, ikayaki.gui.StyledWrapper.selectedBorder, ikayaki.gui.StyledWrapper.selectedFocusBackground, ikayaki.gui.StyledWrapper.selectedFocusBorder, ikayaki.gui.StyledWrapper.value, and ikayaki.gui.StyledWrapper.verticalAlignment.

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/StyledTableCellRenderer.java

9.85 ikayaki.gui.StyledWrapper Class Reference

Public Member Functions

- Override Object `clone ()`

Public Attributes

- Object `value`
- int `horizontalAlignment` = `SwingConstants.LEADING`
- int `verticalAlignment` = `SwingConstants.CENTER`
- boolean `opaque` = `true`
- Border `border` = `null`
- Border `selectedBorder` = `null`
- Border `focusBorder` = `null`
- Border `selectedFocusBorder` = `null`
- Color `background` = `null`
- Color `selectedBackground` = `null`
- Color `focusBackground` = `null`
- Color `selectedFocusBackground` = `null`
- Color `foreground` = `null`
- Font `font` = `null`

9.85.1 Detailed Description

Wrapper class for holding the value to be rendered and its style parameters. Used by `StyledTableCellRenderer`(p. 416) and `StyledCellEditor`(p. 414).

Author:

Esko Luontola

Definition at line 35 of file `StyledWrapper.java`.

9.85.2 Member Function Documentation

9.85.2.1 Override Object `ikayaki.gui.StyledWrapper.clone ()`

Creates and returns a copy of this object. The value property of the copy will be `null`.

Definition at line 116 of file `StyledWrapper.java`.

References `ikayaki.gui.null`, and `ikayaki.gui.StyledWrapper.value`.

9.85.3 Member Data Documentation

9.85.3.1 Color `ikayaki.gui.StyledWrapper.background = null`

The background color of this component or `null` to use the parent's background color.

Definition at line 85 of file `StyledWrapper.java`.

Referenced by `ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent()`.

9.85.3.2 Border `ikayaki.gui.StyledWrapper.border = null`

The border of this component or null if no border is currently set.

Definition at line 63 of file `StyledWrapper.java`.

Referenced by `ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent()`.

9.85.3.3 Color `ikayaki.gui.StyledWrapper.focusBackground = null`

The background color of this component when it has focus or null to use the parent's background color.

Definition at line 95 of file `StyledWrapper.java`.

Referenced by `ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent()`.

9.85.3.4 Border `ikayaki.gui.StyledWrapper.focusBorder = null`

The border of this component when it has focus or null to use the default border.

Definition at line 73 of file `StyledWrapper.java`.

Referenced by `ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent()`.

9.85.3.5 Font `ikayaki.gui.StyledWrapper.font = null`

The font of this component or null to use the parent's font.

Definition at line 111 of file `StyledWrapper.java`.

Referenced by `ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.DetailsTableModel()`, `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.ErrorsTableModel()`, `ikayaki.gui.StyledCellEditor.getTableCellEditorComponent()`, `ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent()`, `ikayaki.gui.StyledCellEditor.getTreeCellEditorComponent()`, and `ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getValueAt()`.

9.85.3.6 Color `ikayaki.gui.StyledWrapper.foreground = null`

The foreground color of this component or null to use the parent's foreground color.

Definition at line 106 of file `StyledWrapper.java`.

Referenced by `ikayaki.gui.StyledCellEditor.getTableCellEditorComponent()`, `ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent()`, and `ikayaki.gui.StyledCellEditor.getTreeCellEditorComponent()`.

9.85.3.7 int `ikayaki.gui.StyledWrapper.horizontalAlignment = SwingConstants.LEADING`

The value of the `horizontalAlignment` property, one of the following constants defined in `SwingConstants`: `LEFT`, `CENTER`, `RIGHT`, `LEADING` or `TRAILING`.

Definition at line 46 of file `StyledWrapper.java`.

Referenced by `ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.DetailsTableModel()`, `ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.ErrorsTableModel()`, `ikayaki.gui.Styled-`

CellEditor.getTableCellEditorComponent(), ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent(), and ikayaki.gui.StyledCellEditor.getTreeCellEditorComponent().

9.85.3.8 boolean ikayaki.gui.StyledWrapper.opaque = true

If true the component paints every pixel within its bounds. Otherwise, the component may not paint some or all of its pixels, allowing the underlying pixels to show through.

Definition at line 58 of file StyledWrapper.java.

Referenced by ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent().

9.85.3.9 Color ikayaki.gui.StyledWrapper.selectedBackground = null

The background color of this component when it is selected or null to use the parent's background color.

Definition at line 90 of file StyledWrapper.java.

Referenced by ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent().

9.85.3.10 Border ikayaki.gui.StyledWrapper.selectedBorder = null

The border of this component when it is selected or null to use the default border.

Definition at line 68 of file StyledWrapper.java.

Referenced by ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent().

9.85.3.11 Color ikayaki.gui.StyledWrapper.selectedFocusBackground = null

The background color of this component when it is selected and has focus or null to use the parent's background color.

Definition at line 101 of file StyledWrapper.java.

Referenced by ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent().

9.85.3.12 Border ikayaki.gui.StyledWrapper.selectedFocusBorder = null

The border of this component when it is selected and has focus or null to use the default border.

Definition at line 78 of file StyledWrapper.java.

Referenced by ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent().

9.85.3.13 Object ikayaki.gui.StyledWrapper.value

The wrapped value.

Definition at line 40 of file StyledWrapper.java.

Referenced by ikayaki.gui.StyledWrapper.clone(), ikayaki.gui.StyledCellEditor.getTableCellEditorComponent(), ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent(),

ikayaki.gui.StyledCellEditor.getTreeCellEditorComponent(), ikayaki.gui.ProjectExplorerTable.ProjectExplorerTableModel.getValueAt(), ikayaki.gui.PrintPanel.PrintSequenceTableModel.getValueAt(), ikayaki.gui.MeasurementDetailsPanel.ErrorsTableModel.wrap(), and ikayaki.gui.MeasurementDetailsPanel.DetailsTableModel.wrap().

9.85.3.14 int ikayaki.gui.StyledWrapper.verticalAlignment = SwingConstants.CENTER

The value of the verticalAlignment property, one of the following constants defined in SwingConstants: TOP, CENTER, or BOTTOM.

Definition at line 52 of file StyledWrapper.java.

Referenced by ikayaki.gui.StyledTableCellRenderer.getTableCellRendererComponent().

The documentation for this class was generated from the following file:

- My Documents/squid/src/ikayaki/gui/**StyledWrapper.java**

Chapter 10

Squid File Documentation

10.1 My Documents/squid/src/ikayaki/gui/Abstract-Plot.java File Reference

Namespaces

- namespace `ikayaki.gui`
- namespace `javax.swing`
- namespace `java.awt`

10.2 My Documents/squid/src/ikayaki/gui/Calibration-Panel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.3 My Documents/squid/src/ikayaki/gui/ComponentFlasher.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.4 My Documents/squid/src/ikayaki/gui/DeviceSettings-Panel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.5 My Documents/squid/src/ikayaki/gui/FittedComboBoxRenderer.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.6 My Documents/squid/src/ikayaki/gui/GenericFile-Filter.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.7 My Documents/squid/src/ikayaki/gui/Intensity-Plot.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.8 My Documents/squid/src/ikayaki/gui/Magnetometer-StatusPanel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.9 My Documents/squid/src/ikayaki/gui/MainMenuBar.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.10 My Documents/squid/src/ikayaki/gui/MainStatus- Bar.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.11 My Documents/squid/src/ikayaki/gui/MainView- Panel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.12 My Documents/squid/src/ikayaki/gui/Measurement-ControlsPanel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.13 My Documents/squid/src/ikayaki/gui/Measurement-DetailsPanel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.14 My Documents/squid/src/ikayaki/gui/Measurement- GraphsPanel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.15 My Documents/squid/src/ikayaki/gui/Measurement-SequencePanel.java File Reference

Namespaces

- namespace `ikayaki.gui`
- namespace `javax.swing.event`
- namespace `java.awt.event`
- namespace `ikayaki.gui.SequenceColumn`

10.16 My Documents/squid/src/ikayaki/gui/Measurement-SequenceTableModel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.17 My Documents/squid/src/ikayaki/gui/NullableDecimalFormat.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.18 My Documents/squid/src/ikayaki/gui/Plot.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.19 My Documents/squid/src/ikayaki/gui/Positive-DecimalFormat.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.20 My Documents/squid/src/ikayaki/gui/Print-Panel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.21 My Documents/squid/src/ikayaki/gui/ProgramSettingsPanel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.22 My Documents/squid/src/ikayaki/gui/Project-Component.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.23 My Documents/squid/src/ikayaki/gui/Project-ExplorerPanel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.24 My Documents/squid/src/ikayaki/gui/Project-ExplorerTable.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.25 My Documents/squid/src/ikayaki/gui/Project-InformationPanel.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.26 My Documents/squid/src/ikayaki/gui/SequenceColumn.java File Reference

Namespaces

- namespace `ikayaki.gui`

Enumerations

- enum `SequenceColumn` {
 - `rowIndex` = "Number of the measurement step", `project`, `rowIndex` = "Number of the measurement step", `null`,
 - `rowIndex` = "Number of the measurement step", `value`, `rowIndex` = "Number of the measurement step", `data`,
 - `rowIndex` = "Number of the measurement step", `rowIndex` = "Number of the measurement step", `rowIndex` = "Number of the measurement step", `rowIndex` = "Number of the measurement step", `null`,
 - `rowIndex` = "Number of the measurement step", `value`, `rowIndex` = "Number of the measurement step", `data`,
 - `rowIndex` = "Number of the measurement step", `rowIndex` = "Number of the measurement step", `false`, `rowIndex` = "Number of the measurement step",
 - `null`, `rowIndex` = "Number of the measurement step", `value`, `rowIndex` = "Number of the measurement step",
 - `data`, `rowIndex` = "Number of the measurement step", `rowIndex` = "Number of the measurement step", `false`,
 - `rowIndex` = "Number of the measurement step", `null`, `rowIndex` = "Number of the measurement step", `value`,
 - `rowIndex` = "Number of the measurement step", `data`, `rowIndex` = "Number of the measurement step", `rowIndex` = "Number of the measurement step",
 - `false`, `E0`, `E0`, `E0`,
 - `E0`, `E0`, `E0`, `E0`,
 - `setMaximumFractionDigits`, `setMaximumFractionDigits`, `E0`, `project`,
 - `setMaximumFractionDigits`, `COUNT`, `STEP`, `VOLUME`,
 - `MASS`, `SUSCEPTIBILITY`, `DECLINATION`, `INCLINATION`,
 - `MAGNETIZATION`, `RELATIVE_MAGNETIZATION`, `THETA63`, `MOMENT`,
 - `GEOGRAPHIC_X`, `GEOGRAPHIC_X_NORMALIZED`, `GEOGRAPHIC_Y`,
 - `GEOGRAPHIC_Z`,
 - `SAMPLE_X`, `SAMPLE_Y`, `value`, `rowIndex` = "Number of the measurement step",
 - `rowIndex` = "Number of the measurement step", `data`, `rowIndex` = "Number of the measurement step", `rowIndex` = "Number of the measurement step",
 - `numberFormat` }

10.26.1 Enumeration Type Documentation

10.26.1.1 enum `ikayaki::gui::SequenceColumn`

Represents a column in the measurement sequence table. Calculates the values of that column.

Author:

Esko Luontola

Enumeration values:

rowIndex Showing ordinal number of the measurement step, starting from number 1.

project

rowIndex Showing ordinal number of the measurement step, starting from number 1.

null

rowIndex Showing ordinal number of the measurement step, starting from number 1.

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

null

rowIndex Showing ordinal number of the measurement step, starting from number 1.

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

false

rowIndex Showing ordinal number of the measurement step, starting from number 1.

null

rowIndex Showing ordinal number of the measurement step, starting from number 1.

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

false

rowIndex Showing ordinal number of the measurement step, starting from number 1.

null

rowIndex Showing ordinal number of the measurement step, starting from number 1.

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

false

EO

EO

EO

EO

EO

EO

EO

setMaximumFractionDigits

setMaximumFractionDigits

EO

project

setMaximumFractionDigits

COUNT Returns all the columns supported by the program. The returned values are in the order that they should be shown in the measurement sequence table.

STEP

VOLUME

MASS

SUSCEPTIBILITY

DECLINATION

INCLINATION

MAGNETIZATION

RELATIVE_MAGNETIZATION

THETA63

MOMENT

GEOGRAPHIC_X

GEOGRAPHIC_X_NORMALIZED

GEOGRAPHIC_Y

GEOGRAPHIC_Z

SAMPLE_X

SAMPLE_Y

value Wraps the specified object to a styled renderer's wrapper according to the state of the measurement step.

Parameters:

value the object to be wrapped.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to get. Can be null.

Returns:

the wrapped object.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

data Sets the value for this column's specified row. The default implementation does nothing. Subclasses can override the default behaviour.

Parameters:

data new value for the cell.

rowIndex the index of the row. Can be greater than the number of measurement steps.

project the project whose value to set. Can be null.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

rowIndex Showing ordinal number of the measurement step, starting from number 1.

numberFormat Sets the number format used for rendering the numbers in this column.

Exceptions:

NullPointerException if numberFormat is null.

Definition at line 42 of file SequenceColumn.java.

10.27 My Documents/squid/src/ikayaki/gui/Settings-Dialog.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.28 My Documents/squid/src/ikayaki/gui/Stereo-Plot.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.29 My Documents/squid/src/ikayaki/gui/StyledCell- Editor.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.30 My Documents/squid/src/ikayaki/gui/StyledTable-CellRenderer.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.31 My Documents/squid/src/ikayaki/gui/Styled-Wrapper.java File Reference

Namespaces

- namespace `ikayaki.gui`

10.32 My Documents/squid/src/ikayaki/Ikayaki.java File Reference

Namespaces

- namespace **ikayaki**

10.33 My Documents/squid/src/ikayaki/Measurement-Event.java File Reference

Namespaces

- namespace **ikayaki**

10.34 My Documents/squid/src/ikayaki/Measurement-Listener.java File Reference

Namespaces

- namespace **ikayaki**

10.35 My Documents/squid/src/ikayaki/Measurement-Result.java File Reference

Namespaces

- namespace `ikayaki`

10.36 My Documents/squid/src/ikayaki/Measurement-Sequence.java File Reference

Namespaces

- namespace **ikayaki**

10.37 My Documents/squid/src/ikayaki/Measurement-Step.java File Reference

Namespaces

- namespace `ikayaki`
- namespace `ikayaki.MeasurementStep.State`

10.38 My Documents/squid/src/ikayaki/Measurement-Value.java File Reference

Namespaces

- namespace `ikayaki`
- namespace `ikayaki.MeasurementResult.Type`

10.39 My Documents/squid/src/ikayaki/Project.java File Reference

Namespaces

- namespace **ikayaki**
- namespace **java.io**
- namespace **java.util**
- namespace **ikayaki.MeasurementEvent.Type**
- namespace **ikayaki.Project.Normalization**
- namespace **ikayaki.Project.Orientation**
- namespace **ikayaki.Project.State**
- namespace **ikayaki.Project.SampleType**
- namespace **ikayaki.Project.Type**
- namespace **ikayaki.ProjectEvent.Type**

10.40 My Documents/squid/src/ikayaki/ProjectEvent.java File Reference

Namespaces

- namespace **ikayaki**

10.41 My Documents/squid/src/ikayaki/Project-Listener.java File Reference

Namespaces

- namespace **ikayaki**

10.42 My Documents/squid/src/ikayaki/Settings.java File Reference

Namespaces

- namespace **ikayaki**

10.43 My Documents/squid/src/ikayaki/squid/Degausser.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.44 My Documents/squid/src/ikayaki/squid/Handler.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.45 My Documents/squid/src/ikayaki/squid/Magnetometer.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.46 My Documents/squid/src/ikayaki/squid/Serial-IO.java File Reference

Namespaces

- namespace `ikayaki.squid`
- namespace `javax.comm`

10.47 My Documents/squid/src/ikayaki/squid/SerialIOEvent.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.48 My Documents/squid/src/ikayaki/squid/Serial-IOException.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.49 My Documents/squid/src/ikayaki/squid/SerialIOListener.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.50 My Documents/squid/src/ikayaki/squid/Serial-Parameters.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.51 My Documents/squid/src/ikayaki/squid/Squid.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.52 My Documents/squid/src/ikayaki/squid/Squid-Emulator.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.53 My Documents/squid/src/ikayaki/squid/SquidFront.java File Reference

Namespaces

- namespace `ikayaki.squid`

10.54 My Documents/squid/src/ikayaki/util/Component-Printer.java File Reference

Namespaces

- namespace `ikayaki.util`

10.55 My Documents/squid/src/ikayaki/util/DocumentUtilities.java File Reference

Namespaces

- namespace `ikayaki.util`

10.56 My Documents/squid/src/ikayaki/util/Last-Executor.java File Reference

Namespaces

- namespace `ikayaki.util`

10.57 My Documents/squid/src/ikayaki/util/LoggerPrintStream.java File Reference

Namespaces

- namespace `ikayaki.util`

10.58 My Documents/squid/src/ikayaki/util/Serial-Proxy.java File Reference

Namespaces

- namespace `ikayaki.util`

Chapter 11

Squid Page Documentation

11.1 Deprecated List

Class `ikayaki.gui.MagnetometerStatusPanel.MagnetometerStatusAnimator`(p. 135)
replaced by a simple Timer in constructor

Member `ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator.going`(p. 136)(`int` positions)
handler positions estimated by Handler.

Member `ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator.run_old`(p. 137)()
handler positions now estimated by Handler.

Member `ikayaki::gui::MeasurementSequenceTableModel.projectUpdated`(p. 224)(`ProjectEvent` event)
The selected rows need to be saved before updating the table data, and that can only be done with access to the JTable. That's why it is on MeasurementSequencePanel's responsibility is to react to ProjectEvents.

Member `ikayaki::gui::ProjectExplorerPanel.setBrowserFieldCursorToEnd`(p. 314)()
not needed anymore; cursor seems to be there anyway?

Index

- \$\$setupUI
 - ikayaki::gui::DeviceSettingsPanel, 68
 - ikayaki::gui::MeasurementSequencePanel, 209
 - ikayaki::gui::PrintPanel, 251
 - ikayaki::gui::ProgramSettingsPanel, 260
 - ikayaki::gui::ProjectInformationPanel, 334
 - ikayaki::squid::SquidFront, 402
- [instance initializer]
 - ikayaki::gui::DeviceSettingsPanel, 69
 - ikayaki::gui::MeasurementSequencePanel, 209
 - ikayaki::gui::PrintPanel, 252
 - ikayaki::gui::ProgramSettingsPanel, 260
 - ikayaki::gui::ProjectInformationPanel, 335
 - ikayaki::squid::SquidFront, 402
- [static initializer]
 - ikayaki::Ikayaki, 102
 - ikayaki::Settings, 363
- abort
 - ikayaki::gui::MainMenuBar, 151
- abortAction
 - ikayaki::gui::MeasurementControlsPanel, 173
- abortButton
 - ikayaki::gui::MeasurementControlsPanel, 173
- abortButtonFlasher
 - ikayaki::gui::MeasurementControlsPanel, 173
- ABORTED
 - ikayaki::Project, 269
- about
 - ikayaki::gui::MainMenuBar, 151
- aboutAction
 - ikayaki::gui::MainViewPanel, 164
- ACCELERATION
 - ikayaki::squid::Handler, 96
- acceleration
 - ikayaki::gui::DeviceSettingsPanel, 70
 - ikayaki::squid::SquidEmulator, 390
- accept
 - ikayaki::gui::GenericFileFilter, 83
- add
 - ikayaki::gui::IntensityPlot, 106
 - ikayaki::gui::Plot, 248
 - ikayaki::gui::StereoPlot, 411
- addMeasurementListener
 - ikayaki::Project, 270
- addProjectListener
 - ikayaki::Project, 270
- addResult
 - ikayaki::MeasurementStep, 230
- addSequence
 - ikayaki::gui::MeasurementSequencePanel, 210
 - ikayaki::Project, 270
 - ikayaki::Settings, 363
- addSequenceButton
 - ikayaki::gui::MeasurementSequencePanel, 212
- addSerialIOListener
 - ikayaki::squid::SerialIO, 345
- addStep
 - ikayaki::MeasurementSequence, 204
 - ikayaki::Project, 271
- AF
 - ikayaki::Project, 269
- amplitude
 - ikayaki::Project::ManualDemag, 302
- angle
 - ikayaki::Project::ManualRotate, 305
- animatorThread
 - ikayaki::gui::MagnetometerStat usPanel::MagnetometerStat usAnimator, 137
- answerQueue
 - ikayaki::squid::Handler, 96
- APP_BUILD
 - ikayaki::Ikayaki, 103
- APP_HOME_PAGE
 - ikayaki::Ikayaki, 103
- APP_NAME
 - ikayaki::Ikayaki, 103
- APP_VERSION
 - ikayaki::Ikayaki, 103
- applyFixes

- ikayaki::MeasurementResult, 197
- AREA_PROPERTY
 - ikayaki::Project, 295
- areaField
 - ikayaki::gui::ProjectInformationPanel, 337
- AUTHORS
 - ikayaki::Ikayaki, 104
- autoCompleteExecutor
 - ikayaki::gui::ProjectExplorerPanel, 315
- autosaveQueue
 - ikayaki::Project, 295
 - ikayaki::Settings, 378
- autosaveRunnable
 - ikayaki::Project, 295
 - ikayaki::Settings, 378
- autoStep
 - ikayaki::gui::MainMenuBar, 151
- autoStepAction
 - ikayaki::gui::MeasurementControlsPanel, 174
- axel
 - ikayaki::Project::ManualDemag, 302
- AXIAL_AF_POSITION
 - ikayaki::squid::Handler, 96
- axialAFPosition
 - ikayaki::gui::DeviceSettingsPanel, 70
- BACKGROUND
 - ikayaki::Project, 268
- background
 - ikayaki::gui::StyledWrapper, 417
- BACKGROUND_POSITION
 - ikayaki::squid::Handler, 96
- backgroundPosition
 - ikayaki::gui::DeviceSettingsPanel, 70
- baudRate
 - ikayaki::squid::SerialParameters, 356
- blockingWrite
 - ikayaki::squid::Degausser, 60
- border
 - ikayaki::gui::StyledWrapper, 417
- browseButton
 - ikayaki::gui::ProjectExplorerPanel, 315
- browsePanel
 - ikayaki::gui::ProjectExplorerPanel, 316
- browserField
 - ikayaki::gui::ProjectExplorerPanel, 316
- browserFieldEditor
 - ikayaki::gui::ProjectExplorerPanel, 316
- browserFieldFlasher
 - ikayaki::gui::ProjectExplorerPanel, 316
- browserFieldPopupIsAutocomplete
 - ikayaki::gui::ProjectExplorerPanel, 316
- browserFieldRenderer
 - ikayaki::gui::ProjectExplorerPanel, 316
- browserFieldUpdatingPopup
 - ikayaki::gui::ProjectExplorerPanel, 316
- calculateStatus
 - ikayaki::gui::MainStatusBar, 155
- calibrateAction
 - ikayaki::gui::MeasurementControlsPanel, 174
- calibrateButton
 - ikayaki::gui::CalibrationPanel, 52
- calibratePanel
 - ikayaki::gui::CalibrationPanel, 52
- Calibration
 - ikayaki::Project, 269
- calibration_columns
 - ikayaki::gui::ProjectExplorerTable, 323
- CALIBRATION_PROJECT_DIR
 - ikayaki::Ikayaki, 104
- calibrationNoticeFont
 - ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableModel, 331
- CalibrationPanel
 - ikayaki::gui::CalibrationPanel, 51
- calibrationPanel
 - ikayaki::gui::MainViewPanel, 164
- calibrationProjectTable
 - ikayaki::gui::CalibrationPanel, 52
- cancel
 - ikayaki::gui::PrintPanel, 252
- cancelAction
 - ikayaki::gui::DeviceSettingsPanel, 70
- cancelButton
 - ikayaki::gui::DeviceSettingsPanel, 71
- caption
 - ikayaki::MeasurementValue< T >, 240
- checkAborted
 - ikayaki::Project::Measurement, 306
- clear
 - ikayaki::util::LastExecutor, 109
- clearFlux
 - ikayaki::squid::Magnetometer, 120
- clone
 - ikayaki::gui::StyledWrapper, 417
- closeAllPorts
 - ikayaki::squid::SerialIO, 346
- closeButton
 - ikayaki::gui::ProgramSettingsPanel, 260
- closed
 - ikayaki::Project, 295
- closeDialog
 - ikayaki::gui::PrintPanel, 252

- closePort
 - ikayaki::squid::SerialIO, 346
- closeProject
 - ikayaki::Project, 272
- COLUMN_FILENAME
 - ikayaki::gui::ProjectExplorerTable, 323
- COLUMN_LASTMEASURE
 - ikayaki::gui::ProjectExplorerTable, 323
- COLUMN_LASTMOD
 - ikayaki::gui::ProjectExplorerTable, 323
- column_name
 - ikayaki::gui::ProjectExplorerTable, 323
- COLUMN_TYPE
 - ikayaki::gui::ProjectExplorerTable, 324
- COLUMN_UNDEFINED
 - ikayaki::gui::ProjectExplorerTable, 324
- COLUMN_UNMEASURED
 - ikayaki::gui::ProjectExplorerTable, 324
- COLUMNS
 - ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 182
 - ikayaki::gui::MeasurementDetails-Panel::ErrorsTableModel, 186
- columns
 - ikayaki::gui::ProjectExplorerTable, 324
- commandedDistance
 - ikayaki::squid::SquidEmulator, 390
- commandedRotation
 - ikayaki::squid::SquidEmulator, 390
- commandStack
 - ikayaki::squid::Squid-Emulator::DegausserEmu, 395
 - ikayaki::squid::SquidEmulator::Handler-Emu, 397
 - ikayaki::squid::Squid-Emulator::MagnetometerEmu, 399
- COMMENT_PROPERTY
 - ikayaki::Project, 295
- commentArea
 - ikayaki::gui::ProjectInformationPanel, 337
- compare
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerTable-Comparator, 329
- compareTimestamps
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerTable-Comparator, 329
- compareTo
 - ikayaki::MeasurementSequence, 204
 - ikayaki::util::LastExecutor::Run-Delayed, 114
- component
 - ikayaki::gui::ComponentFlasher, 55
- componentBG
 - ikayaki::gui::ComponentFlasher, 55
- ComponentFlasher
 - ikayaki::gui::ComponentFlasher, 54
- ComponentPrinter
 - ikayaki::util::ComponentPrinter, 56
- components
 - ikayaki::gui::MagnetometerStatu-Panel::ManualControlsPanel, 143
- componentToBePrinted
 - ikayaki::util::ComponentPrinter, 58
- configure
 - ikayaki::squid::Magnetometer, 120
- contentPane
 - ikayaki::gui::DeviceSettingsPanel, 71
 - ikayaki::gui::PrintPanel, 252
 - ikayaki::gui::ProgramSettingsPanel, 260
 - ikayaki::gui::ProjectInformationPanel, 337
 - ikayaki::squid::SquidFront, 404
- controlPanel
 - ikayaki::gui::PrintPanel, 253
- controlsPane
 - ikayaki::gui::MeasurementSequence-Panel, 212
- copySequence
 - ikayaki::Project, 272, 273
- CORE
 - ikayaki::Project, 268
- correctValues
 - ikayaki::gui::DeviceSettingsPanel, 69
- COUNT
 - ikayaki::gui, 27
 - SequenceColumn.java, 449
- createAFPProject
 - ikayaki::Project, 273
- createCalibrationProject
 - ikayaki::Project, 273
- createDialog
 - ikayaki::gui::MainViewPanel::New-ProjectFileChooser, 168
- createExtraButtons
 - ikayaki::gui::MainViewPanel::New-ProjectFileChooser, 168
- createNewProjectButton
 - ikayaki::gui::ProjectExplorer-Panel::NewProjectPanel, 318
- createProject
 - ikayaki::gui::MainViewPanel, 159
 - ikayaki::Project, 274
- createThellierProject
 - ikayaki::Project, 274

- createThermalProject
 - ikayaki::Project, 275
- creator
 - ikayaki::gui::DeviceSettingsPanel, 71
 - ikayaki::gui::PrintPanel, 253
 - ikayaki::gui::ProgramSettingsPanel, 260
- currentMotor
 - ikayaki::squid::Handler, 96
- currentPosition
 - ikayaki::squid::Handler, 96
 - ikayaki::squid::SquidEmulator, 390
- currentRotation
 - ikayaki::squid::Handler, 96
 - ikayaki::squid::SquidEmulator, 390
- currentSequence
 - ikayaki::gui::MainStatusBar, 156
- currentStep
 - ikayaki::Project, 296
- currentVelocity
 - ikayaki::squid::Handler, 97
- data
 - ikayaki::gui, 25–28
 - SequenceColumn.java, 447–449
- DATA_CHANGED
 - ikayaki::ProjectEvent, 310
- databits
 - ikayaki::squid::SerialParameters, 356
- DATE_PROPERTY
 - ikayaki::Project, 296
- dateField
 - ikayaki::gui::ProjectInformationPanel, 337
- dateFormat
 - ikayaki::squid::SerialIO, 348
 - ikayaki::util::LoggerPrintStream, 118
 - ikayaki::util::SerialProxy, 358
- ddemagnetizeY
 - ikayaki::squid::SquidFront, 404
- ddemagnetizeZ
 - ikayaki::squid::SquidFront, 404
- DEBUG
 - ikayaki::Project, 296
 - ikayaki::squid::SerialIO, 348
- debug
 - ikayaki::squid::SerialIO, 346
- DEBUG_LOG_DIR
 - ikayaki::Ikayaki, 104
- DEBUG_LOG_FILE
 - ikayaki::Ikayaki, 104
- DECELERATION
 - ikayaki::squid::Handler, 97
- deceleration
 - ikayaki::gui::DeviceSettingsPanel, 71
- ikayaki::squid::SquidEmulator, 390
- DECLINATION
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 240
 - SequenceColumn.java, 449
- defaultFlashColor
 - ikayaki::gui::ComponentFlasher, 55
- default_columns
 - ikayaki::gui::ProjectExplorerTable, 324
- defaultColumnsPane
 - ikayaki::gui::ProgramSettingsPanel, 260
- defaultWrapper
 - ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 182
 - ikayaki::gui::MeasurementDetails-Panel::ErrorsTableModel, 186
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerTableModel, 331
 - ikayaki::Settings, 378
- Degausser
 - ikayaki::squid::Degausser, 60
- degausser
 - ikayaki::squid::Squid, 387
 - ikayaki::squid::SquidEmulator, 390
- DEGAUSSER_Y
 - ikayaki::Project, 268
- DEGAUSSER_Z
 - ikayaki::Project, 268
- degausserAmplitude
 - ikayaki::squid::SquidEmulator, 391
- degausserCoil
 - ikayaki::squid::SquidEmulator, 391
- degausserDelay
 - ikayaki::squid::Degausser, 64
 - ikayaki::squid::SquidEmulator, 391
- DegausserEmu
 - ikayaki::squid::Squid-Emulator::DegausserEmu, 394
- degausserLog
 - ikayaki::squid::SquidFront, 404
- degausserPort
 - ikayaki::squid::SquidEmulator, 391
- degausserRamp
 - ikayaki::squid::Degausser, 65
 - ikayaki::squid::SquidEmulator, 391
- degausserStatus
 - ikayaki::squid::SquidEmulator, 391
- delayMillis
 - ikayaki::util::LastExecutor, 111
- deleteSequence
 - ikayaki::gui::ProgramSettings-Panel::EditSequencesTableModel, 262

- delimiter
 - ikayaki::gui::FittedComboBoxRenderer, 81
- delimiterRegexp
 - ikayaki::gui::FittedComboBoxRenderer, 81
- demagAmplitudeField
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 143
- demagAmplitudeFieldError
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 142
- demagAmplitudeFieldFlasher
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 143
- demagAmplitudeLabel
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 143
- demagButton
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 143
- demagButtonBaseText
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 144
- demagButtonFlasher
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 144
- demagButtonIsY
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 144
- demagDelay
 - ikayaki::gui::DeviceSettingsPanel, 71
- demagLabel
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 144
- DEMAGNETIZE_END
 - ikayaki::MeasurementEvent, 189
- DEMAGNETIZE_START
 - ikayaki::MeasurementEvent, 189
- demagnetizerPort
 - ikayaki::gui::DeviceSettingsPanel, 71
- demagnetizeY
 - ikayaki::squid::Degausser, 60
- demagnetizeZ
 - ikayaki::squid::Degausser, 61
- demagnetizing
 - ikayaki::gui::MagnetometerStatusPanel, 130
 - ikayaki::squid::Degausser, 65
- DEMAGNETIZING_COLOR
 - ikayaki::gui::MagnetometerStatusPanel, 130
- demagRamp
 - ikayaki::gui::DeviceSettingsPanel, 71
- demagYButton
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 144
- demagYButtonFlasher
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 144
- demagZButton
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 144
- demagZButtonFlasher
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 145
- density
 - ikayaki::gui::PrintPanel, 253
- description
 - ikayaki::gui::GenericFileFilter, 84
 - ikayaki::MeasurementValue< T >, 240
- detailsPanel
 - ikayaki::gui::MeasurementSequencePanel, 212
- detailsTable
 - ikayaki::gui::MeasurementDetailsPanel, 178
- DetailsTableModel
 - ikayaki::gui::MeasurementDetailsPanel::DetailsTableModel, 180
- detailsTableModel
 - ikayaki::gui::MeasurementDetailsPanel, 178
- DEVICE_SETTINGS
 - ikayaki::gui::SettingsDialog, 382
- deviceSettings
 - ikayaki::gui::MainMenuBar, 151
- deviceSettingsAction
 - ikayaki::gui::MainViewPanel, 164
- DeviceSettingsPanel
 - ikayaki::gui::DeviceSettingsPanel, 68
- dexecuteRampCycle
 - ikayaki::squid::SquidFront, 404
- dexecuteRampDown
 - ikayaki::squid::SquidFront, 404
- dexecuteRampUp
 - ikayaki::squid::SquidFront, 404
- dgetAmplitude
 - ikayaki::squid::SquidFront, 404
- dgetCoil
 - ikayaki::squid::SquidFront, 404
- dgetDelay
 - ikayaki::squid::SquidFront, 404
- dgetRamp
 - ikayaki::squid::SquidFront, 404
- dgetRampStatus
 - ikayaki::squid::SquidFront, 404
- dialogInit

- ikayaki::gui::SettingsDialog, 382
- dialogType
 - ikayaki::gui::SettingsDialog, 382
- dip
 - ikayaki::gui::PrintPanel, 253
 - ikayaki::Project, 296
- dipField
 - ikayaki::gui::ProjectInformationPanel, 337
- directory
 - ikayaki::gui::CalibrationPanel, 52
 - ikayaki::gui::ProjectExplorerPanel, 317
 - ikayaki::gui::ProjectExplorerTable, 324
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerPopupMenu, 327
- DIRECTORY_HISTORY_SIZE
 - ikayaki::Settings, 378
- directoryHistory
 - ikayaki::Settings, 379
- disableDoubleBuffering
 - ikayaki::util::ComponentPrinter, 56
- disOK
 - ikayaki::squid::SquidFront, 405
- DIVIDER_DEFAULT_LOCATION
 - ikayaki::gui::MainViewPanel, 164
- DIVIDER_SIZE
 - ikayaki::gui::MainViewPanel, 164
- doAbort
 - ikayaki::Project, 275
- doAutoComplete
 - ikayaki::gui::ProjectExplorerPanel, 314
- doAutoStep
 - ikayaki::Project, 275
- doManualDemagY
 - ikayaki::Project, 275
- doManualDemagZ
 - ikayaki::Project, 276
- doManualMeasure
 - ikayaki::Project, 276
- doManualMove
 - ikayaki::Project, 276
- doManualMoveBackground
 - ikayaki::Project, 276
- doManualMoveDegausserY
 - ikayaki::Project, 277
- doManualMoveDegausserZ
 - ikayaki::Project, 277
- doManualMoveHome
 - ikayaki::Project, 277
- doManualMoveLeftLimit
 - ikayaki::Project, 277
- doManualMoveMeasurement
 - ikayaki::Project, 278
- doManualMoveRightLimit
 - ikayaki::Project, 278
- doManualReset
 - ikayaki::Project, 278
- doManualRotate
 - ikayaki::Project, 278
- doManualStepDone
 - ikayaki::Project, 279
- done
 - ikayaki::MeasurementStep, 229
- doneRecentlyProjectFile
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerTableModel, 332
- doneRecentlyWrapper
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerTableModel, 332
 - ikayaki::Settings, 379
- doPause
 - ikayaki::Project, 279
- doSingleStep
 - ikayaki::Project, 279
- drawArrow
 - ikayaki::gui::MagnetometerStatusPanel, 128
- dRawCommand
 - ikayaki::squid::SquidFront, 405
- drawFillOval
 - ikayaki::gui::MagnetometerStatusPanel, 128
- drawFillSideRect
 - ikayaki::gui::MagnetometerStatusPanel, 128
- dRawSend
 - ikayaki::squid::SquidFront, 405
- dsetAmplitude
 - ikayaki::squid::SquidFront, 405
- dsetCoil
 - ikayaki::squid::SquidFront, 405
- updateSettings
 - ikayaki::squid::SquidFront, 405
- E0
 - ikayaki::gui, 27
 - SequenceColumn.java, 448, 449
- EditSequencesTableModel
 - ikayaki::gui::ProgramSettings-Panel::EditSequencesTableModel, 262
- enableDoubleBuffering
 - ikayaki::util::ComponentPrinter, 56
- errorsTable

- ikayaki::gui::MeasurementDetailsPanel, 179
- ErrorsTableModel
 - ikayaki::gui::MeasurementDetails-Panel::ErrorsTableModel, 184
- errorsTableModel
 - ikayaki::gui::MeasurementDetailsPanel, 179
- estimatedPositionEnd
 - ikayaki::squid::Handler, 97
- estimatedPositionStart
 - ikayaki::squid::Handler, 97
- estimatedPositionStartTime
 - ikayaki::squid::Handler, 97
- estimatedRotationEnd
 - ikayaki::squid::Handler, 97
- estimatedRotationStart
 - ikayaki::squid::Handler, 98
- estimatedRotationStartTime
 - ikayaki::squid::Handler, 98
- execOnlyLast
 - ikayaki::util::LastExecutor, 111
- execute
 - ikayaki::util::LastExecutor, 109
- executeRampCycle
 - ikayaki::squid::Degausser, 61
- executeRampDown
 - ikayaki::squid::Degausser, 61
- executeRampUp
 - ikayaki::squid::Degausser, 61
- exit
 - ikayaki::gui::MainMenuBar, 152
- exitAction
 - ikayaki::gui::MainViewPanel, 164
- exitProgram
 - ikayaki::gui::MainViewPanel, 159
- expires
 - ikayaki::util::LastExecutor::Run-Delayed, 115
- explorerTable
 - ikayaki::gui::ProjectExplorerPanel, 317
- explorerTableComparator
 - ikayaki::gui::ProjectExplorerTable, 324
- explorerTableModel
 - ikayaki::gui::ProjectExplorerTable, 324
- explorerTableScrollPane
 - ikayaki::gui::ProjectExplorerPanel, 317
- explorerTableSortColumn
 - ikayaki::gui::ProjectExplorerTable, 325
- exportProject
 - ikayaki::gui::MainViewPanel, 159
- exportProjectMenu
 - ikayaki::gui::MainMenuBar, 152
- exportProjectToDAT
 - ikayaki::gui::MainMenuBar, 152
- exportProjectToDATAAction
 - ikayaki::gui::MainViewPanel, 165
- exportProjectToDTD
 - ikayaki::gui::MainMenuBar, 152
- exportProjectToDTDAction
 - ikayaki::gui::MainViewPanel, 165
- exportProjectToSRM
 - ikayaki::gui::MainMenuBar, 152
- exportProjectToSRMAAction
 - ikayaki::gui::MainViewPanel, 165
- exportToDAT
 - ikayaki::Project, 279
- exportToSRM
 - ikayaki::Project, 280
- exportToTDT
 - ikayaki::Project, 280
- extensions
 - ikayaki::gui::GenericFileFilter, 84
- false
 - ikayaki::gui, 26, 27
 - ikayaki::MeasurementStep, 229
 - SequenceColumn.java, 448
- file
 - ikayaki::Project, 296
- FILE_DESCRIPTION
 - ikayaki::Ikayaki, 104
- FILE_SAVED
 - ikayaki::ProjectEvent, 310
- FILE_TYPE
 - ikayaki::Ikayaki, 104
- fileMenu
 - ikayaki::gui::MainMenuBar, 152
- files
 - ikayaki::gui::ProjectExplorerTable, 325
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerPopu-Menu, 327
- fireMeasurementEvent
 - ikayaki::Project, 280
- fireMovementStopped
 - ikayaki::squid::Handler, 87
- fireProjectEvent
 - ikayaki::Project, 281
- firePropertiesModified
 - ikayaki::Settings, 363
- fireRotationStopped
 - ikayaki::squid::Handler, 87
- fireSequencesModified
 - ikayaki::Settings, 364
- fireSerialIOEvent
 - ikayaki::squid::SerialIO, 346
- fitColumnWidths

- ikayaki::gui::ProjectExplorerTable, 322
- fitLimit
 - ikayaki::gui::FittedComboBoxRenderer, 81
- FittedComboBoxRenderer
 - ikayaki::gui::FittedComboBoxRenderer, 79
- fitToComponent
 - ikayaki::gui::FittedComboBoxRenderer, 81
- fitValue
 - ikayaki::gui::FittedComboBoxRenderer, 80
- flash
 - ikayaki::gui::ComponentFlasher, 55
- flashcolor
 - ikayaki::gui::ComponentFlasher, 55
- flowControlIn
 - ikayaki::squid::SerialParameters, 356
- flowControlOut
 - ikayaki::squid::SerialParameters, 356
- flowPanel
 - ikayaki::gui::ProjectExplorerPanel::NewProjectPanel, 318
- focusBackground
 - ikayaki::gui::StyledWrapper, 418
- focusBorder
 - ikayaki::gui::StyledWrapper, 418
- font
 - ikayaki::gui::StyledWrapper, 418
- foreground
 - ikayaki::gui::StyledWrapper, 418
- format
 - ikayaki::gui::PositiveDecimalFormat, 249
- Forwarder
 - ikayaki::util::SerialProxy::Forwarder, 359
- GenericFileFilter
 - ikayaki::gui::GenericFileFilter, 83
- GEOGRAPHIC_X
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 240
 - SequenceColumn.java, 449
- GEOGRAPHIC_X_NORMALIZED
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 241
 - SequenceColumn.java, 449
- GEOGRAPHIC_Y
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 241
 - SequenceColumn.java, 449
- GEOGRAPHIC_Z
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 241
 - SequenceColumn.java, 449
- geographicVector
 - ikayaki::MeasurementResult, 200
- getAbortAction
 - ikayaki::gui::MeasurementControlsPanel, 171
- getAboutAction
 - ikayaki::gui::MainViewPanel, 160
- getAmplitude
 - ikayaki::squid::Degausser, 62
- getAutocompleteFiles
 - ikayaki::gui::ProjectExplorerPanel, 314
- getAutoStepAction
 - ikayaki::gui::MeasurementControlsPanel, 171
- getBaudRate
 - ikayaki::squid::SerialParameters, 355
- getCachedProjects
 - ikayaki::Project, 281
- getCalibrateAction
 - ikayaki::gui::MeasurementControlsPanel, 172
- getCalibrationPanel
 - ikayaki::gui::MainViewPanel, 160
- getCalibrationProjectFiles
 - ikayaki::Settings, 364
- getCancelAction
 - ikayaki::gui::DeviceSettingsPanel, 69
- getCaption
 - ikayaki::MeasurementValue< T >, 239
- getCleanMessage
 - ikayaki::squid::SerialIOEvent, 350
- getCoil
 - ikayaki::squid::Degausser, 62
- getColumnClass
 - ikayaki::gui::MeasurementDetailsPanel::DetailsTableModel, 181
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 185
 - ikayaki::gui::MeasurementSequenceTableModel, 221
 - ikayaki::gui::PrintPanel::PrintSequenceTableModel, 257
 - ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableModel, 330
- getColumnCount
 - ikayaki::gui::MeasurementDetailsPanel::DetailsTableModel, 181
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 185

- ikayaki::gui::MeasurementSequence-
TableModel, 221
- ikayaki::gui::PrintPanel::PrintSequence-
TableModel, 257
- ikayaki::gui::ProgramSettings-
Panel::EditSequencesTableModel,
262
- ikayaki::gui::ProjectExplorer-
Table::ProjectExplorerTableModel,
330
- getColumnName
 - ikayaki::gui::MeasurementDetails-
Panel::DetailsTableModel, 181
 - ikayaki::gui::MeasurementDetails-
Panel::ErrorsTableModel, 185
 - ikayaki::gui::MeasurementSequence-
TableModel, 221
 - ikayaki::gui::ProjectExplorer-
Table::ProjectExplorerTableModel,
331
- getColumnToolTip
 - ikayaki::gui::MeasurementSequence-
TableModel, 222
- getCompletedSteps
 - ikayaki::Project, 281
- getCurrentStep
 - ikayaki::Project, 281
- getData
 - ikayaki::squid::Magnetometer, 121
- getDatabits
 - ikayaki::squid::SerialParameters, 355
- getDefaultColumns
 - ikayaki::Settings, 364
- getDefaultWrapperInstance
 - ikayaki::Settings, 364
- getDegausser
 - ikayaki::squid::Squid, 385
- getDegausserDelay
 - ikayaki::Settings, 364
- getDegausserMaximumField
 - ikayaki::Settings, 364
- getDegausserMinimumField
 - ikayaki::Settings, 364
- getDegausserMinimumFieldIncrement
 - ikayaki::Settings, 365
- getDegausserPort
 - ikayaki::Settings, 365
- getDegausserRamp
 - ikayaki::Settings, 365
- getDelay
 - ikayaki::squid::Degausser, 62
 - ikayaki::util::LastExecutor::Run-
Delayed, 115
- getDelayMillis
 - ikayaki::util::LastExecutor, 110
- getDeleteSelectedAction
 - ikayaki::gui::MeasurementSequence-
Panel::SequencePopupMenu, 218
- getDemagAmplitude
 - ikayaki::gui::MagnetometerStatu-
Panel::ManualControlsPanel, 142
- getDescription
 - ikayaki::gui::GenericFileFilter, 84
 - ikayaki::MeasurementValue< T >, 239
- getDetailsPanel
 - ikayaki::gui::MeasurementSequence-
Panel, 210
- getDeviceSettingsAction
 - ikayaki::gui::MainViewPanel, 160
- getDip
 - ikayaki::Project, 281
- getDirectoryHistory
 - ikayaki::gui::ProjectExplorerPanel, 314
 - ikayaki::Settings, 365
- getDocument
 - ikayaki::Project, 282
- getDoneRecentlyWrapperInstance
 - ikayaki::Settings, 365
- getElement
 - ikayaki::MeasurementResult, 197
 - ikayaki::MeasurementSequence, 204
 - ikayaki::MeasurementStep, 231
- getEstimatedPosition
 - ikayaki::squid::Handler, 87
- getEstimatedRotation
 - ikayaki::squid::Handler, 87
- getExitAction
 - ikayaki::gui::MainViewPanel, 160
- getExportProjectToDATAAction
 - ikayaki::gui::MainViewPanel, 160
- getExportProjectToSRMAAction
 - ikayaki::gui::MainViewPanel, 160
- getExportProjectToTDTAction
 - ikayaki::gui::MainViewPanel, 160
- getExtension
 - ikayaki::gui::GenericFileFilter, 84
- getFile
 - ikayaki::Project, 282
- getFilters
 - ikayaki::squid::Magnetometer, 121
- getFirstIndex
 - ikayaki::gui::MeasurementSequence-
Panel::SequencePopupMenu, 218
- getFitLimit
 - ikayaki::gui::FittedComboBoxRenderer,
80
- getFlowControlIn
 - ikayaki::squid::SerialParameters, 355

- getFlowControlOut
 - ikayaki::squid::SerialParameters, 355
- getFormatter
 - ikayaki::gui::DeviceSettingsPanel::MyFormatterFactory, 76
 - ikayaki::gui::MeasurementSequencePanel::MyFormatterFactory, 216
 - ikayaki::gui::ProjectInformationPanel::MyFormatterFactory, 342
- getGeographicVector
 - ikayaki::MeasurementResult, 197
- getGeographicX
 - ikayaki::MeasurementResult, 197
- getGeographicY
 - ikayaki::MeasurementResult, 198
- getGeographicZ
 - ikayaki::MeasurementResult, 198
- getHandler
 - ikayaki::squid::Squid, 385
- getHandlerAcceleration
 - ikayaki::Settings, 365
- getHandlerAxialAFPosition
 - ikayaki::Settings, 365
- getHandlerBackgroundPosition
 - ikayaki::Settings, 366
- getHandlerDeceleration
 - ikayaki::Settings, 366
- getHandlerMeasurementPosition
 - ikayaki::Settings, 366
- getHandlerMeasurementVelocity
 - ikayaki::Settings, 366
- getHandlerPort
 - ikayaki::Settings, 366
- getHandlerRightLimit
 - ikayaki::Settings, 366
- getHandlerRotation
 - ikayaki::Settings, 367
- getHandlerRotationAcceleration
 - ikayaki::Settings, 367
- getHandlerRotationDeceleration
 - ikayaki::Settings, 367
- getHandlerRotationVelocity
 - ikayaki::Settings, 367
- getHandlerSampleLoadPosition
 - ikayaki::Settings, 367
- getHandlerTransverseYAFPosition
 - ikayaki::Settings, 367
- getHandlerVelocity
 - ikayaki::Settings, 368
- getHelpAction
 - ikayaki::gui::MainViewPanel, 160
- getHolder
 - ikayaki::MeasurementStep, 231
- getHolderCalibration
 - ikayaki::Settings, 368
- getHolderCalibrationFile
 - ikayaki::Settings, 368
- getInsertAfterAction
 - ikayaki::gui::MeasurementSequencePanel::SequencePopupMenu, 218
- getInsertBeforeAction
 - ikayaki::gui::MeasurementSequencePanel::SequencePopupMenu, 218
- getLastDirectory
 - ikayaki::Settings, 368
- getLastIndex
 - ikayaki::gui::MeasurementSequencePanel::SequencePopupMenu, 218
- getLastPositiveStepValue
 - ikayaki::gui::MeasurementSequencePanel, 210
- getLastStepValue
 - ikayaki::gui::MeasurementSequencePanel, 210
- getListCellRendererComponent
 - ikayaki::gui::FittedComboBoxRenderer, 81
- getLogMessage
 - ikayaki::squid::SerialIOEvent, 350
- getLoop
 - ikayaki::squid::Magnetometer, 121
- getMagnetometer
 - ikayaki::squid::Squid, 385
- getMagnetometerPort
 - ikayaki::Settings, 368
- getMagnetometerXAxisCalibration
 - ikayaki::Settings, 368
- getMagnetometerYAxisCalibration
 - ikayaki::Settings, 369
- getMagnetometerZAxisCalibration
 - ikayaki::Settings, 369
- getMass
 - ikayaki::MeasurementStep, 231
 - ikayaki::Project, 282
- getMeasurementControlsPanel
 - ikayaki::gui::MainViewPanel, 161
- getMeasurementDetailsPanel
 - ikayaki::gui::MainViewPanel, 161
- getMeasurementGraphsPanel
 - ikayaki::gui::MainViewPanel, 161
- getMeasurementRotations
 - ikayaki::Settings, 369
- getMeasurementSequencePanel
 - ikayaki::gui::MainViewPanel, 161
- getMeasuringWrapperInstance
 - ikayaki::Settings, 369
- getMenuBar
 - ikayaki::gui::MainViewPanel, 161

- getMessage
 - ikayaki::squid::SerialIOEvent, 350
- getName
 - ikayaki::MeasurementSequence, 205
 - ikayaki::Project, 282
- getNewProjectAction
 - ikayaki::gui::MainViewPanel, 161
- getNoise
 - ikayaki::MeasurementStep, 231
- getNormalization
 - ikayaki::Project, 283
- getNumMeasurements
 - ikayaki::gui::IntensityPlot, 106
 - ikayaki::gui::Plot, 248
 - ikayaki::gui::StereoPlot, 411
- getOpenProjectAction
 - ikayaki::gui::MainViewPanel, 162
- getOrientation
 - ikayaki::Project, 283
- getOwner
 - ikayaki::squid::Squid, 385
- getParentFrame
 - ikayaki::gui::ProjectComponent, 307
- getParity
 - ikayaki::squid::SerialParameters, 355
- getPauseAction
 - ikayaki::gui::MeasurementControls-Panel, 172
- getPortName
 - ikayaki::squid::SerialIO, 346
 - ikayaki::squid::SerialParameters, 355
- getPosition
 - ikayaki::squid::Handler, 88
- getPossibleColumns
 - ikayaki::gui::MeasurementSequence-TableModel, 222
- getPrintAction
 - ikayaki::gui::MainViewPanel, 162
- getPrintedDocument
 - ikayaki::gui::PrintPanel, 252
- getPrintPreviewAction
 - ikayaki::gui::MainViewPanel, 162
- getProgramSettingsAction
 - ikayaki::gui::MainViewPanel, 162
- getProject
 - ikayaki::gui::MainViewPanel, 162
 - ikayaki::gui::MeasurementSequence-TableModel, 222
 - ikayaki::gui::ProjectComponent, 308
 - ikayaki::MeasurementEvent, 189
 - ikayaki::MeasurementStep, 231
 - ikayaki::ProjectEvent, 311
- getProjectExplorerPanel
 - ikayaki::gui::MainViewPanel, 162
- getProjectFiles
 - ikayaki::gui::ProjectExplorerTable, 322
- getProjectHistory
 - ikayaki::Settings, 369
- getProjectInformationPanel
 - ikayaki::gui::MainViewPanel, 162
- getProjectType
 - ikayaki::gui::MainViewPanel::New-ProjectFileChooser, 169
- getProperty
 - ikayaki::Project, 283
 - ikayaki::Settings, 369, 370
- getRamp
 - ikayaki::squid::Degausser, 62
- getRampStatus
 - ikayaki::squid::Degausser, 63
- getRange
 - ikayaki::squid::Magnetometer, 122
- getRawVector
 - ikayaki::MeasurementResult, 198
- getRawX
 - ikayaki::MeasurementResult, 198
- getRawY
 - ikayaki::MeasurementResult, 198
- getRawZ
 - ikayaki::MeasurementResult, 199
- getResult
 - ikayaki::MeasurementStep, 232
- getResults
 - ikayaki::MeasurementStep, 232
- getRotation
 - ikayaki::MeasurementResult, 199
 - ikayaki::squid::Handler, 88
- getRowCount
 - ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 181
 - ikayaki::gui::MeasurementDetails-Panel::ErrorsTableModel, 185
 - ikayaki::gui::MeasurementSequence-TableModel, 222
 - ikayaki::gui::PrintPanel::PrintSequence-TableModel, 257
 - ikayaki::gui::ProgramSettings-Panel::EditSequencesTableModel, 262
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerTableModel, 331
- getRunnable
 - ikayaki::util::LastExecutor::Run-Delayed, 115
- getSampleType
 - ikayaki::Project, 284
- getSampleVector

- ikayaki::MeasurementResult, 199
- getSampleX
 - ikayaki::MeasurementResult, 199
- getSampleY
 - ikayaki::MeasurementResult, 199
- getSampleZ
 - ikayaki::MeasurementResult, 199
- getSaveAction
 - ikayaki::gui::DeviceSettingsPanel, 69
- getSaveAllAsAction
 - ikayaki::gui::MeasurementSequencePanel::SequencePopupMenu, 218
- getSaveSelectedAsAction
 - ikayaki::gui::MeasurementSequencePanel::SequencePopupMenu, 218
- getSequences
 - ikayaki::Settings, 370
- getSequenceTable
 - ikayaki::gui::MeasurementSequencePanel, 210
- getSingleStepAction
 - ikayaki::gui::MeasurementControlsPanel, 172
- getSlew
 - ikayaki::squid::Magnetometer, 122
- getSquid
 - ikayaki::gui::MainViewPanel, 162
 - ikayaki::Project, 284
- getState
 - ikayaki::MeasurementStep, 232
 - ikayaki::Project, 284
- getStatusBar
 - ikayaki::gui::MainViewPanel, 163
- getStep
 - ikayaki::gui::MeasurementDetailsPanel, 178
 - ikayaki::gui::MeasurementDetailsPanel::DetailsTableModel, 181
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 185
 - ikayaki::MeasurementEvent, 189
 - ikayaki::MeasurementSequence, 205
 - ikayaki::Project, 284
- getSteps
 - ikayaki::MeasurementSequence, 205
 - ikayaki::Project, 285
- getStepValue
 - ikayaki::MeasurementStep, 232
- getStopbits
 - ikayaki::squid::SerialParameters, 356
- getStrike
 - ikayaki::Project, 285
- getSusceptibility
 - ikayaki::MeasurementStep, 233
- ikayaki::Project, 285
- getTableCellEditorComponent
 - ikayaki::gui::StyledCellEditor, 415
- getTableCellRendererComponent
 - ikayaki::gui::StyledTableCellRenderer, 416
- getTimeStamp
 - ikayaki::MeasurementStep, 233
 - ikayaki::Project, 285
- getTransform
 - ikayaki::Project, 286
- getTreeCellEditorComponent
 - ikayaki::gui::StyledCellEditor, 415
- getType
 - ikayaki::MeasurementEvent, 189
 - ikayaki::MeasurementResult, 199
 - ikayaki::Project, 286
 - ikayaki::ProjectEvent, 311
- getUnit
 - ikayaki::MeasurementValue< T >, 239
- getValue
 - ikayaki::MeasurementValue< T >, 239
 - ikayaki::Project, 286
- getValueAt
 - ikayaki::gui::MeasurementDetailsPanel::DetailsTableModel, 181
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 185
 - ikayaki::gui::MeasurementSequenceTableModel, 223
 - ikayaki::gui::PrintPanel::PrintSequenceTableModel, 258
 - ikayaki::gui::ProgramSettingsPanel::EditSequencesTableModel, 262
 - ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableModel, 331
- getVolume
 - ikayaki::MeasurementStep, 233
 - ikayaki::Project, 287
- getWindowHeight
 - ikayaki::Settings, 370
- getWindowMaximized
 - ikayaki::Settings, 370
- getWindowWidth
 - ikayaki::Settings, 371
- getXXX
 - ikayaki::Settings, 371
- go
 - ikayaki::squid::Handler, 88
- going
 - ikayaki::gui::MagnetometerStat usPanel::MagnetometerStat us-

- Animator, 136, 137
- gone
 - ikayaki::gui::MagnetometerStatus-Panel::MagnetometerStatus-Animator, 136
- HAND
 - ikayaki::Project, 268
- Handler
 - ikayaki::squid::Handler, 87
- handler
 - ikayaki::squid::Squid, 387
 - ikayaki::squid::SquidEmulator, 391
- HANDLER_MOVE
 - ikayaki::MeasurementEvent, 188
- HANDLER_ROTATE
 - ikayaki::MeasurementEvent, 188
- HANDLER_ROTATION
 - ikayaki::squid::Handler, 98
- HANDLER_STOP
 - ikayaki::MeasurementEvent, 188
- HandlerEmu
 - ikayaki::squid::SquidEmulator::Handler-Emu, 396
- handlerLog
 - ikayaki::squid::SquidFront, 405
- handlerPort
 - ikayaki::gui::DeviceSettingsPanel, 72
 - ikayaki::squid::SquidEmulator, 391
- handlerStatus
 - ikayaki::squid::SquidEmulator, 392
- header
 - ikayaki::gui::PrintPanel, 253
- HEADER_COLUMN
 - ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 182
 - ikayaki::gui::MeasurementDetails-Panel::ErrorsTableModel, 186
- HeaderPopupMenu
 - ikayaki::gui::MeasurementSequence-Panel::HeaderPopupMenu, 215
- headerWrapper
 - ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 182
 - ikayaki::gui::MeasurementDetails-Panel::ErrorsTableModel, 186
- help
 - ikayaki::gui::MainMenuBar, 152
- HELP_PAGES
 - ikayaki::Ikayaki, 104
- helpAction
 - ikayaki::gui::MainViewPanel, 165
- helpMenu
 - ikayaki::gui::MainMenuBar, 152
- hgetPosition
 - ikayaki::squid::SquidFront, 405
- hgetRotation
 - ikayaki::squid::SquidFront, 405
- hgetStatus
 - ikayaki::squid::SquidFront, 405
- hgo
 - ikayaki::squid::SquidFront, 405
- hideColumn
 - ikayaki::gui::MeasurementSequence-TableModel, 223
- hisOK
 - ikayaki::squid::SquidFront, 405
- hjoin
 - ikayaki::squid::SquidFront, 406
- hmoveToBackground
 - ikayaki::squid::SquidFront, 406
- hmoveToDegausserY
 - ikayaki::squid::SquidFront, 406
- hmoveToDegausserZ
 - ikayaki::squid::SquidFront, 406
- hmoveToHome
 - ikayaki::squid::SquidFront, 406
- hmoveToMeasurement
 - ikayaki::squid::SquidFront, 406
- hmoveToPos
 - ikayaki::squid::SquidFront, 406
- HOLDER
 - ikayaki::MeasurementResult, 196
- holderCalibrationCombo
 - ikayaki::gui::ProgramSettingsPanel, 260
- HOME
 - ikayaki::Project, 268
- homePosition
 - ikayaki::squid::SquidEmulator, 392
- horizontalAlignment
 - ikayaki::gui::StyledWrapper, 418
- hperformSlew
 - ikayaki::squid::SquidFront, 406
- hRawCommand
 - ikayaki::squid::SquidFront, 406
- hRawSend
 - ikayaki::squid::SquidFront, 406
- hrotateTo
 - ikayaki::squid::SquidFront, 406
- hsetAcceleration
 - ikayaki::squid::SquidFront, 407
- hsetBaseSpeed
 - ikayaki::squid::SquidFront, 407
- hsetCrystalFrequency
 - ikayaki::squid::SquidFront, 407
- hsetDeceleration
 - ikayaki::squid::SquidFront, 407
- hsetHoldTime

- ikayaki::squid::SquidFront, 407
- hsetMotorNegative
 - ikayaki::squid::SquidFront, 407
- hsetMotorPositive
 - ikayaki::squid::SquidFront, 407
- hsetOnline
 - ikayaki::squid::SquidFront, 407
- hsetPosition
 - ikayaki::squid::SquidFront, 407
- hsetPositionRegister
 - ikayaki::squid::SquidFront, 407
- hsetSteps
 - ikayaki::squid::SquidFront, 407
- hsetVelocity
 - ikayaki::squid::SquidFront, 407
- hstop
 - ikayaki::squid::SquidFront, 408
- hstopExecution
 - ikayaki::squid::SquidFront, 408
- htakeMessage
 - ikayaki::squid::SquidFront, 408
- hupdateSettings
 - ikayaki::squid::SquidFront, 408
- hverify
 - ikayaki::squid::SquidFront, 408
- IDLE
 - ikayaki::Project, 269
- IDLE_COLOR
 - ikayaki::gui::MagnetometerStatusPanel, 131
- Ikayaki
 - ikayaki::Ikayaki, 102
- ikayaki, 23
- ikayaki.gui, 24
- ikayaki.gui.SequenceColumn, 29
- ikayaki.MeasurementEvent.Type, 30
- ikayaki.MeasurementResult.Type, 31
- ikayaki.MeasurementStep.State, 32
- ikayaki.Project.Normalization, 33
- ikayaki.Project.Orientation, 34
- ikayaki.Project.SampleType, 35
- ikayaki.Project.State, 36
- ikayaki.Project.Type, 37
- ikayaki.ProjectEvent.Type, 38
- ikayaki.squid, 39
- ikayaki.util, 40
- ikayaki::gui
 - COUNT, 27
 - data, 25–28
 - DECLINATION, 28
 - E0, 27
 - false, 26, 27
 - GEOGRAPHIC_X, 28
 - GEOGRAPHIC_X_NORMALIZED, 28
 - GEOGRAPHIC_Y, 28
 - GEOGRAPHIC_Z, 28
 - INCLINATION, 28
 - MAGNETIZATION, 28
 - MASS, 27
 - MOMENT, 28
 - null, 25–27
 - numberFormat, 28
 - project, 25, 27
 - RELATIVE_MAGNETIZATION, 28
 - rowIndex, 25–28
 - SAMPLE_X, 28
 - SAMPLE_Y, 28
 - SequenceColumn, 25
 - setMaximumFractionDigits, 27
 - STEP, 27
 - SUSCEPTIBILITY, 28
 - THETA63, 28
 - value, 25–28
 - VOLUME, 27
- ikayaki::gui::AbstractPlot, 49
- ikayaki::gui::AbstractPlot
 - paintComponent, 49
 - render, 49
- ikayaki::gui::CalibrationPanel, 51
- ikayaki::gui::CalibrationPanel
 - calibrateButton, 52
 - calibratePanel, 52
 - CalibrationPanel, 51
 - calibrationProjectTable, 52
 - directory, 52
 - parent, 52
 - setProject, 52
- ikayaki::gui::ComponentFlasher, 54
- ikayaki::gui::ComponentFlasher
 - component, 55
 - componentBG, 55
 - ComponentFlasher, 54
 - defaultFlashColor, 55
 - flash, 55
 - flashcolor, 55
- ikayaki::gui::DeviceSettingsPanel, 67
- ikayaki::gui::DeviceSettingsPanel
 - \$\$setupUI, 68
 - [instance initializer], 69
 - acceleration, 70
 - axialAFPosition, 70
 - backgroundPosition, 70
 - cancelAction, 70
 - cancelButton, 71
 - contentPane, 71
 - correctValues, 69

- creator, 71
- deceleration, 71
- demagDelay, 71
- demagnetizerPort, 71
- demagRamp, 71
- DeviceSettingsPanel, 68
- getCancelAction, 69
- getSaveAction, 69
- handlerPort, 72
- magnetometerPort, 72
- maximumField, 72
- measurementPosition, 72
- measurementVelocity, 72
- rotation, 73
- rotationAcc, 73
- rotationDec, 73
- rotationVelocity, 73
- sampleLoadPosition, 73
- saveAction, 74
- saveButton, 74
- saveSettings, 69
- transverseYAFPosition, 74
- velocity, 74
- warningLabel, 74
- xAxisCalibration, 74
- yAxisCalibration, 74
- zAxisCalibration, 75
- ikayaki::gui::DeviceSettingsPanel::MyFormatterFactory, 76
- ikayaki::gui::DeviceSettingsPanel::MyFormatterFactory
 - getFormatter, 76
- ikayaki::gui::FittedComboBoxRenderer, 79
- ikayaki::gui::FittedComboBoxRenderer
 - delimiter, 81
 - delimiterRegexp, 81
 - fitLimit, 81
 - FittedComboBoxRenderer, 79
 - fitToComponent, 81
 - fitValue, 80
 - getFitLimit, 80
 - getListCellRendererComponent, 81
 - setFitLimit, 81
- ikayaki::gui::GenericFileFilter, 83
- ikayaki::gui::GenericFileFilter
 - accept, 83
 - description, 84
 - extensions, 84
 - GenericFileFilter, 83
 - getDescription, 84
 - getExtension, 84
- ikayaki::gui::IntensityPlot, 106
- ikayaki::gui::IntensityPlot
 - add, 106
 - getNumMeasurements, 106
 - points, 107
 - project, 107
 - render, 107
 - reset, 107
- ikayaki::gui::MagnetometerStatusPanel, 126
- ikayaki::gui::MagnetometerStatusPanel
 - demagnetizing, 130
 - DEMAGNETIZING_COLOR, 130
 - drawArrow, 128
 - drawFillOval, 128
 - drawFillSideRect, 128
 - IDLE_COLOR, 131
 - MagnetometerStatusPanel, 127
 - manualControlsPanel, 131
 - maxposition, 131
 - maxrotation, 131
 - measurementUpdated, 128
 - measuring, 131
 - MEASURING_COLOR, 131
 - moveButtons, 131
 - moving, 132
 - MOVING_COLOR, 132
 - paintComponent, 128
 - posBG, 132
 - posDemagY, 132
 - posDemagZ, 132
 - posHome, 132
 - position, 132
 - posLeft, 133
 - posMeasure, 133
 - posMove, 133
 - posRight, 133
 - rotating, 133
 - rotation, 133
 - setSquid, 129
 - squid, 133
 - updateButtonPositions, 129
 - updatePositions, 129
 - updateStatus, 130
- ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 135
- ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator
 - animatorThread, 137
 - going, 136, 137
 - gone, 136
 - killAnimatorThread, 136
 - MagnetometerStatusAnimator, 135
 - msps, 137
 - posAmount, 138
 - posDirection, 138
 - posFrom, 138

- rotateAmount, 138
- rotateDirection, 138
- rotateFrom, 138
- rps, 138
- run, 136
- run_old, 137
- sps, 139
- startTime, 139
- updateDelay, 139
- ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 140
- ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel
 - components, 143
 - demagAmplitudeField, 143
 - demagAmplitudeFieldError, 142
 - demagAmplitudeFieldFlasher, 143
 - demagAmplitudeLabel, 143
 - demagButton, 143
 - demagButtonBaseText, 144
 - demagButtonFlasher, 144
 - demagButtonIsY, 144
 - demagLabel, 144
 - demagYButton, 144
 - demagYButtonFlasher, 144
 - demagZButton, 144
 - demagZButtonFlasher, 145
 - getDemagAmplitude, 142
 - ManualControlsPanel, 141
 - measureAllButton, 145
 - measureAllButtonBaseText, 145
 - measureAllButtonFlasher, 145
 - measureLabel, 145
 - moveBG, 145
 - moveButtonGroup, 146
 - moveDemagY, 146
 - moveDemagZ, 146
 - moveHome, 146
 - moveLabel, 147
 - moveLeft, 147
 - moveMeasure, 147
 - moveRight, 147
 - nextLineButton, 147
 - nextLineButtonFlasher, 148
 - project, 148
 - resetAllButton, 148
 - resetAllButtonFlasher, 148
 - rotate0, 148
 - rotate180, 148
 - rotate270, 149
 - rotate90, 149
 - rotateButtonGroup, 149
 - rotateLabel, 149
 - setEnabled, 142
 - setProject, 142
- ikayaki::gui::MainMenuBar, 150
- ikayaki::gui::MainMenuBar
 - abort, 151
 - about, 151
 - autoStep, 151
 - deviceSettings, 151
 - exit, 152
 - exportProjectMenu, 152
 - importProjectToDAT, 152
 - importProjectToDTD, 152
 - exportProjectToSRM, 152
 - fileMenu, 152
 - help, 152
 - helpMenu, 152
 - initialize, 151
 - main, 152
 - MainMenuBar, 151
 - measurementMenu, 153
 - newProject, 153
 - openProject, 153
 - openRecentProjectMenu, 153
 - pause, 153
 - print, 153
 - printPreview, 153
 - programSettings, 153
 - singleStep, 153
 - toolsMenu, 154
- ikayaki::gui::MainStatusBar, 155
- ikayaki::gui::MainStatusBar
 - calculateStatus, 155
 - currentSequence, 156
 - MainStatusBar, 155
 - measurementProgress, 156
 - measurementStatus, 156
 - projectType, 156
 - setMeasurement, 155
- ikayaki::gui::MainViewPanel, 157
- ikayaki::gui::MainViewPanel
 - aboutAction, 164
 - calibrationPanel, 164
 - createProject, 159
 - deviceSettingsAction, 164
 - DIVIDER_DEFAULT_LOCATION, 164
 - DIVIDER_SIZE, 164
 - exitAction, 164
 - exitProgram, 159
 - exportProject, 159
 - exportProjectToDATAAction, 165
 - exportProjectToDTDAction, 165
 - exportProjectToSRMAAction, 165
 - getAboutAction, 160
 - getCalibrationPanel, 160

- getDeviceSettingsAction, 160
- getExitAction, 160
- getExportProjectToDATAAction, 160
- getExportProjectToSRMAAction, 160
- getExportProjectToTDTAction, 160
- getHelpAction, 160
- getMeasurementControlsPanel, 161
- getMeasurementDetailsPanel, 161
- getMeasurementGraphsPanel, 161
- getMeasurementSequencePanel, 161
- getMenuBar, 161
- getNewProjectAction, 161
- getOpenProjectAction, 162
- getPrintAction, 162
- getPrintPreviewAction, 162
- getProgramSettingsAction, 162
- getProject, 162
- getProjectExplorerPanel, 162
- getProjectInformationPanel, 162
- getSquid, 162
- getStatusBar, 163
- helpAction, 165
- latestMeasuringProject, 165
- loadProject, 163
- MainViewPanel, 158
- measurementControlsPanel, 165
- measurementDetailsPanel, 165
- measurementGraphsPanel, 165
- measurementSequencePanel, 165
- menuBar, 165
- newProjectAction, 166
- openProjectAction, 166
- printAction, 166
- printPreviewAction, 166
- programSettingsAction, 166
- project, 166
- projectExplorerPanel, 166
- projectInformationPanel, 166
- projectUpdated, 163
- setProject, 163
- setSquid, 164
- splitPane, 166
- squid, 166
- statusBar, 167
- ikayaki::gui::MainViewPanel::NewProjectFileChooser, 168
- ikayaki::gui::MainViewPanel::NewProject-
FileChooser
 - createDialog, 168
 - createExtraButtons, 168
 - getProjectType, 169
 - NewProjectFileChooser, 168
 - projectType, 169
- ikayaki::gui::MeasurementControlsPanel, 170
- ikayaki::gui::MeasurementControlsPanel
 - abortAction, 173
 - abortButton, 173
 - abortButtonFlasher, 173
 - autoStepAction, 174
 - calibrateAction, 174
 - getAbortAction, 171
 - getAutoStepAction, 171
 - getCalibrateAction, 172
 - getPauseAction, 172
 - getSingleStepAction, 172
 - magnetometerStatusPanel, 174
 - manualControlsPanel, 174
 - measureButton, 174
 - measureButtonFlasher, 174
 - MeasurementControlsPanel, 171
 - measurementUpdated, 172
 - pauseAction, 174
 - pauseButton, 174
 - pauseButtonFlasher, 175
 - projectUpdated, 172
 - sampleInsertIconLabel, 175
 - sampleInsertPanel, 175
 - sampleInsertTextLabel, 175
 - sampleInsertZMinusIcon, 175
 - sampleInsertZPlusIcon, 175
 - setOrientation, 173
 - setProject, 173
 - singleStepAction, 175
 - stepButton, 176
 - stepButtonFlasher, 176
 - updateActions, 173
 - zButtonGroup, 176
 - zMinusRadioButton, 176
 - zPlusRadioButton, 176
- ikayaki::gui::MeasurementDetailsPanel, 177
- ikayaki::gui::MeasurementDetailsPanel
 - detailsTable, 178
 - detailsTableModel, 178
 - errorsTable, 179
 - errorsTableModel, 179
 - getStep, 178
 - MeasurementDetailsPanel, 177
 - measurementUpdated, 178
 - setProject, 178
 - setStep, 178
 - step, 179
- ikayaki::gui::MeasurementDetailsPanel::DetailsTableModel, 180
- ikayaki::gui::MeasurementDetails-
Panel::DetailsTableModel
 - COLUMNS, 182
 - defaultWrapper, 182
 - DetailsTableModel, 180

- get ColumnClass, 181
- get ColumnCount, 181
- get ColumnName, 181
- get RowCount, 181
- get Step, 181
- get ValueAt, 181
- HEADER_COLUMN, 182
- headerWrapper, 182
- numberFormat, 183
- set Step, 182
- step, 183
- wrap, 182
- X_COLUMN, 183
- Y_COLUMN, 183
- Z_COLUMN, 183
- ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 184
- ikayaki::gui::MeasurementDetails-Panel::ErrorsTableModel
 - COLUMNS, 186
 - default Wrapper, 186
 - ErrorsTableModel, 184
 - get ColumnClass, 185
 - get ColumnCount, 185
 - get ColumnName, 185
 - get RowCount, 185
 - get Step, 185
 - get ValueAt, 185
 - HEADER_COLUMN, 186
 - headerWrapper, 186
 - numberFormat, 186
 - set Step, 185
 - SIGNAL_DRIFT_COLUMN, 187
 - SIGNAL HOLDER_COLUMN, 187
 - SIGNAL_NOISE_COLUMN, 187
 - step, 187
 - wrap, 185
- ikayaki::gui::MeasurementGraphsPanel, 191
- ikayaki::gui::MeasurementGraphsPanel
 - main, 192
 - MeasurementGraphsPanel, 191
 - measurementUpdated, 192
 - plots, 193
 - projectUpdated, 192
 - setProject, 192
 - updatePlots, 192
- ikayaki::gui::MeasurementSequencePanel, 208
- ikayaki::gui::MeasurementSequencePanel
 - \$\$setupUI, 209
 - [instance initializer], 209
 - addSequence, 210
 - addSequenceButton, 212
 - controlsPane, 212
 - detailsPanel, 212
 - getDetailsPanel, 210
 - getLastPositiveStepValue, 210
 - getLastStepValue, 210
 - getSequenceTable, 210
 - loadSequenceBox, 212
 - loadSequenceLabel, 212
 - MeasurementSequencePanel, 209
 - measurementUpdated, 210
 - projectUpdated, 210
 - resetAddSequence, 211
 - resetLoadSequenceBox, 211
 - scrollToRow, 211
 - sequenceStartField, 212
 - sequenceStartFieldFlasher, 212
 - sequenceStartLabel, 212
 - sequenceStepField, 213
 - sequenceStepFieldFlasher, 213
 - sequenceStepLabel, 213
 - sequenceStopField, 213
 - sequenceStopFieldFlasher, 213
 - sequenceStopLabel, 213
 - sequenceTable, 213
 - sequenceTableModel, 213
 - setEnabled, 211
 - setProject, 211
 - stepValueTypeLabel, 214
 - updateColumns, 211
- ikayaki::gui::MeasurementSequencePanel::HeaderPopupMenu, 215
- ikayaki::gui::MeasurementSequence-Panel::HeaderPopupMenu
 - HeaderPopupMenu, 215
- ikayaki::gui::MeasurementSequencePanel::MyFormatterFactory, 216
- ikayaki::gui::MeasurementSequence-Panel::MyFormatterFactory
 - getFormatter, 216
- ikayaki::gui::MeasurementSequencePanel::SequencePopupMenu, 217
- ikayaki::gui::MeasurementSequence-Panel::SequencePopupMenu
 - getDeleteSelectedAction, 218
 - getFirstIndex, 218
 - getInsertAfterAction, 218
 - getInsertBeforeAction, 218
 - getLastIndex, 218
 - getSaveAllAsAction, 218
 - getSaveSelectedAsAction, 218
 - SequencePopupMenu, 217
 - showSequenceNameDialog, 218
 - steps, 219
- ikayaki::gui::MeasurementSequenceTableModel, 220

- ikayaki::gui::MeasurementSequenceTable-
Model
 - getColumnClass, 221
 - getColumnCount, 221
 - getColumnName, 221
 - getColumnToolTip, 222
 - getPossibleColumns, 222
 - getProject, 222
 - getRowCount, 222
 - getValueAt, 223
 - hideColumn, 223
 - isCellEditable, 223
 - isColumnVisible, 224
 - MeasurementSequenceTableModel, 221
 - measurementUpdated, 224
 - possibleColumns, 226
 - project, 227
 - projectUpdated, 224
 - saveColumn, 224
 - setColumnVisible, 225
 - setProject, 225
 - setValueAt, 226
 - showColumn, 226
 - VISIBLE_COLUMNS_PROPERTY, 227
 - visibleColumns, 227
- ikayaki::gui::NullableDecimalFormat, 247
- ikayaki::gui::NullableDecimalFormat
parseObject, 247
- ikayaki::gui::Plot, 248
 - add, 248
 - getNumMeasurements, 248
 - reset, 248
- ikayaki::gui::PositiveDecimalFormat, 249
- ikayaki::gui::PositiveDecimalFormat
format, 249
parseObject, 249
- ikayaki::gui::PrintPanel, 250
- ikayaki::gui::PrintPanel
 - \$\$setupUI, 251
 - [instance initializer], 252
 - cancel, 252
 - closeDialog, 252
 - contentPane, 252
 - controlPanel, 253
 - creator, 253
 - density, 253
 - dip, 253
 - getPrintedDocument, 252
 - header, 253
 - latitude, 253
 - longitude, 253
 - mass, 253
 - operator, 253
 - plot1, 254
 - plot1Panel, 254
 - plot2, 254
 - plot2Panel, 254
 - plot3, 254
 - plot3Panel, 254
 - plot4, 254
 - plot4Panel, 254
 - plots, 254
 - print, 255
 - printedPanel, 255
 - PrintPanel, 251
 - project, 255
 - qValue, 255
 - scrollPane, 255
 - sequenceTable, 255
 - sequenceTableModel, 255
 - setOpaque, 252
 - strike, 255
 - susceptibility, 255
 - updateColumns, 252
 - volume, 256
- ikayaki::gui::PrintPanel::PrintSequenceTableModel, 257
- ikayaki::gui::PrintPanel::PrintSequence-
TableModel
 - getColumnClass, 257
 - getColumnCount, 257
 - getRowCount, 257
 - getValueAt, 258
 - model, 258
 - PrintSequenceTableModel, 257
 - wrapper, 258
- ikayaki::gui::ProgramSettingsPanel, 259
- ikayaki::gui::ProgramSettingsPanel
 - \$\$setupUI, 260
 - [instance initializer], 260
 - closeButton, 260
 - contentPane, 260
 - creator, 260
 - defaultColumnsPane, 260
 - holderCalibrationCombo, 260
 - measurementRotationsField, 260
 - ProgramSettingsPanel, 259
 - sequencesDeleteButton, 260
 - sequencesTable, 261
- ikayaki::gui::ProgramSettingsPanel::EditSequencesTableModel, 262
- ikayaki::gui::ProgramSettingsPanel::Edit-
SequencesTableModel
 - deleteSequence, 262
 - EditSequencesTableModel, 262
 - getColumnCount, 262
 - getRowCount, 262

- getValueAt, 262
- isCellEditable, 263
- sequences, 263
- setValueAt, 263
- updateSequences, 263
- ikayaki::gui::ProjectComponent, 307
- ikayaki::gui::ProjectComponent
 - getParentFrame, 307
 - getProject, 308
 - measurementUpdated, 308
 - project, 309
 - ProjectComponent, 307
 - projectUpdated, 308
 - setProject, 308
- ikayaki::gui::ProjectExplorerPanel, 312
- ikayaki::gui::ProjectExplorerPanel
 - autocompleteExecutor, 315
 - browseButton, 315
 - browsePanel, 316
 - browserField, 316
 - browserFieldEditor, 316
 - browserFieldFlasher, 316
 - browserFieldPopupIsAutocomplete, 316
 - browserFieldRenderer, 316
 - browserFieldUpdatingPopup, 316
 - directory, 317
 - doAutoComplete, 314
 - explorerTable, 317
 - explorerTableScrollPane, 317
 - getAutocompleteFiles, 314
 - getDirectoryHistory, 314
 - newProjectPanel, 317
 - parent, 317
 - ProjectExplorerPanel, 313
 - setBrowserFieldCursorToEnd, 314
 - setBrowserFieldPopup, 314
 - setDirectory, 315
 - setProject, 315
- ikayaki::gui::ProjectExplorerPanel::NewProjectPanel, 318
- ikayaki::gui::ProjectExplorerPanel::NewProjectPanel
 - createNewProjectButton, 318
 - flowPanel, 318
 - newProjectName, 318
 - newProjectNameFlasher, 319
 - NewProjectPanel, 318
 - newProjectType, 319
- ikayaki::gui::ProjectExplorerTable, 320
- ikayaki::gui::ProjectExplorerTable
 - calibration_columns, 323
 - COLUMN_FILENAME, 323
 - COLUMN_LASTMEASURE, 323
 - COLUMN_LASTMOD, 323
 - column_name, 323
 - COLUMN_TYPE, 324
 - COLUMN_UNDEFINED, 324
 - COLUMN_UNMEASURED, 324
 - columns, 324
 - default_columns, 324
 - directory, 324
 - explorerTableComparator, 324
 - explorerTableModel, 324
 - explorerTableSortColumn, 325
 - files, 325
 - fitColumnWidths, 322
 - getProjectFiles, 322
 - isCalibration, 325
 - parent, 325
 - ProjectExplorerTable, 321
 - projectTypeCacher, 325
 - projectUpdated, 322
 - scrollToRow, 322
 - selectedFile, 325
 - setColumns, 323
 - setDirectory, 323
- ikayaki::gui::ProjectExplorerTable::ProjectExplorerPopupMenu, 327
- ikayaki::gui::ProjectExplorerTable::ProjectExplorerPopupMenu
 - directory, 327
 - files, 327
 - ProjectExplorerPopupMenu, 327
- ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableComparator, 329
- ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableComparator
 - compare, 329
 - compareTimestamps, 329
- ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableModel, 330
- ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableModel
 - calibrationNoticeFont, 331
 - defaultWrapper, 331
 - doneRecentlyProjectFile, 332
 - doneRecentlyWrapper, 332
 - getColumnClass, 330
 - getColumnCount, 330
 - getColumnName, 331
 - getRowCount, 331
 - getValueAt, 331
 - measuringProjectFile, 332
 - measuringWrapper, 332
 - ProjectExplorerTableModel, 330
 - projectUpdated, 331
- ikayaki::gui::ProjectInformationPanel, 333
- ikayaki::gui::ProjectInformationPanel

- \$\$setupUI, 334
- [instance initializer], 335
- areaField, 337
- commentArea, 337
- contentPane, 337
- dateField, 337
- dipField, 337
- initSaveParameters, 335
- initSaveProperties, 335
- latitudeField, 338
- longitudeField, 338
- massField, 338
- measurementType, 338
- measurementTypeAuto, 338
- measurementTypeManual, 338
- normalization, 339
- normalizationMass, 339
- normalizationVolume, 339
- operatorField, 339
- parametersModified, 339
- ProjectInformationPanel, 334
- propertiesModified, 339
- rockTypeField, 339
- sampleType, 340
- sampleTypeCore, 340
- sampleTypeHand, 340
- saveParameters, 335
- saveProperties, 336
- setEnabled, 336
- setProject, 336
- siteField, 340
- strikeField, 340
- susceptibilityField, 340
- volumeField, 341
- ikayaki::gui::ProjectInformationPanel::MyFormatterFactory, 342
- ikayaki::gui::ProjectInformationPanel::MyFormatterFactory, 342
- ikayaki::gui::SettingsDialog, 381
- ikayaki::gui::SettingsDialog
 - DEVICE_SETTINGS, 382
 - dialogInit, 382
 - dialogType, 382
 - PRINT_PREVIEW, 383
 - printDirectly, 383
 - PROGRAM_SETTINGS, 383
 - project, 383
 - SettingsDialog, 381
 - showDeviceSettingsDialog, 382
 - showPrintPreview, 382
 - showProgramSettingsDialog, 382
- ikayaki::gui::StereoPlot, 411
- ikayaki::gui::StereoPlot
 - add, 411
 - getNumMeasurements, 411
 - incSign, 412
 - points, 413
 - project, 413
 - render, 412
 - reset, 412
 - toXY, 412
- ikayaki::gui::StyledCellEditor, 414
- ikayaki::gui::StyledCellEditor
 - getTableCellEditorComponent, 415
 - getTreeCellEditorComponent, 415
 - StyledCellEditor, 414
- ikayaki::gui::StyledTableCellRenderer, 416
- ikayaki::gui::StyledTableCellRenderer
 - getTableCellRendererComponent, 416
- ikayaki::gui::StyledWrapper, 417
- ikayaki::gui::StyledWrapper
 - background, 417
 - border, 417
 - clone, 417
 - focusBackground, 418
 - focusBorder, 418
 - font, 418
 - foreground, 418
 - horizontalAlignment, 418
 - opaque, 419
 - selectedBackground, 419
 - selectedBorder, 419
 - selectedFocusBackground, 419
 - selectedFocusBorder, 419
 - value, 419
 - verticalAlignment, 420
- ikayaki::Ikayaki, 101
- Ikayaki, 102
- [static initializer], 102
- APP_BUILD, 103
- APP_HOME_PAGE, 103
- APP_NAME, 103
- APP_VERSION, 103
- AUTHORS, 104
- CALIBRATION_PROJECT_DIR, 104
- DEBUG_LOG_DIR, 104
- DEBUG_LOG_FILE, 104
- FILE_DESCRIPTION, 104
- FILE_TYPE, 104
- HELP_PAGES, 104
- Ikayaki, 102
- logDirCleanup, 102
- logFileCleanup, 102
- main, 102
- PROGRAM_JAR_NAME, 104
- PROPERTIES_FILE, 105
- SEQUENCES_FILE, 105
- setTitle, 103

- STARTUP_DIRECTORY, 105
- ikayaki::MeasurementEvent, 188
 - DEMAGNETIZE_END, 189
 - DEMAGNETIZE_START, 189
 - HANDLER_MOVE, 188
 - HANDLER_ROTATE, 188
 - HANDLER_STOP, 188
 - STEP_ABORTED, 188
 - STEP_END, 188
 - STEP_START, 188
 - VALUE_MEASURED, 189
- ikayaki::MeasurementEvent
 - getProject, 189
 - getStep, 189
 - getType, 189
 - MeasurementEvent, 189
 - project, 190
 - step, 190
 - Type, 188
 - type, 190
- ikayaki::MeasurementListener, 194
- ikayaki::MeasurementListener
 - measurementUpdated, 194
- ikayaki::MeasurementResult, 195
 - HOLDER, 196
 - NOISE, 196
 - SAMPLE, 196
- ikayaki::MeasurementResult
 - applyFixes, 197
 - geographicVector, 200
 - getElement, 197
 - getGeographicVector, 197
 - getGeographicX, 197
 - getGeographicY, 198
 - getGeographicZ, 198
 - getRawVector, 198
 - getRawX, 198
 - getRawY, 198
 - getRawZ, 199
 - getRotation, 199
 - getSampleVector, 199
 - getSampleX, 199
 - getSampleY, 199
 - getSampleZ, 199
 - getType, 199
 - MeasurementResult, 196
 - rawVector, 200
 - rotation, 200
 - sampleVector, 201
 - setTransform, 200
 - Type, 196
 - type, 201
- ikayaki::MeasurementSequence, 202
- ikayaki::MeasurementSequence
 - addStep, 204
 - compareTo, 204
 - getElement, 204
 - getName, 205
 - getStep, 205
 - getSteps, 205
 - MeasurementSequence, 202, 203
 - name, 206
 - removeStep, 205
 - setName, 206
 - steps, 206
 - toString, 206
- ikayaki::MeasurementStep, 228
 - done, 229
 - false, 229
 - true, 229
- ikayaki::MeasurementStep
 - addResult, 230
 - getElement, 231
 - getHolder, 231
 - getMass, 231
 - getNoise, 231
 - getProject, 231
 - getResult, 232
 - getResults, 232
 - getState, 232
 - getStepValue, 232
 - getSusceptibility, 233
 - getTimestamp, 233
 - getVolume, 233
 - iterator, 233
 - mass, 235
 - MeasurementStep, 229, 230
 - project, 236
 - results, 236
 - save, 233
 - setDone, 234
 - setMass, 234
 - setMeasuring, 234
 - setStepValue, 234
 - setSusceptibility, 235
 - setVolume, 235
 - State, 229
 - state, 236
 - stepValue, 236
 - susceptibility, 236
 - timestamp, 236
 - updateTransforms, 235
 - volume, 237
- ikayaki::MeasurementValue< T >, 238
- ikayaki::MeasurementValue< T >
 - caption, 240
 - DECLINATION, 240
 - description, 240

- GEOGRAPHIC_X, 240
- GEOGRAPHIC_X_NORMALIZED, 241
- GEOGRAPHIC_Y, 241
- GEOGRAPHIC_Z, 241
- getCaption, 239
- getDescription, 239
- getUnit, 239
- getValue, 239
- INCLINATION, 242
- MAGNETIZATION, 242
- MeasurementValue, 239
- MOMENT, 242
- RELATIVE_MAGNETIZATION, 243
- SAMPLE_X, 243
- SAMPLE_Y, 244
- SAMPLE_Z, 244
- SIGNAL_TO_DRIFT, 245
- SIGNAL_TO HOLDER, 245
- SIGNAL_TO_NOISE, 245
- THETA63, 246
- unit, 246
- ikayaki::Project, 264
 - ABORTED, 269
 - addMeasurementListener, 270
 - addProjectListener, 270
 - addSequence, 270
 - addStep, 271
 - AF, 269
 - AREA_PROPERTY, 295
 - autosaveQueue, 295
 - autosaveRunnable, 295
 - BACKGROUND, 268
 - Calibration, 269
 - closed, 295
 - closeProject, 272
 - COMMENT_PROPERTY, 295
 - copySequence, 272, 273
 - CORE, 268
 - createAFProject, 273
 - createCalibrationProject, 273
 - createProject, 274
 - createThellierProject, 274
 - createThermalProject, 275
 - currentStep, 296
 - DATE_PROPERTY, 296
 - DEBUG, 296
 - DEGAUSSER_Y, 268
 - DEGAUSSER_Z, 268
 - dip, 296
 - doAbort, 275
 - doAutoStep, 275
 - doManualDemagY, 275
 - doManualDemagZ, 276
 - doManualMeasure, 276
 - doManualMove, 276
 - doManualMoveBackground, 276
 - doManualMoveDegausserY, 277
 - doManualMoveDegausserZ, 277
 - doManualMoveHome, 277
 - doManualMoveLeftLimit, 277
 - doManualMoveMeasurement, 278
 - doManualMoveRightLimit, 278
 - doManualReset, 278
 - doManualRotate, 278
 - doManualStepDone, 279
 - doPause, 279
 - doSingleStep, 279
 - exportToDAT, 279
 - exportToSRM, 280
 - exportToTDT, 280
 - file, 296
 - fireMeasurementEvent, 280
 - fireProjectEvent, 281
 - getCachedProjects, 281
 - getCompletedSteps, 281
 - getCurrentStep, 281
 - getDip, 281
 - getDocument, 282
 - getFile, 282
 - getMass, 282
 - getName, 282
 - getNormalization, 283
 - getOrientation, 283
 - getProperty, 283
 - getSampleType, 284
 - getSquid, 284
 - getState, 284
 - getStep, 284
 - getSteps, 285
 - getStrike, 285
 - getSusceptibility, 285
 - getTimestamp, 285
 - getTransform, 286
 - getType, 286
 - getValue, 286
 - getVolume, 287
 - HAND, 268
 - HOME, 268
 - IDLE, 269
 - isAbortEnabled, 287
 - isAutoStepEnabled, 287
 - isClosed, 287
 - isDegaussingEnabled, 288
 - isHolderCalibration, 288
 - isManualControlEnabled, 288
 - isModified, 288
 - isPauseEnabled, 288

- isSequenceEditEnabled, 288
- isSingleStepEnabled, 289
- LATITUDE_PROPERTY, 296
- LEFT_LIMIT, 268
- listenerList, 296
- loadProject, 289
- LONGITUDE_PROPERTY, 296
- ManualDemagAxel, 268
- ManualMovePosition, 268
- MASS, 268
- mass, 297
- MEASUREMENT, 268
- MEASUREMENT_TYPE_AUTO_VALUE, 297
- MEASUREMENT_TYPE_MANUAL_VALUE, 297
- MEASUREMENT_TYPE_PROPERTY, 297
- MEASURING, 269
- MINUS_Z, 268
- modified, 297
- name, 269
- Normalization, 268
- normalization, 297
- OPERATOR_PROPERTY, 297
- Orientation, 268
- orientation, 297
- pad, 289
- PAUSED, 269
- PLUS_Z, 268
- Project, 269
- projectCache, 298
- projectTypeCache, 298
- properties, 298
- removeMeasurementListener, 290
- removeProjectListener, 290
- removeStep, 290
- RIGHT_LIMIT, 268
- ROCK_TYPE_PROPERTY, 298
- runMeasurement, 291
- SampleType, 268
- sampleType, 298
- save, 291
- saveNow, 291
- sequence, 298
- setDip, 292
- setMass, 292
- setNormalization, 292
- setOrientation, 292
- setProperty, 293
- setSampleType, 293
- setSquid, 293
- setState, 294
- setStrike, 294
- setSusceptibility, 294
- setVolume, 294
- SITE_PROPERTY, 299
- squid, 299
- State, 268
- state, 299
- strike, 299
- susceptibility, 299
- Thellier, 269
- transform, 299
- Type, 269
- type, 300
- updateTransforms, 294
- VOLUME, 268
- volume, 300
- Y, 268
- Z, 268
- ikayaki::Project::DummyMeasurement, 301
- ikayaki::Project::DummyMeasurement run, 301
- ikayaki::Project::ManualDemag, 302
- ikayaki::Project::ManualDemag amplitude, 302
- axel, 302
- ManualDemag, 302
- run, 302
- ikayaki::Project::ManualMeasure, 303
- ikayaki::Project::ManualMeasure run, 303
- ikayaki::Project::ManualMove, 304
- ikayaki::Project::ManualMove ManualMove, 304
- pos, 304
- run, 304
- ikayaki::Project::ManualRotate, 305
- ikayaki::Project::ManualRotate angle, 305
- ManualRotate, 305
- run, 305
- ikayaki::Project::Measurement, 306
- checkAborted, 306
- run, 306
- ikayaki::ProjectEvent, 310
- DATA_CHANGED, 310
- FILE_SAVED, 310
- STATE_CHANGED, 310
- ikayaki::ProjectEvent
- getProject, 311
- getType, 311
- project, 311
- ProjectEvent, 310
- Type, 310
- type, 311
- ikayaki::ProjectListener, 343

- ikayaki::ProjectListener
 - projectUpdated, 343
- ikayaki::Settings, 361
 - [static initializer], 363
 - addSequence, 363
 - autosaveQueue, 378
 - autosaveRunnable, 378
 - defaultWrapper, 378
 - DIRECTORY_HISTORY_SIZE, 378
 - directoryHistory, 379
 - doneRecentlyWrapper, 379
 - firePropertiesModified, 363
 - fireSequencesModified, 364
 - getCalibrationProjectFiles, 364
 - getDefaultColumns, 364
 - getDefaultWrapperInstance, 364
 - getDegausserDelay, 364
 - getDegausserMaximumField, 364
 - getDegausserMinimumField, 364
 - getDegausserMinimumFieldIncrement, 365
 - getDegausserPort, 365
 - getDegausserRamp, 365
 - getDirectoryHistory, 365
 - getDoneRecentlyWrapperInstance, 365
 - getHandlerAcceleration, 365
 - getHandlerAxialAFPosition, 365
 - getHandlerBackgroundPosition, 366
 - getHandlerDeceleration, 366
 - getHandlerMeasurementPosition, 366
 - getHandlerMeasurementVelocity, 366
 - getHandlerPort, 366
 - getHandlerRightLimit, 366
 - getHandlerRotation, 367
 - getHandlerRotationAcceleration, 367
 - getHandlerRotationDeceleration, 367
 - getHandlerRotationVelocity, 367
 - getHandlerSampleLoadPosition, 367
 - getHandlerTransverseYAFPosition, 367
 - getHandlerVelocity, 368
 - getHolderCalibration, 368
 - getHolderCalibrationFile, 368
 - getLastDirectory, 368
 - getMagnetometerPort, 368
 - getMagnetometerXAxisCalibration, 368
 - getMagnetometerYAxisCalibration, 369
 - getMagnetometerZAxisCalibration, 369
 - getMeasurementRotations, 369
 - getMeasuringWrapperInstance, 369
 - getProjectHistory, 369
 - getProperty, 369, 370
 - getSequences, 370
 - getWindowHeight, 370
 - getWindowMaximized, 370
 - getWindowWidth, 371
 - getXXX, 371
 - loadDirectoryHistory, 371
 - loadProjectHistory, 371
 - measuringWrapper, 379
 - PROJECT_HISTORY_SIZE, 379
 - projectHistory, 379
 - properties, 379
 - propertiesFile, 379
 - propertiesModified, 380
 - removeSequence, 371
 - save, 372
 - saveNow, 372
 - sequences, 380
 - sequencesFile, 380
 - sequencesModified, 380
 - setDefaultColumn, 372
 - setDegausserDelay, 372
 - setDegausserMaximumField, 372
 - setDegausserPort, 373
 - setDegausserRamp, 373
 - setHandlerAcceleration, 373
 - setHandlerAxialAFPosition, 373
 - setHandlerBackgroundPosition, 373
 - setHandlerDeceleration, 373
 - setHandlerMeasurementPosition, 373
 - setHandlerMeasurementVelocity, 374
 - setHandlerPort, 374
 - setHandlerRightLimit, 374
 - setHandlerRotation, 374
 - setHandlerRotationAcceleration, 374
 - setHandlerRotationDeceleration, 374
 - setHandlerRotationVelocity, 375
 - setHandlerSampleLoadPosition, 375
 - setHandlerTransverseYAFPosition, 375
 - setHandlerVelocity, 375
 - setHolderCalibrationFile, 375
 - setMagnetometerPort, 375
 - setMagnetometerXAxisCalibration, 376
 - setMagnetometerYAxisCalibration, 376
 - setMagnetometerZAxisCalibration, 376
 - setMeasurementRotations, 376
 - setProperty, 376
 - setWindowHeight, 377
 - setWindowMaximized, 377
 - setWindowWidth, 377
 - setXXX, 377
 - updateDirectoryHistory, 378
 - updateProjectHistory, 378
- ikayaki::squid::Degausser, 59
 - blockingWrite, 60
 - Degausser, 60
 - degausserDelay, 64
 - degausserRamp, 65

- demagnetizeY, 60
- demagnetizeZ, 61
- demagnetizing, 65
- executeRampCycle, 61
- executeRampDown, 61
- executeRampUp, 61
- getAmplitude, 62
- getCoil, 62
- getDelay, 62
- getRamp, 62
- getRampStatus, 63
- isDemagnetizing, 63
- isOK, 63
- maximumField, 65
- messageBuffer, 65
- minimumField, 65
- pollTimeout, 65
- queue, 65
- serialIO, 66
- serialIOEvent, 63
- setAmplitude, 63
- setCoil, 64
- updateSettings, 64
- waitingForMessage, 66
- ikayaki::squid::Handler, 85
 - ACCELERATION, 96
 - answerQueue, 96
 - AXIAL_AF_POSITION, 96
 - BACKGROUND_POSITION, 96
 - currentMotor, 96
 - currentPosition, 96
 - currentRotation, 96
 - currentVelocity, 97
 - DECELERATION, 97
 - estimatedPositionEnd, 97
 - estimatedPositionStart, 97
 - estimatedPositionStartTime, 97
 - estimatedRotationEnd, 97
 - estimatedRotationStart, 98
 - estimatedRotationStartTime, 98
 - fireMovementStopped, 87
 - fireRotationStopped, 87
 - getEstimatedPosition, 87
 - getEstimatedRotation, 87
 - getPosition, 88
 - getRotation, 88
 - go, 88
 - Handler, 87
 - HANDLER_ROTATION, 98
 - isMoving, 88
 - isOK, 89
 - isRotating, 89
 - join, 89
 - MEASUREMENT_POSITION, 98
 - MEASUREMENT_VELOCITY, 98
 - moveSteps, 89
 - moveToBackground, 89
 - moveToDegausserY, 90
 - moveToDegausserZ, 90
 - moveToLeftLimit, 90
 - moveToMeasurement, 90
 - moveToPosition, 90
 - moveToRightLimit, 90
 - moveToSampleLoad, 91
 - performSlew, 91
 - POLL_TIMEOUT, 98
 - rotateTo, 91
 - ROTATION_ACCELERATION, 98
 - ROTATION_DECELERATION, 98
 - ROTATION_VELOCITY, 99
 - SAMPLE_LOAD_POSITION, 99
 - seekHome, 91
 - selectMovement, 91
 - selectRotation, 92
 - serialIO, 99
 - serialIOEvent, 92
 - setAcceleration, 92
 - setDeceleration, 92
 - setMotorNegative, 92
 - setMotorPositive, 93
 - setOnline, 93
 - setPosition, 93
 - setRotation, 93
 - setUp, 93
 - setVelocity, 94
 - slewToLimit, 94
 - stopExecution, 94
 - takeMessage, 94
 - TRANSVERSE_YAF_POSITION, 99
 - updateSettings, 95
 - VELOCITY, 99
 - verify, 95
 - waitForMessage, 95
 - waitingForMessage, 99
 - workQueue, 100
- ikayaki::squid::Magnetometer, 119
 - clearFlux, 120
 - configure, 120
 - getData, 121
 - getFilters, 121
 - getLoop, 121
 - getRange, 122
 - getSlew, 122
 - isMeasuring, 122
 - isOK, 122
 - latchAnalog, 122
 - latchCounter, 122
 - Magnetometer, 120

- measuring, 124
- messageBuffer, 124
- pollTimeout, 124
- pulseReset, 123
- queue, 124
- readData, 123
- reset, 123
- resetCounter, 123
- serialIO, 124
- serialIOEvent, 123
- updateSettings, 124
- waitingForMessage, 125
- ikayaki::squid::SerialIO, 344
 - REVEIVE, 345
 - SEND, 345
 - SESSION_START, 345
- ikayaki::squid::SerialIO
 - addSerialIOListener, 345
 - closeAllPorts, 346
 - closePort, 346
 - dateFormat, 348
 - DEBUG, 348
 - debug, 346
 - fireSerialIOEvent, 346
 - getPortName, 346
 - is, 348
 - listenerList, 348
 - LogEvent, 345
 - logWriter, 348
 - logWriterTriedCreate, 349
 - openPort, 347
 - openPorts, 349
 - os, 349
 - padn, 347
 - portName, 349
 - removeSerialIOListener, 347
 - serialEvent, 347
 - SerialIO, 345
 - sPort, 349
 - writeMessage, 347
- ikayaki::squid::SerialIOEvent, 350
- ikayaki::squid::SerialIOEvent
 - getCleanMessage, 350
 - getLogMessage, 350
 - getMessage, 350
 - message, 351
 - SerialIOEvent, 350
- ikayaki::squid::SerialIOException, 352
- ikayaki::squid::SerialIOException
 - SerialIOException, 352
- ikayaki::squid::SerialIOListener, 353
- ikayaki::squid::SerialIOListener
 - serialIOEvent, 353
- ikayaki::squid::SerialParameters, 354
 - ikayaki::squid::SerialParameters
 - baudRate, 356
 - databits, 356
 - flowControlIn, 356
 - flowControlOut, 356
 - getBaudRate, 355
 - getDatabits, 355
 - getFlowControlIn, 355
 - getFlowControlOut, 355
 - getParity, 355
 - getPortName, 355
 - getStopbits, 356
 - parity, 356
 - portName, 356
 - SerialParameters, 354, 355
 - stopbits, 357
- ikayaki::squid::Squid, 384
 - degausser, 387
 - getDegausser, 385
 - getHandler, 385
 - getMagnetometer, 385
 - getOwner, 385
 - handler, 387
 - instance, 386, 387
 - isOK, 386
 - magnetometer, 387
 - owner, 387
 - setOwner, 386
 - Squid, 385
 - updateSettings, 386
- ikayaki::squid::SquidEmulator, 388
- ikayaki::squid::SquidEmulator
 - acceleration, 390
 - commandedDistance, 390
 - commandedRotation, 390
 - currentPosition, 390
 - currentRotation, 390
 - deceleration, 390
 - degausser, 390
 - degausserAmplitude, 391
 - degausserCoil, 391
 - degausserDelay, 391
 - degausserPort, 391
 - degausserRamp, 391
 - degausserStatus, 391
 - handler, 391
 - handlerPort, 391
 - handlerStatus, 392
 - homePosition, 392
 - jbInit, 389
 - logFile, 392
 - logWriter, 392
 - magnetometer, 392
 - magnetometerPort, 392

- main, 389
- online, 392
- running, 393
- SquidEmulator, 389
- usingOldLog, 393
- velocity, 393
- writeMessage, 389
- ikayaki::squid::SquidEmulator::DegausserEmu, 394
- ikayaki::squid::SquidEmulator::Degausser-Emu
 - commandStack, 395
 - DegausserEmu, 394
 - run, 394
 - serialIOEvent, 394
- ikayaki::squid::SquidEmulator::HandlerEmu, 396
- ikayaki::squid::SquidEmulator::HandlerEmu
 - commandStack, 397
 - HandlerEmu, 396
 - lastMessagePart, 397
 - run, 396
 - serialIOEvent, 396
- ikayaki::squid::SquidEmulator::MagnetometerEmu, 398
- ikayaki::squid::Squid-Emulator::MagnetometerEmu
 - commandStack, 399
 - MagnetometerEmu, 398
 - run, 398
 - serialIOEvent, 398
- ikayaki::squid::SquidFront, 400
- ikayaki::squid::SquidFront
 - \$\$setUpUI, 402
 - [instance initializer], 402
 - contentPane, 404
 - ddemagnetizeY, 404
 - ddemagnetizeZ, 404
 - degausserLog, 404
 - dexecuteRampCycle, 404
 - dexecuteRampDown, 404
 - dexecuteRampUp, 404
 - dgetAmplitude, 404
 - dgetCoil, 404
 - dgetDelay, 404
 - dgetRamp, 404
 - dgetRampStatus, 404
 - disOK, 405
 - dRawCommand, 405
 - dRawSend, 405
 - dsetAmplitude, 405
 - dsetCoil, 405
 - dupdateSettings, 405
 - handlerLog, 405
 - hgetPosition, 405
 - hgetRotation, 405
 - hgetStatus, 405
 - hgo, 405
 - hisOK, 405
 - hjoin, 406
 - hmoveToBackground, 406
 - hmoveToDegausserY, 406
 - hmoveToDegausserZ, 406
 - hmoveToHome, 406
 - hmoveToMeasurement, 406
 - hmoveToPos, 406
 - hperformSlew, 406
 - hRawCommand, 406
 - hRawSend, 406
 - hrotateTo, 406
 - hsetAcceleration, 407
 - hsetBaseSpeed, 407
 - hsetCrystalFrequence, 407
 - hsetDeceleration, 407
 - hsetHoldTime, 407
 - hsetMotorNegative, 407
 - hsetMotorPositive, 407
 - hsetOnline, 407
 - hsetPosition, 407
 - hsetPositionRegister, 407
 - hsetSteps, 407
 - hsetVelocity, 407
 - hstop, 408
 - hstopExecution, 408
 - htakeMessage, 408
 - hupdateSettings, 408
 - hverify, 408
 - initDegausserActions, 402
 - initHandlerActions, 402
 - initLogging, 403
 - initMagnetometerActions, 403
 - initRawActions, 403
 - magnetometerLog, 408
 - main, 403
 - mclearFlux, 408
 - mconfigure, 408
 - mgetData, 408
 - mgetFilters, 408
 - mgetLoop, 408
 - mgetRange, 408
 - mgetSlew, 409
 - misOK, 409
 - mjoin, 409
 - mlatchAnalog, 409
 - mlatchCounter, 409
 - mopenLoop, 409
 - mRawCommand, 409
 - mRawSend, 409

- mreadData, 409
- mreset, 409
- mresetCounter, 409
- mupdateSettings, 409
- param1, 410
- param2, 410
- param3, 410
- setSquid, 403
- squid, 410
- SquidFront, 402
- ikayaki::util::ComponentPrinter, 56
- ikayaki::util::ComponentPrinter
 - ComponentPrinter, 56
 - componentToBePrinted, 58
 - disableDoubleBuffering, 56
 - enableDoubleBuffering, 56
 - plotHeight, 58
 - print, 57
 - printComponent, 57
- ikayaki::util::DocumentUtilities, 77
- ikayaki::util::DocumentUtilities
 - loadFromXML, 77
 - storeToXML, 77, 78
- ikayaki::util::LastExecutor, 108
- ikayaki::util::LastExecutor
 - clear, 109
 - delayMillis, 111
 - execOnlyLast, 111
 - execute, 109
 - getDelayMillis, 110
 - isExecOnlyLast, 110
 - join, 110
 - LastExecutor, 109
 - main, 110
 - queue, 111
 - setDelayMillis, 111
 - setExecOnlyLast, 111
 - workerThread, 112
- ikayaki::util::LastExecutor::LastExecutorThread, 113
- ikayaki::util::LastExecutor::LastExecutorThread
 - run, 113
- ikayaki::util::LastExecutor::RunDelayed, 114
- ikayaki::util::LastExecutor::RunDelayed
 - compareTo, 114
 - expires, 115
 - getDelay, 115
 - getRunnable, 115
 - RunDelayed, 114
 - runnable, 115
- ikayaki::util::LoggerPrintStream, 116
- ikayaki::util::LoggerPrintStream
 - dateFormat, 118
 - lineStart, 118
 - LoggerPrintStream, 116, 117
 - print, 117
 - println, 117, 118
 - screen, 118
 - timestamp, 118
- ikayaki::util::SerialProxy, 358
- ikayaki::util::SerialProxy
 - dateFormat, 358
 - main, 358
- ikayaki::util::SerialProxy::Forwarder, 359
- ikayaki::util::SerialProxy::Forwarder
 - Forwarder, 359
 - in, 360
 - log, 360
 - out, 360
 - serialIOEvent, 359
- in
 - ikayaki::util::SerialProxy::Forwarder, 360
- INCLINATION
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 242
 - SequenceColumn.java, 449
- incSign
 - ikayaki::gui::StereoPlot, 412
- initDegausserActions
 - ikayaki::squid::SquidFront, 402
- initHandlerActions
 - ikayaki::squid::SquidFront, 402
- initialize
 - ikayaki::gui::MainMenuBar, 151
- initLogging
 - ikayaki::squid::SquidFront, 403
- initMagnetometerActions
 - ikayaki::squid::SquidFront, 403
- initRawActions
 - ikayaki::squid::SquidFront, 403
- initSaveParameters
 - ikayaki::gui::ProjectInformationPanel, 335
- initSaveProperties
 - ikayaki::gui::ProjectInformationPanel, 335
- instance
 - ikayaki::squid::Squid, 386, 387
- is
 - ikayaki::squid::SerialIO, 348
- isAbortEnabled
 - ikayaki::Project, 287
- isAutoStepEnabled
 - ikayaki::Project, 287
- isCalibration
 - ikayaki::gui::ProjectExplorerTable, 325

- isCellEditable
 - ikayaki::gui::MeasurementSequenceTableModel, 223
 - ikayaki::gui::ProgramSettingsPanel::EditSequencesTableModel, 263
- isClosed
 - ikayaki::Project, 287
- isColumnVisible
 - ikayaki::gui::MeasurementSequenceTableModel, 224
- isDegaussingEnabled
 - ikayaki::Project, 288
- isDemagnetizing
 - ikayaki::squid::Degausser, 63
- isExecOnlyLast
 - ikayaki::util::LastExecutor, 110
- isHolderCalibration
 - ikayaki::Project, 288
- isManualControlEnabled
 - ikayaki::Project, 288
- isMeasuring
 - ikayaki::squid::Magnetometer, 122
- isModified
 - ikayaki::Project, 288
- isMoving
 - ikayaki::squid::Handler, 88
- isOK
 - ikayaki::squid::Degausser, 63
 - ikayaki::squid::Handler, 89
 - ikayaki::squid::Magnetometer, 122
 - ikayaki::squid::Squid, 386
- isPauseEnabled
 - ikayaki::Project, 288
- isRotating
 - ikayaki::squid::Handler, 89
- isSequenceEditEnabled
 - ikayaki::Project, 288
- isSingleStepEnabled
 - ikayaki::Project, 289
- iterator
 - ikayaki::MeasurementStep, 233
- java.awt, 41
- java.awt.event, 42
- java.io, 43
- java.util, 44
- javax.comm, 45
- javax.swing, 46
- javax.swing.event, 47
- jbInit
 - ikayaki::squid::SquidEmulator, 389
- join
 - ikayaki::squid::Handler, 89
- ikayaki::util::LastExecutor, 110
- killAnimatorThread
 - ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 136
- LastExecutor
 - ikayaki::util::LastExecutor, 109
- lastMessagePart
 - ikayaki::squid::SquidEmulator::HandlerEmu, 397
- latchAnalog
 - ikayaki::squid::Magnetometer, 122
- latchCounter
 - ikayaki::squid::Magnetometer, 122
- latestMeasuringProject
 - ikayaki::gui::MainViewPanel, 165
- latitude
 - ikayaki::gui::PrintPanel, 253
- LATITUDE_PROPERTY
 - ikayaki::Project, 296
- latitudeField
 - ikayaki::gui::ProjectInformationPanel, 338
- LEFT_LIMIT
 - ikayaki::Project, 268
- lineStart
 - ikayaki::util::LoggerPrintStream, 118
- listenerList
 - ikayaki::Project, 296
 - ikayaki::squid::SerialIO, 348
- loadDirectoryHistory
 - ikayaki::Settings, 371
- loadFromXML
 - ikayaki::util::DocumentUtilities, 77
- loadProject
 - ikayaki::gui::MainViewPanel, 163
 - ikayaki::Project, 289
- loadProjectHistory
 - ikayaki::Settings, 371
- loadSequenceBox
 - ikayaki::gui::MeasurementSequencePanel, 212
- loadSequenceLabel
 - ikayaki::gui::MeasurementSequencePanel, 212
- log
 - ikayaki::util::SerialProxy::Forwarder, 360
- logDirCleanup
 - ikayaki::Ikayaki, 102
- LogEvent
 - ikayaki::squid::SerialIO, 345

- logFile
 - ikayaki::squid::SquidEmulator, 392
- logFileCleanup
 - ikayaki::Ikayaki, 102
- LoggerPrintStream
 - ikayaki::util::LoggerPrintStream, 116, 117
- logWriter
 - ikayaki::squid::SerialIO, 348
 - ikayaki::squid::SquidEmulator, 392
- logWriterTriedCreate
 - ikayaki::squid::SerialIO, 349
- longitude
 - ikayaki::gui::PrintPanel, 253
- LONGITUDE_PROPERTY
 - ikayaki::Project, 296
- longitudeField
 - ikayaki::gui::ProjectInformationPanel, 338
- MAGNETIZATION
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 242
 - SequenceColumn.java, 449
- Magnetometer
 - ikayaki::squid::Magnetometer, 120
- magnetometer
 - ikayaki::squid::Squid, 387
 - ikayaki::squid::SquidEmulator, 392
- MagnetometerEmu
 - ikayaki::squid::SquidEmulator::MagnetometerEmu, 398
- magnetometerLog
 - ikayaki::squid::SquidFront, 408
- magnetometerPort
 - ikayaki::gui::DeviceSettingsPanel, 72
 - ikayaki::squid::SquidEmulator, 392
- MagnetometerStatusAnimator
 - ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 135
- MagnetometerStatusPanel
 - ikayaki::gui::MagnetometerStatusPanel, 127
- magnetometerStatusPanel
 - ikayaki::gui::MeasurementControlsPanel, 174
- main
 - ikayaki::gui::MainMenuBar, 152
 - ikayaki::gui::MeasurementGraphsPanel, 192
 - ikayaki::Ikayaki, 102
 - ikayaki::squid::SquidEmulator, 389
 - ikayaki::squid::SquidFront, 403
 - ikayaki::util::LastExecutor, 110
 - ikayaki::util::SerialProxy, 358
- MainMenuBar
 - ikayaki::gui::MainMenuBar, 151
- MainStatusBar
 - ikayaki::gui::MainStatusBar, 155
- MainViewPanel
 - ikayaki::gui::MainViewPanel, 158
- ManualControlsPanel
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 141
- manualControlsPanel
 - ikayaki::gui::MagnetometerStatusPanel, 131
 - ikayaki::gui::MeasurementControlsPanel, 174
- ManualDemag
 - ikayaki::Project::ManualDemag, 302
- ManualDemagAxel
 - ikayaki::Project, 268
- ManualMove
 - ikayaki::Project::ManualMove, 304
- ManualMovePosition
 - ikayaki::Project, 268
- ManualRotate
 - ikayaki::Project::ManualRotate, 305
- MASS
 - ikayaki::gui, 27
 - ikayaki::Project, 268
 - SequenceColumn.java, 449
- mass
 - ikayaki::gui::PrintPanel, 253
 - ikayaki::MeasurementStep, 235
 - ikayaki::Project, 297
- massField
 - ikayaki::gui::ProjectInformationPanel, 338
- maximumField
 - ikayaki::gui::DeviceSettingsPanel, 72
 - ikayaki::squid::Degausser, 65
- maxposition
 - ikayaki::gui::MagnetometerStatusPanel, 131
- maxrotation
 - ikayaki::gui::MagnetometerStatusPanel, 131
- mclearFlux
 - ikayaki::squid::SquidFront, 408
- mconfigure
 - ikayaki::squid::SquidFront, 408
- measureAllButton
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 145

- measureAllButtonBaseText
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 145
- measureAllButtonFlasher
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 145
- measureButton
 - ikayaki::gui::MeasurementControlsPanel, 174
- measureButtonFlasher
 - ikayaki::gui::MeasurementControlsPanel, 174
- measureLabel
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 145
- MEASUREMENT
 - ikayaki::Project, 268
- MEASUREMENT_POSITION
 - ikayaki::squid::Handler, 98
- MEASUREMENT_TYPE_AUTO_VALUE
 - ikayaki::Project, 297
- MEASUREMENT_TYPE_MANUAL_VALUE
 - ikayaki::Project, 297
- MEASUREMENT_TYPE_PROPERTY
 - ikayaki::Project, 297
- MEASUREMENT_VELOCITY
 - ikayaki::squid::Handler, 98
- MeasurementControlsPanel
 - ikayaki::gui::MeasurementControlsPanel, 171
- measurementControlsPanel
 - ikayaki::gui::MainViewPanel, 165
- MeasurementDetailsPanel
 - ikayaki::gui::MeasurementDetailsPanel, 177
- measurementDetailsPanel
 - ikayaki::gui::MainViewPanel, 165
- MeasurementEvent
 - ikayaki::MeasurementEvent, 189
- MeasurementGraphsPanel
 - ikayaki::gui::MeasurementGraphsPanel, 191
- measurementGraphsPanel
 - ikayaki::gui::MainViewPanel, 165
- measurementMenu
 - ikayaki::gui::MainMenuBar, 153
- measurementPosition
 - ikayaki::gui::DeviceSettingsPanel, 72
- measurementProgress
 - ikayaki::gui::MainStatusBar, 156
- MeasurementResult
 - ikayaki::MeasurementResult, 196
- measurementRotationsField
 - ikayaki::gui::ProgramSettingsPanel, 260
- MeasurementSequence
 - ikayaki::MeasurementSequence, 202, 203
- MeasurementSequencePanel
 - ikayaki::gui::MeasurementSequencePanel, 209
- measurementSequencePanel
 - ikayaki::gui::MainViewPanel, 165
- MeasurementSequenceTableModel
 - ikayaki::gui::MeasurementSequenceTableModel, 221
- measurementStatus
 - ikayaki::gui::MainStatusBar, 156
- MeasurementStep
 - ikayaki::MeasurementStep, 229, 230
- measurementType
 - ikayaki::gui::ProjectInformationPanel, 338
- measurementTypeAuto
 - ikayaki::gui::ProjectInformationPanel, 338
- measurementTypeManual
 - ikayaki::gui::ProjectInformationPanel, 338
- measurementUpdated
 - ikayaki::gui::MagnetometerStatusPanel, 128
 - ikayaki::gui::MeasurementControlsPanel, 172
 - ikayaki::gui::MeasurementDetailsPanel, 178
 - ikayaki::gui::MeasurementGraphsPanel, 192
 - ikayaki::gui::MeasurementSequencePanel, 210
 - ikayaki::gui::MeasurementSequenceTableModel, 224
 - ikayaki::gui::ProjectComponent, 308
 - ikayaki::MeasurementListener, 194
- MeasurementValue
 - ikayaki::MeasurementValue< T >, 239
- measurementVelocity
 - ikayaki::gui::DeviceSettingsPanel, 72
- MEASURING
 - ikayaki::Project, 269
- measuring
 - ikayaki::gui::MagnetometerStatusPanel, 131
 - ikayaki::squid::Magnetometer, 124
- MEASURING_COLOR
 - ikayaki::gui::MagnetometerStatusPanel, 131
- measuringProjectFile

- ikayaki::gui::ProjectExplorer-Table::ProjectExplorerTableModel, 332
- measuringWrapper
 - ikayaki::gui::ProjectExplorer-Table::ProjectExplorerTableModel, 332
 - ikayaki::Settings, 379
- menuBar
 - ikayaki::gui::MainViewPanel, 165
- message
 - ikayaki::squid::SerialIOEvent, 351
- messageBuffer
 - ikayaki::squid::Degausser, 65
 - ikayaki::squid::Magnetometer, 124
- mgetData
 - ikayaki::squid::SquidFront, 408
- mgetFilters
 - ikayaki::squid::SquidFront, 408
- mgetLoop
 - ikayaki::squid::SquidFront, 408
- mgetRange
 - ikayaki::squid::SquidFront, 408
- mgetSlew
 - ikayaki::squid::SquidFront, 409
- minimumField
 - ikayaki::squid::Degausser, 65
- MINUS_Z
 - ikayaki::Project, 268
- misOK
 - ikayaki::squid::SquidFront, 409
- mjoin
 - ikayaki::squid::SquidFront, 409
- mlatchAnalog
 - ikayaki::squid::SquidFront, 409
- mlatchCounter
 - ikayaki::squid::SquidFront, 409
- model
 - ikayaki::gui::PrintPanel::PrintSequenceTableModel, 258
- modified
 - ikayaki::Project, 297
- MOMENT
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 242
 - SequenceColumn.java, 449
- mopenLoop
 - ikayaki::squid::SquidFront, 409
- moveBG
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 145
- moveButtonGroup
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 146
- moveButtons
 - ikayaki::gui::MagnetometerStatusPanel, 131
- moveDemagY
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 146
- moveDemagZ
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 146
- moveHome
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 146
- moveLabel
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 147
- moveLeft
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 147
- moveMeasure
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 147
- moveRight
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 147
- moveSteps
 - ikayaki::squid::Handler, 89
- moveToBackground
 - ikayaki::squid::Handler, 89
- moveToDegausserY
 - ikayaki::squid::Handler, 90
- moveToDegausserZ
 - ikayaki::squid::Handler, 90
- moveToLeftLimit
 - ikayaki::squid::Handler, 90
- moveToMeasurement
 - ikayaki::squid::Handler, 90
- moveToPosition
 - ikayaki::squid::Handler, 90
- moveToRightLimit
 - ikayaki::squid::Handler, 90
- moveToSampleLoad
 - ikayaki::squid::Handler, 91
- moving
 - ikayaki::gui::MagnetometerStatusPanel, 132
- MOVING_COLOR
 - ikayaki::gui::MagnetometerStatusPanel, 132
- mRawCommand
 - ikayaki::squid::SquidFront, 409
- mRawSend
 - ikayaki::squid::SquidFront, 409
- mreadData
 - ikayaki::squid::SquidFront, 409

- mreset
 ikayaki::squid::SquidFront, 409
- mresetCounter
 ikayaki::squid::SquidFront, 409
- mmps
 ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 137
- mupdateSettings
 ikayaki::squid::SquidFront, 409
- My Documents/ Directory Reference, 18
- My Documents/squid/ Directory Reference, 20
- My Documents/squid/src/ Directory Reference, 21
- My Documents/squid/src/ikayaki/ Directory Reference, 17
- My Documents/squid/src/ikayaki/gui/ Directory Reference, 15
- My Documents/squid/src/ikayaki/gui/AbstractPlot.java, 421
- My Documents/squid/src/ikayaki/gui/CalibrationPanel.java, 422
- My Documents/squid/src/ikayaki/gui/ComponentFlasher.java, 423
- My Documents/squid/src/ikayaki/gui/DeviceSettingsPanel.java, 424
- My Documents/squid/src/ikayaki/gui/FittedComboBoxRenderer.java, 425
- My Documents/squid/src/ikayaki/gui/GenericFileFilter.java, 426
- My Documents/squid/src/ikayaki/gui/IntensityPlot.java, 427
- My Documents/squid/src/ikayaki/gui/MagnetometerStatusPanel.java, 428
- My Documents/squid/src/ikayaki/gui/MainMenuBar.java, 429
- My Documents/squid/src/ikayaki/gui/MainStatusBar.java, 430
- My Documents/squid/src/ikayaki/gui/MainViewPanel.java, 431
- My Documents/squid/src/ikayaki/gui/MeasurementControlPanel.java, 432
- My Documents/squid/src/ikayaki/gui/MeasurementDetailsPanel.java, 433
- My Documents/squid/src/ikayaki/gui/MeasurementGraphPanel.java, 434
- My Documents/squid/src/ikayaki/gui/MeasurementSequencePanel.java, 435
- My Documents/squid/src/ikayaki/gui/MeasurementSequenceTableModel.java, 436
- My Documents/squid/src/ikayaki/gui/NullableDecimalFormat.java, 437
- My Documents/squid/src/ikayaki/gui/Plot.java, 438
- My Documents/squid/src/ikayaki/gui/PositiveDecimalFormat.java, 439
- My Documents/squid/src/ikayaki/gui/PrintPanel.java, 440
- My Documents/squid/src/ikayaki/gui/ProgramSettingsPanel.java, 441
- My Documents/squid/src/ikayaki/gui/ProjectComponent.java, 442
- My Documents/squid/src/ikayaki/gui/ProjectExplorerPanel.java, 443
- My Documents/squid/src/ikayaki/gui/ProjectExplorerTable.java, 444
- My Documents/squid/src/ikayaki/gui/ProjectInformationPanel.java, 445
- My Documents/squid/src/ikayaki/gui/SequenceColumn.java, 446
- My Documents/squid/src/ikayaki/gui/SettingsDialog.java, 451
- My Documents/squid/src/ikayaki/gui/StereoPlot.java, 452
- My Documents/squid/src/ikayaki/gui/StyledCellEditor.java, 453
- My Documents/squid/src/ikayaki/gui/StyledTableCellRenderer.java, 454
- My Documents/squid/src/ikayaki/gui/StyledWrapper.java, 455
- My Documents/squid/src/ikayaki/Ikayaki.java, 456
- My Documents/squid/src/ikayaki/MeasurementEvent.java, 457
- My Documents/squid/src/ikayaki/MeasurementListener.java, 458
- My Documents/squid/src/ikayaki/MeasurementResult.java, 459
- My Documents/squid/src/ikayaki/MeasurementSequence.java, 460
- My Documents/squid/src/ikayaki/MeasurementStep.java, 461
- My Documents/squid/src/ikayaki/MeasurementValue.java, 462
- My Documents/squid/src/ikayaki/Project.java, 463
- My Documents/squid/src/ikayaki/ProjectEvent.java, 464
- My Documents/squid/src/ikayaki/ProjectListener.java, 465
- My Documents/squid/src/ikayaki/Settings.java, 466
- My Documents/squid/src/ikayaki/squid/ Directory Reference, 19
- My Documents/squid/src/ikayaki/squid/Degausser.java, 467

- My Documents/squid/src/ikayaki/squid/Handler.java, 468
- My Documents/squid/src/ikayaki/squid/Magnetometer.java, 469
- My Documents/squid/src/ikayaki/squid/SerialIO.java, 470
- My Documents/squid/src/ikayaki/squid/SerialIOEvent.java, 471
- My Documents/squid/src/ikayaki/squid/SerialIOException.java, 472
- My Documents/squid/src/ikayaki/squid/SerialIOListener.java, 473
- My Documents/squid/src/ikayaki/squid/SerialParameters.java, 474
- My Documents/squid/src/ikayaki/squid/Squid.java, 475
- My Documents/squid/src/ikayaki/squid/SquidEmulator.java, 476
- My Documents/squid/src/ikayaki/squid/SquidFront.java, 477
- My Documents/squid/src/ikayaki/util/DirectoryReference, 22
- My Documents/squid/src/ikayaki/util/ComponentPrinter.java, 478
- My Documents/squid/src/ikayaki/util/DocumentUtilities.java, 479
- My Documents/squid/src/ikayaki/util/LastExecutor.java, 480
- My Documents/squid/src/ikayaki/util/LoggerPrintStream.java, 481
- My Documents/squid/src/ikayaki/util/SerialProxy.java, 482
- name
 - ikayaki::MeasurementSequence, 206
 - ikayaki::Project, 269
- newProject
 - ikayaki::gui::MainMenuBar, 153
- newProjectAction
 - ikayaki::gui::MainViewPanel, 166
- NewProjectFileChooser
 - ikayaki::gui::MainViewPanel::NewProjectFileChooser, 168
- newProjectName
 - ikayaki::gui::ProjectExplorerPanel::NewProjectPanel, 318
- newProjectNameFlasher
 - ikayaki::gui::ProjectExplorerPanel::NewProjectPanel, 319
- NewProjectPanel
 - ikayaki::gui::ProjectExplorerPanel::NewProjectPanel, 318
- newProjectPanel
 - ikayaki::gui::ProjectExplorerPanel, 317
- newProjectType
 - ikayaki::gui::ProjectExplorerPanel::NewProjectPanel, 319
- nextLineButton
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 147
- online
 - ikayaki::squid::SquidEmulator, 392
- opaque
 - ikayaki::gui::StyledWrapper, 419
- openPort
 - ikayaki::squid::SerialIO, 347
- openPorts
 - ikayaki::squid::SerialIO, 349
- openProject
 - ikayaki::gui::MainMenuBar, 153
- openProjectAction
 - ikayaki::gui::MainViewPanel, 166
- openRecentProjectMenu
 - ikayaki::gui::MainMenuBar, 153
- operator
 - ikayaki::gui::PrintPanel, 253
- OPERATOR_PROPERTY
 - ikayaki::Project, 297
- operatorField

- ikayaki::gui::ProjectInformationPanel, 339
- Orientation
 - ikayaki::Project, 268
- orientation
 - ikayaki::Project, 297
- os
 - ikayaki::squid::SerialIO, 349
- out
 - ikayaki::util::SerialProxy::Forwarder, 360
- owner
 - ikayaki::squid::Squid, 387
- pad
 - ikayaki::Project, 289
- padn
 - ikayaki::squid::SerialIO, 347
- paintComponent
 - ikayaki::gui::AbstractPlot, 49
 - ikayaki::gui::MagnetometerStatusPanel, 128
- param1
 - ikayaki::squid::SquidFront, 410
- param2
 - ikayaki::squid::SquidFront, 410
- param3
 - ikayaki::squid::SquidFront, 410
- parametersModified
 - ikayaki::gui::ProjectInformationPanel, 339
- parent
 - ikayaki::gui::CalibrationPanel, 52
 - ikayaki::gui::ProjectExplorerPanel, 317
 - ikayaki::gui::ProjectExplorerTable, 325
- parity
 - ikayaki::squid::SerialParameters, 356
- parseObject
 - ikayaki::gui::NullableDecimalFormat, 247
 - ikayaki::gui::PositiveDecimalFormat, 249
- pause
 - ikayaki::gui::MainMenuBar, 153
- pauseAction
 - ikayaki::gui::MeasurementControlsPanel, 174
- pauseButton
 - ikayaki::gui::MeasurementControlsPanel, 174
- pauseButtonFlasher
 - ikayaki::gui::MeasurementControlsPanel, 175
- PAUSED
 - ikayaki::Project, 269
- performSlew
 - ikayaki::squid::Handler, 91
- plot1
 - ikayaki::gui::PrintPanel, 254
- plot1Panel
 - ikayaki::gui::PrintPanel, 254
- plot2
 - ikayaki::gui::PrintPanel, 254
- plot2Panel
 - ikayaki::gui::PrintPanel, 254
- plot3
 - ikayaki::gui::PrintPanel, 254
- plot3Panel
 - ikayaki::gui::PrintPanel, 254
- plot4
 - ikayaki::gui::PrintPanel, 254
- plot4Panel
 - ikayaki::gui::PrintPanel, 254
- plotHeight
 - ikayaki::util::ComponentPrinter, 58
- plots
 - ikayaki::gui::MeasurementGraphsPanel, 193
 - ikayaki::gui::PrintPanel, 254
- PLUS_Z
 - ikayaki::Project, 268
- points
 - ikayaki::gui::IntensityPlot, 107
 - ikayaki::gui::StereoPlot, 413
- POLL_TIMEOUT
 - ikayaki::squid::Handler, 98
- pollTimeout
 - ikayaki::squid::Degausser, 65
 - ikayaki::squid::Magnetometer, 124
- portName
 - ikayaki::squid::SerialIO, 349
 - ikayaki::squid::SerialParameters, 356
- pos
 - ikayaki::Project::ManualMove, 304
- posAmount
 - ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 138
- posBG
 - ikayaki::gui::MagnetometerStatusPanel, 132
- posDemagY
 - ikayaki::gui::MagnetometerStatusPanel, 132
- posDemagZ
 - ikayaki::gui::MagnetometerStatusPanel, 132
- posDirection

- ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 138
- posFrom
 - ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 138
- posHome
 - ikayaki::gui::MagnetometerStatusPanel, 132
- position
 - ikayaki::gui::MagnetometerStatusPanel, 132
- posLeft
 - ikayaki::gui::MagnetometerStatusPanel, 133
- posMeasure
 - ikayaki::gui::MagnetometerStatusPanel, 133
- posMove
 - ikayaki::gui::MagnetometerStatusPanel, 133
- posRight
 - ikayaki::gui::MagnetometerStatusPanel, 133
- possibleColumns
 - ikayaki::gui::MeasurementSequenceTableModel, 226
- print
 - ikayaki::gui::MainMenuBar, 153
 - ikayaki::gui::PrintPanel, 255
 - ikayaki::util::ComponentPrinter, 57
 - ikayaki::util::LoggerPrintStream, 117
- PRINT_PREVIEW
 - ikayaki::gui::SettingsDialog, 383
- printAction
 - ikayaki::gui::MainViewPanel, 166
- printComponent
 - ikayaki::util::ComponentPrinter, 57
- printDirectly
 - ikayaki::gui::SettingsDialog, 383
- printedPanel
 - ikayaki::gui::PrintPanel, 255
- println
 - ikayaki::util::LoggerPrintStream, 117, 118
- PrintPanel
 - ikayaki::gui::PrintPanel, 251
- printPreview
 - ikayaki::gui::MainMenuBar, 153
- printPreviewAction
 - ikayaki::gui::MainViewPanel, 166
- PrintSequenceTableModel
 - ikayaki::gui::PrintPanel::PrintSequenceTableModel, 257
- PROGRAM_JAR_NAME
 - ikayaki::Ikayaki, 104
- PROGRAM_SETTINGS
 - ikayaki::gui::SettingsDialog, 383
- programSettings
 - ikayaki::gui::MainMenuBar, 153
- programSettingsAction
 - ikayaki::gui::MainViewPanel, 166
- ProgramSettingsPanel
 - ikayaki::gui::ProgramSettingsPanel, 259
- Project
 - ikayaki::Project, 269
- project
 - ikayaki::gui, 25, 27
 - ikayaki::gui::IntensityPlot, 107
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 148
 - ikayaki::gui::MainViewPanel, 166
 - ikayaki::gui::MeasurementSequenceTableModel, 227
 - ikayaki::gui::PrintPanel, 255
 - ikayaki::gui::ProjectComponent, 309
 - ikayaki::gui::SettingsDialog, 383
 - ikayaki::gui::StereoPlot, 413
 - ikayaki::MeasurementEvent, 190
 - ikayaki::MeasurementStep, 236
 - ikayaki::ProjectEvent, 311
 - SequenceColumn.java, 447, 449
- PROJECT_HISTORY_SIZE
 - ikayaki::Settings, 379
- projectCache
 - ikayaki::Project, 298
- ProjectComponent
 - ikayaki::gui::ProjectComponent, 307
- ProjectEvent
 - ikayaki::ProjectEvent, 310
- ProjectExplorerPanel
 - ikayaki::gui::ProjectExplorerPanel, 313
- projectExplorerPanel
 - ikayaki::gui::MainViewPanel, 166
- ProjectExplorerPopupMenu
 - ikayaki::gui::ProjectExplorerTable::ProjectExplorerPopupMenu, 327
- ProjectExplorerTable
 - ikayaki::gui::ProjectExplorerTable, 321
- ProjectExplorerTableModel
 - ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableModel, 330
- projectHistory
 - ikayaki::Settings, 379

- ProjectInformationPanel
 - ikayaki::gui::ProjectInformationPanel, 334
- projectInformationPanel
 - ikayaki::gui::MainViewPanel, 166
- projectType
 - ikayaki::gui::MainStatusBar, 156
 - ikayaki::gui::MainViewPanel::NewProjectFileChooser, 169
- projectTypeCache
 - ikayaki::Project, 298
- projectTypeCacher
 - ikayaki::gui::ProjectExplorerTable, 325
- projectUpdated
 - ikayaki::gui::MainViewPanel, 163
 - ikayaki::gui::MeasurementControlsPanel, 172
 - ikayaki::gui::MeasurementGraphsPanel, 192
 - ikayaki::gui::MeasurementSequencePanel, 210
 - ikayaki::gui::MeasurementSequenceTableModel, 224
 - ikayaki::gui::ProjectComponent, 308
 - ikayaki::gui::ProjectExplorerTable, 322
 - ikayaki::gui::ProjectExplorerTable::ProjectExplorerTableModel, 331
 - ikayaki::ProjectListener, 343
- properties
 - ikayaki::Project, 298
 - ikayaki::Settings, 379
- PROPERTIES_FILE
 - ikayaki::Ikayaki, 105
- propertiesFile
 - ikayaki::Settings, 379
- propertiesModified
 - ikayaki::gui::ProjectInformationPanel, 339
 - ikayaki::Settings, 380
- pulseReset
 - ikayaki::squid::Magnetometer, 123
- queue
 - ikayaki::squid::Degausser, 65
 - ikayaki::squid::Magnetometer, 124
 - ikayaki::util::LastExecutor, 111
- qValue
 - ikayaki::gui::PrintPanel, 255
- rawVector
 - ikayaki::MeasurementResult, 200
- readData
 - ikayaki::squid::Magnetometer, 123
- RELATIVE_MAGNETIZATION
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 243
 - SequenceColumn.java, 449
- removeMeasurementListener
 - ikayaki::Project, 290
- removeProjectListener
 - ikayaki::Project, 290
- removeSequence
 - ikayaki::Settings, 371
- removeSerialIOListener
 - ikayaki::squid::SerialIO, 347
- removeStep
 - ikayaki::MeasurementSequence, 205
 - ikayaki::Project, 290
- render
 - ikayaki::gui::AbstractPlot, 49
 - ikayaki::gui::IntensityPlot, 107
 - ikayaki::gui::StereoPlot, 412
- reset
 - ikayaki::gui::IntensityPlot, 107
 - ikayaki::gui::Plot, 248
 - ikayaki::gui::StereoPlot, 412
 - ikayaki::squid::Magnetometer, 123
- resetAddSequence
 - ikayaki::gui::MeasurementSequencePanel, 211
- resetAllButton
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 148
- resetAllButtonFlasher
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 148
- resetCounter
 - ikayaki::squid::Magnetometer, 123
- resetLoadSequenceBox
 - ikayaki::gui::MeasurementSequencePanel, 211
- results
 - ikayaki::MeasurementStep, 236
- REVEIVE
 - ikayaki::squid::SerialIO, 345
- RIGHT_LIMIT
 - ikayaki::Project, 268
- ROCK_TYPE_PROPERTY
 - ikayaki::Project, 298
- rockTypeField
 - ikayaki::gui::ProjectInformationPanel, 339
- rotate0
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 148
- rotate180

- ikayaki::gui::MagnetometerStatus-Panel::ManualControlsPanel, 148
- rotate270
 - ikayaki::gui::MagnetometerStatus-Panel::ManualControlsPanel, 149
- rotate90
 - ikayaki::gui::MagnetometerStatus-Panel::ManualControlsPanel, 149
- rotateAmount
 - ikayaki::gui::MagnetometerStatus-Panel::MagnetometerStatus-Animator, 138
- rotateButtonGroup
 - ikayaki::gui::MagnetometerStatus-Panel::ManualControlsPanel, 149
- rotateDirection
 - ikayaki::gui::MagnetometerStatus-Panel::MagnetometerStatus-Animator, 138
- rotateFrom
 - ikayaki::gui::MagnetometerStatus-Panel::MagnetometerStatus-Animator, 138
- rotateLabel
 - ikayaki::gui::MagnetometerStatus-Panel::ManualControlsPanel, 149
- rotateTo
 - ikayaki::squid::Handler, 91
- rotating
 - ikayaki::gui::MagnetometerStatusPanel, 133
- rotation
 - ikayaki::gui::DeviceSettingsPanel, 73
 - ikayaki::gui::MagnetometerStatusPanel, 133
 - ikayaki::MeasurementResult, 200
- ROTATION_ACCELERATION
 - ikayaki::squid::Handler, 98
- ROTATION_DECELERATION
 - ikayaki::squid::Handler, 98
- ROTATION_VELOCITY
 - ikayaki::squid::Handler, 99
- rotationAcc
 - ikayaki::gui::DeviceSettingsPanel, 73
- rotationDec
 - ikayaki::gui::DeviceSettingsPanel, 73
- rotationVelocity
 - ikayaki::gui::DeviceSettingsPanel, 73
- rowIndex
 - ikayaki::gui, 25–28
 - SequenceColumn.java, 447–450
- rps
 - ikayaki::gui::MagnetometerStatus-Panel::MagnetometerStatus-Animator, 138
- run
 - ikayaki::gui::MagnetometerStatus-Panel::MagnetometerStatus-Animator, 136
 - ikayaki::Project::DummyMeasurement, 301
 - ikayaki::Project::ManualDemag, 302
 - ikayaki::Project::ManualMeasure, 303
 - ikayaki::Project::ManualMove, 304
 - ikayaki::Project::ManualRotate, 305
 - ikayaki::Project::Measurement, 306
 - ikayaki::squid::Squid-Emulator::DegausserEmu, 394
 - ikayaki::squid::SquidEmulator::Handler-Emu, 396
 - ikayaki::squid::Squid-Emulator::MagnetometerEmu, 398
 - ikayaki::util::LastExecutor::Last-ExecutorThread, 113
- run_old
 - ikayaki::gui::MagnetometerStatus-Panel::MagnetometerStatus-Animator, 137
- RunDelayed
 - ikayaki::util::LastExecutor::Run-Delayed, 114
- runMeasurement
 - ikayaki::Project, 291
- runnable
 - ikayaki::util::LastExecutor::Run-Delayed, 115
- running
 - ikayaki::squid::SquidEmulator, 393
- SAMPLE
 - ikayaki::MeasurementResult, 196
- SAMPLE_LOAD_POSITION
 - ikayaki::squid::Handler, 99
- SAMPLE_X
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 243
 - SequenceColumn.java, 449
- SAMPLE_Y
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 244
 - SequenceColumn.java, 449
- SAMPLE_Z
 - ikayaki::MeasurementValue< T >, 244
- sampleInsertIconLabel
 - ikayaki::gui::MeasurementControls-Panel, 175
- sampleInsertPanel

- ikayaki::gui::MeasurementControls-Panel, 175
- sampleInsertTextLabel
 - ikayaki::gui::MeasurementControls-Panel, 175
- sampleInsertZMinusIcon
 - ikayaki::gui::MeasurementControls-Panel, 175
- sampleInsertZPlusIcon
 - ikayaki::gui::MeasurementControls-Panel, 175
- sampleLoadPosition
 - ikayaki::gui::DeviceSettingsPanel, 73
- SampleType
 - ikayaki::Project, 268
- sampleType
 - ikayaki::gui::ProjectInformationPanel, 340
 - ikayaki::Project, 298
- sampleTypeCore
 - ikayaki::gui::ProjectInformationPanel, 340
- sampleTypeHand
 - ikayaki::gui::ProjectInformationPanel, 340
- sampleVector
 - ikayaki::MeasurementResult, 201
- save
 - ikayaki::MeasurementStep, 233
 - ikayaki::Project, 291
 - ikayaki::Settings, 372
- saveAction
 - ikayaki::gui::DeviceSettingsPanel, 74
- saveButton
 - ikayaki::gui::DeviceSettingsPanel, 74
- saveColumn
 - ikayaki::gui::MeasurementSequence-TableModel, 224
- saveNow
 - ikayaki::Project, 291
 - ikayaki::Settings, 372
- saveParameters
 - ikayaki::gui::ProjectInformationPanel, 335
- saveProperties
 - ikayaki::gui::ProjectInformationPanel, 336
- saveSettings
 - ikayaki::gui::DeviceSettingsPanel, 69
- screen
 - ikayaki::util::LoggerPrintStream, 118
- scrollPane
 - ikayaki::gui::PrintPanel, 255
- scrollToRow
 - ikayaki::gui::MeasurementSequence-Panel, 211
- ikayaki::gui::ProjectExplorerTable, 322
- seekHome
 - ikayaki::squid::Handler, 91
- selectedBackground
 - ikayaki::gui::StyledWrapper, 419
- selectedBorder
 - ikayaki::gui::StyledWrapper, 419
- selectedFile
 - ikayaki::gui::ProjectExplorerTable, 325
- selectedFocusBackground
 - ikayaki::gui::StyledWrapper, 419
- selectedFocusBorder
 - ikayaki::gui::StyledWrapper, 419
- selectMovement
 - ikayaki::squid::Handler, 91
- selectRotation
 - ikayaki::squid::Handler, 92
- SEND
 - ikayaki::squid::SerialIO, 345
- sequence
 - ikayaki::Project, 298
- SequenceColumn
 - ikayaki::gui, 25
 - SequenceColumn.java, 446
- SequenceColumn.java
 - COUNT, 449
 - data, 447–449
 - DECLINATION, 449
 - E0, 448, 449
 - false, 448
 - GEOGRAPHIC_X, 449
 - GEOGRAPHIC_X_NORMALIZED, 449
 - GEOGRAPHIC_Y, 449
 - GEOGRAPHIC_Z, 449
 - INCLINATION, 449
 - MAGNETIZATION, 449
 - MASS, 449
 - MOMENT, 449
 - null, 447, 448
 - numberFormat, 450
 - project, 447, 449
 - RELATIVE_MAGNETIZATION, 449
 - rowIndex, 447–450
 - SAMPLE_X, 449
 - SAMPLE_Y, 449
 - setMaximumFractionDigits, 449
 - STEP, 449
 - SUSCEPTIBILITY, 449
 - THETA63, 449
 - value, 447–449
 - VOLUME, 449

- SequenceColumn.java
 - SequenceColumn, 446
- SequencePopupMenu
 - ikayaki::gui::MeasurementSequence-Panel::SequencePopupMenu, 217
- sequences
 - ikayaki::gui::ProgramSettings-Panel::EditSequencesTableModel, 263
 - ikayaki::Settings, 380
- SEQUENCES_FILE
 - ikayaki::Ikayaki, 105
- sequencesDeleteButton
 - ikayaki::gui::ProgramSettingsPanel, 260
- sequencesFile
 - ikayaki::Settings, 380
- sequencesModified
 - ikayaki::Settings, 380
- sequencesTable
 - ikayaki::gui::ProgramSettingsPanel, 261
- sequenceStartField
 - ikayaki::gui::MeasurementSequence-Panel, 212
- sequenceStartFieldFlasher
 - ikayaki::gui::MeasurementSequence-Panel, 212
- sequenceStartLabel
 - ikayaki::gui::MeasurementSequence-Panel, 212
- sequenceStepField
 - ikayaki::gui::MeasurementSequence-Panel, 213
- sequenceStepFieldFlasher
 - ikayaki::gui::MeasurementSequence-Panel, 213
- sequenceStepLabel
 - ikayaki::gui::MeasurementSequence-Panel, 213
- sequenceStopField
 - ikayaki::gui::MeasurementSequence-Panel, 213
- sequenceStopFieldFlasher
 - ikayaki::gui::MeasurementSequence-Panel, 213
- sequenceStopLabel
 - ikayaki::gui::MeasurementSequence-Panel, 213
- sequenceTable
 - ikayaki::gui::MeasurementSequence-Panel, 213
 - ikayaki::gui::PrintPanel, 255
- sequenceTableModel
 - ikayaki::gui::MeasurementSequence-Panel, 213
 - ikayaki::gui::PrintPanel, 255
- serialEvent
 - ikayaki::squid::SerialIO, 347
- SerialIO
 - ikayaki::squid::SerialIO, 345
- serialIO
 - ikayaki::squid::Degausser, 66
 - ikayaki::squid::Handler, 99
 - ikayaki::squid::Magnetometer, 124
- SerialIOEvent
 - ikayaki::squid::SerialIOEvent, 350
- serialIOEvent
 - ikayaki::squid::Degausser, 63
 - ikayaki::squid::Handler, 92
 - ikayaki::squid::Magnetometer, 123
 - ikayaki::squid::SerialIOListener, 353
 - ikayaki::squid::Squid-Emulator::DegausserEmu, 394
 - ikayaki::squid::SquidEmulator::Handler-Emu, 396
 - ikayaki::squid::Squid-Emulator::MagnetometerEmu, 398
 - ikayaki::util::SerialProxy::Forwarder, 359
- SerialIOException
 - ikayaki::squid::SerialIOException, 352
- SerialParameters
 - ikayaki::squid::SerialParameters, 354, 355
- SESSION_START
 - ikayaki::squid::SerialIO, 345
- setAcceleration
 - ikayaki::squid::Handler, 92
- setAmplitude
 - ikayaki::squid::Degausser, 63
- setBrowserFieldCursorToEnd
 - ikayaki::gui::ProjectExplorerPanel, 314
- setBrowserFieldPopup
 - ikayaki::gui::ProjectExplorerPanel, 314
- setCoil
 - ikayaki::squid::Degausser, 64
- setColumns
 - ikayaki::gui::ProjectExplorerTable, 323
- setColumnVisible
 - ikayaki::gui::MeasurementSequence-TableModel, 225
- setDeceleration
 - ikayaki::squid::Handler, 92
- setDefaultColumn
 - ikayaki::Settings, 372
- setDegausserDelay
 - ikayaki::Settings, 372
- setDegausserMaximumField

- ikayaki::Settings, 372
- setDegausserPort
 - ikayaki::Settings, 373
- setDegausserRamp
 - ikayaki::Settings, 373
- setDelayMillis
 - ikayaki::util::LastExecutor, 111
- setDip
 - ikayaki::Project, 292
- setDirectory
 - ikayaki::gui::ProjectExplorerPanel, 315
 - ikayaki::gui::ProjectExplorerTable, 323
- setDone
 - ikayaki::MeasurementStep, 234
- setEnabled
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 142
 - ikayaki::gui::MeasurementSequencePanel, 211
 - ikayaki::gui::ProjectInformationPanel, 336
- setExecOnlyLast
 - ikayaki::util::LastExecutor, 111
- setFitLimit
 - ikayaki::gui::FittedComboBoxRenderer, 81
- setHandlerAcceleration
 - ikayaki::Settings, 373
- setHandlerAxialAFPosition
 - ikayaki::Settings, 373
- setHandlerBackgroundPosition
 - ikayaki::Settings, 373
- setHandlerDeceleration
 - ikayaki::Settings, 373
- setHandlerMeasurementPosition
 - ikayaki::Settings, 373
- setHandlerMeasurementVelocity
 - ikayaki::Settings, 374
- setHandlerPort
 - ikayaki::Settings, 374
- setHandlerRightLimit
 - ikayaki::Settings, 374
- setHandlerRotation
 - ikayaki::Settings, 374
- setHandlerRotationAcceleration
 - ikayaki::Settings, 374
- setHandlerRotationDeceleration
 - ikayaki::Settings, 374
- setHandlerRotationVelocity
 - ikayaki::Settings, 375
- setHandlerSampleLoadPosition
 - ikayaki::Settings, 375
- setHandlerTransverseYAFPosition
 - ikayaki::Settings, 375
- setHandlerVelocity
 - ikayaki::Settings, 375
- setHolderCalibrationFile
 - ikayaki::Settings, 375
- setMagnetometerPort
 - ikayaki::Settings, 375
- setMagnetometerXAxisCalibration
 - ikayaki::Settings, 376
- setMagnetometerYAxisCalibration
 - ikayaki::Settings, 376
- setMagnetometerZAxisCalibration
 - ikayaki::Settings, 376
- setMass
 - ikayaki::MeasurementStep, 234
 - ikayaki::Project, 292
- setMaximumFractionDigits
 - ikayaki::gui, 27
 - SequenceColumn.java, 449
- setMeasurement
 - ikayaki::gui::MainStatusBar, 155
- setMeasurementRotations
 - ikayaki::Settings, 376
- setMeasuring
 - ikayaki::MeasurementStep, 234
- setMotorNegative
 - ikayaki::squid::Handler, 92
- setMotorPositive
 - ikayaki::squid::Handler, 93
- setName
 - ikayaki::MeasurementSequence, 206
- setNormalization
 - ikayaki::Project, 292
- setOnline
 - ikayaki::squid::Handler, 93
- setOpaque
 - ikayaki::gui::PrintPanel, 252
- setOrientation
 - ikayaki::gui::MeasurementControlsPanel, 173
 - ikayaki::Project, 292
- setOwner
 - ikayaki::squid::Squid, 386
- setPosition
 - ikayaki::squid::Handler, 93
- setProject
 - ikayaki::gui::CalibrationPanel, 52
 - ikayaki::gui::MagnetometerStatusPanel::ManualControlsPanel, 142
 - ikayaki::gui::MainViewPanel, 163
 - ikayaki::gui::MeasurementControlsPanel, 173
 - ikayaki::gui::MeasurementDetailsPanel, 178

- ikayaki::gui::MeasurementGraphsPanel, 192
- ikayaki::gui::MeasurementSequencePanel, 211
- ikayaki::gui::MeasurementSequenceTableModel, 225
- ikayaki::gui::ProjectComponent, 308
- ikayaki::gui::ProjectExplorerPanel, 315
- ikayaki::gui::ProjectInformationPanel, 336
- setProperty
 - ikayaki::Project, 293
 - ikayaki::Settings, 376
- setRotation
 - ikayaki::squid::Handler, 93
- setSampleType
 - ikayaki::Project, 293
- setSquid
 - ikayaki::gui::MagnetometerStatusPanel, 129
 - ikayaki::gui::MainViewPanel, 164
 - ikayaki::Project, 293
 - ikayaki::squid::SquidFront, 403
- setState
 - ikayaki::Project, 294
- setStep
 - ikayaki::gui::MeasurementDetailsPanel, 178
 - ikayaki::gui::MeasurementDetailsPanel::DetailsTableModel, 182
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 185
- setStepValue
 - ikayaki::MeasurementStep, 234
- setStrike
 - ikayaki::Project, 294
- setSusceptibility
 - ikayaki::MeasurementStep, 235
 - ikayaki::Project, 294
- SettingsDialog
 - ikayaki::gui::SettingsDialog, 381
- setTitle
 - ikayaki::Ikayaki, 103
- setTransform
 - ikayaki::MeasurementResult, 200
- setUp
 - ikayaki::squid::Handler, 93
- setValueAt
 - ikayaki::gui::MeasurementSequenceTableModel, 226
 - ikayaki::gui::ProgramSettingsPanel::EditSequencesTableModel, 263
- setVelocity
 - ikayaki::squid::Handler, 94
- setVolume
 - ikayaki::MeasurementStep, 235
 - ikayaki::Project, 294
- setWindowHeight
 - ikayaki::Settings, 377
- setWindowMaximized
 - ikayaki::Settings, 377
- setWindowWidth
 - ikayaki::Settings, 377
- setXXX
 - ikayaki::Settings, 377
- showColumn
 - ikayaki::gui::MeasurementSequenceTableModel, 226
- showDeviceSettingsDialog
 - ikayaki::gui::SettingsDialog, 382
- showPrintPreview
 - ikayaki::gui::SettingsDialog, 382
- showProgramSettingsDialog
 - ikayaki::gui::SettingsDialog, 382
- showSequenceNameDialog
 - ikayaki::gui::MeasurementSequencePanel::SequencePopupMenu, 218
- SIGNAL_DRIFT_COLUMN
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 187
- SIGNAL_HOLDER_COLUMN
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 187
- SIGNAL_NOISE_COLUMN
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 187
- SIGNAL_TO_DRIFT
 - ikayaki::MeasurementValue< T >, 245
- SIGNAL_TO_HOLDER
 - ikayaki::MeasurementValue< T >, 245
- SIGNAL_TO_NOISE
 - ikayaki::MeasurementValue< T >, 245
- singleStep
 - ikayaki::gui::MainMenuBar, 153
- singleStepAction
 - ikayaki::gui::MeasurementControlsPanel, 175
- SITE_PROPERTY
 - ikayaki::Project, 299
- siteField
 - ikayaki::gui::ProjectInformationPanel, 340
- slewToLimit
 - ikayaki::squid::Handler, 94
- splitPane
 - ikayaki::gui::MainViewPanel, 166
- sPort

- ikayaki::squid::SerialIO, 349
- sps
 - ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 139
- Squid
 - ikayaki::squid::Squid, 385
- squid
 - ikayaki::gui::MagnetometerStatusPanel, 133
 - ikayaki::gui::MainViewPanel, 166
 - ikayaki::Project, 299
 - ikayaki::squid::SquidFront, 410
- SquidEmulator
 - ikayaki::squid::SquidEmulator, 389
- SquidFront
 - ikayaki::squid::SquidFront, 402
- startTime
 - ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 139
- STARTUP_DIRECTORY
 - ikayaki::Ikayaki, 105
- State
 - ikayaki::MeasurementStep, 229
 - ikayaki::Project, 268
- state
 - ikayaki::MeasurementStep, 236
 - ikayaki::Project, 299
- STATE_CHANGED
 - ikayaki::ProjectEvent, 310
- statusBar
 - ikayaki::gui::MainViewPanel, 167
- STEP
 - ikayaki::gui, 27
 - SequenceColumn.java, 449
- step
 - ikayaki::gui::MeasurementDetailsPanel, 179
 - ikayaki::gui::MeasurementDetailsPanel::DetailsTableModel, 183
 - ikayaki::gui::MeasurementDetailsPanel::ErrorsTableModel, 187
 - ikayaki::MeasurementEvent, 190
- STEP_ABORTED
 - ikayaki::MeasurementEvent, 188
- STEP_END
 - ikayaki::MeasurementEvent, 188
- STEP_START
 - ikayaki::MeasurementEvent, 188
- stepButton
 - ikayaki::gui::MeasurementControlsPanel, 176
- stepButtonFlasher
 - ikayaki::gui::MeasurementControlsPanel, 176
- steps
 - ikayaki::gui::MeasurementSequencePanel::SequencePopupMenu, 219
 - ikayaki::MeasurementSequence, 206
- stepValue
 - ikayaki::MeasurementStep, 236
- stepValueTypeLabel
 - ikayaki::gui::MeasurementSequencePanel, 214
- stopbits
 - ikayaki::squid::SerialParameters, 357
- stopExecution
 - ikayaki::squid::Handler, 94
- storeToXML
 - ikayaki::util::DocumentUtilities, 77, 78
- strike
 - ikayaki::gui::PrintPanel, 255
 - ikayaki::Project, 299
- strikeField
 - ikayaki::gui::ProjectInformationPanel, 340
- StyledCellEditor
 - ikayaki::gui::StyledCellEditor, 414
- SUSCEPTIBILITY
 - ikayaki::gui, 28
 - SequenceColumn.java, 449
- susceptibility
 - ikayaki::gui::PrintPanel, 255
 - ikayaki::MeasurementStep, 236
 - ikayaki::Project, 299
- susceptibilityField
 - ikayaki::gui::ProjectInformationPanel, 340
- takeMessage
 - ikayaki::squid::Handler, 94
- Thellier
 - ikayaki::Project, 269
- THETA63
 - ikayaki::gui, 28
 - ikayaki::MeasurementValue< T >, 246
 - SequenceColumn.java, 449
- timestamp
 - ikayaki::MeasurementStep, 236
 - ikayaki::util::LoggerPrintStream, 118
- toolsMenu
 - ikayaki::gui::MainMenuBar, 154
- toString
 - ikayaki::MeasurementSequence, 206
- toXY
 - ikayaki::gui::StereoPlot, 412
- transform

- ikayaki::Project, 299
- TRANSVERSE_YAF_POSITION
 - ikayaki::squid::Handler, 99
- transverseYAFPosition
 - ikayaki::gui::DeviceSettingsPanel, 74
- true
 - ikayaki::MeasurementStep, 229
- Type
 - ikayaki::MeasurementEvent, 188
 - ikayaki::MeasurementResult, 196
 - ikayaki::Project, 269
 - ikayaki::ProjectEvent, 310
- type
 - ikayaki::MeasurementEvent, 190
 - ikayaki::MeasurementResult, 201
 - ikayaki::Project, 300
 - ikayaki::ProjectEvent, 311
- unit
 - ikayaki::MeasurementValue< T >, 246
- updateActions
 - ikayaki::gui::MeasurementControlsPanel, 173
- updateButtonPositions
 - ikayaki::gui::MagnetometerStatusPanel, 129
- updateColumns
 - ikayaki::gui::MeasurementSequencePanel, 211
 - ikayaki::gui::PrintPanel, 252
- updateDelay
 - ikayaki::gui::MagnetometerStatusPanel::MagnetometerStatusAnimator, 139
- updateDirectoryHistory
 - ikayaki::Settings, 378
- updatePlots
 - ikayaki::gui::MeasurementGraphsPanel, 192
- updatePositions
 - ikayaki::gui::MagnetometerStatusPanel, 129
- updateProjectHistory
 - ikayaki::Settings, 378
- updateSequences
 - ikayaki::gui::ProgramSettingsPanel::EditSequencesTableModel, 263
- updateSettings
 - ikayaki::squid::Degausser, 64
 - ikayaki::squid::Handler, 95
 - ikayaki::squid::Magnetometer, 124
 - ikayaki::squid::Squid, 386
- updateStatus
 - ikayaki::gui::MagnetometerStatusPanel, 130
- updateTransforms
 - ikayaki::MeasurementStep, 235
 - ikayaki::Project, 294
- usingOldLog
 - ikayaki::squid::SquidEmulator, 393
- value
 - ikayaki::gui, 25–28
 - ikayaki::gui::StyledWrapper, 419
 - SequenceColumn.java, 447–449
- VALUE_MEASURED
 - ikayaki::MeasurementEvent, 189
- VELOCITY
 - ikayaki::squid::Handler, 99
- velocity
 - ikayaki::gui::DeviceSettingsPanel, 74
 - ikayaki::squid::SquidEmulator, 393
- verify
 - ikayaki::squid::Handler, 95
- verticalAlignment
 - ikayaki::gui::StyledWrapper, 420
- VISIBLE_COLUMNS_PROPERTY
 - ikayaki::gui::MeasurementSequenceTableModel, 227
- visibleColumns
 - ikayaki::gui::MeasurementSequenceTableModel, 227
- VOLUME
 - ikayaki::gui, 27
 - ikayaki::Project, 268
 - SequenceColumn.java, 449
- volume
 - ikayaki::gui::PrintPanel, 256
 - ikayaki::MeasurementStep, 237
 - ikayaki::Project, 300
- volumeField
 - ikayaki::gui::ProjectInformationPanel, 341
- waitForMessage
 - ikayaki::squid::Handler, 95
- waitingForMessage
 - ikayaki::squid::Degausser, 66
 - ikayaki::squid::Handler, 99
 - ikayaki::squid::Magnetometer, 125
- warningLabel
 - ikayaki::gui::DeviceSettingsPanel, 74
- workerThread
 - ikayaki::util::LastExecutor, 112
- workQueue
 - ikayaki::squid::Handler, 100
- wrap

- ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 182
- ikayaki::gui::MeasurementDetails-Panel::ErrorsTableModel, 185
- wrapper
 - ikayaki::gui::PrintPanel::PrintSequenceTableModel, 258
- writeMessage
 - ikayaki::squid::SerialIO, 347
 - ikayaki::squid::SquidEmulator, 389
- X_COLUMN
 - ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 183
- xAxisCalibration
 - ikayaki::gui::DeviceSettingsPanel, 74
- Y
 - ikayaki::Project, 268
- Y_COLUMN
 - ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 183
- yAxisCalibration
 - ikayaki::gui::DeviceSettingsPanel, 74
- Z
 - ikayaki::Project, 268
- Z_COLUMN
 - ikayaki::gui::MeasurementDetails-Panel::DetailsTableModel, 183
- zAxisCalibration
 - ikayaki::gui::DeviceSettingsPanel, 75
- zButtonGroup
 - ikayaki::gui::MeasurementControls-Panel, 176
- zMinusRadioButton
 - ikayaki::gui::MeasurementControls-Panel, 176
- zPlusRadioButton
 - ikayaki::gui::MeasurementControls-Panel, 176