

Realization Document 1.0

Group Mavis

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Software Engineering Project

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Course

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1 Introduction

This document describes the changes from design to production (section 2), improvement suggestions for the program (section 3), as well as installation instructions for Ikayaki and Mavis (section 4).

2 Changes from the Design document

Here we describe how the implementation/production of the Mavis software differs from that planned in the Design document.

Because of the iterative nature of our project design, architecture design was constantly changing and although the version of the design document that was in the wiki wasn't always up-to-date, the final version of the document is. Because of all of this, the realization of the project doesn't differ much from the design presented in the final version of the design document.

3 Improvement suggestions

Things that could be improved in the future.

3.1 Refactoring

The whole division between Ikayaki classes and Mavis classes is a cause of many headaches. The projects should have used a common code base that supported both programs. If a team is to continue developing both projects, the first thing to do would be to look at combining the source code before anything else. There is a lot of confusing code to clean up.

The clients have wished that in the future all the measurement devices in their laboratory used software that was based on Ikayaki and all measurement results were analyzed with software based on Mavis code.

3.2 Plots

Although drawing of Stereoplots was corrected and improved from the previous project, it could be drawn in a more correct way. Right now the lines between points (steps) are straight. They should be curved according to the non-linear scaling of the stereoplots. Also the Difference Vectors should be drawn in a stereoplot in the printout in Mavis.

It would be nice if the Zijderveld plots were available in Ikayaki as well.

3.3 Testing

JUnit testing should be done for the classes in Ikayaki and Mavis, although in many cases it isn't feasible due to the many dependencies between classes. Using coverage testing tools such as Coverlipse to do coverage testing would be very useful. Testing that covers all of the code might be impossible to accomplish without doing a lot of code refactoring before testing.

4 Installation instructions

In this section there are installation instructions for both Ikayaki and Mavis.

4.1 Installing or updating Ikayaki

This is a short guide for installing Ikayaki

4.1.1 New install

For new installs, just run the ikayaki-setup-v???.exe

The preferred install folder is C:\Program Files\Ikayaki

The first time you run Ikayaki, you should use the menu Tools, Device Configuration to configure Ikayaki for your SQUID environment.

4.1.2 Upgrade or update

Don't uninstall the old version.

There are two paths for an update install.

Either you received

- 1) the files ikayaki.exe and ikayaki.jar

In this case, copy the files into your existing Ikayaki folder, e.g. C:\Program Files\Ikayaki

No further actions required

- 2) a full installer ikayaki-setup-v???.exe

In this case, run the installer.

If you want to keep your old installation of Ikayaki, specify a different destination folder in the installer, e.g. "C:\Program Files\Ikayaki v104" if the new version is v104

After the installer completes:

- if you installed into the same directory / on top of the old Ikayaki, usually no further actions are required. However, if you were using a pre-1.0.2 version of Ikayaki, you should create a new folder "configs" into the Ikayaki program directory and move the existing file ikayaki.config into that folder.
- if you installed into a new directory, you should copy the three folders
 - "calibration"
 - "configs"
 - "sequences"

from the old ikayaki directory to the new directory. Older ikayaki versions might not have a "configs" directory - in this case, copy the file ikayaki.config from the old directory into a new "configs" folder in the new directory.

4.2 Installing or updating Mavis

This is a short guide for installing Mavis

4.2.1 New install

For new installs, just run the mavis-setup-v???.exe

The preferred install folder is C:\Program Files\Mavis

After the install, you can start Mavis from the desktop icon or from the Windows Start menu.

4.2.2 Upgrade or update

When you want to install a newer version of Mavis, it is advisable, although not strictly required, to first uninstall the old version i.e. in the Windows Start menu select

All Programs -> Mavis -> Uninstall

Then run the mavis-setup-v???.exe as for new installs.

The preferred install folder is C:\Program Files\Mavis

After the install, you can start Mavis from the desktop icon or from the Windows Start menu.