Writing xml-studies

Use this as a reference for writing studies. If you write or modify study by hand its good idea to validate it before transferring it to palm. Schema for study and examples at http://code.google.com/p/kurre/source/browse/trunk/XML/

General

Everything is case sensitive. Boolean values are written in lowercase eg. "false". Character encoding has to be `ISO-8859-15`. `All attributes are required unless definition says otherwise.`

Study settings and structure

study

- Attributes
    - sid - Any positive integer. Used to tell different studies apart. Carried over to answer-xml.
    - name - Name of the study. String. Carried over to answer-xml.
- Children
    - settings
    - measure

measure

- Attributes
    - mid - Any positive integer. Used to tell different measures apart. Carried over to answer-xml.
    - name - Name of the measure. String. Carried over to answer-xml.
- Children
    - settings
    - item
    - description

item

- Attributes
    - iid - Any positive integer. Used to tell different items apart. Carried over to answer-xml.
    - name - Name of the item. String. Carried over to answer-xml. Carried over to answer-xml.
    - subI - True of false. Set to true if question is part of a branch.
    - secondsToAnswer - Time in seconds test subject has to answer item. Set to 0 to disable.
- Children

- label
- button
- checkbox
- radiobutton
- slider
- list
- grid

settings (study)

- Attributes
  - random - True or false. If set to true study measures will appear in random order.
  - allowSkippingAnswering - True or false. Has not been implemented.
  - allowUnscheduledAnswring - True or false. If set to true user can only answer to questionaire after alarm.
  - allowExit- True of false. If set to true user cannot exit program.
- Children
  - reset
  - alarms

alarms

- Attributes
  - start - Study start date in XML time format. (2009-09-31T22:59:00.000) If study has alarms set alarms start to appear after this date. The time part defines the earliest time a random alarm can appear daily.
  - end - Study end date in XML time format. If study has alarms set no alarms will appear after this date. The time part defines the latest time in a day a random alarm can appear daily. If you dont want to set any alarms for study set this to date that has already gone.
- Children
  - daily
  - random

random

Use random to set random daily alarms. Either random or daily element has to be defined. If you dont want to set any alarms for study set alarms end date to past.

- Attributes
  - numAlarmsInDay - Number of random alarms each day. Has to be positive integer below 100.
  - minMinutesBetween - Minimum time in minutes between each random alarm.

daily

Container element for static daily alarms. Either random or daily element has to be defined. If you dont want to set any alarms for study set alarms end date to past.

- Children
    - alarm

alarm

Used for static daily alarm.

- Attributes
    - start - Static time for alarm. Format HH:MM:SS.DSM

settings (measure)

- Attributes
    - random - True of false. If set to true, measures questions will appear in random order.

GUI components

All coordinates are pixels from the topleft corner. Palm Z22 display is 160x160 pixels. All GUI components have to be inside an item. GUI components create corresponding GUI events to resulting answer-xml.

label

- Attributes
    - id - Integer between 1000-9997. Has to be unique in the file..
    - x - x-coordinate of the label
    - y - y-coordinate of the label
    - text - Label text. String
    - font - Text font. Possible values are: normal, bold, large, largeBold. Optional.

button

- Attributes
    - id - Integer between 1000-9997. Has to be unique in the file.. Carried over to answer-xml.
    - x - x-coordinate of the button.
    - y - y-coordinate of the button.
    - width - Button width. Positive integer.
    - height - Button height. Positive integer. Optional.

- text - Text on button. String. Carried over to answer-xml.
- font - Text font. Possible values are: normal, bold, large, largeBold. Optional.
- subIid - id of the subItem that button leads to if study branches. Optional.
- resultName - String representation of button. Will be written as an attribute to buttonEvent in answer file if button is pressed. Optional. Carried over to answer-xml.

checkbox

- Attributes
  - id - Integer between 1000-9997. Has to be unique in the file.. Carried over to answer-xml.
  - x - x-coordinate of the checkbox.
  - y - y-coordinate of the checkbox.
  - width - Checkbox width. Positive integer.
  - height - Checkbox height. Positive integer. Optional.
  - text - Text on checkbox. String. Carried over to answer-xml.
  - font - Text font. Possible values are: normal, bold, large, largeBold. Optional.
  - resultName - String representation of checkbox. Will be written as an attribute to checkboxEvent in answer file if checkbox is pressed. Optional. Carried over to answer-xml.

slider

- Attributes
  - id - Integer between 1000-9997. Has to be unique in the file.. Carried over to answer-xml.
  - x - x-coordinate of the slider.
  - y - y-coordinate of the slider.
  - width - Slider width. Positive integer.
  - height - Slider height. Positive integer. Optional.
  - min - Minimum value of slider. Integer.
  - max - Maximum value of slider. Integer.
  - step - Minimum value between two values.
  - value - Default value.

radiobutton

- Attributes
  - id - Integer between 1000-9997. Has to be unique in the file.. Carried over to answer-xml.
  - groupid - Any positive integer. Only one radiobutton with same groupid can be selected at a time. Carried over to answer-xml.
  - x - x-coordinate of the radiobutton.
  - y - y-coordinate of the radiobutton.
  - width - Radiobutton width. Positive integer.
  - height - Radiobutton height. Positive integer. Optional.

- text - Text on radiobutton. String. Carried over to answer-xml.
- font - Text font. Possible values are: normal, bold, large, largeBold. Optional.
- resultName - String representation of radiobutton. Will be written as an attribute to buttonEvent in answer file if radiobutton is pressed. Optional. Carried over to answer-xml.

grid

Grid is 90x90 pixels wide, topleft corner is (0,0).

- Attributes
    - id - Integer between 1000-9997. Has to be unique in the file.. Carried over to answer-xml.

list

- Attributes
    - id - Integer between 1000-9997. Has to be unique in the file..
    - x - x-coordinate of the list
    - y - y-coordinate of the list
    - width - List width. Positive integer.
    - height - List height. Positive integer. Optional.
    - numElements - Number of elements in list.
    - numVisible - Number of elements visible at the same time.
    - font - Text font. Possible values are: normal, bold, large, largeBold. Optional.
- Children
    - element

element

- Attributes
    - id - Integer between 1000-9997. Has to be unique in the file.. Carried over to answer-xml.
    - text - List element text.
    - subIid - id of the subItem that this list element leads to if study branches. Optional.
    - resultName - String representation of listElement. Will be written as an attribute to listEvent in answer file if element is chosen. Optional. Carried over to answer-xml.