

Instructions for the Change Pattern Modeling Experiment

Preparation Phase

- ✓ Students need to have Java 6 installed on their laptops
- ✓ The following link can be used to test whether Java is installed in the correct version <http://www.java.com/en/download/installed.jsp>
- ✓ Adobe Flash has to be installed for Microsoft Internet Explorer in order to be able to view the tutorial (IE's rendering engine is used for displaying the tutorial).
Check and Install Flash: <http://www.adobe.com/software/flash/about/>
- ✓ Windows OS (the software is only running on windows pcs)
- ✓ Internet Access during the experiment!
- ✓ Make copies of the task descriptions for each student
- ✓ Download the modeler from: <http://tinyurl.com/6b4rwtr> and go through the entire experiment by yourself in order to test the procedure

Conducting the Experiment

- ✓ Let the students install the modeler: Download modeler from:
- ✓ <http://tinyurl.com/6b4rwtr>
- ✓ Un-zip the file
- ✓ Provide the students with the task descriptions of the modeling task. Half of the students will use change pattern for process modeling, the other half plain BPMN.
- ✓ Students start the modeler by clicking "cheetah.exe"
- ✓ Students are asked to enter the 4 digit code which they can find in the footnote of the task descriptions
- ✓ Students answer demographic questions
- ✓ Students participate in BPMN/Change Pattern tutorial
- If students cannot see the video on the left perform the following steps to install flash
 - start Microsoft Internet Explorer
 - go to <http://www.adobe.com/software/flash/about>
 - if not installed Flash should install now
 - go back to the tutorial
 - click into the area where the video should be shown (left half of the window)
 - press F5 - the video should start playing
- ✓ Students perform modeling task; At the beginning of the modeling task students are presented with a modeling id which they should write on the sheet with the modeling task description (box on the top right)
- ✓ When students have finished the modeling task they can click "finish modeling" on the top left to move to the next step of the experiment
- ✓ Students perform change task; At the beginning of the change task students are presented with a modeling id which they should write on the sheet with the modeling task description (box on the top right)
- ✓ When students have finished the change modeling task they can click "finish modeling" to move to the next step of the experiment
- ✓ Collect the sheets with the modeling task descriptions

- ✓ Students have to fill out the questionnaire on cognitive load
- ✓ The collected data is automatically transferred to our database server.