# **Exercise 7 – Mensch-Maschine-Interaktion 1**

## **Heuristic Evaluation**

(Per-group homework, 1 week)

Familiarize yourself with the principles of heuristic evaluation. Starting points for your research could be e.g.:

- <u>http://jthom.best.vwh.net/usability/heuristic.htm</u>
- <u>www.useit.com/papers/heuristic/</u>
- <u>www.useit.com/papers/heuristic/severityrating.html</u>
- Search online ( <u>www.google.com</u> )
- <u>http://www.usability.gov/pdfs/guidelines.html</u> a smaller version of the PDF (13 MB instead of 161 MB) is linked from the MMI website.

Explain in your own words (300 words maximum) what a heuristic evaluation is, how it is conducted and what the potential problems and benefits are.

Heuristic evaluations are performed by a team of experts. Perform the heuristic evaluation on one of the following topics that has been assigned to you:

- 1. Set-top-box (Groups 2, 4, 6, 8, 10, 12, 14)
- 2. Open Source Application (Groups 1, 3, 5, 7, 9, 11, 13, 15)

Carefully document your findings – you will have to present them to the developers later. Based on your findings, write a short usability report (at most one page) mentioning the topic, outlining problems and their severity. Try to offer constructive rather than a destructive critique.

The set-top-box prototypes are installed in Room A 103 (front building) in Amalienstr. 17, the open source applications in Room B 205 (rear building). In order to do the heuristic evaluation you will have to book the room. To do so, please go to <a href="https://wiki.medien.ifi.lmu.de/Main/WebHome">https://wiki.medien.ifi.lmu.de/Main/WebHome</a> and create a Wiki Account (if you do not have one yet). Obey the naming conventions mentioned on the registration form! Once you have an account you can book time slots for your group here: <a href="https://wiki.medien.ifi.lmu.de/Main/MMIEvaluationWS0708">https://wiki.medien.ifi.lmu.de/Main/MMIEvaluationWS0708</a> .

#### 1. Evaluation of the Set-Top Box

A set-top-box is a decoder for digital TV, which often allows the use of special features, such as video-on-demand, Internet access, or chat. In Amalienstr. 17 there is a set-top-box and a Flash prototype, which incorporate different GUIs for set-top-boxes. Divide your group into two teams, one doing a heuristic evaluation of the set-top-box, the other one doing a heuristic evaluation of the Flash prototype.

For the evaluation choose the following topics:

- a. Music
- b. Video on Demand
- c. Images/Pictures

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On the set-top-box everything can be explored, but only the parts mentioned above must be evaluated within the exercise. The prototype works only in pre-defined parts:

- a. Music  $\rightarrow$  Sort  $\rightarrow$  Interpret "Toto"  $\rightarrow$  Song "Taint Your world"  $\rightarrow$  Play
- b. Video on Demand (Maxdome)  $\rightarrow$  Blockbuster  $\rightarrow$  "7 Jahre Tibet"  $\rightarrow$  Play
- c. Images/Pictures  $\rightarrow$  "Urlaubsbilder"  $\rightarrow$  "Thailand 2007"  $\rightarrow$  Mosaik  $\rightarrow$  Fullscreen Picture & Slideshow

Please keep in mind that it is only a prototype with limited functionality. Nevertheless, your evaluation should be the same as with the set-top-box, e.g. evaluation against navigation principles.

For the functional keys on the remote control please check *Figure 1* and *Figure 2* below.

Choose a set of heuristics (e.g. Nielson) to evaluate your topic. Find potential problems and rate their severity. Based on your findings, write a short usability report (at most one page) mentioning the topic, outlining problems and their severity.





Figure 1: Remote Control for the Flash Prototype

Figure 2: Remote Control for the Set-Top-Box

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### 2. Evaluation of Open Source Applications

We have teamed up with two open-source projects for this evaluation. Okular (<u>http://okular.kde.org/</u>) is a document viewer, Dolphin (<u>http://enzosworld.gmxhome.de/</u>) is a file manager. Both will be introduced with the new KDE 4.0 desktop environment this month.

Your task is to conduct a heuristic evaluation of these applications. Evaluation will be done in two sub-teams. One half of your group will evaluate Okular, the others will evaluate Dolphin. Use two different sets of heuristics for each application:

• **KDE4 Human Interface Guidelines (HIG)** – the accompanying checklists should provide a useful starting point.

(http://wiki.openusability.org/guidelines/index.php/Main\_Page#Checklists).

• Any other set of **heuristics of your choice**. Make sure that they fit the application's domain (e.g. don't use web usability or OSX guidelines).

Each sub-team should do a walkthrough of the application together, one student focusing on the KDE HIGs, the other one on the generic heuristics. For each application you shall write on report (containing results from both heuristics)

You can conduct the evaluation in our new lab (room B 205, **rear building**) during one of the time slots assigned in the Wiki. A short howto document on starting the applications will be available in the lab. Please direct technical and other questions to Raphael Wimmer (room A 206, front building, <u>raphael.wimmer@ifi.lmu.de</u>).

If you don't want to conduct the evaluation in our lab you can also do it on your own computer. However, you have to make sure to have the latest KDE 4.0 desktop environment installed. Previous versions of the applications may miss certain features or have bugs.

#### Submission:

- Submit your Evaluation Reports to the UniWorx<sup>1</sup> system.
- Please hand in a zip file named exercise7-groupN.zip (N is the number of your group). The archive should contain two reports in PDF format.
- The report must be written in English
- Deadline for submission: **Tuesday, January 22nd 2008, 12 a.m.**

<sup>1</sup> http://www.pst.ifi.lmu.de/uniworx/