

Exercise 8 – Mensch-Maschine-Interaktion 1

User Study Design

(Group homework: You are free to choose your group of 4-5 people yourself)

Study Goal:

Imagine you want to evaluate the performance and user acceptance of text input speed of two different mobile text-entry methods. You can choose any devices and any input technology. Be aware of the fact that if you vary both, the device and the input technique, the keypad itself is very likely to influence the speed and performance more than you might want. Therefore, it would be wise to use two different input mechanisms on the same device. For instance QWERTY input on Android compared to Swype on the same Android device.

1. Usability Evaluation Considered Harmful

Before you prepare the user study, we recommend you to read the following paper:

<http://www.billbuxton.com/usabilityHarmful.pdf>

2. Hypotheses

Define your hypotheses. What do you want to prove in the experiment? Null hypotheses are welcome but not required.

3. Methodology

Define the methodology of the study. What type of study are you performing? How will you achieve counter balancing? What are the tasks the user study participants have to perform? Are there ethical issues with the study? What are the dependent and independent variables? How do you intend to measure them?

Explain your choices. What are the advantages compared to the alternatives?

4. Participants

How do you plan to recruit participants for the experiment? What are important factors that might negatively influence the outcome of the experiment?

5. Study Protocol

Prepare a document that explains the different steps of the study. The document will be used by the experimenter to conduct the experiment and should contain all the important steps.

Do not perform the user study (yet).

Submission:

- Submit the solution using Uniworx. Include names of team members. Your file has to be a PDF and has to be named in the following scheme: exercise8-<cip-Kennung>.pdf. Each group should submit only one solution.
- **Deadline:** 11.07.2011, 12:00 (noon).