

# Exercise 10 – Mensch-Maschine-Interaktion 1

## Concept Evaluation

(Per-group homework, 1 week)

Evaluate your concept using the paper-prototype you have created last week.

### 1. Preparation

Create a paper-prototyping usability test setup:

- Choose at least 2-3 people from your focus group to act as testers.
- Within your team distribute the roles of observers and moderator (compare Exercise 6).
- Think about at least one task that the tester will be asked to do.
- Prepare questions that the testers will be asked after performing the task(s), such as
  - How difficult was the task to accomplish? (on a 5-point Likert scale)
  - How confident did you feel while doing the task? (on a 5-point Likert scale)
  - Where do you see room for improvement? (open question)

### 2. Running the Test

Run the paper-prototyping usability test to evaluate your concept. Remind the tester that the prototype is evaluated (not the tester) and ask him/her to **think aloud**.

During the test one observer videotapes the tester and paper prototype. If you do not have a video camera, you can also use still images instead.

Another observer protocols (1) what happens and (2) what the tester comments or “thinks aloud”.

Depending on the team size this task can also be split. Think about how you can structure the protocol, so that you can reconstruct what happened at which point. If, e.g., there are two protocols written by two different people, you should be able to merge them afterwards by sorting the entries by time.

### 3. Interview

Subsequent to the test, the moderator asks the questions. Print out the questionnaire, but do not let the tester fill it out silently. Rather ask the questions in a conversation. That way your findings are not limited to the questionnaire items and you can find out about things you have not thought of earlier.

(turn the page)

#### 4. Evaluation

Create an Excel sheet containing the questionnaire results and transcribe the protocols (if they are handwritten). Then, summarize the findings of the study. Add diagrams where helpful. Furthermore, think about how the insights you gained in the usability test would influence a further development. For example, if the next step in an iterative design process would be developing another prototype, what would you modify based on the lessons you have learned in this test?

Write a full report about the usability test including a short description of the task(s), the participants, the questionnaire, the findings and the consequences for a further development of your prototype.

Add still images or screenshots from the video.

#### Submission:

- Send your solution to your tutor by email. Use an attachment named exercise10-groupN.zip (N is the number of your group). Use the email subject “mmi1 exercise 10 group N”.
- The attachment must contain:
  1. A report containing the setup and results of the user study.
  2. An Excel sheet containing the questionnaire results (“answers.pdf”)
  3. The observer’s protocol (“protocol.pdf”).
  4. A document that specifies how the work was split between the team members (“task-sharing.pdf”).
- **Deadline:** 15.07.2009, 12 noon
- Present the findings of the usability test and describe how you would modify the user interface based on these insights if you would continue developing your application.