

## **Assignment 3 – Mensch-Maschine-Interaktion 2**

**Note: You can receive a maximum of 20 points for each exercise sheet. If you reached at least 15 points you get one bonus point. You can receive only 1 bonus point per sheet. Bonus points will be added to the points achieved in the final exam.**

**Please perform the tasks in groups of 3-4 people. However, everyone within the group submits his/her individual solution. We expect those solutions to be similar, but not equal!**

### **Exercise 1: Exploration phase (10 points)**

Choose a profession (that you have access to!) that could profit from using any mobile technology. (Decide on one profession for your group, but report on your decision individually!)

- 1) **Each of you:** Name this profession and explain your decision. Describe in detail one task/situation this profession does that might be not well modelled with a common single-user mouse-and-keyboard desktop setup. (1 points)
- 2) **Each of you:** Choose 6 questions for a semi-structured interview following the guidelines by Wendy Mackay (see related work below, „vague questions produce vague answers!“). (3 points)
- 3) **Each of you:** Conduct this interview with 1 person (as a group you would have 1 interview per group member). Since you need to record the interview, please let the participants sign the attached consent form! (3 points)  
**Or if you do not have limited access to this profession, pick 6 questions from the in 2) created questionnaires and conduct only one interview (take care, less data can lead to less findings, which makes exercise 2+3 more difficult!)**
- 4) Discuss and evaluate as **a group** the findings of all interviews. Summarize **individually** all problematic situations within a real-world task (even those that were found by other group members) using the following shape (at least 3, if you have less you should consider re-doing the interview with different questions): (3 points)

(1)Problem Name : (2)Problem Description, (3)Citation of user statement in interview.

example:

(1)Redundancy problem:

(2)biologists have to work across two different media (explain why!), paper and desktop setup, [more details] etc.,

(3) „Ich gehe mit meinem Block und Stift ins Lab und schreibe mir dort meine Messwerte auf, weil [etc.]“ (Subject 1, 1:24 min [in audio recording])

**Related Work:** Mackay, W. (2002), *Video to Support Interaction Design*, DVD, ISBN 1-58113-516-5, ACM, New York.

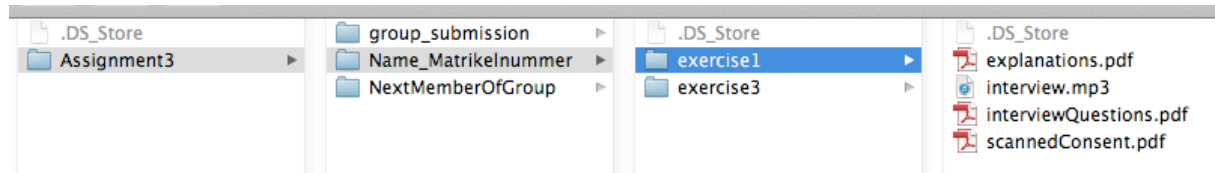
<http://www.cs.ubc.ca/~cs544/video/Mackay-using-video-usletter.pdf>

**Submission per person (your individual thoughts and writing!):**

- 1) **written explanations and interview questions as .pdf**

- 2) scanned consent form as .pdf or .jpg
- 3) submit your own recording file of the conducted interview as .mp3 (**or the recording of the single interview you did as a group.**)
- 4) written identified problems (name, description, citation) as .pdf

example:



### Exercise 2: Creative Phase: collect and generate facts, problem statements and ideas... without criticism (5 points)

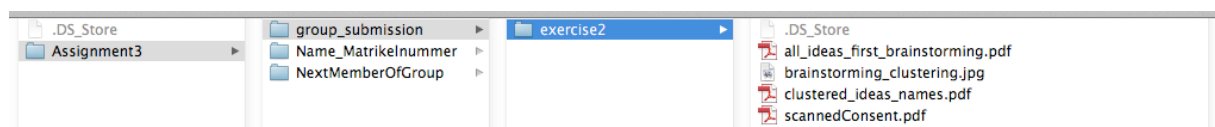
At this point you successfully identified real-world problems that people encounter during their work process. In this exercise, you will elaborate on those problems. Be creative and come up with potential solutions!

1. **As a group:** Brainstorm in the group following the rules indicated in the related work. Write all your ideas down. (1 point)
2. **As a group:** write all ideas on post-its and rearrange them in space, cluster them and give the cluster a name. Report all cluster names and take a picture of your post-it clusters. (2 points)
3. **As a group:** Of all ideas that came up during the brainstorming session, every member of the group gets to vote for 3 ideas. Follow the process of „phase 2“ on page 13 of Wendy Mackay’s guidelines. Decide as a group for one solution you like best and report: (2 points)
  - a. **name of the solution/idea**
  - b. **description of the solution**

**Related Work:** <https://dschool.stanford.edu/blog/2009/10/12/rules-for-brainstorming/>

### Submission as a group:

- 1) description of all ideas that came up during the brainstorm session as .pdf
- 2) picture of your idea clustering as .jpg
- 3) report of all cluster names as .pdf
- 4) report of the group’s decision on one idea/solution as .pdf



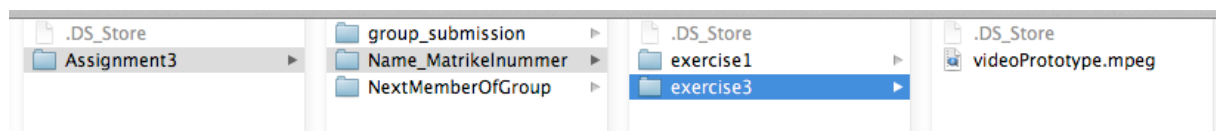
### Exercise 3: Communicate your idea(s) (5 points)

Create video prototypes of your ideas of potential interactive systems that could solve the issues found in exercise 1. Video prototypes are not polished videos. They should be done cheap and quick. However, they should be understood by people outside the group.

1. **Each of you:** With the help of all members of the group, you create one video prototype following the guidelines of Wendy Mackay. Blend in the titlecards in the beginning of the video with the name of the idea, the author's name, date and take (page 17 in her document). If your video has multiple scenes, attach them together into a single movie clip.

#### Submission per person:

##### 1) your video prototype as .mpeg



**Related Work:** Mackay, W. (2002), *Video to Support Interaction Design*, DVD, ISBN 1-58113-516-5, ACM, New York.

<http://www.cs.ubc.ca/~cs544/video/Mackay-using-video-usletter.pdf>

**The submission date is december 4th 2pm in UniWorx.**