

Milestone 5

Evaluation of Low-Fidelity Prototypes

Due: Monday, January 20, 2020, 9:00 am

Description

At the end of last week, you prototyped at least three solutions for several core activities by using the prototyping techniques discussed in the video lectures. During this week, you will evaluate all three prototypes with target users.

Tasks

For **each prototype**, you will perform the following tasks:

1. Discuss what you want to test in the user study. Come up with a user study protocol. The user study protocol describes the procedure of your user study. It should be detailed enough so that any HCI practitioner should be able to repeat the experiment herself.
2. Ask the user to perform the *core activities* (you identified last week) with your prototype.
3. One member should record the video, one should be the interviewer/experimenter, one member should take notes, and one member should be (if necessary) the Wizard or prototype troubleshooter.
4. Once you have evaluated all of your prototypes, discuss the findings among your group. Pick **one** solution based on what the users were most excited about.

Note

- The total time to evaluate all three prototypes with a user should be around 45 minutes. This includes the time taken to set up your study, introduce your project and team members, and wrap up. Please keep this in mind when scheduling appointments with the participants.
- Each prototype should be evaluated with **at least two users**. Note that each user can evaluate all three prototypes. Also, try to evaluate the prototypes with a new user, i.e., you have not discussed the project with him/her earlier.
- After user evaluations, you will select a prototype to proceed with. For milestone 6, you will modify this prototype based on the users' feedback. Then, you will create a video that communicates a) the problem you are solving and b) the solution you identified by showing the interaction. See <https://hci.rwth-aachen.de/dis-19> for sample videos from the last year's course. Start thinking about the story (i.e., script) for your video already.

Resources

- Details about the user study protocol can be found here: *Kevin O'Brien and Jean Wright. "How to Write a Protocol." Journal of Orthodontics 29.1 (2002): 58-61.* A PDF version of this paper can be found in RWTHmoodle along with this milestone document.
- Consider using an STN (State Transition Network) to keep track of the different interface states and the transitions among them during the user study. Please refer to videos: 11.4.1.–11.4.4.

Deliverables

Please prepare the deliverables as a **PDF**. If you link to a video or other sources, include the URL in the PDF. You can also include videos or other relevant files. Gather everything in a **ZIP** file. It should eventually contain:

1. The user study protocol of the evaluation. This should include the following details:
 - i. title,
 - ii. objective of the study,
 - iii. contextual information, i.e., where the user will perform the tasks,
 - iv. details of the task, i.e., steps in the study, duration, etc.,
 - v. experimental procedure, i.e., what did the experimenter do,
 - vi. (optional) roles of the different team members,
 - vii. (optional) images of the setup, and
 - viii. (optional) STN for the prototype (just for the activities the user will be performing). Use images of the interface in the state diagram. See Lab slides from Jan. 13 on RWTHmoodle for an example. STN should capture all states of the interface you have prototyped.
2. For each evaluation with the user, include the following:
 - i. an unedited video recording of the user performing the task,
 - ii. (optional) notes that were collected during the interview, and
 - iii. 3–5 important findings from the session. (This will be used in task 4.)
3. A short paragraph describing which prototype you select and your reasons.

Name your file **P05-GXX.zip**, where XX indicates your group number. E.g., if you are in group 5, name your ZIP file as **P05-G05.zip**. Submit your ZIP file to RWTHonline before **9:00 a.m., Monday, Jan. 20.**