## Project phase #2 (due 5/10/2018)

# **Prototyping**

### Overview

During phase #2, you will focus on the "Ideation" and "Idea Selection" steps of the design process that we studied in class. Using the results of phase #1, your team will explore several ways to serve your personas' goals, select the most promising solution and create a low fidelity prototype for this solution.

# What to do

#### **Brainstorming session**

Now that your group is comfortable with your personas and their goals, you are ready to brainstorm about how to serve each persona's goal. The brainstorming session should address each goal (either in turn or in parallel) and then address how to integrate these goals in a coherent interface. Most brainstorming sessions are about an hour but you are free to manage your time as you wish. Overall, your group should produce around 100 ideas during this phase. You are encouraged to help each other by participating other group's brainstorming session. IT IS REQUIRED TO RUN A BRAINSTORMING SESSION WITH AT LEAST **THREE** PARTICIPANTS.

At the end of the brainstorm, you should make a record of your brainstorming session (either by taking a set of legible pictures of the board you were working on, or copying all ideas on a piece of paper, or working with large pieces of paper and making (reduced) copy of them), then spend 5 to 10 minutes selecting the best ideas you found. The group should then write a brief report on the brainstorming session findings.

#### Exploring possible designs

Using the information gathered during the brainstorming session and phase #1, each group member should <u>independently</u> create a *low-fidelity prototype* of the interface. The prototype does not have to be very detailed, but must convey how each goal will be addressed. If you are working on the project alone, just create one prototype.

Then, the group should run each candidate interface, by having its author run the interface, another group member use the interface and the remaining group members observe and take notes about what is working and what should be improved. This is **not a competition**, and the goal is not to pick the "best" solution. Instead, it is an exploration of the design space and your final prototype might draw from each prototype. During this phase, it is important that the person running the interface be mute so that problems could be identified rapidly. IT IS REQUIRED TO RUN YOUR PROTOTYPE IN FRONT OF AT LEAST ONE OBSERVER. Invite your friends or classmates.

#### Building the final prototype

Using the information gathered previously, your group should now decide on a final design for your prototype (probably drawing from all prototypes) and build the corresponding low-fidelity prototype. This final design should be detailed, but you should not be concentrating on prettiness. Rather, you are trying to show the overall representation and interaction style of your system. Note that your prototype should be feasible at least in principle. Don't forget to debug it by having members of the group use the interface.

#### Validating your prototype

Once your prototype is correctly debugged, you should validate it by running it in front of at least one representative of **each** of your key persona. During this phase, it is important that the person "running" the interface be mute (to avoid influencing users' reaction. For example, be careful not to influence users' reaction by making comments.) and that at least another group member (or anyone who could help you)

MAKE A VIDEO RECODING while observing user reactions AS YOU SAW IN CLASS.

### **Deliverables**

In addition to the VIDEO you will take for validation (20 points), your report will include the following sections.

### Section 1 (30 points): Ideation phase (2 pages)

- 1. Record of your brainstorming session as detailed above.
- 2. Presentation of the brainstorming session findings as well as the best ideas you selected. Provide a brief explanation for each of them.
- 3. For **each** group member, the low-fidelity prototype created by this group member as well as the pros and cons identified during the presentation to the rest of the group.

### Section 2 (30 points): Idea selection phase (2 pages)

- Describe the key aspects of your final design and how your group reached this design (~ 1 page),
- 2. The final (debugged) low-fidelity prototype. You should provide all elements necessary to "run" your prototype including interface elements, cursors and so on. While we might not run the prototype ourselves, your group might be asked to run the prototype during the group presentations on the project due date, or during office hours if some aspect of the interface need to be clarified,
- 3. For each goal of your main personas, storyboard (4x2) how your interface will help the corresponding persona reach his or her goal. Include a script to explain what is going on each frame of each storyboard.

## Section 3 (20 points): Validation (1 page)

- 1. Persona specific findings. For *each* persona:
  - Explain why the user you picked, is a good representative of the

- persona,
- Describe the user test setting (where the test took place, which member of the team did what, what was the general layout...),
- Describe what went well, and what did not go so well with your interface.
- Write a summary of what you should change in your interface to serve this persona better.
- 2. Overall findings. Write a synthesis of your findings describing the strong point of your interface and what should be improved in the next design cycle.

# Grading

Grading will be based upon the sophistication, logic and maturity of the presentation, and the completeness of the work. It is important to base your ideation and prototyping on the results of the phase #1 by showing clear connections between them in your report.