

Group Assignment 5: High-Fidelity Prototyping

Date Assigned: Monday, March 11, 2013

Date Due: Monday, April 8, 2013

Points: 65 pts

Overview

In this assignment you will build a working prototype of your interface. You will first revise your user interface ideas based on the evaluation of your low-fidelity prototype from the previous assignment. You will then build an interactive prototype of your revised design.

Interface Redesign

Use the results of your low-fi prototype tests to design a revised user interface. Develop new and/or revised scenarios for your tasks by storyboarding your ideas. The tasks that most of you used in the low-fi assignment should be sufficient for this. However you should update or replace simple or partial tasks that did not adequately cover your proposed functionality. Make sure to revise all of your tasks based on the feedback from your users. If you are making significant changing your tasks, make an appointment with me to present your new tasks, design ideas, and storyboards for discussion.

Prototyping

Your prototype should implement the three scenarios that you developed for your tasks. In addition, the design of the prototype should now start to account for the size, resolution, colors, and other attributes of the target platform.

You should implement enough functionality so that a user could adequately evaluate the interface. While the underlying functionality does not have to be fully implemented, there should be enough there so that you can ask users to tell you whether or not the interface would address their task-specific needs. For example, applications requiring voice recognition could instead use a wizard-of-oz interface in which a human-operator could manually do the recognition behind the scenes.

You have a short period of time to complete this prototype, so you should focus on showing only what is essential and try to avoid writing code where it is not necessary. You will likely have to make some difficult choices! Make sure you talk with me if you have any questions about how much of your project you should implement.

Note: You should not consider this interactive prototype to be your final implementation. You will be evaluating this prototype in the next assignment and I expect that you will continue revising the implementation through the remainder of the class.

Deliverables

- **Prototype:** Your prototype must be accessible and/or executable by everyone in the class. It must be accompanied by a README file that describes any installation requirements and operating instructions, including any limitations in the implementation.
- **Report:** You must submit one copy of a printed report (about 6 pages of text) in class on April 8th. You must also put a copy of the report on your website.
- **Group member evaluation:** Each group member must submit a summary of the other group members' contributions. The evaluation should list each team member's role, what they contributed for this portion of the project, and an evaluation of their performance (did they do their fair share, show up to meetings on time, complete tasks on time, etc.). You should also list two strengths and one weakness of every member of your group. Do not evaluate yourself!

Report

The report should follow this outline with separate sections for the top-level items.

- **Each team member's name and role in this assignment**
- **Problem and solution overview (1 paragraph)**
- **Tasks (1/2 page):** 3 representative tasks to test your interface (easy, medium, hard)
- **Revised interface design (1 page plus screenshots or scripts)**
 - Changes as a result of low-fi testing and rationale behind the changes (refer to screenshots or scripts).
 - Sketches or scripts for unimplemented portions of the interface
 - Storyboards of tasks (annotated screenshots or scripts)
- **Prototype overview (2 pages)**
 - Overview of the UI implemented (reference figures or scripts from next section)
 - What was left out and why
 - Any wizard of oz techniques that are required to make it work
- **Prototype screenshots or scripts (as many as needed)**

Grading

Here is the grading for the report and prototype (60 pts total):

Design (20 Points)

- **Tasks (3 pts)**
 - Do the tasks cover the interesting features of the project?
 - Do the tasks have an appropriate difficulty/complexity specified?
 - Do the tasks altogether form a compelling story for the project?
- **Changes (5 pts)**
 - Were appropriate changes made to address the important problems discovered?
 - Are these changes well illustrated with screenshots or scripts?
- **Transition from low-fi to interactive prototype (12 pts)**
 - Were the limitations of the low-fi addressed?
 - Were any non-standard interactions described and justified?

Prototype (20 pts)

- Is the prototype accessible and working?
- Can users complete the three tasks with the prototype?
- Were appropriate tradeoffs made between functionality and completeness?
- Are the limitations and tradeoffs described and justified in the report?
- Does the README file summarize these limitations and any other details needed?

Report (20 pts)

- **Writing**
 - Does the report cover all the topics in the outline?
 - Does the organization follow the outline?
 - Are sub-sections used for easy scanning of important parts?
 - Are good writing techniques used throughout the document?
- **Screenshots and Storyboards or Scripts**
 - Are important figures referenced and placed inline with the text?
 - Are they clearly annotated (i.e. with explanatory captions)?

Group Member Evaluation(5 pts)

Turn in a hard copy of this assignment at the beginning of class on the day that it is due.