CS 377E Spring 2015: Assignment 7
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Interactive Medium-fi Prototype (Team)

Due: Thursday, May 21, 2015 (due at class)

Goals

The goal of this assignment is to learn how to build interactive, medium-fidelity prototypes of application ideas. You will revise your design solution based on the low-fi evaluation *and our feedback*. Then, you will use whatever tools make sense to build an interactive, medium-fidelity prototype of the design.

Interface Redesign

Use the results of your low-fi prototype tests & teaching staff feedback to design a revised solution to your problem. 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, but some of them may have been ***simple or partial tasks*** that did not adequately cover your proposed functionality or your functionality may have changed based on testing or our feedback. Make sure to ***revise those tasks***. If you are changing your tasks, email us to present your new tasks, design ideas, and scenario storyboards for discussion.

Prototyping

You should use whatever tools are appropriate to ***quickly*** create an interactive prototype of your application. For some applications, you might use a design tool that targets mobile platforms (e.g., iPhone, iPad, or Android). Students in the past have had success with Marvel, InVision, and proto.io. If there is another tool (e.g., Justinmind Prototyper – which can also support Google Glass) you think would work better for your project due to capabilities or expertise on your team, please contact us and discuss it first.

Your prototype should “implement” the three scenarios that you developed for your tasks. You should now be making your design work with the actual target constraints (e.g., size of screen, text size, and built-in controls/widgets) of a real platform (e.g., iPhone, Android, iPad, watch, Google Glass, or ambient display). Many of the limitations and tradeoffs you made for the low-fidelity prototype should be addressed by this medium fidelity prototype.

The ***underlying functionality does not have to be fully implemented***. For example, applications requiring large databases of information can instead have a sufficient number of hard-coded data points for supporting the three tasks. You may need to use Wizard of Oz techniques for complex sensing (e.g., sensing what someone is eating or how much water has just been used in a home).

You have a short period of time to complete this prototype, so you should focus on showing only what is essential. Focus on design and interface, not underlying implementation. You will likely have to make some difficult choices!

Deliverables

1. **Prototype**
   Your prototype must be accessible from a web site. It must be accompanied by a README file that describes the tool that it runs with and operating instructions, including any limitations in the current implementation.
2. **Presentation**
   Your team will present your project in class during a **five-minute** presentation. See the grading guidelines for information on how to structure your talk. Practice in advance! You must **make the slides available for on your Google drive directory.**

Grading Criteria

Here is the grading criteria for prototype (100 pts total):

Design (50 Points)

- Tasks
  - Do the tasks cover the interesting features of the project?
  - Do the tasks have an appropriate difficulty/complexity specified?
  - Are the tasks complete, real tasks rather than features or sub-tasks?
  - Do the tasks altogether form a compelling story for the project?
- Changes
  - Were ***appropriate changes*** made to address the important problems discovered during the low-fi testing?
  - Is there a clear ***rationale for the changes***?
  - Are these changes ***well illustrated with screenshots***?
  - Are the three scenarios clear, labeled, and mapped 1 to 1 from the tasks?
- Transition from low-fi to interactive prototype
  - Were some of the ***limitations of the low-fi addressed***?
  - Were appropriate ***constraints from the final target platform*** considered?
  - Were any non-standard interactions described and justified?

Prototype (50 pts)

- Is the prototype ***accessible and fully*** **working** for the 3 tasks?
- Can users complete the three tasks with the prototype?
- Were ***appropriate tradeoffs*** made between functionality and completeness?
- Does the README file summarize these limitations and any other details needed?

Presentation Guidelines

Note that you should use images liberally and try to keep the text on the slides brief (and use large fonts – **no less than 20 pt anywhere**).

Suggested Organization

- ___ Overview of talk (1 slide) – don't read this, ***tell it like a story***
- ___ 3 representative tasks noting key changes (1-3 slides)
- ___ Revised UI design & rationale (1-3 slides – mainly images w/ captions)
- ___ 3 scenarios shown carrying out each task w medium-fi prototype (use screen shots and/or live demo)
- ___ Tools Used (what worked, what didn't work, WoZ techniques) (1-3 slides)
- ___ Summary of talk (1 slide)

Content Grading

- Representative Tasks & Scenarios
  - ___ Did they provide coverage of the functionality?
  - ___ Where the tasks too easy or too hard?
  - ___ Where the tasks real, complete tasks or fragmented?
- Medium-fi Prototype
  - ___ Was the interface novel and creative?
  - ___ Was it appropriate for the supported tasks?
  - ___ Did UI changes follow from sound reasoning/data from low-fi testing?
  - ___ Did interface fit the target platform's constraints?
- Tools
  - ___ Were appropriate tools used & explained?
  - ___ Were tradeoffs to using the tool discussed?
  - ___ If Wizard of Oz techniques used, were they clearly explained?