

GRP05 : interactive prototype & presentation

=====overview

In this assignment you will build a working prototype of your 2 interfaces (mobile phone and smartwatch). 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 in Android. Remember that your interactive prototype should be of the two devices talking to each other! You will therefore be building two projects in Android, one for the mobile phone, one for the smartwatch.

You will also be giving a presentation of your interactive prototype in front of the class. You'll be grading others' presentations, and they will be grading yours! The grade for the presentation will be broken down into two parts : a grade for the design of the presentation itself, and a grade for the information presented. This is detailed below.

You will need to submit your slides to us as you would like them presented. You may use Keynote, PowerPoint, Google Docs, or PDF, but we will be queueing them all on a single laptop for speed reasons.

=====the assignment

part 1 : 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.

part 2 : prototypes

Your prototype should implement the three scenarios that you developed for your tasks through two Android projects: one for the mobile phone, one for the smartwatch.

You should implement enough functionality so that a user could adequately evaluate your application. While the underlying functionality does not have to be fully implemented, enough

parts should work so that you can ask users to tell you whether or not the application is understandable and usable. For example, an application requiring voice recognition could instead use a wizard-of-oz interface in which a human-operator could manually do the recognition behind the scenes (Note however that wizard-of-oz control often requires special code to be written, and that you should avoid hard-coded functionality).

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. For example, you may wish to skip implementing features such as configuration screens in favor of features that are more central to the user experience. You will likely have to make some difficult choices! Make sure you talk with us 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 we expect that you will continue revising the implementation through the remainder of the class.

part 3 : presentation

On 5 August, your team will present your project to the class, including a demo of your prototype. Presentations will be short and sweet — 3.5 minutes per team. Presentation order has been assigned randomly and can be found at the bottom of this page. Telling the story of your project in 3.5 minutes is hard — practice in advance! At most two people from your group should actively speak during the presentation (there just isn't enough time for everyone to speak). Each group's project will then be discussed/critiqued for an additional 1.5 minutes (Q/A).

=====deliverables

- Prototype: You must record a video of your prototype and run through all of the features your group has implemented.
- Report: You must submit a copy of your report via hackster.
- Presentation: You must submit a copy of your slides (in your preferred format) via bcourses.
- Note: We'll also be asking each of you to evaluate other teams, so class is mandatory on 5 August. Feedback will go on bcourses after the presentations.

=====grading criteria : prototype

The report and prototype will be graded together, and the presentation will be graded separately. 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 appropriate constraints from the mobile device considered?
 - 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?

Report (20 pts)

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

- Each team member's name and role in this assignment (1 pt)
- Problem and solution overview (1 pts)
 - 1 paragraph
- Tasks (3 pts)
 - 3 short descriptions, 2-3 sentences each
 - 3 representative tasks to test your interface (easy, medium, hard)
- Revised interface design (4 pts)
 - 1 page + screenshots
 - Changes as a result of low-fi testing and rationale behind the changes (refer to screenshots or scripts).
 - Sketches for unimplemented portions of the interface
 - Storyboards of tasks
- Prototype overview (8 pts)
 - 2 pages
 - Overview of the implemented UI (reference figures in your report)
 - What was left out and why?
 - Any wizard of oz techniques that are required to make it work
 - Documentation of any code not written by the team (libraries used, etc.) – This section may be left out if not applicable
- Prototype screenshots (3 pts)

=====grading criteria : presentation

Design of Presentation (15 pts)

Suggested Organization

- Overview
- Overall problem
- Representative tasks
- Overall UI idea, including design changes from the previous iteration and the rationale behind these changes
- Summary

Presentation

- Use slides. Ensure that the presentation shows appropriate preparation, and that visual aids are effective, properly prepared, and properly employed. Try to replace text with images wherever possible. Make sure text is not too small.
- Ensure the presenters make eye contact with the audience and speak with adequate volume.
- Cover the required scope within the 4 minute time period. Practice and time your presentation.
- You will lose points if you go overtime.

Team Work

- The most common mistake in CS160 presentations is trying to demo while speaking. One person in ten can do this effectively. Most lose the audience. Even with one person speaking and another one demoing, live demos often go wrong. We suggest you use pre-recorded video instead.
- At most 2 people from your group should speak during the presentation. There isn't enough time to switch between all group members. However, all group members should be prepared to answer questions.

Information in Presentation (10 pts)

Representative Tasks

- Did they provide coverage of the functionality?
- Were the tasks too easy or too hard?

User Interface

- Was the interface novel and creative?
- Was it appropriate for the supported tasks?
- Does it follow from the task analysis, low-fi prototype, and other sound reasoning?

Presentation of Functionality

- Was enough functionality presented to illustrate the representative tasks?
- Was enough presented to give a flavor of the interface?

=====submission instructions

Your *report and prototype details* will go on hackster, while the *slides* will be submitted on bcourses for us to easily load them up for the presentations. Student feedback will also go on bcourses; we're making it anonymous this time.

=====presentation order

1. The Pandas
2. HYJJR
3. The Next Medium-Sized Thing
4. ELKREW
5. Tomato Gummies
6. Mynstur
7. JITD
8. Ndroids
9. HAZY
10. E and the Ds
11. Jaws
12. Team Asia
13. This is Not Our Grade
14. Bloodhound Gang