GR2: Designs

In this group assignment, you will start designing your term project. Your project may have changed direction slightly from GR1. Make sure you update your GR1 write-up to be consistent with your GR2 submission.

Design

Scenario. Write a scenario that involves the tasks you identified in GR1. A scenario is a concrete, realistic story that sets up a situation involving a user with a goal to satisfy, and then follows the user through the tasks they do to satisfy that goal. While your task descriptions were abstract (e.g. "Buy a subway ticket"), your scenario should be concrete, complete with imaginary users and imaginary details (e.g. "Frodo is going to the Red Sox game with 3 of his friends. He needs to buy a ticket, but the T station is packed with commuters and other Red Sox fans...").

Design sketches. As an *individual*, each member of your group should generate **three different** preliminary designs for your user interface. Each design should be represented by one or more sketches, and accompanied by an explanation in a few sentences. These do not need to be fully fleshed out but should reflect the insights gained from writing the scenario.

We want you to stretch your design thinking. So at least one of each individual's three designs should be extreme in one of the following ways or similar:

- ultra-efficient
- ultra-safe (preventing all errors)
- for illiterate users
- for blind users
- for a non-computer, non-phone interface
- for a tiny screen (smaller than a standard smartphone screen - e.g., a watch)
- for children
- for the elderly
- for use while driving
- for physically-disadvantaged users

Storyboard designs. As a *group*, synthesize your individual design ideas to generate **three different** proposed designs for your user interface. These designs should

synthesize the best parts of the individual designs. Explain each design and include a storyboard showing how it works for your scenario. The storyboard should combine words with sketches showing how the interface appears over the course of the scenario and should include (at the end) an analysis of the design's good and bad points for learnability, efficiency, and safety.

Deliverables

Google Doc Project Report. Under the section "GR2 Design" add the following sections:

- **Scenario**
- **Individual design sketches**
- **Group designs, consisting of storyboards and analyses**

Peer Evaluation Form. Complete your peer assessments and upload them in BlackBoard. Peer Evaluation Form

--due Feb 25

Advice

Your designs will be judged on how well you've described them, how well you analyze them, and how diverse they are. <u>Three group designs that differ only in small ways will not receive much credit.</u> Individual designs that fail to show stretch will not receive much credit.

Take time to brainstorm on a variety of different interface designs, sketching them by hand on paper or a whiteboard. You should play with many more than the required designs, but we only require you to record a subset of them in your report.

When you draw your sketches, don't get bogged down in details like wording, graphical appearance, or layout. Keep things simple. Focus on the conceptual model you're trying to communicate to the user, and think about your task analysis: what the user needs to do and how they can do it. Putting too much time into designing low-level details is pointless if big things have to change on the next design iteration.

Hand-drawn sketches are preferred. There are a number of ways to get hand-drawn sketches into your report. You can draw on paper and use a scanner to convert it to electronic form. Make sure your sketches are readable, and crop them and size them appropriately so that your report presentation has good usability. Sketches may be annotated on a computer.