Term Project Checkpoint: Design Studio

Logistics For Presenters

The studio classes in this course were previously run as studios – you had a chance to present your project and got feedback from the class. Given the size of the class we would divide into two rooms and do this over two days. We want to do the same thing but have to adjust for current circumstances. It's actually not too big a change – instead of an in-person presentation, you'll make a video that you'll upload to YouTube. We'll split the class into 3 separate Zoom meetings supervised by one of the TAs or Prof. Davis, and do this on both Tue and Thur. We'll play the videos via Zoom during class and the class will provide live feedback.

All the rest of the project checkpoints will be done the same way.

Your task for the design studio:

- 1. **Make a 6-minute video** where you discuss all the points outlined in the **content** section below.
 - a. You only need to make one video per team. You may find it helpful to make slides and then record yourself talking and explaining as you go through the slides (this can be done by recording your screen with microphone).
- 2. Upload your video to YouTube and copy the link into the spreadsheet below:
 - a. https://docs.google.com/spreadsheets/d/1rkX3RZutWElXmTwanW-VyFmhB oNdprDzLGmrSv5V0Y/edit?usp=sharing
 - b. You need to upload only one copy of the video per team. Once you upload it, double check that it plays correctly before copying the link over to the video spreadsheet.
 - c. Fill in the slots in the spreadsheet in order; we will separate into six groups.

Content

This course tries to give you practice in design, and one of the best ways to do that is with a studio, i.e., a session in which you present your work to the class and get feedback. We will do this several times over the semester, with your work at various stages of completion.

This presentation will be in the form of a 6-minute video to be viewed by other students, who will provide feedback. The purpose is (a) to focus your efforts toward a checkpoint to ensure that you are making progress, and (b) to provide a forum for you to receive feedback on your ideas before you start building your system.

The idea is to present an updated and refined version of your project proposal. You should consider carefully the feedback you got on your proposal, both the generic and the individual feedback, and modify the proposal as appropriate.

Even in the absence of any explicit guidance from us on your proposal, you should further refine your problem statement, scenario, proposed solution, and implementation plan. In particular, be sure you have a *completely specific, concrete scenario of your system in use,* as you currently envision it. That scenario will surely change as the project develops, but having a specific, concrete scenario now will help you debug and develop your ideas.

Your presentation should include:

Problem scenario. Describe a scenario that illustrates the problem you are tackling in your term project. A scenario is a *concrete*, realistic story involving a user with a goal to satisfy, and outlines the tasks that they need to perform in order to achieve that goal. Illustrate the scenario with a *storyboard*: images showing the scenario you described. The storyboard should show the actions that the user is performing and how the interface appears over the course of the scenario. Be as concrete as possible about the gestures or speech, or ... that the user is performing and the resulting outcomes.

Proposed solution. Concisely explain the vision behind your solution to the problem. What does your solution improve upon, or why does it enable the user to achieve their goals in an easier / more efficient / more enjoyable way?

Implementation plan. Describe how you plan to build your system. You should include: a **system diagram** showing how the user's input will flow through your system, the **libraries** and packages you plan to integrate into your system, and the **components** that you will be building yourself. Check any libraries you plan to use to ensure as best you can that (a) they do what you need to do, and (b) they will work with whatever operating system, browser, etc., you have. Now is the time to see if you're going to have compatibility problems. **Be sure to explain** *why you need* the library you mention: know what it does and why it's useful to you.

Explain the *current status* of your implementation. Do you have all of the hardware and software your project requires? Have you started testing any of the outside libraries or services (e.g., speech recognition) that you intend to use?

If you need to collect **training data**, explain how you plan to collect it.

Evaluation. Describe how you plan to evaluate your completed system in terms of usability and/or recognition. What tasks will the user perform and what baseline(s) will you compare against?

Use your time well: the clearer your presentation, the more useful feedback you will get on possible features or usability issues of your designs.

Logistics For Listeners

Listen carefully to the videos during class, ask live questions and make suggestions. You should download a copy of the evaluation form

 $\frac{https://stellar.mit.edu/S/course/6/sp20/6.835/courseMaterial/homework/assignments/assignment7/studioEvaluations.docx}{/assignment/1/StudioEvaluations.docx}$

and take notes during the videos, to help you ask good questions and make good suggestions. You will also be required to fill out this form for each video you see, and upload it to Stellar, so pay attention and take notes during the video.

Grading

Presenters will be graded on how well you've described your designs and implementation plan. The more concrete you can be about the system you plan to build, or the research you need to perform in order to make technical decisions, the better.

Listeners will be graded on participation during the class and on the quality of the evaluations they provide.