

NOTE:

Before making the video prototype, we conducted a short contextual inquiry based on a meeting with Morgan and Katie. We changed our app to one that will allow students to track their current progress in any class such as CSE 440, and compare it to the progress of other students. We wanted the app to be in real time, which would be used frequently.

The contextual inquiry showed that (i) students cared about their individual grades in a class; (ii) students do not wish to compare grades with other students; and (iii) students do wish to know whether they feel the same way about assignments and whether they have learnt as much as others.

Our new design incorporates all of the above. It is a web application that allows a student to track the time taken to complete an assignment, and correlate the grade he/she receives with time spent on each assignment. The app also compares qualitatively the general feedback (happy/sad/angry/excited) and level of learning (on a scale of one to 5 from “Very Little” to “Learnt a Lot!”) from each assignment with data from classmates. Hence, this is an app a student would use and reuse over a quarter.

The new tasks also use this app. The first task allows the student to start working on a new assignment and time him/herself (easy), the second task asks the student to provide feedback about the assignment (moderate), and the third task tracks progress over the course and provides comparison and individual data (hard).

Video Prototype Report

How did you make it?

We rented a high quality video camera from classroom support services for 2 weeks. Once the tasks were decided upon, we prepared complete scripts that would describe each entire task. Roles were then assigned between ourselves, and 2-3 practice runs were made for each scene. During this process, the script was edited and re-edited to better suit the task and the movie. We recorded multiple videos for each task and watched it after completing each task, to make sure everything was covered. Then we recorded prototype interaction for all three tasks (that was inserted at a later point during editing). After all scenes were completed, the video was edited, and music and credits were included.

Any interesting new techniques you came up with?

During the video prototype process, we came across two new techniques to make production efficient. Instead of starting/stopping the video when the task needed to show the prototype interaction, we kept the camera rolling and focused on actors. Later, we shot interaction videos with the UI, which was cut into multiple small videos to include in each task. Another thing we discovered was that using a plain white sheet of paper for popup button overlay layer, which makes it a fairly transparent and user can still see the user interface. We also found that it was more interesting to keep the entire background and listener reactions in the frame, instead of focusing on the speaker alone. It also helped to record voices during the filming itself, rather than do voiceovers after filming. As we are not trained actors, it would have been more difficult to reenact the whole scene for the purpose of voiceovers, and make it synchronize with the video that was shot.

What worked well?

Preparing the script beforehand and rehearsing helped while filming the videos, and reduced the time needed to film each video. We also thought that showing prototype interaction with small videos and voiceovers was very effective and would help us get our point across to our audience. We were able to get high quality video recording for all of our tasks because of the HD camera. Videos were crystal clear and didn't have any pixel problems. As for transferring videos, moving files from camera to computer became easier with time, and eventually files were also moved to portable storage such as USBs. Camera's internal memory allowed storage of more than 2 GB of videos on it without any problem.

What was difficult?

One of the biggest problems we faced was volume of the video. There wasn't any external mic associated with video camera, so we had to rely on the mic inside the camera. After doing couple of dry runs, we found out that sound quality was very low. We had to increase the volume during the video editing but the quality is not optimal. Next time, we would consult someone uses video cameras quite often and ask for suggestion about which camera to rent depending on the usage.

It was also difficult deciding how long each video should be, and the extent to which background details should be expanded (Eg. setting up who the student was, place, friends etc) vs. using a scene that just described the app, as short as possible. We came up with videos that were in between the two.