15-300, Fall 2018

Project Milestone Report

1st Technical Milestone for 15-300:

Decide what mobile OS we will be developing for and make a simple mobile application that allows for user feedback, asks for permission for phone activity, and learning possible gestures and push notifications to other users who have downloaded the app. Explore what options for phone activity are available as a part of the mobile application creation, and brainstorm ideas for gestures.

Major Changes:

There have been no major changes in the goals or implementation of the project! Ideas are still being fleshed out, just on schedule.

What You Have Accomplished So Far:

So far, I've been reading Android developer documents and created dummy Android apps (deployed on my on phone) that allow me to play around with motion, position, and accelerometer sensors; the following docs have helped me make the dummy application:

- Sensors overview (https://developer.android.com/guide/topics/sensors/sensors_overview)
- Motion sensors (https://developer.android.com/guide/topics/sensors/sensors_motion)
- Position sensors (https://developer.android.com/guide/topics/sensors/sensors_position)
- AccelerometerPlay (https://github.com/googlesamples/android-AccelerometerPlay)

Right now, I have some of the gestures that were brainstorm completed: detecting when a person has their phone above their head and reflecting that on the app's screen with a visual cue; turning the screen red when the user is shaking their phone with enough force. I'm still exploring how the position sensors can be used—we also are not sure if we'll be using that sensor for our app quiet yet.

I still have to read through more documentation and consult with my advisor to see which kinds of permissions are necessary. Right now, I have these resources (a, b) lined up. Over the next couple of days, I will be going through these two docs and accumulating the possible features that we could use for our app.

Surprises/Revisions:

So far, all of the work done has been ramping up towards the specification as it's being built, so there have been no surprises. Since the final details of the project are still being fine-tuned, I am finding ways to stay productive and make sure I am ready for more versions of the project.

Because of this, there will be no revisions to my 15-400 milestones: with the end of the winter break, the specification will along with my prep will allow for us to continue on the path that was originally planned.