

SE 491 – sdmay20-48

Hear Together

Week 5 Report

11/12 – 11/18

Client and Adviser: Mat Wymore

Team Members

Jessie Rutledge - Communicator/Full Stack Developer

Andrew Peterson - Backend Developer

Malcolm Johnson - Backend Developer

Paul Licata - Full Stack/QA Developer

Richard Smith - Frontend Developer

Roger Ferguson - Test Engineer

Status for 11/12 - 11/18:

Weekly Summary

This week the team largely continued working towards a uniform goal of having an application capable of our most basic use case in order to be able to begin work on the heavy lifting parts of the project (the actual modification of sound for hearing impaired using transformations) during the following semester and allowing for enough research to give a more accurate finalized project plan.

Past two week accomplishments

Malcolm Johnson- Researched sound processing and integration of C code into android projects

Roger Ferguson - Continued implementation of connectivity logic contributed to required assignments. Discussed plans with team members.

Andrew Peterson - Researched android UI options for settings. Implemented some basic settings options. Worked with team on project related documentation and discussion around plan to capture voice from background sound. (~6 hours report period, ~30 hours total)

Jessie Rutledge - Researched into discrete fourier transforms for modification of sound pitch and frequency. Discussed planning of use with the team. Looked into how to apply C code into Java android studio project for performance based reasons.

Richard Smith - More Android Studio research on ways to better implement classes and fragments for overall cleaner front-end performance. Along with a little bit more Firebase research to help familiarize myself.

Paul Licata - Did further research on WiFi direct and connecting through phones. Also read up on fourier transforms as they will be needed to modify frequencies.

Plans for the upcoming week

The plan for the upcoming week is to finish up research and have a complete vision of the project as well as the capability to use the application to listen to our surroundings unmodified as a base platform for employing the vision of the project over the next semester. We also plan on having a unified understanding on how we can use fourier transforms in order to modify the sound and having a better idea of what baseline latency we have to work with regarding that.