EE 491 WEEKLY REPORT 8

Group number: 37

Date:10/31/16

Project title: High Clarity Speaker System

Client &/Advisor: Dr. Louis Banitt, M.D. / Professor Tuttle.

Team Members/Role: Quinn Rayner, Nicholas Bramanti, Arifi Salim, Andrew McNeil

Weekly Summary (Short summary about what you did this week)

We continued our research into our given parts to decide a final design document submission for later this week. GNU radio does seem to have all the things we need, with a lot of online design support. They also have introductions to good signal receivers that will work with the software. We need to decide this week on our final design to submit our design document. The main focus will be where we want to invest the bulk of our money initially, and making sure we have everything we need to start to test our designs. Professor Tuttle suggested we get our initial design down and start to tinker as this is a new type of project for all of us. Andrew is working on a project in another class where a group member is attempting to develop an app that will allow a phone to be used as a microphone. We are optimistic we could use something similar for the microphone in our system.

Individual contributions

<u>NAME</u>	Individual Contributions	Hours this week	HOURS cumulative
Quinn	Researching antenna designs online.	4	28
Nick	Researching software radio	4	28
Arifi	Researching speaker designs	4	28
Andrew	Researching microphone and speaker.	4	28

o Comments and extended discussion

Now that we have a base for the rest of our design we can really start to lock into concrete components with our design. Nick found the GNU radio, and we will most likely use this free software along with hardware that we know is compatible. By ordering or building hardware that has already been tested by others we can start with a working project and move on from there to make this project work better for us. We're all interested in creating our own hardware and software, but want to ensure we end up with a finished project.

Plan for coming week (please describe as what, who, when)

- Quinn: researching hardware for sending signals from websites provided by Tuttle.
- Nick: researching software radio, found an interesting one called GNU radio.
- Arifi: researching potential designs of speakers and how to build components
- Andrew: researching microphone and speaker design concepts