

sdmay18-22: Adaptive Wireless Wearable Neuro-Stimulator

Week 7 Report

October 21 - October 27

Team MembersKevin Wang — *Meeting Facilitator*Kevin Simons — *Test Engineer*Matthew Stephenson — *Report Manager*Patrick Walsh — *Communication Manager*Brian Weber — *Chief Engineer*

Summary of Progress this Report

For the wearable:

Looked into more components. Did a simple high-level sketch on paper. Started looking into P-Spice.

The website:

Created the SQL database tables that we will use, and started the screen sketches for how we want the selection for the data bounds to be. As we want to allow the researchers to create custom queries that let them refine the data they see to things such as "all users around XX country"

Android App:

We have begun creating all of the layouts for the android application. We have also met with our faculty adviser to learn about proper android development and the ways to create the layouts that we want. In addition to creating the layouts, we have also begun to implement the main activity.

Pending Issues

Look into P-Spice for circuit simulation or some-other software. Once best software is determined, sketch circuit. Once we have a simulated circuit, we will reach out to faculty to confirm design is viable

Continue the creation of the data input form for the website. Some investigation for what types of queries researchers would want to use is still needed, but a basic form input can be created in the meantime.

Learn more about android development and how we can apply it to our project. Also, we need to figure out how to make the layout act the way we need it to. We will be meeting with our faculty adviser to go over ways to accomplish our goals for each piece that we lack the required knowledge to accomplish.

We will also be meeting with our client to discuss our progress, and the designs we have come up with for each part.

Plans for Upcoming Reporting Period

Look into circuit simulation.

Create a basic form input for the website and populate the tables with spoofed information that will allow us to

visualize tables for testing.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kevin Wang	Met with faculty advisor about development of Android application and planning for connecting device with Bluetooth. Looked a bit into Bluetooth connections in Android.	5	31
Kevin Simons	This working period was mostly involving around the website's databases, I created all the tables that we need and started testing them. Next step is to get the exact form of data that will go into the tables and put some fake data in to start testing the frontend. Also was working on the design for the website, including how data input will work and how we will show the graphs to the researchers, this work is ongoing as there is potential to be millions of data points in one graph so we may need a special library for it.	7	38
Matthew Stephenson	Did a simple paper sketch for the design of the wearable. Looked into simulation programs for circuits. Worked on Project plan V2. Worked on status report.	3.5	34.25
Patrick Walsh	Did portion of project plan, created initial layouts for various screens in the app, met with faculty adviser to discuss android development, created new activities and modified layout to reflect our desired look	8	34.5
Brian Weber	Worked on Project plan, added more items to our parts list for consideration for our final design. Found the stats on the items to better evaluate our parts	5	15.5

