

EE/CprE/SE 491 WEEKLY REPORT #2

09/30/2019 – 10/7/2019

Group number: sdmay20-24

Project title: Wearable Cardiac Monitor

Client &/Advisor: Huang Cheng

Team Members/Role:

Andrew O'Brien - Software

Peyton Sher - Software

Ruiyu Sun - Hardware

Scott Beard - Hardware

Samantha Kimball - Communications

Vincent Lazzaro - Communications

Weekly Summary:

We ordered parts for our project this week. We also started to start choosing an initial direction to head on our parts of the project after we spent the last few weeks researching our topics. We also started to put things on our group website and have been organizing our meeting notes and other resources better on Google Drive.

Past Week Accomplishments:

Andrew O'Brien: This past week I have worked on setting up the android app and figuring out how to get it properly set up on git.

Peyton Sher: Looked over some common arduino coding practices, as well as worked on our lightning talks.

Ruiyu Sun: Still doing research for circuit design and come up with block diagram. Upload one weekly report. Work on design doc and lightning talk as well.

Scott Beard: Ordered parts for initial testing, went to ETG with Vincent and found spare heart monitors, worked on submissions.

Samantha Kimball: Researched different bluetooth modules a little more then ordered parts for our group. I worked on the lightning talk and the design document as well.

Vincent Lazzaro: I ordered parts for our group. Talked with ETG to see what they currently have that we could use to help with our project and found out they have some spare heart monitor parts that we can use to compare with our prototype to make sure we are getting the correct readings. I worked with Sam to select what bluetooth module we are wanting to use for our first prototype. I worked on a portion of our design document and our lightning talk.

Pending issues: (If applicable: Were there any unexpected complications? Please elaborate.)

Andrew O'Brien: Git is always difficult to get set up right the first time.

Peyton Sher: Getting the arduino and heart rate monitor in would be helpful for setting up an initial layout, but we got parts ordered.

Ruiyu Sun: We may need to design a smaller size pcb.

Scott Beard: Sparkfun PCB may be too large or use too much power.

Samantha Kimball: I currently have no pending issues as we are waiting for the parts to come in.

Vincent Lazzaro: From what I read about the bluetooth module it should be able to connect to the arduino and communicate to a smartphone but there may be some issues there but we will have to wait until the parts are in.

Individual contributions: (Creating this section is optional, but it is Required to include the “Hours Worked for the Week” and their “Total Cumulative Hours” for the project for each member somewhere relevant in your report. Your individual weekly hours should be at a minimum of 6-8 hours for this course. So please manage your time well. Also, ensure that individual contributions support your claim to the weekly hours. Be honest with the reports.)

Name	Contribution	Weekly Hours	Cumulative Hours
Andrew O’Brien	App initialization	8	18
Peyton Sher	Found right arduino/arduino practices	6	13
Ruiyu Sun	Upload weekly report, lightning talk powerpoint, design document.	7	14
Scott Beard	Lightning talk, design doc, parts ordering. research	6	13
Samantha Kimball	Bluetooth module research, lightning talk powerpoint, design document, set up appointment with Professor Cheng for next week	8	15
Vincent Lazzaro	Order parts/ bluetooth module research	8	16

Comments and extended discussion: (Optional)

Feel free to discuss non-technical issues related to your project.

Plans for the upcoming week:(Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.)

Andrew O'Brien: I plan to start getting simple app layouts and themes developed.

Peyton Sher: I want to get a layout for our arduino code and push something to git.

Ruiyu Sun: Start to build the circuit with Scott with ordered components.

Scott Beard: Start circuit build with Ruiyu to prove functionality, test power consumption

Samantha Kimball: Work with Vincent to get schematics on connecting the bluetooth module to the Arduino.

Vincent Lazzaro: I plan on working with Sam to get the schematics on connecting the bluetooth module to the arduino for our first prototype made.

Summary of weekly advisor meeting: (If applicable/optional)

(Provide a concise summary on the contents and progress made during the advisor meeting.)

Our group did not have an advisor meeting last week as we got parts ordered. We plan on meeting with our advisor on Monday (10/7/19) to update him on the progress we have made.