

EE/CprE/SE 492 WEEKLY REPORT #5

03/10/2020 – 03/30/2020

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:

These past few weeks we figured out how our project can move forward and how we want to interact as a group now that we can't physically meet up in person. We also worked on our presentation and answered the questions other groups had for us about our project.

Past Week Accomplishments:

Andrew O'Brien: We figured out how our project would be moving forward now that we can't meet up in person.

Peyton Sher: With the move to online and things, I didn't get that much accomplished.

Ruiyu Sun: Complete the booster and charging circuit. Draw the schematic of PCB.

Scott Beard: Worked on layout of PCB, component selection and dimensions

Samantha Kimball: Advisor meeting, bi-weekly report, and peer evaluation questions for the three other teams.

Vincent Lazzaro: Advisor meeting, bi-weekly report, tested if the arduino mini pro worked with our device and it does, and peer evaluation questions for the three other teams.

Pending issues:

Andrew O'Brien: Testing the bluetooth connection with the application will be a bit difficult now but we should be able to grab the board out of the lab at some point

Peyton Sher:

Ruiyu Sun: PCB layout and ordering, testing.

Scott Beard: Complete layout and order. Ordering may be difficult due to Work-from-home initiatives causing much longer than usual lead times.

Samantha Kimball: It will be difficult without being able to meet with the team now with Covid-19 so we will need to figure out how to work around that. I know our PCB might not get done now so we'll have to look into figuring out if we can get it or if we are just going to keep it on the breadboard.

Vincent Lazzaro: Finding away to accurately detect a heartbeat accord.

Individual contributions:

Name	Contribution	Weekly Hours	Cumulative Hours
Andrew O'Brien	Reestablished some goals for the rest of the semester and worked on the application	10	47
Peyton Sher	Looked over app current state, conversing with team, peer evals.	6	26
Ruiyu Sun	Meeting with the advisor. Peer evaluations. Find appropriate components and draw schematic for PCB.	10	32
Scott Beard	Meeting with advisor, peer evaluations. Started working on PCB	6	26
Samantha Kimball	Worked on the peer evaluations, bi-weekly report, and had an advisor meeting.	6	36
Vincent Lazzaro	Advisor meeting, bi-weekly report, tested if the arduino mini pro worked with our device and it does, and peer evaluation questions for the three other teams.	10	47

Plans for the upcoming week:

Andrew O'Brien: Keep working on making the application better and fix bugs.

Peyton Sher: Get stuff done!

Ruiyu Sun: Get PCB done ordering and wait for shipping.

Scott Beard: Complete PCB design and order

Samantha Kimball: Start answering the peer evaluations questions that we were asked, try to help Vincent with reducing the noise in our system and (maybe) start working on an online poster for final presentation.

Vincent Lazzaro: Grab the device from the lab room and work on having the device detect a heartbeat rather than just noticing it through plotting it on a screen.

Summary of weekly advisor meeting:

With everything that is happening with Covid-19, our meeting consisted of discussing the changes of going to online and how that might affect our project. We more than likely won't be able to do PCB testing since we would need access to the labs in Coover. We discussed maybe just keeping it on the breadboard since we wouldn't be able to test the PCB to ensure it's working properly.