EE/CprE/SE 492 WEEKLY REPORT 1

1/25/2020 - 2/8/2020

Group 3

Smart Digital Stethoscope

Dr. Khokhar

Team:

- Erik Becker: Chief Hardware Engineer
- Joseph Dobosenski: Scribe
- Margaret Heaslip: Report Manager
- Andrew Holman: Chief Software Engineer
- Megan Kasabian: Meeting Facilitator
- Jordan Spidle: Test Engineer

Weekly Summary:

This week we spent most of our time regrouping and reevaluating what needs to get done this semester to finish the project. We had individual meetings with the hardware and software teams to decide specific tasks that each person could do to further the project. On the software side we got the ADC and bluetooth devices and have begun learning how to program them. Also we added multiple user types to the website. For hardware, meetings for technical advice on the transducer were held or are being scheduled. These meetings are held with professors or persons who may have some technical background in microphones or biosensing.

Past Week Accomplishments:

- Erik Becker:
 - Held meeting with Dr. Pandey to discuss transducer and project scope
- Joe Dobosenski:
 - Set up MSP432 development environment and got a sample program working
 - Found GitHub repo with sample project that will combine the MSP432 board with the CC2650 bluetooth board
 - Found data sheet and technical reference from board and am trying to figure out how to configure ADC components on the board
- Margaret Heaslip:
 - Looked through new MSP432 board datasheet used for when initializing board and program it
- Andrew Holman:
 - Implement multiple user types on the website
 - Add additional account functionality to website
 - Refactor parts of website code to improve readability and efficiency.

- Megan Kasabian:
 - Contacted biosensors professor regarding information about microphones.
- Jordan Spidle:
 - Contacted Recording Engineer for possible microphones to use

Pending issues

N/A

Individual contributions

<u>NAME</u>	<u>Hours this</u> <u>week</u>	<u>HOURS</u> <u>cumulative</u>
Andrew Holman	15	15
Megan Kasabian	1	1
Erik Becker	1	1
Jordan Spidle	1	1
Maggie Heaslip	4	4
Joe Dobosenski	6	6

Plans for the upcoming week

- Erik Becker:
 - Meet with hardware group members to discuss microphone options
 - Pick and order a microphone through ETG
 - Explore ADC datasheet and begin computing component values for hardware circuit
- Joe Dobosenski:
 - Set up new program that utilizes both the base MSP432 board and CC2650 bluetooth boster board
- Margaret Heaslip:
 - Working with Joe to develop program for board
 - Coding so UI stuff for the website
 - Learn html/css
- Andrew Holman:
 - Continue to update specific user functionality on the website.
 - Implement file sharing between users on the website.
- Megan Kasabian:
 - Follow up with my biosensors professor.
- Jordan Spidle:
 - Select microphone to use based on the recommendations.

Summary of weekly advisor meeting:

N/A