Team: Sdmay 18-22

Project Title: Smart Digital Stethoscope – Phase II

Date: 10/24/2021

Members:

Joyce Lai Omar Alsaedi Abdalla Alzaabi Vignati Yalamanchili Matthew Gasparaitis Austin Collins Yilun Huang

What we've accomplished in the past week/what we've been researching

Joyce Lai: Decided on the microcontroller platform and Bluetooth chip we will be using, assigned tasks for everyone, arranged new group meeting time to increase our team's collaboration and productivity, started reading Raspberry Pi Pico datasheet.

Omar Alsaedi:

Abdalla Alzaabi: Worked on a secondary method of sending the audio file to the Server (doctor side) using C-libraries and the IP address of the Server to establish a direct connection and sending of data.

Vignati Yalamanchili: Helped out where and when needed. Started to look at the code from last year.

Matthew Gasparaitis: Simulated last year's (sdmay2021-03) bandpass filter in LTSPICE, talked to ETG about the process of ordering parts.

Austin Collins: Continued to learn about WebRTC. Did not fix previous problems sufficiently for demo.

Yilun Huang:

Everyone: Meeting to figure out what is the plan for going forward. Added audio to all the PPTS. Figured out a meeting time to meet every week.

What we're planning to do in the coming week

Omar, Abdalla, and Austin – Work on enabling real-time streaming of audio files instead of microphone input. Clean up the client-server connection and number of instances. If time permits, make the user login/identification more specific and secure. Look into last year's (sdmay2021-03) web application code to see what modules we can reuse.

Joyce, Matthew, and Vignati – Order the Raspberry Pi Pico and HiLetgo HC-05 BT chip, start reading the datasheet for its GPIO (voltage-input pins), how to initialize ADC and UART, read tutorials with Raspberry Pi Pico and HC-05 BT chip combined usage.

Yiilun – Start thinking about overall product design, CAD model for our final product

Issues we had in the previous week

Joyce Lai: n/a Omar Alsaedi: Abdalla Alzaabi: Vignati Yalamanchili: n/a Matthew Gasparaitis: Austin Collins: Yilun Huang: