

Team: **Sdmay 18-22**

Project Title: Smart Digital Stethoscope – Phase II

Date: 10/17/2021

## 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:** Met with the client meeting with Dr. Khokhar, presented in class, researched possible microcontrollers with integrated BT modules, looked into IoT devices with BT functionality, decided on Raspberry Pi Pico and HC-05 BT Chip, started reading Raspberry Pi Pico datasheet, looking into specific frequency requirements (sampling and ADC conversion frequency based on heartbeat frequencies).

**Omar Alsaedi:**

**Abdalla Alzaabi:**

**Vignati Yalamanchili:**

**Matthew Gasparaitis:** Presented in class, met with Dr. Khokhar, and simulated the old circuit in LTSPICE.

**Austin Collins:** Worked on developing stage two of the WebRTC server – established possibility for multiple instances or channels, enabled live streaming of microphone input audio, added user login functionality.

**Yilun Huang:** Bluetooth connection research.

**Everyone:** We gave our design presentation in class this 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.

**Joyce, Yilun, 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.

## Issues we had in the previous week

Joyce Lai: n/a

Omar Alsaedi:

Abdalla Alzaabi:

Vignati Yalamanchili: n/a

Matthew Gasparaitis: n/a

Austin Collins:

Yilun Huang: n/a