2nd week(?) first meeting

- unsupervised machine learning, boonlogic.com
- might give us Whoop strap devices (whoop.com) for collecting data
    - whoop sends data in csv(?)
- could use apple watch to show data
- ISU biofeedback center https://www.counseling.iastate.edu/services/mind-body/biofeedback/

feb 18th

- working to get raw EKG data
    - whoop devices can't send raw data
- fitbit doesn't allow getting raw data as well (?)
- 3rd option: apple watch
    - for research purposes we can get raw data
    - someone needs to have a mac device for testing/setting up watch app
- apple watch -> server (hosted on ISU servers) -> boon logic server (ML) rest API
    - builds model from data(?) -> web interface to show health data and boonlogic anomaly detections
- boonlogic doesn't keep the data we send to them (only gives anomalies detected)
- using java springboot for backend
    - using sql database for storing iOS data from apple watch and also store returned anomalies detected from boonlogic
- using react or angular for frontend

feb 25th:

- have apple watches from Brandon
- API: started work in springboot API
    - set up DB on server
- frontend: have angular project set up, some pages done
- set up twilio board to track progress on different things
- looking at how to interface with boonlogic API

mar 4th

- Frontend is functioning, committed to the repository.
    - Needs to be connected with the backend
- API: Continuing work on springboot API
    - Added Jython dependency, working on adding functionality for HTTP requests
        - Discussed how to approach establishing authentication with Boon
    - Discussed working more on the database and setting up endpoints by this weekend.
- Brendan and Trevor have the apple watches
    - Trevor was able to pull data from his watch, currently working on organizing the information that we need.

mar 11th

- Frontend is working on connecting with the backend functions that Kyle created (connected to database).
- Kyle working on looking into CI/CD
- Riley working on getting python script (using Jython parser) integrated into Spring Application
    - Script is working and successfully retrieving authentication token from Boon Logic API, however the parser is preventing the Spring App from starting.
- Trevor is successfully collecting data from the watch
    - Is now working on parsing/collecting only the data that we need

mar 18th (Presentation/Demo Day)

- Worked together to construct slide presentation
    - Determined which slides each person would talk about

mar 25th

- Riley: API refactored to use the dependency OkHTTP instead of Jython
    - Created controllers for requests
    - Authenticating correctly
- Trevor: working on converting data from Apple Watch into a format that we can easily parse
    - Apple's proprietary default format is difficult to work with
- Kyle: modified database, set up endpoints, starting work on deployment

Discussed a day/time to meet up and work together on connecting our endpoints

apr 1st

- Riley: continuing to write controller class for sensor requests
- Trevor: Created functions to send data to our API
- Kyle: Working on CICD for API JAR

Brendan and Kyle worked together over our video call (Brendan shared his screen) to work on connecting frontend with backend.

apr 6th

- Brandon from LT joined to provide feedback/input on our progress.
    - Interested in having timestamps associated with the ECG data
        - Beneficial when displaying that an anomaly occurred at a given date/time
    - Planning on attending our Thursday meetings (will determine next week if more meetings are needed).

- Riley: Boon Logic requests are working and merged into master. Ready to start testing with sending data to Boon Logic's API

- Trevor: Successfully able to send data to an endpoint on our backend and store raw, collected watch data in our database. Will then pull the data from our database within our backend to send/stream to Boon Logic

- Kyle: have spring boot working that the watch & frontend can use, DB tables are setup for storing anomalies associated with raw data (tho column layout is open to change depending on how boon logic API likes it), currently working on auto-deploying API to server & investigating the CORS issue with web -- should have both by thursday afternoon

- Brendon and Xin Jun: Successfully linked frontend API with backend, able to communicate.

apr 15th

- Riley and Kyle: Refactored backend request functions to use Jackson library for mapping json response body values to variables that can be accessed within our codebase. Also worked on storing sample data in our database and sending it to Boon Logic.
- Trevor: Helping to troubleshoot how the sensor processes data; Boon Logic's documentation is lacking, Trevor has some experience with machine learning to better understand the issues that we're having.
- Xin Jun and Brendon: Successfully implemented login on the frontend, working to construct a graph for displaying anomaly data.
- Brandon (LT): Knows about / has seen the issues that we are facing with our sensors, but similarly because of Boon Logic's documentation, he is unsure of what the solution might be.
    - Trevor is going to take a look at it and let Brandon know whether we need to make connections with a representative from Boon Logic to get further clarification.
- Discussed final presentation date that works for everyone (hedging on either morning of 3rd or 4th).

apr 20th

- Riley, Kyle, and Trevor met with Boon Logic CTO and an Engineer to discuss issues regarding sending data and maintaining sensors.
    - What was needed in our sensor configs to be able to change Machine Learning states.
- Accessed better documentation

apr 22nd

- Riley, Kyle, and Trevor: Continued to troubleshoot/test sensor configurations to get a better idea of how to send data to Boon Amber.
- Xin Jun keeping in contact with rest of team to get a better understanding of what information to display on frontend (what types of data points will we need to show).
- Brandon (LT): updated with the progress that we have been making and of the implementation/testing that we are working towards.

apr 29th

- Riley, Kyle, Trevor, and Xin Jun: Discussed what we need to do for our presentation.