# EE / CprE / SE 491 - sddec19-03 GoMe Week 4 Report

3/1/19 - 3/8/19

Client: General Public

Faculty Advisor: Goce Trajcevski

#### **Team Members**

Michael Arnold - Chief Engineer
Jacob Montgomery - Lead UI
Jaclyn Ralfs - Data Analytics/Scribe
Akaash Suresh - Engineer/AI Tech
Mark Marrano - Systems Engineer/Requirements Analysis
Bailey Jensen - Lead Back End/AI Tech

#### **Past Week Accomplishments**

- Everyone- Began Working on the design document
- Got into our groups and discussed our topics-- Akaash and Bailey: A.I., Jake and Mark: System Design, Mike and Jaclyn: Data Analysis.
  - Began working on understanding how we are going to bring these three things together to work in the most effective way possible.
- Research more on google maps Michael
  - Implemented Google Maps into existing project
- Answered all the questions about Firebase.
  - o Created a Database/System Documentation document.
- Defined our goals more specifically and made sure we are starting with deep knowledge of topics and features before we start moving too quickly. everyone
- Updated our 'Iteration Goals and Deliverable Schedule' document

## **Pending Issues**

None

### **Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Michael Arnold	Worked on understanding the data analytics of the project and researched strategies and techniques for data analytics to be used in the project. Helped define the data model	3	24
Jacob Montgomery	Researching design patterns, Firebase usage, data streaming fundamentals. UI research and prototype design.	4	22
Bailey Jensen	Worked with Akaash to solidify the data model. In addition, we started working on a prototype demo for a sleep schedule.	2	17
Jaclyn Ralfs	Researched approaches for analyzing large amounts of data and formatting data for machine learning models. Looking into different data sources (Fitbit, When I Work, Outlook, etc) to use in our application.	5	19
Akaash Suresh	Decided on the model of the data we need to collect for the application. Working on a working prototype of a ML application that takes in sample sleep data and can predict sleep schedules for following weeks.	3	19
Mark Marrano	Familiarized myself more with Firebase. Looked into how we can use Firebase's Test Lab in our project. Worked on design document and the Database/System design document.	3	19

# **Plans for Coming Week**

• Everyone- Work on design document

- Get into our groups and discuss our topics-- Akaash and Bailey:A.I., Jake and Mark: System Design, Mike and Jaclyn: Data Analysis.
- Use Fitbit to determine what data can be imported from it Michael & Jaclyn
- Work out any bugs in the location tracking process currently implemented-Michael
- Research and document diagrams using design patterns Mark and Jake
- Finish Database/System Documentation document Mark and Jake
- Begin planning work for spring break- Michael
  - I will be in ames over spring break working on the iteration goals for the current iteration. In the weekly meeting I will be talking to each one of the teams to understand how I need to make the features and collect data to ensure it can be easily integrated with our systems and AI as well as easily scalable to large amounts of data.
- Work on prototype for ML to demo Akaash and Bailey