

EE / CprE / SE 491 – sddec19-03

GoMe

Week 7 Report

4/06/19 – 4/12/19

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

- Further discussed in our groups -- Akaash and Bailey: A.I., Jake and Mark: System Design, Mike and Jaclyn: Data Analysis.
- Further implemented Firestore - Mark, Jake, and Michael
- Further developed ML aspects - Akaash & Bailey
 - Got sleep prediction accuracy to within 2 minutes
- Continued migration from firebase DB to Cloud Firestore - Mark, Jake, and Michael
- Planning how we will store and adjust events that have not occurred yet
- Continue progress plans for data collection of the app and make sure to implement abstract interface design methods for implementing the APIs- Michael
 - Location
 - Sleep
 - FitBit
 - Tasks
 - Canvas
 - Google Calendar
 - Outlook
 - Events
 - Facebook API

Pending Issues

We need to finalize plans on how the ML team will access data collected in the Firestore.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Michael Arnold	Implementing firestore and fixing bugs in login/data collection areas of the app	15	67
Jacob Montgomery	Implementing Firestore into application, structuring data storage in app	5	39
Bailey Jensen	Continued working with Keras examples to learn to use ML models. Synced up with Akaash on the ML model he built for sleep to understand it and start to build on it myself.	6	36
Jaclyn Ralfs	Project Plan revisions, testing functions of the application	3	27
Akaash Suresh	Tried to get model for the AI to more accurately predict sleep schedules. The current time difference is about 80s from being accurate.	6	56
Mark Marrano	Developing with Jacob and Michael, brainstorming future implementations and 'what's next' for development	5	39

Plans for Coming Week

- Begin merging AI with Data Collection - Michael, Jaclyn, Akaash, Bailey
 - Now that we have our data collected we can begin picking out the specific data points we need to feed to our AI and then begin feeding it to our AI.
- Continue working with Canvas to get a developer key for our application and get it integrated into our app - Michael

- Continue to get Firestore working with GoMe, including storing sleep data and other data provided by the APIs - Michael, Jake, Mark
- Finish programming all model classes - Jake
- Finish migration from Firebase DB to cloud firestore
- Begin working on the new version of the project plan- Everyone
- Make the data collection of our APIs a streamlined process - Michael
 - Create a welcome page that allows user to easily connect to our APIs and select the accounts that they want to pull the data from
 - Also determine what starting data we need from user