

EE / CprE / SE 492 – sddec19-03

GoMe

Bi Weekly Report 12

9/28/19 - 10/11/19

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

Accomplishments of the past two weeks

- Began working on a location verification service- Michael and Bailey
 - This is a service that recognizes when the user leaves, arrives or is currently at an activity in their schedule. This sets us up for the triggering of changes to the schedule based on the users ELO score.
- Put the users schedule in the DB- Michael
- Real Time Schedule - Michael
 - The schedule used to be statically built and didn't update whenever there was a change to the users schedule. Now, whenever there is a change to the users schedule in the DB, the users schedule will update for them, so they can see their current schedule.
- Researched and started designing potential ways to visualize data for the user to see - Mark/Jaclyn
- Complete on-boarding process allowing new users to set up their sleep times, work times, home address, work address, connect accounts, and tell us their interests - Jake
- Updated the schedule page UI so it has an attractive look - Jake
- The ML model is getting better at fitting to the data that we give it, and giving accurate results from sample data we give it.

Pending Issues

- Going to need to regression test a lot of the features being added in currently, once the AI is completed.

Individual Contributions

Team Member	Contribution	Hours	Total Hours
Michael Arnold	Got the schedule working in real time, restructured database, bug fixes, began working on implementing a location verification service	18	145
Jacob Montgomery	Updated new user on-boarding process that allows a user to customize their work times, sleep times, interests, etc. and greatly improved the home schedule page UI design	20	90
Bailey Jensen	Refactored the location verification service to make as few database calls as possible. Added an event service to store a copy of the daily schedule with various operations that can be performed on it throughout the app.	18	74
Jaclyn Ralfs	Implemented basic graphs for visualization of user's ELO scores and to demonstrate what activities the user is spending most time on	12	56
Akaash Suresh	Getting the ML model to conform better to the data we get it, using different models based on data correlation, such as start time vs endtime being somewhat linear.	7	83
Mark Marrano	Designing how we want to visualize the data surrounding ELO scores and other aspects. Looking into ways to visualize it how we want.	8	68

Plans for the Next Two Weeks

- Continue 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.
- Implement a nice social feed/user update side-bar with recommendations and updates for the user - Jake
- Finish the location verification service - Michael and Bailey
- Begin working on the following services to understand the ELO score - Mike, Jake, Bailey
 - A service that understands the users elo score and makes updates to the schedule accordingly
 - A service called the feedBackService that understands the users elo score and gives feedback to the user on how they are performing -- an AI-like “app-voice” parent/mentor feeling to it
 - A service that analyzes the users elo score and creates charts and other analysis for the users
- Implement an interval scheduling algorithm to fill in a user’s free time most efficiently (FreeTimeFinderService) - Jake
- Allow users to upload pictures and customize their profile page
- Create a service to traverse activities in the DB and choose recommended activities for the user - Jake, Mike
- Implement some data visualization for the AI to use when the AI is built: Mark/Jaclyn