EE / CprE / SE 492 – sddec19-03
GoMe
Bi Weekly Report 11

9/13/19 - 9/27/19
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 the on boarding process of the application - Michael
- Structured a template for the users schedule on registration - Michael
- Began working on the creation of a schedule object and a better implementation of the schedule - Michael and Jacob
- Updated UI for viewing open activities - Jake
- Updated design pattern for objects we use in our schedule to a polymorphic design - Jake
- Ability to add and delete items from your schedule - Jake
- Presented to the class and got feedback on our current progress - everyone
- Finished figuring out elo (life score) and how it is going to work. Implemented it with Users and into our Firestore database. Discussed how we are going to move forward with visualizing the elo data along with other things collected by the AI - Mark/Jaclyn

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	Began working on the on boarding process, schedule and the template for the users schedule	15	127
Jacob Montgomery	Worked on changing the way we treat different activities (work, sleep, social, etc.) and how we organize them into a schedule for the user by using a polymorphic design pattern. Updated the UI for the activities page for improved look and overall UX. Added ability to add and delete items in schedule.	20	70
Bailey Jensen	Looked into the implementation of Elo and Location Verification within our application. Reviewing code changes to be familiar with all aspects of the app. Research on incorporating our ML models into our existing app.	14	56
Jaclyn Ralfs	Reviewing the updates for elo score to figure out how we should visualize data for the user. Researched various graphing libraries for Android that could be used. Spoke with other senior design teams about data collection for ML algorithms to try to come up with solutions to help both teams.	12	44
Akaash Suresh	Started implementation of Azure ML algorithm to detect sleep patterns. Also looking into ways to integrate our ELO calculation to its own model	10	76
Mark Marrano	Researched ways on how to include an Elo-type system into our project. Settled on a simple algorithmic way to calculate user's scores for 4 major topics and implemented the object into	12	60

	the rest of the code. Started researching ways to display elo scores and other data for the user to see with UI quality in mind.		

Plans for 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.
- Finish on boarding process for application: Michael
- Begin working on the following services to understand the ELO score - mike, jake mark, 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
- Begin working on making the schedule dynamic - Michael
- Implement an interval scheduling algorithm to fill in a user's free time most efficiently (FreeTimeFinderService) - Jake
- Create a service to traverse activities in the DB and choose recommended activities for the user - Jake
- Touch up the onboarding process allowing for more user customization and starting template options - Jake
- Implement some data visualization for the AI to use when the AI is built: Mark/Jaclyn