GoMe

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http://sddec19-03.sd.ece.iastate.edu/

Progress Recap

As of our last PIRM...

- **Data Collection**
  - Fitbit API
  - Facebook API
  - Google Calendar API
  - Location Tracking

- **Static Schedule**
  - Sleep
  - Work
  - Google Calendar Events

Current Progress

Progress since...

- **Dynamic Schedule**
  - Use your location
  - Make adjustments based on performance
  - Re-populate using 0/1 knapsack
  - Properly fill free time to balance your life
- **User Customization**
  - Detailed on-boarding process
  - Personal profile editing
- **Analysis**
  - Scoring of each day in different health areas
  - Easy to read graphs based on your data
- **Machine Learning**
  - Creating a microservice that processes sleep data and returns anticipated sleep for the week
  - Allow retraining on a week by week basis

Design Decisions - Schedule Population

Triggers

- Arriving
- Leaving
- Overriding (Add/Delete/Edit)
- Group Members Actions

1

Schedule Assessment Service

- Analyzes how your spend your time day-to-day
- Scores you Bad, OK, Good

2

Schedule

With Schedule Items

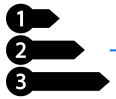
- Holds static schedule items pulled from APIs and user generated activities
- Eventually holds balanced schedule with assistance from other services

3

0/1 Knapsack Algorithm

- Takes in a list of priorities and maximizes utilization of free schedule time based on priority level

4



User Priorities

- Data structure to hold the importance of a schedule item being generated for each category
- Currently, priority level is based on time spent

5

Design Decisions - User Collaboration

Social Feed

See friend's accomplish and updates

Chat

Easily message and create group chats with other users

Friend's Activity

Have a schedule that dynamically adjusts if you team member or friend is late or edits an activity

Group Scheduling

Effortlessly find events that fit you and your friend's schedules

Group Invites

Effortlessly find events that fit you and your friend's schedules

Challenges and Risks

Data privacy

Faking data and users

Prevent users from cheating

Plan for Semester

Priorities

User Collaboration Features

Introducing Tasks

Finalizing Machine Learning Models for a User's Sleep

Finding Fake Data to Test With

Other Plans

Add Social Aspects (Friends, Feed, Profile Page)

Recommend Social Activities

Test Thoroughly

Questions?

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