

Austin Sun

Professor Wai-Tat Fu

Health Companion Research Report

*Documentation for code at

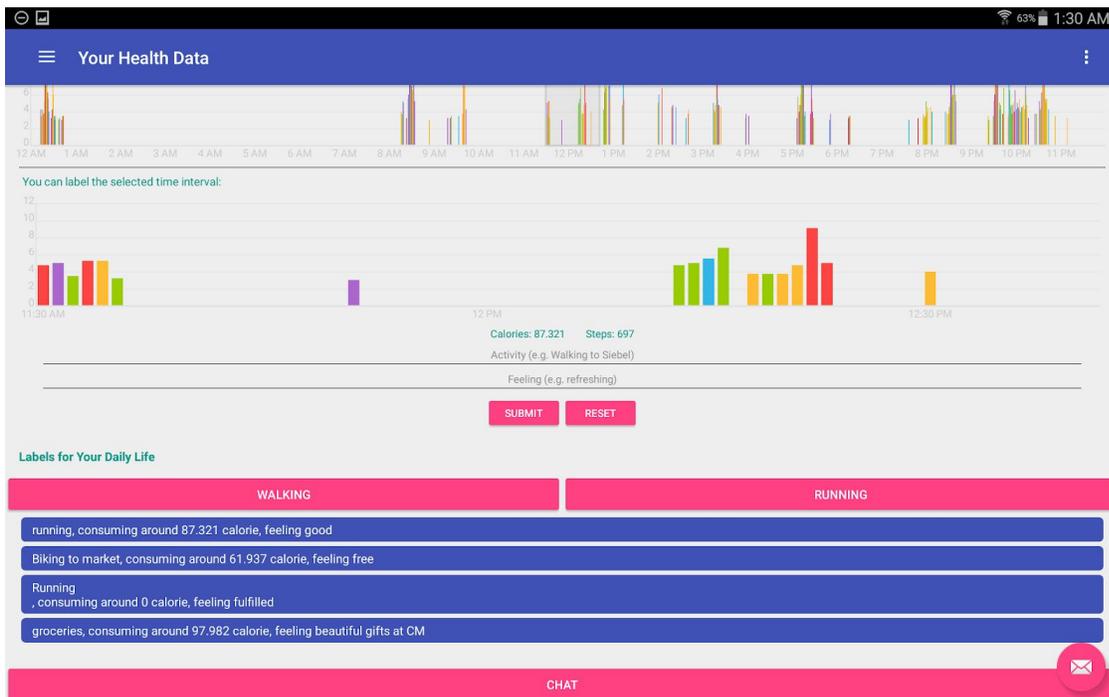
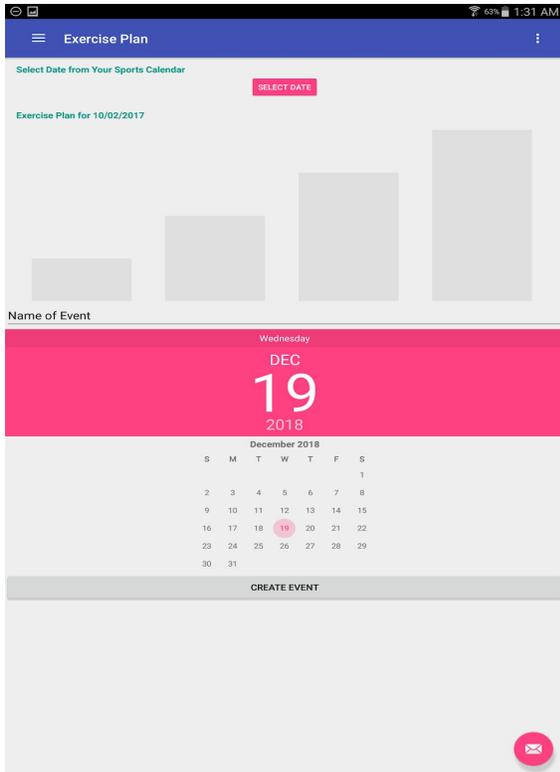
https://github.com/arsun2/health_companion_android

*Documentation for project found at

<http://cascade.cs.illinois.edu/selfefficacy.htm>

Summary: Health Companion was a Human-Computer Interaction research project I worked on Spring/Fall 2018, which was an android application that implemented labeling and self-reflection to help people make better-informed decisions about their exercise. Research had shown that for applications like FitBit, despite the copious amount of fitness data they generate for their users, there still existed a significant user dropoff after a few months - we hypothesized that this occurred because the data presented was not delivered in a way that was actionable into their lives.

1. Spring 2018: I was on-boarded to the project this semester. For several weeks we brainstormed potential features to be added, through the process of literature review on topics of personalization. In our discussion we considered factors such as technical feasibility, relevance to users, ease of integration, and discoverability. The features I then implemented were the calendar feature to add a new health event on the Exercise Plan page (below) and a filter system on the homepage to allow users to filter their past labeled behaviors into walking or running. The calendar feature allows the user to create a fitness event/plan within the health companion app itself on the planning page and augment that plan to their personal Google Calendar. The walking/running filter allows the user to filter their past labeled actions into either walking/running, and view their past reflections on those either of these two activities. The option to filter by any activity of their choice was considered but was withdrawn as walking/running seemed like the popular default activities.



2. Fall 2018: Professor Fu had a strong interest in exploring the integration of a chatbot, so the product I worked on this semester was a chatbot and some extra features embedded within in. Our style of working The user can choose to enter the chat portal from the Chat button within the app on the home screen(above), and that will enter the chat

module with the Health Companion below. In the chat interactions with the Health Companion, the user can perform the help options(below), which can be prompted by: n(creating a calendar event), l(open a list of workouts), p(view progress in the past month), f(open FitBit app), v(open a map of exercise activity). Also available in the Extras feature from the chat module is the ability to create a new calendar event or view a list of workout regimes.

