***30 January – 5 February***

I am trying to think about who I would work the best with. I have some pre-meditated ideas for a program since high school; however, the requirement for the program to be in Java might steer me in a different direction. Researching what kind of applications can be built in Java (applets, desktop, mobile etc.) Looking for examples. (~3 hours)

***6 February – 12 February***

I found my group. They are people who I have a good synergy with and can work well. We are trying to come up with project ideas -more accurately, trying to settle on the both most feasible and interesting idea. Some of the ideas considered include a personal finance management program, virtual pet and a habit tracker. I am trying out applications like Habitica and Defter, Pou to get a feel for what would be required to build these projects. (~4 hours)

***20 February – 26 February***

We settled on creating a mobile application using Android Studio. What we have not settled on, however, is what precisely our program will be about. Currently it seems to be a mixture of the habit tracker and the virtual pet. We are debating and brainstorming with our project members. I am leaning towards the idea of a habit tracker and speaking out about it during the discussions. I think that a personal development program would carry greater real-life utility. (~4 hours)

***27 February – 5 March***

Now with the requirements report approaching, we met together with the group members and settled on a “Real Life RPG” program. I introduced the idea of the “Productivity Index” and the graphs to quantitatively track personal achievements. I am also trying to learn how to use Git and Android Studio properly on the side. I watched “Caleb Curry”s Android Studio tutorial which was a total disappointment. We created the Requirements Presentation with my group members and I authored around a third of the slides. (~8 hours)

***6 March – 12 March***

I took an active role in the writing of the Requirements Report. I am trying to learn the “mindset” of XML which I find a bit confusing, this time mostly from docs (~4hrs).

***13 March – 19 March***

Thinking about UI. I made sketches of possible UI designs. We discussed them with our group members. I tried to come up with solutions for “cluttering” in the UI design; our application featured many graphs and data, but where to view them? Maybe a menu hierarchy, accessing the menu for the graphs from the profile tab, for example, can be useful. (~4 hours)

***20 March – 26 March***

I am learning more Android Studio from the docs (~3 hours).

***27 March – 2 April***

I am toying around in Android Studio, mostly with terrible results. I used to do a bit of web programming in the past and now the XML way of describing a user interface feels counter-intuitive. Ugliness overwhelms me. Life is suffering. There is no God. (~4 hours)

***3 April – 9 April***

I am studying object hierarchies, interfaces and creative / efficient ways of organizing functionality into such hierarchies from the Big Java Late Objects pdf which we will certainly utilize in the project (~4 hours).

***10 April – 16 April***

We met with our friends to strategize since the project deadline was approaching. I was tasked with implementing the core functionality (back-end) of the application. Trying to come up with a sensible class design for the application. (~3 hours)

***17 April – 23 April***

I came up with a class structure that will make sense with the requirements of our application. Four different classes represent four different objects. A UserLocal represents the user. A UserActivity represents the activity user does. A UserGoal is tied to UserActivity and represents what the user aims to achieve with regards to that activity. Finally, a UserAccomplishment is an object that represents the concrete action the User took in their life. (~4 hours)

***24 April – 30 April***

Pre-implementing the classes in Visual Studio locally, the design turned out more complicated than it seems to flesh out. (~3 hours)

***1 May – 7 May***

Trying to solve the problem of statistics functions in UserLocal having to know about different UserAccomplishments (~3 hours)

***8 May – 14 May***

Solved the problem with carrying all data related to a single user in a single UserLocal instance. Implementing and testing the statistics functions. (~4 hours)

***15 May – 21 May***

Finished practically all implementation relating to core classes. Refactored the code to use enums for GoalType instead of String. Found a solution (LocalDateTime) for calculating achievement at a given time. Wrote the functions for comparing UserGoal objects with UserAccomplishment objects to calculate the percentage to which a UserGoal was fulfilled.

***22 May – 28 May***

Revised and guided my friends for the final state of the UI. Wrote safety checks for the forms in the application. Worked together with Rodi to wire up the application with Firebase -wrote a function to take JSON data (turns into HashMap<String, ?> in Java ) from Firebase and populate a UserLocal instance with it. Done further debugging and testing and prepared for the demo. (~12 hours)