**Description**

This mobile app can be used to set and track fitness goals. It will have two sections, one that tracks the user’s location when doing any type of cardio, and the other is tracking the user’s movement for in place exercises. Different types of cardio include biking, running, or walking. Some “in place exercises” are any exercises that involve reps such as push-ups, squats, or pull ups. Using the user’s location, their progress will be tracked and stored once the stop or reach their goal. Assigning specific motions to certain exercises will allow the user’s progress to be tracked and stored once they stop or reach their goal.

One way to give this mobile app an edge over other fitness apps is the reward system. While the user sets and completes goals, overtime, they will acquire coins. These coins can’t be bought, only earned, and are only used for the sole purpose of changing your avatar. After downloading the app, the user must create an account along with an avatar. Both physical and cosmetic features are changeable. This is one way the app tries to mask that the user is working out.

Which brings me to my next major feature, a social fitness app. The reward system is more for users who don’t want to compare themselves to other users. The social aspect of the app allows for users to participate in friendly competitions as well as compare who has done better at any exercise. Users can compete against other users in rep high scores, cardio distances, or real time races. All users participating will be rewarded. All users participating in any ever will be able to see all other avatars as well as stats and high scores.

**Target Users**

As it seems that the target demographic is for those who are serious about exercising but this is not true. This app can obviously be used by the very active but is not limited to them. Anyone who wishes to start being active physically, can use the app. Those who like competition or wish to meet others who have fitness interest can find use in it. As stated, many people who already do exercise can use it but so can people who don’t have a set routine and those who passively do cardio exercises.

**Feature List**

**Goals**

* A usable avatar creation
* Reward system
  + In app shop and money
* Show the user where they are
* Friendly competition
* Tracking the user’s location
  + Cardio exercises
* Three different types of cardio exercises
  + Game modes will be the same for each cardio exercise
* Tracking the correct user’s movement
  + In place exercises
* Three different types of in place exercises
  + Game modes will be the same for each in place exercise
* Three different social game modes
* Social games work with both categories of exercises

**Stretch Goals**

* Real time races
* Weekly events
  + Bases on the user’s previously finished exercises
* Adding 4 more total exercises
* Friend’s List
* Social sharing
  + Sharing on user’s social media

**Technical Specifications**

**Platform**

* Android

**Language**

* React Native

**Database**

* PouchDB

**API’s**

* Google Maps API

**Phase 1**

When the quarter starts, I plan to have my project skeleton finished in the first week so that I can build off anywhere. This will be the time that I get the bare bones of my project. What this means is all programs downloaded and a layout of how I want my project to look and flow. The layout of my project also includes my preparation for all tasks and diving the work load up. I expect the environment set up and layout to take between 3 to 5 hours. By the end of my first week is when I plan to have my database finished and set up as databases are not my strong suit. I expect this to take about 10 hours on the high end. Assuming I am on track with a skeleton and database, my next step would be working on the cardio exercises. This would involve using the Google Maps API as well as tracking the user’s location and the beginning of storing data. If those goals are finished before the second week is ends, my next step would be working on the gyroscope for the in-place exercises. I expect these to take about 15 hours each as they have different requirements.

**Justification**

I think this idea is perfect for a capstone. It takes something that I like to do such as exercising and turns it into a tracking app that is also social. This Capstone idea will allow me to learn three new technologies, React Native, PouchDB, and development for mobile. Doing this Capstone will help me become a more versatile developer as it will allow me the chance to learn and develop in mobile and use a database I haven’t used before. My fitness app will give me the opportunity to freshen up on my designing as well as my knowledge on databases.