

CMPT 276 Proposal 0

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Project name: [SweatSink](#)

Group members:

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Abstract:

We're aiming to create a fitness-tracking app focused on weightlifting and cardio training using the Android Studio IDE and coding in Java and Kotlin. The app will utilize the OpenAI's API and the Google Search API to allow users to access an AI personal trainer and feedback on their training, search for specific workouts and training methods, or to simply do more research on certain exercises. Our app will also make use of the Google Calendar's API, as well as Google map's API which will allow users to schedule workouts throughout the week and plan optimal running routes around their neighborhood. With the help of SQLite we will also store an offline database of exercises for specific body parts to allow users to target certain areas they may want to work out.

Customer:

The target audience for this Android app is anybody who is looking to create and achieve fitness goals. The app will benefit customers who are looking for fitness guidance but can't or don't wish to seek help from a human. It will be useful for both beginners looking to start weightlifting and cardio as well as intermediates who are already experienced. This app will be free meaning it can be easily accessed by people of all ages and financial status.

Competitive Analysis:

Competitors:

- MyFitnessPal
- Nike Training Pal
- Google Fit
- Peloton

The following applications listed above will be our biggest competitors. However, our application strives to provide our users with the use of an AI personal trainer that will provide feedback based on user input. Additionally most of the applications listed above are aimed towards iOS users, while our application will be more geared towards android users. In short, we are aiming to provide our users with all their favorite features together into one app.

Differences that our app brings:

- Most of these apps allow for the creation of a custom workout plan but this can often require a lot of research and experience that is hard to find. Our app will allow for custom workout plans that are created with the help of an AI personal trainer integrated with Chat GPT. This will give the user access to information that they otherwise wouldn't be able to easily receive for free.

- Any workout plans that, for example, an intermediate lifter has been using can be optimized with the AI personal trainer's advice. This also isn't a service that is available on the other apps.
- Provides live guidance and encouragement for people who tend to work out alone.
- Can provide live safety tips to ensure the user is not only working out efficiently but also without the risk of injury
- Using AI, not only helps users to achieve their goals, but also to set realistic and appropriate goals

User Stories

User Suggestion:

As someone with a busy schedule, I would like a scheduling system integrated within the app. This will provide my clients with keeping on track with their workout progress.

Name:	Scheduling system
Actor:	Regular User
Precondition:	Integrated Scheduling system
Iteration:	1
Actions:	implement a scheduling function using Google calendar API. Users should be able to make changes that will be reflected in their own, personal Google Calendar. The goal of this feature is to help users stay on top of their training through scheduling.

User Suggestion

As someone with very little experience in weight training, I would like to see AI integrated within the app to help with my workouts and training exercises. This would be an excellent way to help me start my weight training journey.

Name:	AI personal trainer
Actor:	Regular User
Precondition:	Integrated AI system to provide personal training for user
Iteration:	2
Actions:	implement a function within the application that utilizes AI (such as chatgpt). This allows users to gather information on training methods and workouts. Introducing AI also allows users to ask questions they may not be comfortable asking other people.

User Suggestion:

As a user, I would like to see google maps iterated into the application to help me plan optimal running routes around the neighborhood or find places to work out near me.

Name:	Integrated Map.
Actor:	Regular User
Precondition:	Integrate functioning map into application
Iteration:	1/2
Actions:	Integrate google maps onto our application using Google maps API to allow users to plan runs in their neighborhood and locate places to work out.

User Suggestion:

As someone who wants to work out a specific part of my body, I would like pre-planned workouts available at my disposal for simplicity.

Name:	Workout Database
Actor:	Regular User
Precondition:	A database with pre-planned workout for specific muscles
Iteration:	2
Actions:	With the help of SQLite, it is possible to store an offline database with pre-planned workouts for a specific muscle group or body part.

User Suggestion:

As someone who walks regularly. A step counter would be beneficial to me in tracking my exercise.

Name:	Step counter
Actor:	Regular User
Precondition:	counts steps taken by the user daily.
Iteration:	2
Actions:	not yet decided