

## UMD Fall2020 CMSC436 Project #59 – “Health Improvement App”

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We decided to make an app that helps people track workouts. Users start by selecting their goal - one of weight loss, strength training, flexibility – and the app will then provide suggested workouts to choose from. Additionally, users may design their own workout as well. Since gyms and gym equipment are hard to come by these days, equipment-less workouts will be included in the suggestions.

A user’s workout history is saved so that the user can track progress over time. For example, the user’s workout may suggest 15 pushups but the user was only able to complete and log 12. They can write in the number that they completed for future viewing.

At the end of a workout, the user is asked to rate it on a scale of 1 – 10. Workouts are stored in an online database (user history is, too). When suggested workouts for each type of goal are pulled from the database, the highest rated workout will appear at the top of the list. It will be interesting to see users flesh out the database with custom workouts that others can use, too.

If a workout is not logged in a user-defined amount of time – say, 48 hours – a reminder will be generated to remind them to do so. Certain time-sensitive workouts will also take advantage of alarms (cardio workout such as jumping jacks for 20s, as one example).

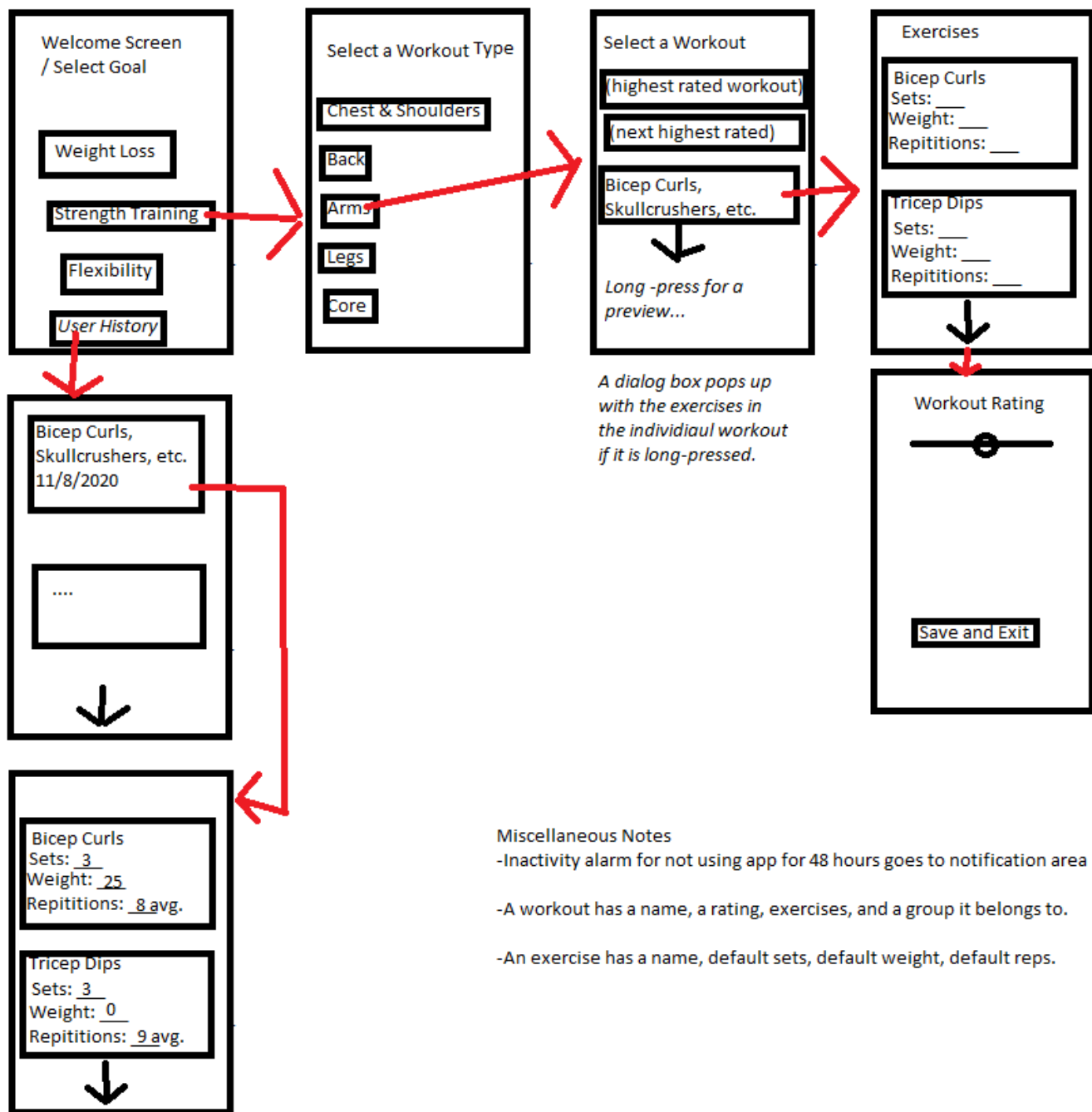
Some Android features we will utilize to implement the app are: activities, intents, permissions, UI, firebase, alarms, scrollable list views, etc.

Tentatively, we will break work up as follows:

Omar – UI, default workout lists, graphics

Philip – Setting up Firebase, storing user workouts, populating user history

Owen – Populating workout lists from database, rating system, alarms



#### Miscellaneous Notes

- Inactivity alarm for not using app for 48 hours goes to notification area
- A workout has a name, a rating, exercises, and a group it belongs to.
- An exercise has a name, default sets, default weight, default reps.