**Goal**

To create an Android application that can input and store my gym workouts. This is a learning project so to maximise learning third party libraries will be avoided when possible.

**Plan**

A combination of Java and XML will be used to develop the app in Android studio. I am currently learning Java in RMIT’s Java bootcamp so Java seems to be the most appropriate choice. With some brief research into Android development it looks like the application data can be stored in an SQLite database. It is recommended to use the Room Persistence Library but to maximise learning we will use SQL API’s instead. It is also recommended to use Compose for the User Interface but again, to maximise learning we will avoid this.

TL/DR

Java for backend

XML for front end

SQL for data storage/retrieval

Android Studio for IDE

**Features**

1. Ability for user to create new exercises to track
2. Ability for user to input sets/reps/weight into the program for each exercise
3. Ability for user to create a new “Workout” consisting of the exercises they created
4. Tapping on a workout will send the user to a new page where each exercise is listed and the user can input reps/sets/weight
5. There should be a page to list all current exercises created
6. The user should have the ability to add an exercise not currently in a workout to record data into
7. To enter the data the user will have to navigate to the workouts page and tap a workout
8. Ability for the user to edit exercises included in a workout after creation
9. To create exercises the user will have to navigate to the exercises page and tap a button
10. All workouts, exercises, reps/sets/weight should be recorded into the database so that the data is not lost after the user closes the app
11. reps/sets/weight will have a date recorded on them
12. Ability for user to see recorded data for each exercise
13. Ability for user to record their body weight as kg, this will also have a date recording
14. Ability for user to edit/delete a rep/set/weight record, exercises, workouts within the app
15. Date recorded cannot be created/deleted/updated unless for testing purposes

**Extras**

1. Create graphs to see progression over time for each exercise
2. Be able to store the data in the cloud for backups
3. Download data as a .csv file