1 Introduction:

Fitness buddy is an application which provides tools for people that don't have any experience in fitness and health.

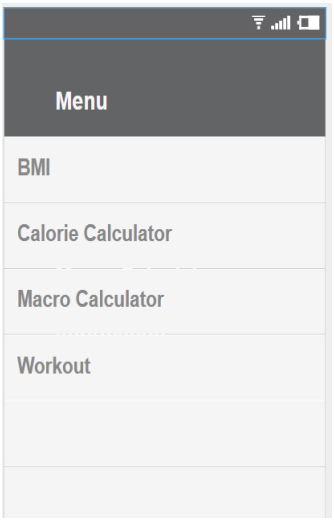
It allows users to easily obtain their Body Mass Index (BMI), Daily calorie requirements for maintaining their weight, losing weight or gaining weight.

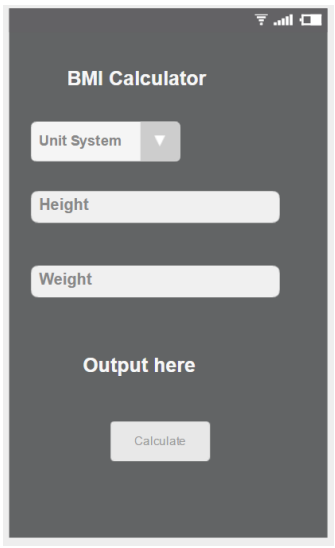
The application also has a simple workout program and a macronutrient calculator which gives the quantity of grams of protein, carbohydrates and fats depending on the type of diet they want to follow.

It was designed with the intention of keeping it as simple as possible so it’s easy to use for new users.

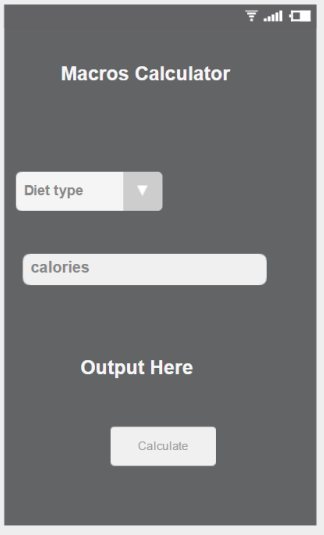
2 Software Design:

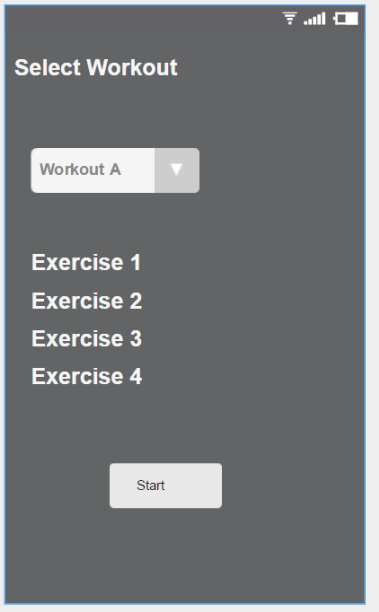
A basic design for the software was created. These are the mock ups created using https://www.fluidui.com. As I was developing the applications I had to make slight changes as new ideas came along meanwhile creating the actual application.

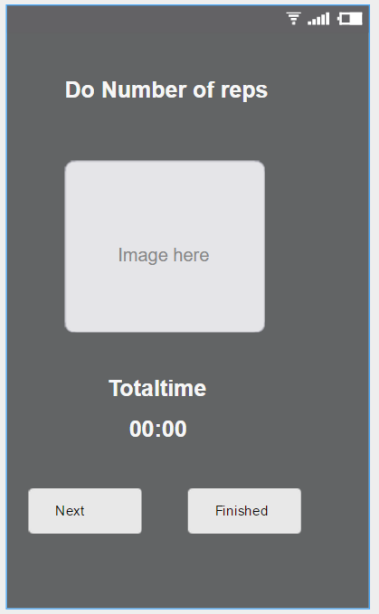





Calories Calculator
Unit System
Height
Weight
Weight
Gender
Activity level
Calculate
Output new Page


Macros Calculator
Diet type
calories
Output Here
Calculate

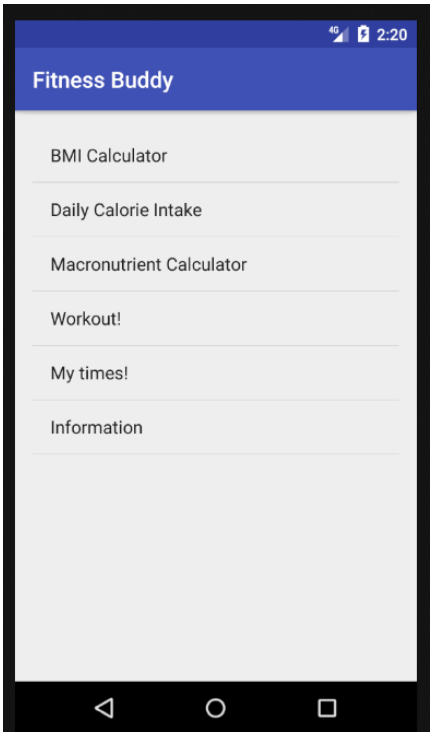

Select Workout
Workout A
Exercise 1
Exercise 2
Exercise 3
Exercise 4
Start


Do Number of reps
Image here
Totaltime
00:00
Next
Finished

3 Short description of application

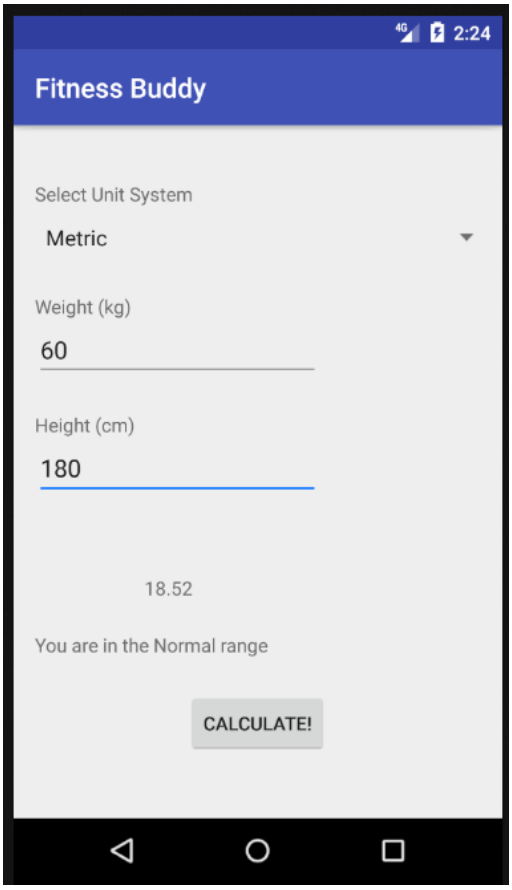
Once you open the application it will display a menu (created with a list view) with the options available.

Once an item is clicked it will open the new activies.



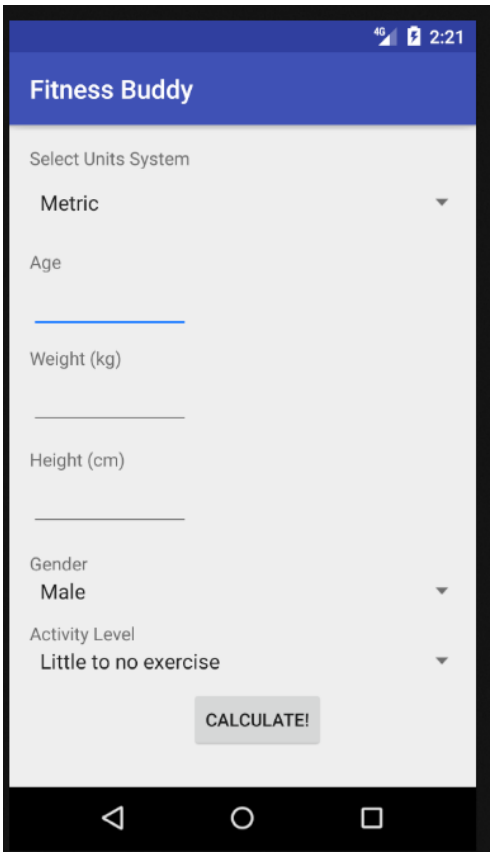
The first option is the BMI calculator which will open a new activity which requires the user to input some data.

Clicking on the calculate button after all the data is introduced will display the results. The app also provides metric and imperial systems so it covers more users.

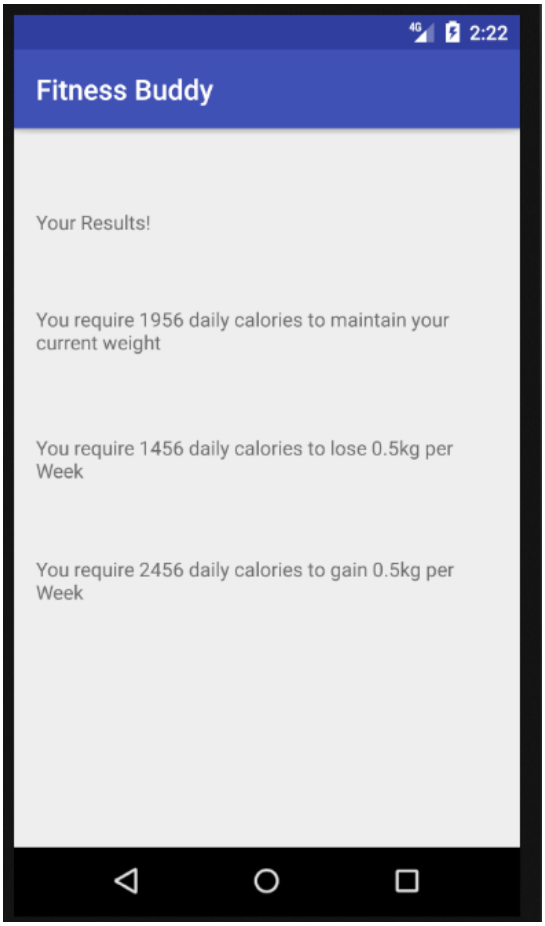


The second option is the daily calorie calculator. This is like the BMI calculations activity but it requires more information from the user such as gender and daily activity level which will both be selected from spinners.

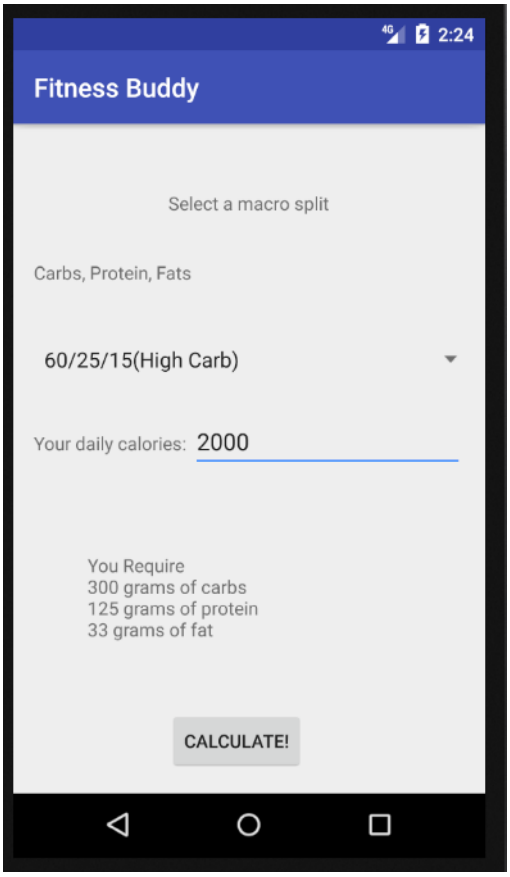
Since the information is too long to fit in the same activity, a new one will open once the calculate button is clicked. It will display calories required to maintain weight, lose weight or gain weight.



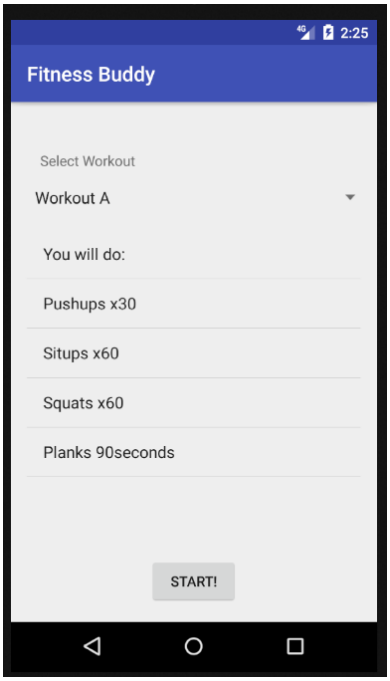
This is the daily calorie calculator results output.



The third option is the macronutrient calculator. It only requires the user to select the diet type and introduce their daily calories and will provide the results on the same screen.



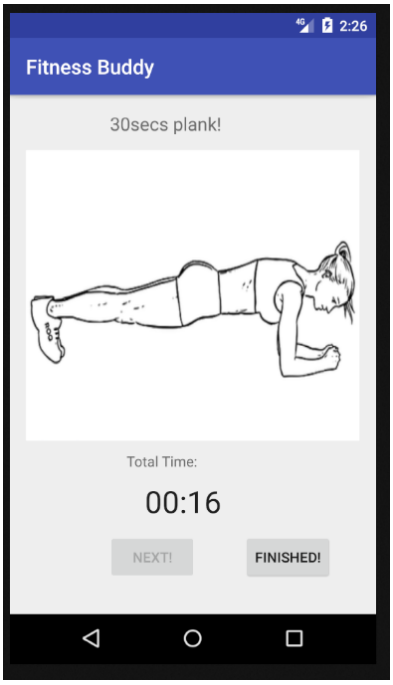
The fourth option is a Workout selector. It provides a list of workouts in a spinner. Once the user selects one it will display the exercises of that specific workout in a list view.



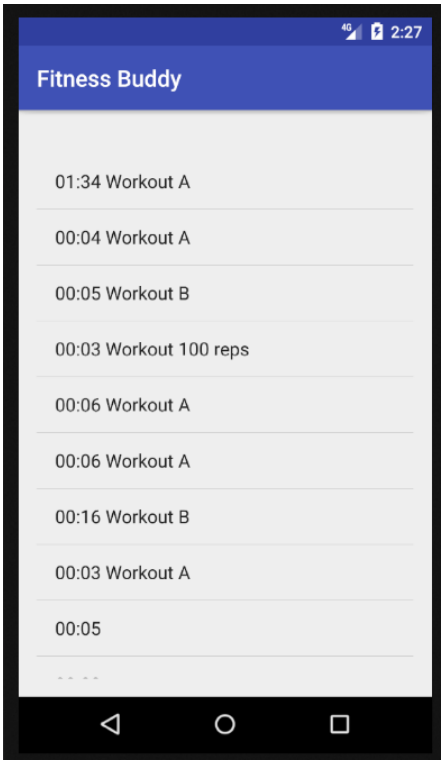
Once the user presses start it opens a new activity with a set of images for each exercise and it will progress to the next one whenever the user clicks the next button.

Workout activity:

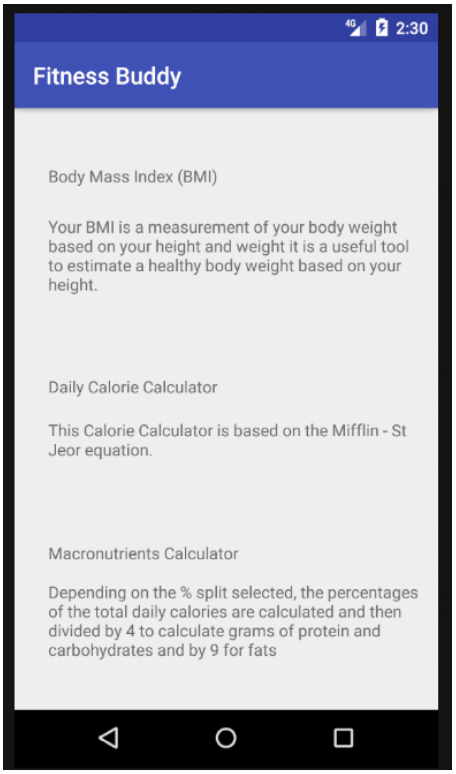
There is an active chronometer and the total time will be saved upon completing the workout (once the user reaches the last exercise a finish button will become enabled and the next button will be disabled).



The time and name of the workout will be saved on a database and will be displayed in a different activity using a list view.



The last option is a simple information activity which only has text in it regarding possible information about the calculators that users might want to know about.



4 Evaluation of the app and resources

As mentioned before the app required more controls and activities than in were created in the mock ups, for example whenever the unit's system was changed from metric to imperial it required an extra textbox for inches.

There are many apps that will do specific calculations but they don't provide for example the sources to how they are obtaining these results. Others apps also don't have the 3 calculators available in the same app or require that the user buys an extension pack to obtain them.

Some great apps like MyFitnessPal have a reputation for being hard for new users to learn how to use at first, since they have many unnecessary options for the average person wanting to get fit and the layouts aren't very clear. Keeping it simple and minimalistic would allow new users to not have to spend time trying to figure out how to use an app or just not using it.

There are a few improvements which could be made such as Customize a workout, for example a user selects what exercises they want to do and then the app will create it for them and allow them to save it.

Images of exercises could be improved, maybe with pictures of a model rather than copyright free images from google. This would make the app look more professional.

New features such as food tracking would also be a good improvement to the app.