CMPE-CMSE419 Mobile Application Development

LAB2

Due Date: 16.03.2023

Project: BMR Calculator

You use energy no matter what you're doing, even when sleeping. The **BMR Calculator** will calculate your Basal Metabolic Rate (BMR); the number of calories you'd burn if you stayed in bed all day.
If you've noticed that every year, it becomes harder to eat whatever you want and stay slim, you've also learnt that your BMR decreases as you age. Likewise, depriving yourself of food in hopes of losing weight also decreases your BMR, a foil to your intentions. However, a regular routine of cardiovascular exercise can increase your BMR, improving your health and fitness when your body's ability to burn energy gradually slows down.

- You are required to create an Android Project in Java to Calculate BMR by using two different formulas:

Formula 1:

Harris-Benedict Equation (Original):

The original harris-benedict formula is one of the most used formulas on the internet to calculate your daily energy needs, however it is also one of the least accurate.

```
Males: 66.4730 + (13.7516 x Weight [kg]) + (5.0033 x Height [cm]) - (6.7550 x Age)
Females: 655.0955 + (9.5634 x Weight [kg]) + (1.8496 x Height [cm]) - (4.6756 x Age)
```

Formula 2:

Oxford (Most Reliable):

Males:

Age	Formula
0–3	61.0 x Weight [kg] - 33.7
3–10	23.3 x Weight [kg] + 514
10–18	18.4 x Weight [kg] + 581
18–30	16.0 x Weight [kg] + 545
30–60	14.2 x Weight [kg] + 593
60+	13.5 x Weight [kg] + 514

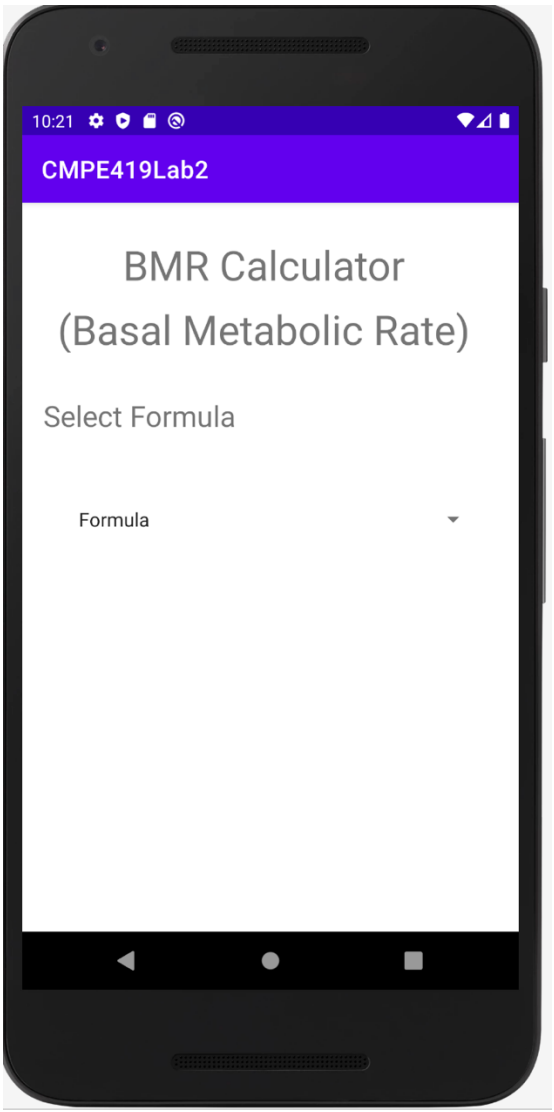
Females:

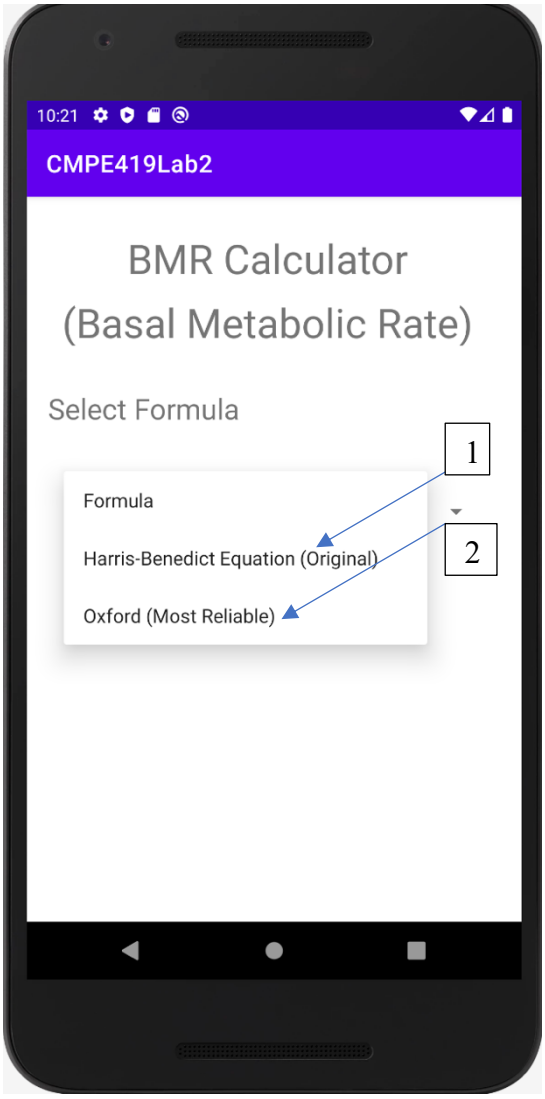
Age	Formula
0–3	58.9 x Weight [kg] - 23.1
3–10	20.1 x Weight [kg] + 507
10–18	11.1 x Weight [kg] + 761
18–30	13.1 x Weight [kg] + 558
30–60	9.74 x Weight [kg] + 694
60+	10.1 x Weight [kg] + 569

Your Project must contain 3 Activities. In Activity main you have to select Formula and move to appropriate activity for entering necessary information to calculate BMR.

Main Activity GUI:

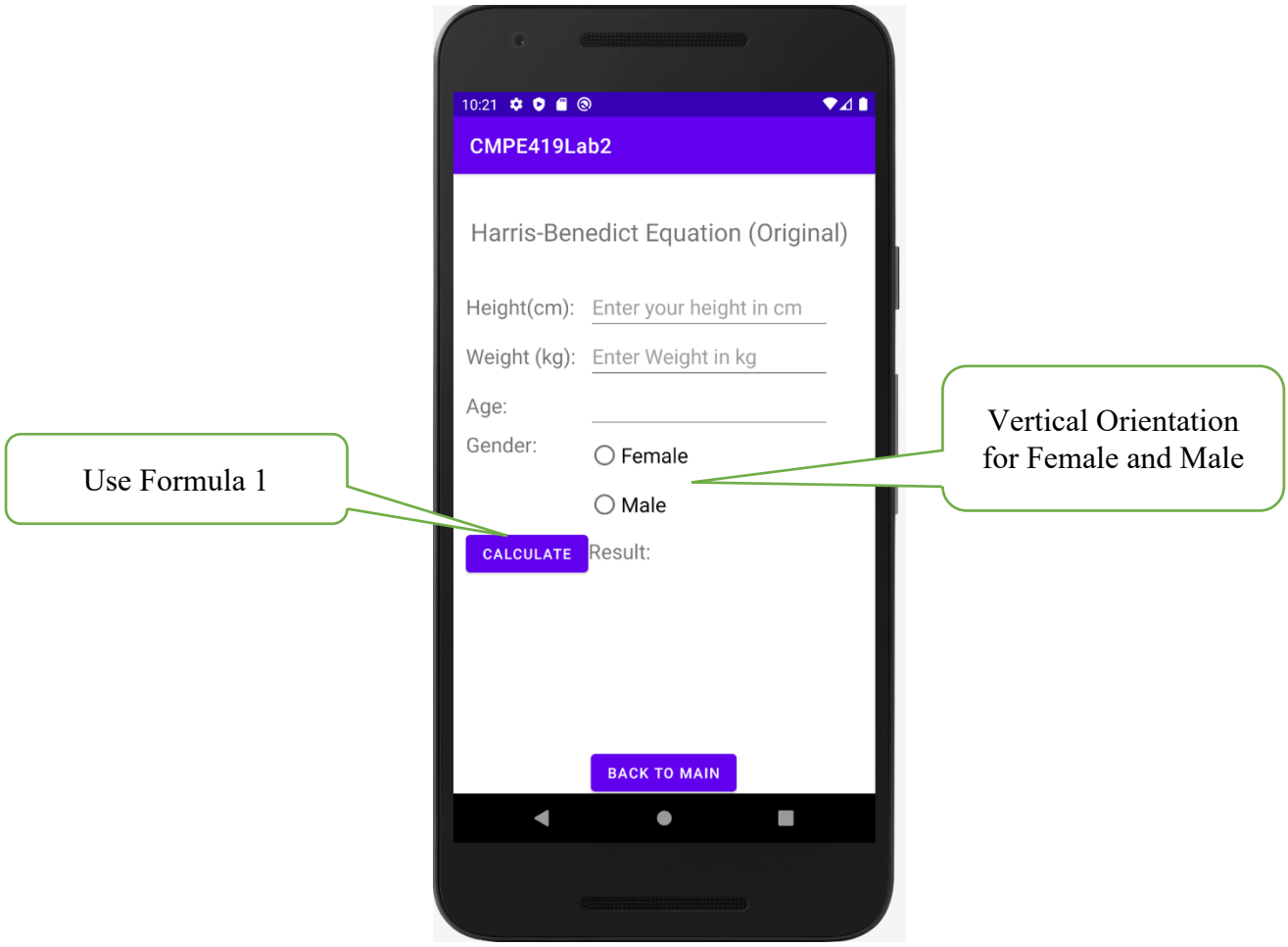
For selecting formula, you have to use spinner. After selecting your formula you have to move to next activity.





[1] Activity for calculating BMR by using **Harris-Benedict Equation (Original)** :

- You have to use table layout for the following design.



[2] Activity for calculating BMR by using **Oxford (Most Reliable)**:

- You have to use linear layout for the following design.