

## Mobile Interface Lab Assignment 2

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Btech/60017.19

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(BMI)
Body Mass
Calculator
App

#### MainActivity.java File

```
package com.example.bmicalculator;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import android.content.DialogInterface;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RelativeLayout;
import android.widget.TextView;
import android.widget.Toast;
import java.text.DecimalFormat;
public class MainActivity extends AppCompatActivity {
    Button calc;
    EditText heighttext, weighttext;
    TextView categoryx,bmiout;
   RelativeLayout rl;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        calc=findViewById(R.id.calculate);
        heighttext=findViewById(R.id.heightInput);
        weighttext=findViewById(R.id.weightInput);
        categoryx=findViewById(R.id.category);
        bmiout=findViewById(R.id.bmioutput);
        rl=findViewById(R.id.RelativeLayout);
        rl.setBackgroundColor(Color.YELLOW);
        calc.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String h=heighttext.getText().toString();
                String w=weighttext.getText().toString();
                if(h.equals("") || w.equals(""))
                    alertDialog();
                else{
                    double weight=Double.parseDouble(w);
                    double height=Double.parseDouble(h);
                    Double BMI=(weight/(height*height));
                    DecimalFormat df = new DecimalFormat("#.#");
                    double BMI trimmed = Double.parseDouble(df.format(BMI));
                    bmiout.setText(Double.toString(BMI_trimmed));
                    String BMI Cat;
                    if (BMI < 15)
                        BMI Cat = "Very severely underweight";
                    else if (BMI < 16)
                        BMI Cat = "Severely underweight";
                    else if (BMI < 18.5)
                        BMI_Cat = "Underweight";
                    else if (BMI < 25)
                        BMI Cat = "Normal";
                    else if (BMI < 30)
                        BMI_Cat = "Overweight";
                    else if (BMI < 35)
                        BMI Cat = "Obese Class 1 - Moderately Obese";
                    else if (BMI < 40)
                        BMI_Cat = "Obese Class 2 - Severely Obese";
                    else
                        BMI Cat = "Obese Class 3 - Very Severely Obese";
                    categoryx.setText(BMI_Cat);
```

```
}
    });
public void alertDialog() {
    AlertDialog.Builder dialog=new AlertDialog.Builder(this);
    dialog.setMessage("Please Select any option");
    dialog.setTitle("Dialog Box");
    dialog.setPositiveButton("YES",
            new DialogInterface.OnClickListener() {
                public void onClick(DialogInterface dialog,
                                     int which) {
                    Toast.makeText(getApplicationContext(), "Yes is clicked", Toast.LENGTH_LONG).show();
            });
    dialog.setNegativeButton("cancel", new DialogInterface.OnClickListener() {
        @Override
        public void onClick(DialogInterface dialog, int which) {
            Toast.makeText(getApplicationContext(), "cancel is clicked", Toast.LENGTH_LONG).show();
    });
    AlertDialog alertDialog=dialog.create();
    alertDialog.show();
```

#### activity\_main.xml file

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity"
    android:id="@+id/RelativeLayout">
    <TextView
        android:id="@+id/BmiCalculator"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="90dp"
        android:layout_marginTop="110dp"
        android:text="BMI CALCULATOR"
        android:textSize="24sp"
        android:visibility="visible"
        tools:layout_editor_absoluteX="159dp"
        tools:layout editor absoluteY="103dp" />
    <TextView
        android:id="@+id/weightText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentLeft="true"
        android:lavout marginStart="10dp"
        android:layout marginLeft="10dp"
        android:layout_marginTop="190dp"
        android:text="Enter you Weight (Kg) :"
        android:textColor="@color/black"
        android:textSize="16sp" />
    <TextView
        android:id="@+id/heightText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentLeft="true"
        android:layout_marginStart="10dp"
        android:layout_marginLeft="10dp"
        android:layout marginTop="240dp"
        android:text="Enter you height (m) :"
        android:textColor="@android:color/black"
        android:textSize="16sp" />
```

```
android:id="@+id/bmiText"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:layout_alignParentLeft="true"
    android:layout_alignParentTop="true"
    android:layout_marginLeft="95dp"
    android:layout_marginTop="397dp"
    android:text="YOUR BMI :"
    android:textColor="@color/purple_700"
    android:textSize="16sp" />
<TextView
    android:id="@+id/category"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout alignParentStart="true"
    android:layout_alignParentBottom="true"
    android:layout centerHorizontal="true"
    android:layout marginStart="154dp"
    android:layout_marginLeft="80dp"
    android:layout marginBottom="152dp"
    android:textColor="@color/black"
    android:textSize="14sp" />
<EditText
    android:id="@+id/weightInput"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout_marginLeft="180dp"
    android:layout marginTop="180dp"
    android:ems="10"
    android:inputType="numberDecimal"
    android:textAlignment="center"
    android:textColor="@color/black"
    tools:ignore="TouchTargetSizeCheck, TouchTargetSizeCheck, SpeakableTextPresentCheck" />
<EditText
    android:id="@+id/heightInput"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="180dp"
    android:layout marginTop="220dp"
    android:ems="10"
    android:inputType="numberDecimal"
    android:minHeight="48dp"
    android:textAlignment="center"
    android:textColor="@color/black"
    tools:ignore="SpeakableTextPresentCheck" />
<TextView
    android:id="@+id/bmioutput"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout alignParentStart="true"
    android:layout alignParentTop="true"
    android:layout marginStart="225dp"
    android:layout marginTop="396dp"
    android:textSize="16sp"
    tools:textColor="#103EE5" />
<Button
    android:id="@+id/calculate"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout alignParentStart="true"
    android:layout alignParentTop="true"
    android:layout centerInParent="true"
    android:layout marginStart="128dp"
    android:layout marginTop="305dp"
    android:text="CALCULATE" />
<TextView
    android:id="@+id/textView2"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout alignEnd="@+id/category"
    android:layout alignParentStart="true"
    android:layout alignParentBottom="true"
    android:layout marginStart="43dp"
```

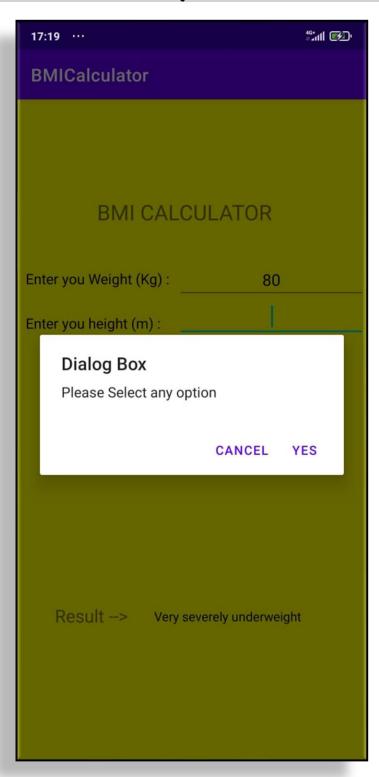
<TextView

```
android:layout_marginEnd="4dp"
    android:layout_marginBottom="149dp"
    android:text="Result --> "
    android:textSize="20sp" />
</RelativeLayout>
```

### UI Design of the activity\_main.xml

appearable and a self-time of the self-t	
BMICalculator	
BMI CALCULATOR	
Enter you Weight (Kg): 80	
Enter you height (m):	
CALCULATE	
YOUR BMI: 80.0	
Result> Obese Class 3 - Very Severely Obe	se

#### Alert Window if any field is left empty



#### Other outputs

