



PRESIDENCY UNIVERSITY

Mobile application development(CSE 3075)

Experiment 2: Body Mass Index Calculator

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5CSE4

1.Design(XML File)

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/editTe"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/bmi"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Body Mass Index"
        android:textColor="#C2185B"
        android:textSize="24sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.022" />

    <EditText
        android:id="@+id/editTextText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="8dp"
        android:ems="10"
        android:hint="Enter the weight(in kg):"
        android:inputType="text"
        android:textColorHint="@color/material_dynamic_neutral40"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView" />

    <EditText
        android:id="@+id/editTextText2"
        android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:layout_marginTop="8dp"
        android:layout_marginEnd="1dp"
        android:ems="10"
        android:hint="Enter the height(in cm):"
        android:inputType="text"
        android:textColorHint="@color/material_dynamic_neutral40"
        app:layout_constraintEnd_toEndOf="@+id/editTextText"
        app:layout_constraintTop_toBottomOf="@+id/editTextText" />
```

<Button

```
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="37dp"
        android:layout_marginTop="7dp"
        android:text="Calculate"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/editTextText2" />
```

<Button

```
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="6dp"
        android:layout_marginEnd="61dp"
        android:text="Clear"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/editTextText2" />
```

<TextView

```
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="164dp"
        android:text="BMI="
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
```

</androidx.constraintlayout.widget.ConstraintLayout>



2.Code(JAVA File)

```
package com.example.myapplicationbmi;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RadioGroup;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    EditText editTextText;
    EditText editTextText2;
    Button button;
    Button button2;
    //RadioGroup rb1;
    TextView tv;
    Double wt, ht, h, bmi;
```

```

@SuppressLint("MissingInflatedId")
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    button = findViewById(R.id.button);
    button2 = findViewById(R.id.button2);
    tv = findViewById(R.id.textView2);
    editTextText = findViewById(R.id.editTextText);
    editTextText2 = findViewById(R.id.editTextText2);

    button.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            //int radioId=rb1.getCheckedRadioButtonId();
            wt = Double.parseDouble(editTextText.getText().toString());
            ht = Double.parseDouble(editTextText2.getText().toString())
/ 100;

            h = ht * ht;
            bmi = wt / h;
            tv.setText("BMI: " + Double.toString(bmi));
            if (bmi > 25) {
                tv.setText("Overweight!" + "BMI= " +
Double.toString(bmi));
            } else if (bmi < 18) {
                tv.setText("Underweight!BMI= " + Double.toString(bmi));
            } else {
                tv.setText("Healthy:") + "BMI= " + Double.toString(bmi));
            }

        }
    });
    button2.setOnClickListener(new View.OnClickListener() {
        @Override public void onClick(View view) {
            editTextText.setText("");
            editTextText2.setText("");
            tv.setText("");
        }
    });
}
}

```

3. Output in the Emulator



