

Mobile Interface Lab Assignment 3

Subhojeet Ghosh

Btech/60017.19

Professor :- Anita Kushwaha Mam

*Dice
Rolling
App*

MainActivity.java File

```
package com.example.dicerolling;

import androidx.appcompat.app.AppCompatActivity;

import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.RelativeLayout;
import android.widget.TextView;

import java.util.Random;

public class MainActivity extends AppCompatActivity {
    Button button;
    TextView diceresult;
    ImageView img;
    RelativeLayout layout;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        button=findViewById(R.id.rollbutton);
        diceresult=findViewById(R.id.diceresult);
        img=findViewById(R.id.diceimage);
        layout=findViewById(R.id.RelativeLayout);
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Random rand=new Random();
                int rollresult=rand.nextInt(6)+1;
                diceresult.setText("\t\t\t\t\t\t\t\t\t\t\t\t\t\t\t\t"+Integer.toString(rollresult));
                switch (rollresult) {
                    case 1:
                        img.setImageResource(R.drawable.dice1);
                        layout.setBackgroundColor(Color.YELLOW);
                        break;
                    case 2:
                        img.setImageResource(R.drawable.dice2);
                        layout.setBackgroundColor(Color.MAGENTA);
                        break;
                    case 3:
                        img.setImageResource(R.drawable.dice3);
                        layout.setBackgroundColor(Color.LTGRAY);
                        break;
                    case 4:
                        img.setImageResource(R.drawable.dice4);
                        layout.setBackgroundColor(Color.GREEN);
                        break;
                    case 5:
                        img.setImageResource(R.drawable.dice5);
                        layout.setBackgroundColor(Color.CYAN);
                        break;
                    case 6:
                        img.setImageResource(R.drawable.dice6);
                        layout.setBackgroundColor(Color.RED);
                        break;
                }
            }
        });
    }
}
```

activity_main.xml file

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity"
    android:id="@+id/RelativeLayout">

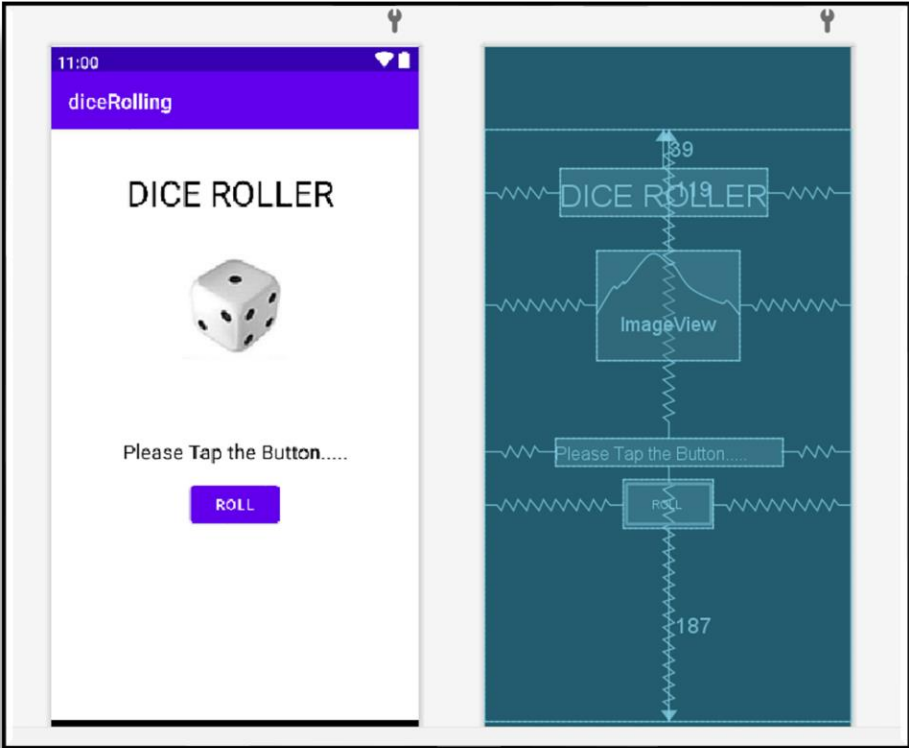
    <TextView
        android:id="@+id/header1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginLeft="73dp"
        android:layout_marginTop="39dp"
        android:text="DICE ROLLER"
        android:textColor="@color/black"
        android:textSize="34sp" />

    <ImageView
        android:id="@+id/diceimage"
        android:layout_width="wrap_content"
        android:layout_height="107dp"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="119dp"
        app:srcCompat="@drawable/dicegenerator" />

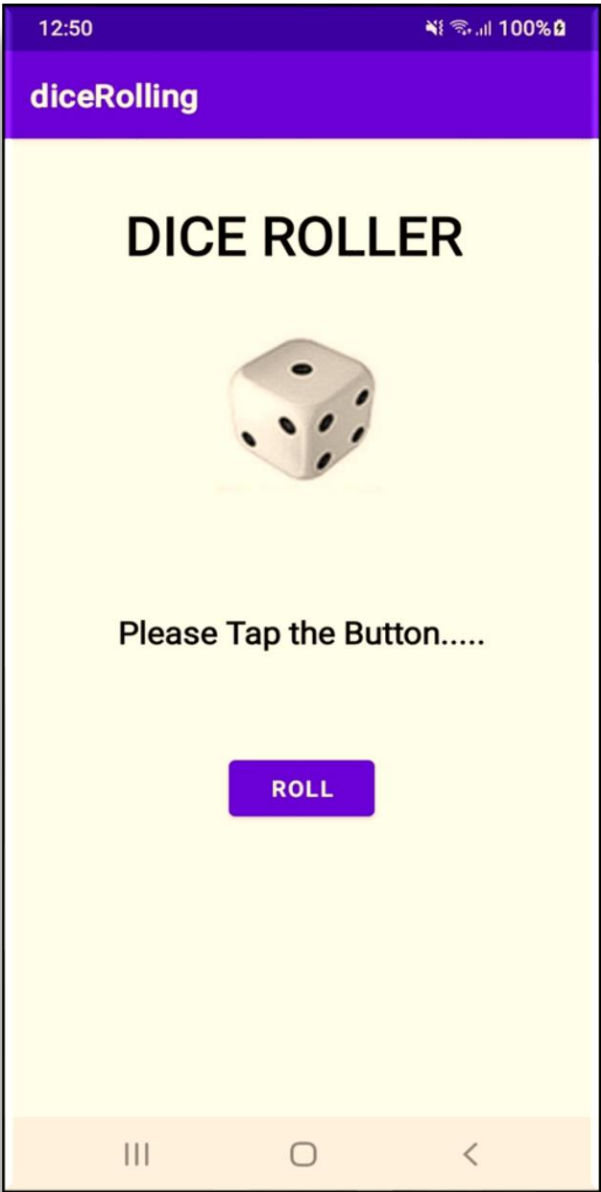
    <TextView
        android:id="@+id/diceresult"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_centerInParent="true"
        android:layout_marginLeft="69dp"
        android:layout_marginTop="302dp"
        android:layout_marginBottom="280dp"
        android:text="Please Tap the Button....."
        android:textColor="@color/black"
        android:textSize="20sp"
        tools:textAlignment="center" />

    <Button
        android:id="@+id/rollbutton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="187dp"
        android:text="ROLL" />
</RelativeLayout>
```

UI Design of the activity_main.xml



Output Windows:



When Dice is Rolled Output Windows:

