*Project Name: tictactoe*

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 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"  
 android:gravity="center"  
 tools:context=".MainActivity">  
  
 <GridLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:columnCount="3"  
 android:rowCount="3"  
 >  
  
 <Button  
 android:id="@+id/btn1"  
 android:onClick="check"  
 android:text="C"  
 />  
 <Button  
 android:id="@+id/btn2"  
 android:layout\_marginLeft="11dp"  
  
 android:onClick="check"/>  
 <Button  
 android:id="@+id/btn3"  
 android:layout\_marginLeft="11dp"  
 android:onClick="check"/>  
 <Button  
 android:id="@+id/btn4"  
 android:onClick="check"/>  
 <Button  
 android:id="@+id/btn5"  
 android:layout\_marginLeft="11dp"  
 android:onClick="check"/>  
 <Button  
 android:id="@+id/btn6"  
 android:layout\_marginLeft="11dp"  
 android:onClick="check"/>  
 <Button  
 android:id="@+id/btn7"  
 android:onClick="check"  
 />  
 <Button  
 android:id="@+id/btn8"  
 android:layout\_marginLeft="11dp"  
 android:onClick="check"/>  
 <Button  
 android:id="@+id/btn9"  
 android:layout\_marginLeft="11dp"  
 />  
  
 </GridLayout>  
  
  
</LinearLayout>

package com.sonal.example.tictactoe;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 Button btn1, btn2, btn3, btn4, btn5, btn6, btn7, btn8, btn9;  
 String b1, b2, b3, b4, b5, b6, b7, b8, b9;  
  
 int count = 0, flag1=0;  
 int flag=0;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 initbutton();  
  
 }  
  
  
 private void initbutton() {  
 btn1 = findViewById(R.id.*btn1*);  
 btn2 = findViewById(R.id.*btn2*);  
 btn3 = findViewById(R.id.*btn3*);  
 btn4 = findViewById(R.id.*btn4*);  
 btn5 = findViewById(R.id.*btn5*);  
 btn6 = findViewById(R.id.*btn6*);  
 btn7 = findViewById(R.id.*btn7*);  
 btn8 = findViewById(R.id.*btn8*);  
 btn9 = findViewById(R.id.*btn9*);  
  
 }  
  
 public void check(View view) {  
  
 Button btncurrent = (Button) view;  
 Toast.*makeText*(this,btncurrent.getText().toString(), Toast.*LENGTH\_LONG*).show();  
  
 *//Toast.makeText(this, "Entered Loop , flag is "+ flag, Toast.LENGTH\_LONG).show();* String s = btncurrent.getText().toString();  
 Toast.*makeText*(this, s, Toast.*LENGTH\_LONG*).show();  
 *//btncurrent.setText("Hi");  
 // String s1="C";* s=s+"Sonal";  
 Toast.*makeText*(this,s, Toast.*LENGTH\_LONG*).show();  
 String e="CSonal";  
 if (s.equals(e)) {  
  
 count = count + 1;  
 Toast.*makeText*(this, "Hello I am in", Toast.*LENGTH\_LONG*).show();  
  
 if (flag1 == 0) {  
 *//Toast.makeText(this, "count = " + count, Toast.LENGTH\_LONG).show();* btncurrent.setText("X");  
 flag1 = 1;  
 } else {  
 btncurrent.setText("O");  
 *// Toast.makeText(this, "count = " + count, Toast.LENGTH\_LONG).show();* flag1 = 0;  
 }  
 if (count > 4) {  
 b1 = btn1.getText().toString();  
 b2 = btn1.getText().toString();  
 b3 = btn1.getText().toString();  
 b4 = btn1.getText().toString();  
 b5 = btn1.getText().toString();  
 b6 = btn1.getText().toString();  
 b7 = btn1.getText().toString();  
 b8 = btn1.getText().toString();  
 b9 = btn1.getText().toString();  
  
  
 }  
 *//Checking Horizontals....* if (b1.equals(b2) && b2.equals(b3) && !b1.equals("")) {  
 Toast.*makeText*(this, "Winner is " + b1, Toast.*LENGTH\_LONG*).show();  
 restart();  
 } else if (b4.equals(b5) && b5.equals(b6) && !b4.equals("")) {  
 Toast.*makeText*(this, "Winner is " + b4, Toast.*LENGTH\_LONG*).show();  
 restart();  
 } else if (b7.equals(b8) && b8.equals(b9) && !b9.equals("")) {  
 Toast.*makeText*(this, "Winner is " + b7, Toast.*LENGTH\_LONG*).show();  
 restart();  
 }  
 *//Checking Verticals* else if (b1.equals(b4) && b4.equals(b7) && !b4.equals("")) {  
 Toast.*makeText*(this, "Winner is " + b1, Toast.*LENGTH\_LONG*).show();  
 restart();  
 } else if (b2.equals(b5) && b5.equals(b6) && !b8.equals("")) {  
 Toast.*makeText*(this, "Winner is " + b2, Toast.*LENGTH\_LONG*).show();  
 restart();  
 } else if (b3.equals(b6) && b6.equals(b9) && !b3.equals("")) {  
 Toast.*makeText*(this, "Winner is " + b3, Toast.*LENGTH\_LONG*).show();  
 restart();  
 }  
 *//Checking diagonals...* else if (b1.equals(b5) && b5.equals(b9) && !b1.equals("")) {  
 Toast.*makeText*(this, "Winner is " + b1, Toast.*LENGTH\_LONG*).show();  
 restart();  
 }  
 else if (b3.equals(b5) && b5.equals(b7) && !b3.equals("")) {  
 Toast.*makeText*(this, "Winner is " + b3, Toast.*LENGTH\_LONG*).show();  
 restart();  
 }  
 else if (count==9){  
 Toast.*makeText*(this, "Draw Game", Toast.*LENGTH\_LONG*).show();  
 restart();  
 }  
 }  
  
 }  
  
 public void restart(){  
 btn1.setText("");  
 btn2.setText("");  
 btn3.setText("");  
 btn4.setText("");  
 btn5.setText("");  
 btn6.setText("");  
 btn7.setText("");  
 btn8.setText("");  
 btn9.setText("");  
 count=0;  
 flag=0;  
  
  
 }  
}