# Develop an application that draws the selected shape{Circle, Rectangle and Square}.

<?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"](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">

<LinearLayout android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:orientation="vertical">

<RadioGroup android:id="@+id/RadioGroup" android:layout\_width="match\_parent" android:layout\_height="wrap\_content">

<RadioButton android:id="@+id/radioButton2"

android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Rectangle" />

<RadioButton android:id="@+id/radioButton3" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Circle" />

<RadioButton android:id="@+id/radioButton4" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Line" />

</RadioGroup>

<Button android:id="@+id/button"

android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="submit" />

<ImageView android:id="@+id/imageView" android:layout\_width="match\_parent" android:layout\_height="0dp" android:layout\_weight="1"

tools:srcCompat="@tools:sample/avatars" />

</LinearLayout>

</androidx.constraintlayout.widget.ConstraintLayout>

# Mainactivity

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity; import android.graphics.Bitmap;

import android.graphics.Canvas;

import android.graphics.Color; import android.graphics.Paint;

import android.graphics.drawable.BitmapDrawable; import android.os.Bundle;

import android.view.View; import android.widget.Button;

import android.widget.ImageView; import android.widget.RadioButton; import android.widget.RadioGroup;

public class MainActivity extends AppCompatActivity {

RadioGroup rg; Button b; ImageView i; String s;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

i = findViewById(R.id.imageView); b = findViewById(R.id.button);

rg = findViewById(R.id.RadioGroup);

final Bitmap bg = Bitmap.createBitmap(620, 1080, Bitmap.Config.ARGB\_8888); i.setImageDrawable(new BitmapDrawable(getResources(), bg)); // Use setImageDrawable instead of

setBackgroundDrawable

final Canvas c = new Canvas(bg); final Paint p = new Paint(); p.setTextSize(30); p.setColor(Color.BLUE);

b.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View v) {

int selectedId = rg.getCheckedRadioButtonId(); RadioButton rb = findViewById(selectedId);

s = rb.getText().toString();

if (s.equals("Rectangle")) { c.drawText("Rectangle", 420, 150, p);

c.drawRect(400, 200, 650, 700, p);

} else if (s.equals("Circle")) { c.drawText("Circle", 120, 150, p);

c.drawCircle(200, 350, 150, p);

} else {

c.drawText("Line", 480, 800, p);

c.drawLine(520, 850, 520, 1150, p);

}

i.invalidate(); // Refresh the ImageView

}

});

}

}