Exp No.1

Rishab Mandal

Batch: C23

Code:

activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.coordinatorlayout.widget.CoordinatorLayout
    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:fitsSystemWindows="true"
    tools:context=".MainActivity">

    <TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="C23\nRishab Mandal\nRoll no: 2103110"
    android:textSize="20sp"
    android:textColor="@android:color/black"
    android:layout_centerHorizontal="true"
    android:layout_margin="50dp"/>

    <!-- Include your CustomView -->
    <com.example.exp1app.CustomView
        android:id="@+id/customView"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />

</androidx.coordinatorlayout.widget.CoordinatorLayout>
```

MainActivity.java

```java
package com.example.exp1app;

import android.os.Bundle;

import com.google.android.material.snackbar.Snackbar;

import androidx.appcompat.app.AppCompatActivity;

import android.view.View;

import androidx.core.view.WindowCompat;
```

```java
import androidx.navigation.NavController;
import androidx.navigation.Navigation;
import androidx.navigation.ui.AppBarConfiguration;
import androidx.navigation.ui.NavigationUI;

import com.example.exp1app.databinding.ActivityMainBinding;

import android.view.Menu;
import android.view.MenuItem;

public class MainActivity extends AppCompatActivity {

    private AppBarConfiguration appBarConfiguration;
    private ActivityMainBinding binding;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        CustomView customView = findViewById(R.id.customView);
    }
}
```

CustomView.java

```java
package com.example.exp1app;

// CustomView.java
import android.content.Context;
import android.graphics.Canvas;
import android.graphics.Color;
import android.graphics.Paint;
import android.util.AttributeSet;
import android.view.View;

public class CustomView extends View {

    private Paint paint;

    public CustomView(Context context) {
        super(context);
        init();
    }

    public CustomView(Context context, AttributeSet attrs) {
        super(context, attrs);
        init();
    }

    private void init() {
        paint = new Paint();
        paint.setColor(Color.RED);
        paint.setStyle(Paint.Style.FILL);
```

```
    }

    @Override
    protected void onDraw(Canvas canvas) {
        super.onDraw(canvas);

        // Draw a rectangle
        int rectLeft = 50;
        int rectTop = 50;
        int rectRight = 250;
        int rectBottom = 250;
        canvas.drawRect(rectLeft, rectTop, rectRight, rectBottom, paint);

        // Draw a circle below the rectangle
        paint.setColor(Color.GREEN);
        int circleRadius = 100;
        int circleCenterX = (rectLeft + rectRight) / 2;
        int circleCenterY = rectBottom + circleRadius + 50;
        canvas.drawCircle(circleCenterX, circleCenterY, circleRadius,
paint);
    }
}
```

Output:

C23
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