

Develop a canvas to draw different shapes and to fill the shapes with different colors.

Main Activity.xml

```
<?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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

Main Activity.java

```
package com.example.shape;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
```

```
public class MainActivity extends AppCompatActivity {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(new com.example.shape.CustomView(this));  
    }  
}
```

CustomView.Java

```
package com.example.shape;  
  
import android.content.Context;  
import android.graphics.Canvas;  
import android.graphics.Color;  
import android.graphics.Paint;  
import android.graphics.Rect;  
import android.graphics.RectF;  
import android.view.View;  
  
class CustomView extends View {  
    private Rect rectangle;  
    private Paint paint, p1;  
  
    public CustomView(Context context) {  
        super(context);  
        int x = 100;  
        int y = 50;  
        int width = 1000;
```

```

        int height = 500;
// create a rectangle that we'll draw later
        rectangle = new Rect(x, y, width, height);
// create the Paint and set its color
        paint = new Paint();
        paint.setColor(Color.YELLOW);
        p1 = new Paint();
        p1.setColor(Color.BLACK);
    }
    @Override
    protected void onDraw(Canvas canvas) {
        canvas.drawColor(Color.WHITE);
        canvas.drawRect(rectangle, paint);
        canvas.drawCircle(550, 270, 150, p1);
        RectF oval = new RectF(300, 700, 800, (float) (520 + 520 / 1.5));
        canvas.drawArc(oval, 180, 180, false, p1);
    }
}

```

Screenshot

