

Program 5

Create an application to show happy face smiley and sad face smiley to demonstrate button click events.

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    tools:context=".MainActivity">
    <com.example.bsmiley.FaceView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="---> Sad Face" />
</RelativeLayout>
```

Main_Activity.java

```
package com.example.bsmiley;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
    Button button;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    super.onCreate(savedInstanceState);
```

```

setContentView(R.layout.activity_main);
button = (Button) findViewById(R.id.button);
button.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        openNewActivity();
    }
});
}

public void openNewActivity(){
    Intent intent = new Intent(this,MainActivity2.class);
    startActivity(intent);
}
}

```

Activity_sec.xml

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <com.example.bsmiley.FaceView2
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/button1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="---> Happy Face" />
</RelativeLayout>

```

MainActivity2.java

```
package com.example.bsmiley;

package com.example.bsmiley;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import com.example.bsmiley.databinding.ActivityMain2Binding;import
androidx.appcompat.app.AppCompatActivity;

import androidx.navigation.ui.AppBarConfiguration;

public class MainActivity3 extends AppCompatActivity {

    Button button1;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_sec);

        button1 = (Button) findViewById(R.id.button1);

        button1.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                openNewActivity();

            }

        });

    }

    public void openNewActivity(){

        Intent intent1 = new Intent(this,MainActivity.class);

        startActivity(intent1);

    }

}
```

FaceView.java

```
package com.example.bsmiley;

import android.content.Context;
import android.graphics.Canvas;
import android.graphics.Color;
import android.graphics.Paint;
import android.graphics.RectF;
import android.util.AttributeSet;
import android.view.View;

public class FaceView extends View {
    private Paint paint,paint1,paint2;
    private RectF RectF;
    public FaceView(Context context,AttributeSet attrs) {
        super(context);// create the Paint and set its color
        paint = new Paint();
        paint1 = new Paint();
        paint2 = new Paint();
        paint.setColor(Color.YELLOW);
        paint1.setColor(Color.RED);
        paint2.setColor(Color.BLACK);
    }
    @Override
    protected void onDraw(Canvas canvas) {
        canvas.drawColor(Color.WHITE);
        canvas.drawCircle(500, 600, 220, paint);
        canvas.drawCircle(400, 570, 30, paint2);
        canvas.drawCircle(600, 570, 30, paint2);
        RectF oval = new RectF(400, 520 + 520 / 8, 600, (float) (520 + 520
        / 2.5));
        canvas.drawArc(oval, 10, 160, false, paint1);
    }
}
```

FaceView2.java

```
package com.example.bsmlley;

import android.content.Context;

import
android.graphics.Canvas;

import android.graphics.Color;

import android.graphics.Paint;

import android.graphics.RectF;

import android.util.AttributeSet;

import android.view.View;

public class FaceView2
extends View {

private Paint
paint,paint1,paint2;

private RectF RectF;

public FaceView2(Context
context,AttributeSet attrs) {

super(context);

// create the Paint and set its
colorpaint = new Paint();

paint1 = new Paint();

paint2 = new Paint();

paint.setColor(Color.YELLOW);

paint1.setColor(Color.RED);

paint2.setColor(Color.BLACK);

}
```

@Override

```
protected void onDraw(Canvas  
canvas) {
```

```
    canvas.drawColor(Color.WHIT  
E);
```

```
    canvas.drawCircle(500, 600,  
220, paint);
```

```
    canvas.drawCircle(400, 570,  
30, paint2);
```

```
    canvas.drawCircle(600, 570,  
30, paint2);
```

```
    RectF oval = new RectF(400,  
520 + 520 / 7, 600, (float) (520  
+ 520
```

```
    / 2.5));
```

```
    canvas.drawArc(oval, 10, -200,  
false, paint1);
```

```
}
```

```
}
```

Output



