

Exp No: 4

## Developing Action Listeners For Rating App

Date:

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## **SOURCE CODE**

activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
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<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:id="@+id/main"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">

<RatingBar
    android:id="@+id/ratingBar"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<Button
    android:id="@+id/submit_btn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="24dp"
    android:text="Submit Rating"
    app:layout_constraintEnd_toEndOf="@+id/ratingBar"
    app:layout_constraintHorizontal_bias="0.493"
    app:layout_constraintStart_toStartOf="@+id/ratingBar"
    app:layout_constraintTop_toBottomOf="@+id/ratingBar" />

<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Rating: 0"
    android:layout_marginTop="16dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/submit_btn" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.lab4;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RatingBar;
import android.widget.TextView;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

    RatingBar ratingBar;
    Button submit_btn;
    TextView textView;

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

        ratingBar = findViewById(R.id.ratingBar);
        submit_btn = findViewById(R.id.submit_btn);
        textView = findViewById(R.id.textView);

        submit_btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                float currentRating = ratingBar.getRating();
                textView.setText("Rating: " + currentRating);
                Toast.makeText(MainActivity.this, "Submitted Rating: " +
currentRating,
                                Toast.LENGTH_SHORT).show();
                ratingBar.setEnabled(false);
            }
        });

        ratingBar.setOnRatingBarChangeListener(new
RatingBar.OnRatingBarChangeListener() {
            @Override
            public void onRatingChanged(RatingBar ratingBar, float rating,
boolean fromUser) {
```

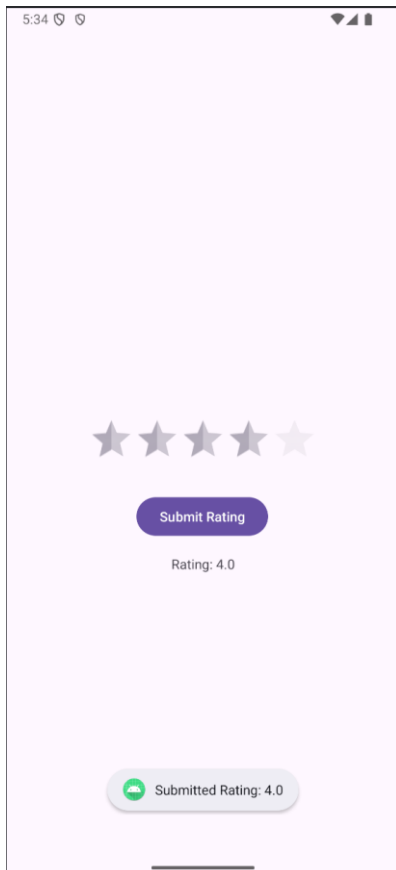
```

        textView.setText("Rating: " + rating);
    }
});

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main),
(v, insets) -> {
    Insets systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars());
    v.setPadding(systemBars.left, systemBars.top,
systemBars.right, systemBars.bottom);
    return insets;
});
}
}

```

### OUTPUT



### RESULT