

Ex.No: 2

Date :

Develop an application that uses Layout Managers and Event Listeners

AIM:

To develop an application that uses Layout Managers and Event Listeners.

PROCEDURE:

1. Open Eclipse IDE.
2. Create the project Ex_No_2.
3. Go to package explorer in the left hand side. Select the project Ex_No_2.
4. Go to res folder and select layout. Double click the activity_main.xml file.
5. Now you can see the Graphical layout window.
6. Drag and drop the following components:
 - a. Four TextViews with texts as Name, Gender, Degree and Programming Knowledge
 - b. One EditText
 - c. One Spinner
 - d. One RadioGroup with two RadioButtons labeled as B.E. CSE and B.Tech. IT
 - e. One RatingBar
 - f. One Button with labeled as SUBMIT
7. Again go to package explorer in the left hand side. Select the project Ex_No_2.
8. Go to src folder. Double click the MainActivity.java file.
9. In java file write the activities done by the application such as, actions of button.
10. Finally run the android application.

PROGRAMS:

activity_main.xml:

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.example.ex_no_2.MainActivity" >

    <TextView
        android:id="@+id/textView1"
        "
        android:layout_width="wrap
```

```
_content"
android:layout_height="wrap_content"
android:layout_alignParentLeft="true"
android:layout_alignParentTop="true"
android:text="Name"
android:textAppearance="?android:attr/textAppearanceMedium"
tools:ignore="HardcodedText" />
```

<EditText

```
android:id="@+id/editText1"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignTop="@+id/textView1"
android:layout_marginLeft="14dp"
android:layout_toRightOf="@+id/textView1"
android:ems="10"
tools:ignore="TextFields" >
```

```
<requestFocus />
```

</EditText>

<TextView

```
android:id="@+id/textView2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentLeft="true"
android:layout_below="@+id/editText1"
android:layout_marginTop="14dp"
android:text="Gender"
android:textAppearance="?android:attr/textAppearanceMedium"
tools:ignore="HardcodedText" />
```

<Spinner

```
android:id="@+id/spinner1"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/editText1"
    android:layout_alignTop="@+id/textView2"
    android:entries="@array/Gender" />
```

```
<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/spinner1"
    android:text="Degree"
    android:textAppearance="?android:attr/textAppearanceMedium"
    tools:ignore="HardcodedText" />
```

```
<RadioGroup
    android:id="@+id/radioGroup1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/spinner1"
    android:layout_below="@+id/spinner1" >
```

```
<RadioButton
    android:id="@+id/radio0"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:checked="true"
    android:text="B.E. CSE"
    tools:ignore="HardcodedText" />
```

```

<RadioBu
tton
    android:id="@+id/radio1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="B.Tech IT"
    tools:ignore="HardcodedText" />

</RadioGroup
>

<RatingBar
    android:id="@+id/ratingBar1"
    android:layout_width="wrap_c
ontent"
    android:layout_height="wrap_
content"
    android:layout_alignLeft="@+
id/textView4"
    android:layout_below="@+id/t
extView4" />

<TextView
    android:id="@+id/textView4"
    android:layout_width="wrap_con
tent"
    android:layout_height="wrap_co
ntent"
    android:layout_alignLeft="@+id
/textView3"
    android:layout_below="@+id/rad
ioGroup1"
    android:text="Programming
Knowledge" an-
droid:textAppearance="?android:attr/textAppearanceMedium"
    tools:ignore="HardcodedText" />

<Button
    android:id="@+id/button1"
    android:layout_width="wrap_c
ontent"
    android:layout_height="wrap_
content"
    android:layout_below="@+id/r
atingBar1"
    android:layout_centerHorizon
tal="true"
    android:text="SUBMIT"
    tools:ignore="HardcodedText"
/>

```

```
</RelativeLayout>
```

MainActivity.java:

```
package com.example.ex_no_2;
import
android.support.v7.app.ActionBarAct
ivity; import android.os.Bundle;
import android.view.View; import
android.view.View.OnClickListener;
import android.widget.Button; import
android.widget.EditText; import
android.widget.RadioButton; import
android.widget.RadioGroup;
import
android.widget.RadioGroup.OnCheckedChangeListener;
import android.widget.RatingBar;
import
android.widget.RatingBar.OnRatingBarChangeLis
tener; import android.widget.Spinner; import
android.widget.Toast;
public class MainActivity extends ActionBarActivity {
    String
    name,gender,
    dept; float
    prog;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main); final EditText
        e=(EditText)findViewById(R.id.editText1); RadioGroup
        rg=(RadioGroup)findViewById(R.id.radioGroup1); final
        RadioButton r1=(RadioButton)findViewById(R.id.radio0);
        final RadioButton
        r2=(RadioButton)findViewById(R.id.radio1); final
        Spinner s=(Spinner)findViewById(R.id.spinner1);
        RatingBar rb=(RatingBar)findViewById(R.id.ratingBar1);
        Button b=(Button)findViewById(R.id.button1);
        rg.setOnCheckedChangeListener( new
            OnCheckedChangeListener()
            {
                @Override
                public void onCheckedChanged(RadioGroup arg0, int
                arg1) {
                    // TODO Auto-generated
                    method stub
                    if(r1.isChecked()==tru
                    e) dept="B.E. CSE";
                    if(r2.isChecked()==true)
                        dept="B.Tech IT";
```

```

    }
    }
    )
    ;
    rb.setOnRatingBarChangeListener(
        new
        OnRatingBarChangeLi
        stener()
        {
            @Override
            public void onRatingChanged(RatingBar arg0, float
                arg1, boolean arg2) {
                // TODO Auto-generated method stub

prog=arg1;

            }
        }
    )
    ;
    b.setOnClickListener(
        new
        OnClickLi
        stener()
        {
            @Override
            public void onClick(View
                arg0) {
                // TODO Auto-generated method stub
                name=e.getText().toString();
                gender=s.getSelectedItem().toString();
                Toast.makeText(getApplicationContext(),
                    "Name : "+name+"\n Gender : "+gender+"\n Degree : "+dept+"\n Programming
Knowledge : "+prog, Toast.LENGTH_LONG).show();
            }
        });
    }
}

```

OUTPUT:

3G 9:54

Ex_No_2

Name Muniya Raj

Gender Male

Degree ☒ B.E. CSE
☐ B.Tech IT

Programming Knowledge

★★★★☆

SUBMIT

Name : Muniya Raj
Gender : Male
Degree : B.E. CSE
Programming Knowledge : 4.5

RESULT:

Thus the application that uses Layout Managers and Event Listener has been developed and the output was verified.