

Program No:	11
Roll No :	1545
Title of Program :	Spinner component
Objective :	To study spinner component of android

What is Spinner?

Android Spinner is a view similar to the dropdown list which is used to select one option from the list of options. It provides an easy way to select one item from the list of items and it shows a dropdown list of all values when we click on it. The default value of the android spinner will be the currently selected value and by using Adapter we can easily bind the items to the spinner objects. Generally, we populate our Spinner control with a list of items by using an ArrayAdapter in our Kotlin/Java file.

Important Attributes for Spinner Widget

XML attributes	Description
android:id	Used to specify the id of the view.
android:textAlignment	Used to the text alignment in the dropdown list.
android:background	Used to set the background of the view.
android:padding	Used to set the padding of the view.
android:visibility	Used to set the visibility of the view.
android:gravity	Used to specify the gravity of the view like center, top, bottom, etc

Source Code:

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:orientation="vertical"
    android:background="@drawable/bg1"

    tools:context=".MainActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:layout_marginBottom="8dp"
        android:paddingStart="16dp"
        android:paddingEnd="16dp"
        android:text="Select an Item:"
        android:textAppearance="?attr/textAppearanceHeadline6" />

    <Spinner
        android:id="@+id/spinner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginStart="16dp"
        android:layout_marginEnd="16dp"
        android:layout_marginBottom="16dp"
        android:prompt="@string/spinner_title"
        android:padding="12dp"

        />

</LinearLayout>
```

MainActivity.java

```
package com.example.spinnercomp;

import android.os.Bundle;

import androidx.activity.EdgeToEdge;
```

```
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.Spinner;
import android.widget.Toast;

import java.util.ArrayList;
public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemClickListener {

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

        });
        Spinner spinner = findViewById(R.id.spinner);
        spinner.setOnItemClickListener(this);

        ArrayList<String> movies = new ArrayList<>();
        movies.add("Fantastic Four");
        movies.add("Superman");
        movies.add("Spiderman");
        movies.add("Avengers Doomsday");

        // Creating adapter for spinner
        ArrayAdapter<String> dataAdapter = new ArrayAdapter<String>(this,
android.R.layout.simple_spinner_item, movies);

        // Drop down layout style - list view with Radio button
dataAdapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item
);

        //Attaching data adapter to spinner
        spinner.setAdapter(dataAdapter);
    }
    @Override
    public void onItemClick(AdapterView<?> parent, android.view.View view, int
position, long id) {
```

```
// On selecting a spinner item
String item = parent.getItemAtPosition(position).toString();

// showing selected spinner item
Toast.makeText(parent.getContext(), "Selected: "+item,
Toast.LENGTH_LONG).show();
}

@Override
public void onNothingSelected(AdapterView<?> parent) {

}
}
```

Output:

