Mobile Programming
Assignment 4 - Four Spinner

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activity_main.xml

```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"
    android:background="@drawable/bg"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Select Country"
        android:textColor="#000000"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.103"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.199" />

    <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Select City"
        android:textColor="#000000"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
```

```xml
        app:layout_constraintHorizontal_bias="0.103"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.393" />

    <TextView
        android:id="@+id/textView5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Select Area"
        android:textColor="#000000"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.103"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.492" />

    <TextView
        android:id="@+id/textView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Select State"
        android:textColor="#000000"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.103"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.297" />

    <Spinner
        android:id="@+id/sp1"
        android:layout_width="256dp"
        android:layout_height="38dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.896"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.177" />

    <Spinner
        android:id="@+id/sp2"
```

```xml
        android:layout_width="256dp"
        android:layout_height="38dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.896"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.278" />

    <Spinner
        android:id="@+id/sp3"
        android:layout_width="256dp"
        android:layout_height="38dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.896"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.376" />

    <Spinner
        android:id="@+id/sp4"
        android:layout_width="256dp"
        android:layout_height="38dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.896"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.479" />

    <Button
        android:id="@+id/b1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Submit"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.74" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```java
package com.mahajant99.collegetwelve;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.Spinner;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    Button b1;
    Spinner sp1, sp2, sp3, sp4;

    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        b1=findViewById(R.id.b1);
        sp1=findViewById(R.id.sp1);
        sp2=findViewById(R.id.sp2);
        sp3=findViewById(R.id.sp3);
        sp4=findViewById(R.id.sp4);

        String country[]={"India","Nepal","China"};

        ArrayAdapter<String> aa = new ArrayAdapter<>(
                getApplicationContext(),
                android.R.layout.simple_spinner_item,
                country);
        aa.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        sp1.setAdapter(aa);

        sp1.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {
                String ss = sp1.getSelectedItem().toString();
```

```java
        ArrayAdapter<String> a11=null;
        String in[]={"Delhi","Maharashtra","Rajasthan"};
        String np[]={"Bagmati","Gandaki","Madhesh"};
        String ch[] = {"Henan", "Sichuan", "Hebai"};

        if(ss.equals("India")){
            a11=new ArrayAdapter<String>(
                    getApplicationContext(),
                    android.R.layout.simple_spinner_item,in);
        }if(ss.equals("Nepal")){
            a11=new ArrayAdapter<String>(
                    getApplicationContext(),
                    android.R.layout.simple_spinner_item,np);
        }if(ss.equals("China")){
            a11=new ArrayAdapter<String>(
                    getApplicationContext(),
                    android.R.layout.simple_spinner_item,ch);
        }

        a11.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        sp2.setAdapter(a11);
    }

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

    }
});

sp2.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
    @Override
    public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {
        String s1 = sp2.getSelectedItem().toString();
        ArrayAdapter<String> a12=null;
        String dl[]={"Delhi"};
        String mh[]={"Pune","Mumbai","Nagpur"};
        String rj[]={"Jodhpur","Jaipur","Udaipur"};

        String bg[]={"Kathmandu","Lalitpur","Bharatpur"};
        String gd[]={"Pokhara","Chapakot","Sarangkot"};
        String md[]={"Janakpur","Birgunj","Balawa"};

        String hen[] = {"Nanyang", "Luoyang", "Sanmenxia"};
        String sic[] = {"Leshan", "Chengdu", "Yaan"};
```

```java
String heb[] = {"Baoding", "Xingtai", "Langfang"};

if(s1.equals("Delhi")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,dl);
}if(s1.equals("Maharashtra")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,mh);
}if(s1.equals("Rajasthan")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,rj);
}if(s1.equals("Bagmati")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,bg);
}if(s1.equals("Gandaki")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,gd);
}if(s1.equals("Madhesh")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,md);
}if(s1.equals("Henan")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,hen);
}if(s1.equals("Sichuan")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,sic);
}if(s1.equals("Hebai")){
    a12=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,heb);
}

a12.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
sp3.setAdapter(a12);
}
```

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

        }
    });

    sp3.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
        @Override
        public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {
            String s2 = sp3.getSelectedItem().toString();
            ArrayAdapter<String> a13=null;

            String d[]={"Govind Puri", "Kalka Ji", "Saket"};

            String pn[]={"Model Colony", "Kodhrod", "Aundh"};
            String mun[]={"Bandra", "Andheri", "Powai"};
            String ng[]={"Bank Colony","Kachimet","Kalameshwar"};

            String jd[]={"Sardar Pura","Shaastri Nagar","Circuit House"};
            String ja[]={"Vaishali Nagar","Kalwar Road","Jagat Pura"};
            String ud[]={"Sarada","Bhinder","Jhadol"};

            String kha[] = {"Thamel", "Lazimpat", "Boudha"};
            String lal[] = {"DevGarh Hill", "MardanSingh Fort", "Mahavir Wildlife Santury"};
            String bha[] = {"Durbar Square", "55 Windows Palace", "Taumadhi Square"};

            String po[] = {"Devi's Fall", "Phewa Lake", "Sarankot"};
            String go[] = {"Manasalu", "Laprak", "Manakamana Temple"};
            String cha[] = {"Circuit Treck", "Himal Treck", "Tilicho Lake"};

            String jan[] = {"Kamalamai", "Bhimeshwor", "Dhalkebar"};
            String bir[] = {"Thrill Factory", "Ghadiarwa Pokhari", "Shree Gahawamai Temple"};
            String gau[] = {"Janki Temple", "Kesariya Stupa", "Janaki Temple"};

            String na [] = {"Spring Temple Buddha", "Shiren Mountain Mountain", "Tongbai
Mountain"};
            String lu [] = {"Longmen Grottoes", "White House Temple", "Shaolin Temple"};
            String sa [] = {"Huanghe Forest Park", "Swan Lake", "The Yellow River"};

            String le[]={"Leshan Giant Buddha", "Jinding Mountain", "Baoguo Temple"};
            String ch1[] = {"Wenshu Yuan Monastery", "Leshan Giant Buddha", "Anshun Bridge"};
            String ya[]={"Bifeng Valley", "Anshun Ground", "Wawu Mountain"};

            String bo[] = {"Baishi Mountain","Langya Mountain","Tailing"};
```

```java
String xi[] = {"Taihang Shan","Qilihe Sports Park","Kongshan White Cloud Cave"};
String ln[] = {"Shengfang Ancient Town", "Yanjiao Park", "langfang stadium"};



if(s2.equals("Delhi")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,d);
}if(s2.equals("Pune")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,pn);
}if(s2.equals("Mumbai")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,mun);
}if(s2.equals("Nagpur")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,ng);
}if(s2.equals("Jodhpur")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,jd);
}if(s2.equals("Jaipur")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,ja);
}if(s2.equals("Udaipur")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,ud);
}if(s2.equals("Kathmandu")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,kha);
}if(s2.equals("Lalitpur")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,lal);
}if(s2.equals("Bharatpur")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,bha);
```

```java
}if(s2.equals("Pokhara")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,po);
}if(s2.equals("Chapakot")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,cha);
}if(s2.equals("Sarangkot")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,go);
}if(s2.equals("Janakpur")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,jan);
}if(s2.equals("Birgunj")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,bir);
}if(s2.equals("Balawa")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,gau);
}if(s2.equals("Nanyang")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,na);
}if(s2.equals("Luoyang")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,lu);
}if(s2.equals("Sanmenxia")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,sa);
}if(s2.equals("Leshan")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,le);
}if(s2.equals("Chengdu")){
    a13=new ArrayAdapter<String>(
        getApplicationContext(),
        android.R.layout.simple_spinner_item,ch1);
```

```java
        }if(s2.equals("Yaan")){
            a13=new ArrayAdapter<String>(
                getApplicationContext(),
                android.R.layout.simple_spinner_item,ya);
        }if(s2.equals("Baoding")){
            a13=new ArrayAdapter<String>(
                getApplicationContext(),
                android.R.layout.simple_spinner_item,bo);
        }if(s2.equals("Xingtai")){
            a13=new ArrayAdapter<String>(
                getApplicationContext(),
                android.R.layout.simple_spinner_item,xi);
        }if(s2.equals("Langfang")){
            a13=new ArrayAdapter<String>(
                getApplicationContext(),
                android.R.layout.simple_spinner_item,ln);
        }

        a13.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        sp4.setAdapter(a13);

    }

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

    }
});

b1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {

        Toast.makeText(getApplicationContext()
            ,"Country: "+sp1.getSelectedItem().toString() +
                ", State: "+sp2.getSelectedItem().toString() +
                ", City: "+sp3.getSelectedItem().toString() +
                ", Area: "+sp4.getSelectedItem().toString(),
            Toast.LENGTH_SHORT).show();
    }
});

}
}
```

Images