Exp 4: Registration Form

1. Create An Empty Views Project
2. Activity_Main.xml

RelativeLayout (id: main)

```
|
├── TextView (id: name_text)
|
├── EditText (id: name)
|      └── below: @id/name_text
|
├── TextView (id: gender_text)
|      └── below: @id/name
|
├── RadioGroup (id: radiogroup)
|      └── below: @id/gender_text
|      ├── RadioButton (id: male)
|      ├── RadioButton (id: female)
|      └── RadioButton (id: other)
|
├── TextView (id: quali)
|      └── below: @id/radiogroup
|
├── CheckBox (id: graduate)
|      └── below: @id/quali
|
├── CheckBox (id: postgraduate)
|      └── below: @id/graduate
|
├── TextView (id: course_text)
|      └── below: @id/postgraduate
|
```

```
├── Spinner (id: spinner)
│   └── below: @id/course_text
│
└── Button (id: submit)
    └── below: @id/spinner
```

3. Display_Activity.xml

```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"
    tools:context=".display">
<TextView
    android:id="@+id/textdisplay"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:textSize="20sp"/>
</LinearLayout>
```

4. Activity_Main.Java

```
MainActivity (extends AppCompatActivity)
 │
 ├── UI Elements (Declared as Private Fields)
 │    ├── EditText name
 │    ├── RadioGroup radiogroupgender
 │    ├── CheckBox cbgrad
 │    ├── CheckBox cbpostgrad
 │    ├── Button btsubmit
 │    └── Spinner spin
 │
 ├── onCreate(Bundle savedInstanceState)
```

```
|   ├── setContentView(R.layout.activity_main)
|   ├── Initialize UI elements using findViewById
|   ├── Create and set ArrayAdapter for Spinner
|   └── Set onClickListener on submit button to call submitform()
|
└── submitform()  // Method to collect and pass form data
    ├── Fetch text from EditText (name)
    ├── Fetch selected item from Spinner
    ├── Get selected RadioButton from RadioGroup
    |   └── If none selected, use default "Gender Not Selected"
    ├── Check which CheckBoxes are selected
    └── Create Intent to start display activity
        ├── Pass name, gender, qualifications, and specialisation as extras
```

```java
package com.example.infoform;

import android.content.Intent;
import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Spinner;
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;

import java.net.SocketImpl;

public class MainActivity extends AppCompatActivity {

    private EditText name;
    private RadioGroup radiogroupgender;
    private CheckBox cbgrad,cbpostgrad;
    private Button btsubmit;
    private Spinner spin;

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

```java
        name=(EditText) findViewById(R.id.name);
        radiogroupgender=(RadioGroup) findViewById(R.id.radiogroup);
        cbgrad=(CheckBox) findViewById(R.id.graduate);
        cbpostgrad=(CheckBox) findViewById(R.id.postgraduate);
        btsubmit=(Button) findViewById(R.id.submit);
        spin=(Spinner) findViewById(R.id.spinner);

        String[] subjects ={"Computer Science","E&TC","Information Technology"};
        ArrayAdapter<String> adapter=new ArrayAdapter<>(this,
android.R.layout.simple_spinner_dropdown_item,subjects);
        spin.setAdapter(adapter);

        btsubmit.setOnClickListener(v->submitform());
        }

        private void submitform()
        {
           String subname=name.getText().toString(); //FETCH THE NAME
           String sub=spin.getSelectedItem().toString(); //FETCH THE SPINNER SELECTION

           //FETCH THE SELECTED GENDER
           int selectedgenderid=radiogroupgender.getCheckedRadioButtonId();
           RadioButton selectedradiobutton=findViewById(selectedgenderid);

           String gender;
           //If no gender is selected then
           if(selectedradiobutton != null)
           {
              gender=selectedradiobutton.getText().toString();
           }
           else
           {
              gender="Gender Not Selected";
           }

           //Selecting the qualifications
           StringBuilder qualifications= new StringBuilder();
           if(cbgrad.isChecked())qualifications.append("Graduate");
           if(cbpostgrad.isChecked())qualifications.append("Post Graduate");

           //Sending this Seleted Data to Display_Activity

           Intent intent=new Intent(MainActivity.this, display.class);
           intent.putExtra("Name:",subname);
           intent.putExtra("Gender:",gender);
           intent.putExtra("Qualifications",qualifications.toString().trim());
           intent.putExtra("Specialisation",sub);
```

```
            startActivity(intent);
        }}
```

5. Display.java

display (extends AppCompatActivity)

|

├── **Field:**

| └── **TextView tvdisplay**

|

├── **Method: onCreate(Bundle savedInstanceState)**

| ├── **setContentView(R.layout.activity_display)**

| ├── **Initialize tvdisplay using findViewById(R.id.textdisplay)**

| |

| ├── **Retrieve Intent extras:**

| | ├── **name ← getStringExtra("subname")**

| | ├── **gender ← getStringExtra("gender")**

| | ├── **qualifications ← getStringExtra("qualifications")**

| | └── **specialisation ← getStringExtra("sub")**

| |

| ├── **Construct displayText:**

| | └── **Concatenate name, gender, qualifications, specialisation into one string**

| |

| └── **Set text to TextView:**

| └── **tvdisplay.setText(displayText)**

package com.example.infoform;

import android.os.Bundle;

import android.widget.TextView;

import androidx.activity.EdgeToEdge;

```java
import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;


public class display extends AppCompatActivity {

    private TextView tvdisplay;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_display);


        tvdisplay=(TextView) findViewById(R.id.textdisplay);
        String name=getIntent().getStringExtra("subname");
        String gender=getIntent().getStringExtra("gender");
        String qualifications=getIntent().getStringExtra("qualifications");
        String specialisation=getIntent().getStringExtra("sub");


        String displaytext="Name:" + name +"\n"+"Gender:" + gender + "\n" +
            "Qualifications+" + qualifications + "\n" + "Specialisation"  + specialisation;


        tvdisplay.setText(displaytext);
    }
}
```