DEPARTMENT OF
ACADEMIC AFFAIRS
Discover. Learn. Empower.
CU CHANDIGARH UNIVERSITY

NAAC GRADE A+
ACCREDITED UNIVERSITY

Experiment - 2.2

Student Name:Rohan Jaiswal   **UID: 21BCS2856**

Branch: BE-CSE   **Section/Group:KRG-CC1-B**

Semester:6   **Date of Performance: 27/02/2024**

Subject Name: MAD Lab   **Subject Code: 21CSH-355**

1. **Aim:** Create an Android App using various controls such TextEdit, CheckBox, RadioButton, RadioGroup etc.

2. **Objective:** The objective of an Android app using various controls such as EditText, CheckBox, RadioButton, and RadioGroup could be to create a user interface that involves user input, selection, and interaction with different types of controls. This type of app aims to showcase the usage and functionalities of these UI elements to enhance the user experience.

3. **System Requirements:**
   - Microsoft Windows 7/8/10(32 Bit or 64bit)
   - 4GB RAM minimum, 8GB RAM recommended(plus 1GB for the Android Emulator)
   - 2GB of available disk space minimum, 4GB recommended(500MB for IDE plus 1.5GB for Android SDK and emulator system image)
   - 1280 x 800 minimum screen resolution

4. **Steps to add the intent to different activity:**

   Step 1. Create a new Project with name radioGroup and in MainActivity.java create radioGroup , button and Text etc.

   ### MainActivity.java

   <?xml version="1.0" encoding="utf-8"?>

```xml
    <RelativeLayout 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"
tools:context=".MainActivity">

<RadioGroup
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerInParent="true"
    android:id="@+id/radioGroup">

    <RadioButton
        android:id="@+id/radio_one"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="One"
        android:onClick="checkButton"
        android:checked="true"/>

    <RadioButton
        android:id="@+id/radio_two"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Two"
        android:onClick="checkButton"/>

    <RadioButton
        android:id="@+id/radio_three"
```

DEPARTMENT OF
ACADEMIC AFFAIRS
Discover. Learn. Empower.

NAAC
GRADE A+
ACCREDITED UNIVERSITY

```xml
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Three"
        android:onClick="checkButton"/>

    </RadioGroup>

    <TextView
        android:id="@+id/text_view_selected"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/radioGroup"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="27dp"
        android:text="Your selection: "
        android:textSize="20sp" />

    <Button
        android:id="@+id/button_apply"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/text_view_selected"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="37dp"
        android:text="apply" />

</RelativeLayout>
```

DEPARTMENT OF ACADEMIC AFFAIRS
CHANDIGARH UNIVERSITY
Discover. Learn. Empower.

NAAC GRADE A+
ACCREDITED UNIVERSITY

Step 2. In MainActivity.java, When the user selects one of these buttons and clicks the "Apply" button, the app displays the selected option in a text view.

```java
package com.example.radiogroup;

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



import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    RadioGroup radioGroup;
    RadioButton radioButton;
    TextView textView;


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

```java
        radioGroup = findViewById(R.id.radioGroup);
        textView = findViewById(R.id.text_view_selected);

        Button buttonApply = findViewById(R.id.button_apply);
        buttonApply.setOnClickListener(new View.OnClickListener(){
            @Override
            public void onClick(View v){
                int radioId = radioGroup.getCheckedRadioButtonId();

                radioButton = findViewById(radioId);

                textView.setText("Your choice: " + radioButton.getText());
            }

        });

    }

    public void checkButton(View v){
        int radioId = radioGroup.getCheckedRadioButtonId();
        radioButton = findViewById(radioId);
        Toast.makeText(this, "Selected Radio Button: " + radioButton.getText(),
            Toast.LENGTH_SHORT).show();
    }
}
```
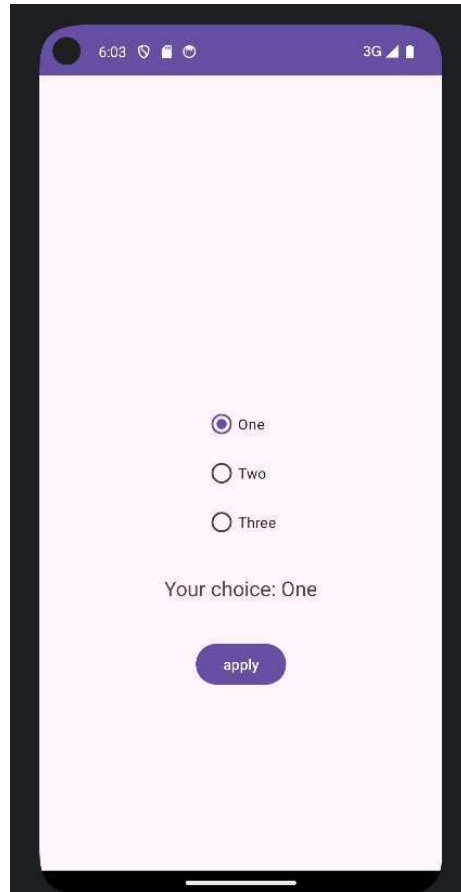
DEPARTMENT OF
ACADEMIC AFFAIRS
Discover. Learn. Empower.

NAAC
GRADE A+
ACCREDITED UNIVERSITY

5. RESULT:

6. Learning outcomes (What I have learnt):

I learn how to create radioGroup, CheckBox, Button etc in android studio.