Experiment 7

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Branch: CSE **Section/Group:605/B**
Semester: 6th **DateofPerformance:03/04/2023**
SubjectName: MAD LAB **SubjectCode:20CSP-356**

Aim:

CreateanAndroidApplicationbyusingtheRadiobutton.

Objective:

Android radio button is a widget that can have more than one option to choose from. Theuser can choose only one option at a time. Each option here refers to a radio button and allthe options for the topic are together referred to as Radio Group. Hence, Radio Buttons areusedinsideaRadioGroup.

Code:

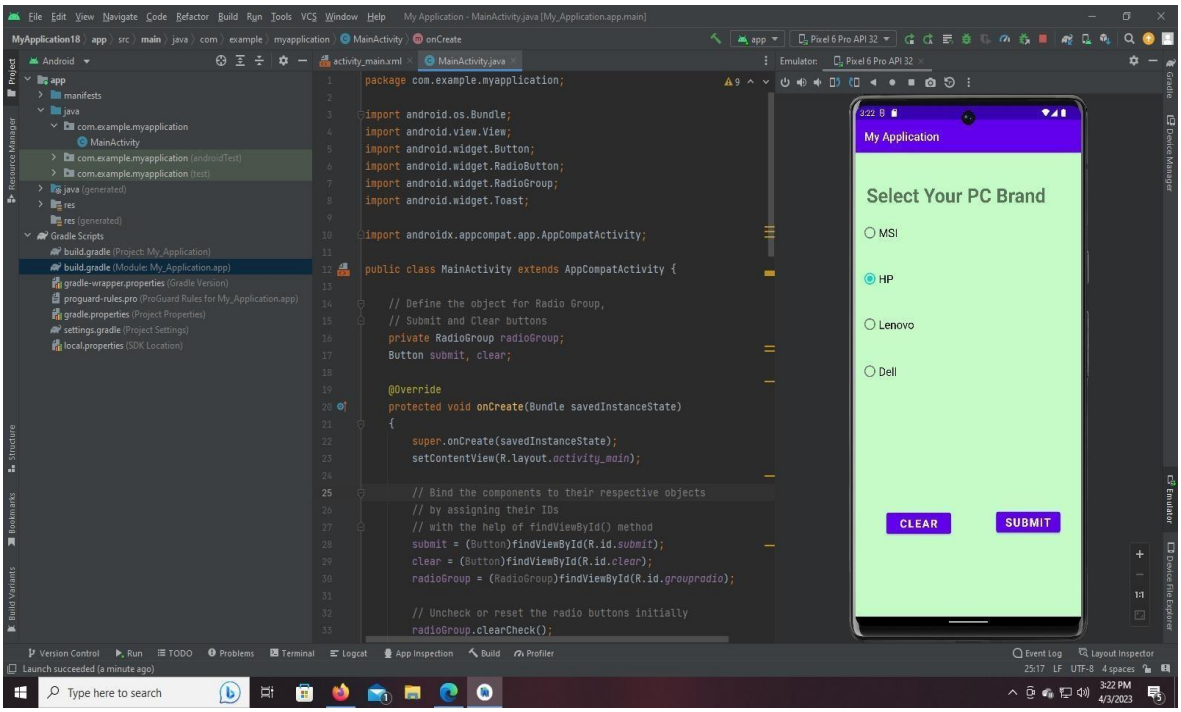
//BelowisthecodeforMainActivity.java

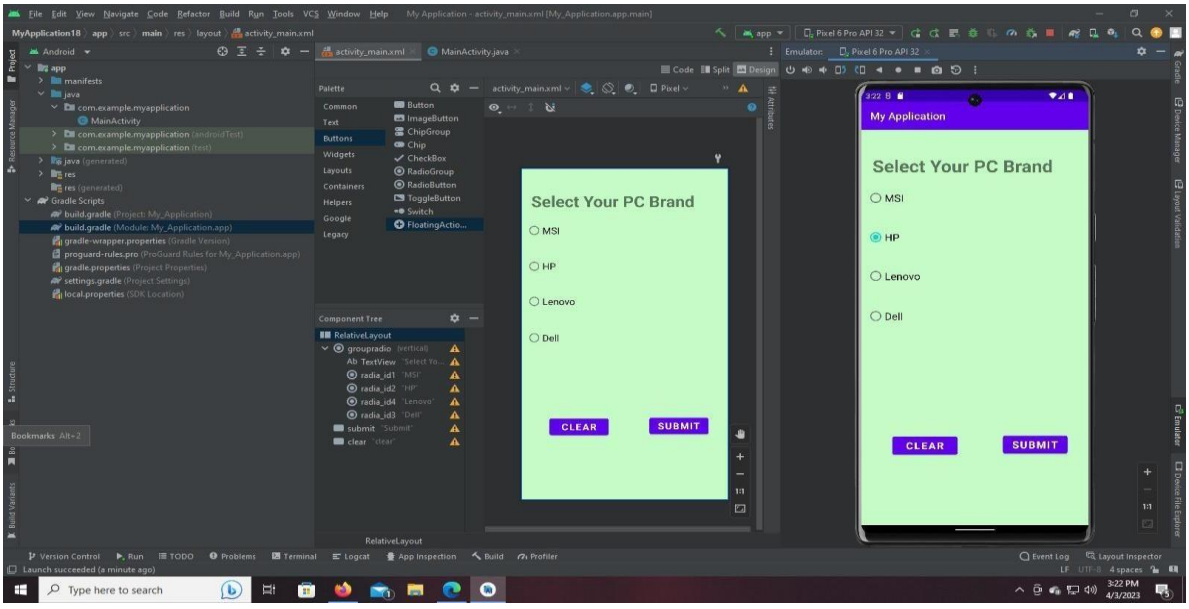
```
packagecom.example.myapplication;

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

import

androidx.appcompat.app.AppCompatActivity;publicclas

sMainActivityextendsAppCompatActivity{

   //DefinetheobjectforRadio Group,
   // Submit and Clear
   buttonsprivateRadioGroupradio
   Group;
```

```
Buttonsubmit,clear;

@Override
protectedvoidonCreate(BundlesavedInstanceState)
{
   super.onCreate(savedInstanceState);setContentView
   (R.layout.activity_main);

   //Bind thecomponentsto their respectiveobjects
   //by assigningtheirIDs
   // with the help of findViewById()
   methodsubmit=(Button)findViewById(R.id.s
   ubmit);clear=(Button)findViewById(R.id.clea
   r);
   radioGroup=(RadioGroup)findViewById(R.id.groupradio);

   //Uncheckorresettheradiobuttonsinitiallyradi
   oGroup.clearCheck();

   // Add the Listener to the
   RadioGroupradioGroup.setOnCheckedChangeListene
   r(
         newRadioGroup
               .OnCheckedChangeListener(){@Override

            //Theflowwillcomeherewhen
            //any oftheradiobuttonsintheradioGroup
            //hasbeen clicked

            //Checkwhich radiobutton hasbeenclicked
            publicvoidonCheckedChanged(RadioGroupgroup,in
                              tcheckedId)
            {

               //GettheselectedRadioButtonRa
               dioButton
                     radioButton
                     =(RadioButton)group
                     .findViewById(checkedId);
            }
         });

   // Add the Listener to the Submit
   Buttonsubmit.setOnClickListener(newView.OnClickListe
   ner(){

      @Override
      publicvoidonClick(Viewv)
```

```
        {

            //When submitbutton isclicked,
            //GetheRadio Button whichisset
            //IfnoRadio Buttonisset,-1willbereturned
            intselectedId=radioGroup.getCheckedRadioButtonId();if
            (selectedId==-1){
                Toast.makeText(MainActivity.this,
                        "Noanswerhasbeenselected",T
                        oast.LENGTH_SHORT)
                    .show();
            }
            else{

                RadioButtonradioButton
                    =(RadioButton)radioGroup
                    .findViewById(selectedId);

                //Nowdisplay thevalueofselected item
                // by the Toast
                messageToast.makeText(MainActivit
                y.this,
                        radioButton.getText(),Toa
                        st.LENGTH_SHORT)
            }       .show();
        }
    });
    // Add the Listener to the Submit
    Buttonclear.setOnClickListener(newView.OnClickListe
    ner(){

        @Override
        publicvoidonClick(Viewv)
        {

            //ClearRadioGroup
            //i.e.resetalltheRadioButtonsrad
            ioGroup.clearCheck();
        }
    });
  }
}
```

Output:


My Application - MainActivity.java [My_Application.app.main]
MainActivity.java
activity_main.xml
package com.example.myapplication;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
// Define the object for Radio Group,
// Submit and Clear buttons
private RadioGroup radioGroup;
Button submit, clear;
@Override
protected void onCreate(Bundle savedInstanceState)
{
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
// Bind the components to their respective objects
// by assigning their IDs
// with the help of findViewById() method
submit = (Button)findViewById(R.id.submit);
clear = (Button)findViewById(R.id.clear);
radioGroup = (RadioGroup)findViewById(R.id.groupradio);
// Uncheck or reset the radio buttons initially
radioGroup.clearCheck();
My Application
Select Your PC Brand
MSI
HP
Lenovo
Dell
CLEAR
SUBMIT


My Application - activity_main.xml [My_Application.app.main]
activity_main.xml
MainActivity.java
Select Your PC Brand
MSI
HP
Lenovo
Dell
CLEAR
SUBMIT

3:23
My Application
Select Your PC Brand
MSI
HP
Lenovo
Dell
CLEAR
SUBMIT
MSI