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20F-1066 | BSE-6A

SMD TASK 02

Shared Preferences, List view, Constraint Layout

**XML Code**

# **Activity\_Student\_One.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="#97F8EBD5"  
 tools:context=".Task2.Student\_Activity\_One">  
  
 <EditText  
 android:id="@+id/getcgpadata"  
 android:layout\_width="202dp"  
 android:layout\_height="48dp"  
 android:layout\_marginTop="448dp"  
 android:layout\_marginEnd="20dp"  
 android:autofillHints=""  
 android:background="#E8AA72"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,MissingConstraints,SpeakableTextPresentCheck" />  
  
 <EditText  
 android:id="@+id/getsgpadata"  
 android:layout\_width="202dp"  
 android:layout\_height="48dp"  
 android:layout\_marginTop="352dp"  
 android:layout\_marginEnd="20dp"  
 android:background="#E8AA72"  
 android:ems="10"  
 android:importantForAutofill="no"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,MissingConstraints,SpeakableTextPresentCheck" />  
  
 <EditText  
 android:id="@+id/getphonedata"  
 android:layout\_width="202dp"  
 android:layout\_height="48dp"  
 android:layout\_marginTop="252dp"  
 android:layout\_marginEnd="20dp"  
 android:background="#E8AA72"  
 android:ems="10"  
 android:importantForAutofill="no"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,MissingConstraints,SpeakableTextPresentCheck" />  
  
 <EditText  
 android:id="@+id/getcnicdata"  
 android:layout\_width="202dp"  
 android:layout\_height="48dp"  
 android:layout\_marginTop="148dp"  
 android:layout\_marginEnd="20dp"  
 android:autofillHints=""  
 android:background="#E8AA72"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,MissingConstraints,SpeakableTextPresentCheck" />  
  
 <TextView  
 android:id="@+id/sgpalabel"  
 android:layout\_width="146dp"  
 android:layout\_height="50dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginTop="352dp"  
 android:ems="10"  
 android:importantForAutofill="no"  
 android:inputType="textPersonName"  
 android:text="@string/sgpa"  
 android:textSize="20sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,TextViewEdits" />  
  
 <TextView  
 android:id="@+id/cgpalabel"  
 android:layout\_width="146dp"  
 android:layout\_height="50dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginTop="448dp"  
 android:ems="10"  
 android:importantForAutofill="no"  
 android:inputType="textPersonName"  
 android:text="@string/cgpa"  
 android:textSize="20sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,TextViewEdits" />  
  
 <TextView  
 android:id="@+id/phonelabel"  
 android:layout\_width="146dp"  
 android:layout\_height="50dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginTop="252dp"  
 android:ems="10"  
 android:importantForAutofill="no"  
 android:inputType="textPersonName"  
 android:text="@string/phone"  
 android:textSize="20sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,TextFields,TextViewEdits" />  
  
 <TextView  
 android:id="@+id/cniclabel"  
 android:layout\_width="146dp"  
 android:layout\_height="50dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginTop="144dp"  
 android:ems="10"  
 android:importantForAutofill="no"  
 android:inputType="textPersonName"  
 android:text="@string/cnic"  
 android:textSize="20sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,TextViewEdits" />  
  
 <TextView  
 android:id="@+id/namelabel"  
 android:layout\_width="146dp"  
 android:layout\_height="50dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginTop="48dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:text="@string/name"  
 android:textSize="20sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 android:importantForAutofill="no"  
 tools:ignore="LabelFor,TextViewEdits" />  
  
 <Button  
 android:id="@+id/savesharedpref"  
 android:layout\_width="128dp"  
 android:layout\_height="63dp"  
 android:background="#AE7A5E"  
 android:shadowRadius="10"  
 android:text="@string/save"  
 android:textColor="@color/white"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.955"  
 tools:ignore="MissingConstraints,TextContrastCheck" />  
  
 <EditText  
 android:id="@+id/getnamedata"  
 android:layout\_width="202dp"  
 android:layout\_height="48dp"  
 android:layout\_marginTop="48dp"  
 android:layout\_marginEnd="20dp"  
 android:background="#E8AA72"  
 android:ems="10"  
 android:importantForAutofill="no"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="LabelFor,SpeakableTextPresentCheck" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

# **Activity\_Student\_One.Java**

package com.example.assignments.Task2;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.annotation.SuppressLint;  
import android.content.Context;  
import android.content.Intent;  
import android.content.SharedPreferences;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
import com.example.assignments.R;  
  
public class Student\_Activity\_One extends AppCompatActivity  
{  
 SharedPreferences sharedPreferences;  
 EditText getNameData, getCnicData, getPhoneData, getSgpaData, getCgpaData;  
 Button saveButton;  
  
 private static final String *SHARED\_PREF\_NAME* = "saveddata";  
 private static final String *DATA\_name* = "data\_key\_name";  
 private static final String *DATA\_cnic* = "data\_key\_cnic";  
 private static final String *DATA\_phone* = "data\_key\_phone";  
 private static final String *DATA\_sgpa* = "data\_key\_sgpa";  
 private static final String *DATA\_cgpa* = "data\_key\_cgpa";  
  
  
 @SuppressLint("MissingInflatedId")  
 @Override  
 protected void onCreate(Bundle savedInstanceState)  
 {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_student\_one*);  
 getNameData = findViewById(R.id.*getnamedata*);  
 getCnicData = findViewById(R.id.*getcnicdata*);  
 getPhoneData = findViewById(R.id.*getphonedata*);  
 getSgpaData = findViewById(R.id.*getsgpadata*);  
 getCgpaData = findViewById(R.id.*getcgpadata*);  
 saveButton = findViewById(R.id.*savesharedpref*);  
  
 sharedPreferences = getSharedPreferences(*SHARED\_PREF\_NAME*, Context.*MODE\_PRIVATE*);  
  
 saveButton.setOnClickListener(new View.OnClickListener()  
 {  
 @Override  
 public void onClick(View view)  
 {  
 String name = getNameData.getText().toString().trim();  
 String cnic = getCnicData.getText().toString().trim();  
 String phone = getPhoneData.getText().toString().trim();  
 String sgpa = getSgpaData.getText().toString().trim();  
 String cgpa = getCgpaData.getText().toString().trim();  
  
 if (name.isEmpty() || cnic.isEmpty() || phone.isEmpty() || sgpa.isEmpty() || cgpa.isEmpty())  
 {  
 Toast.*makeText*(Student\_Activity\_One.this, "Please enter complete data", Toast.*LENGTH\_SHORT*).show();  
 } else  
 {  
 SharedPreferences.Editor editor = sharedPreferences.edit();  
 editor.putString(*DATA\_name*, name);  
 editor.putString(*DATA\_cnic*, cnic);  
 editor.putString(*DATA\_phone*, phone);  
 editor.putString(*DATA\_cgpa*, cgpa);  
 editor.putString(*DATA\_sgpa*, sgpa);  
 editor.commit();  
 Toast.*makeText*(Student\_Activity\_One.this, "Data saved successfully", Toast.*LENGTH\_SHORT*).show();  
  
 }  
 Intent intent = new Intent(Student\_Activity\_One.this, Student\_Activity\_Two.class);  
 startActivity(intent);  
 }  
 });  
 }  
}

# **Activity\_Student\_Two.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"  
 tools:context=".Task2.Student\_Activity\_Two">  
  
 <ListView  
 android:id="@+id/showlistview"  
 android:layout\_width="365dp"  
 android:layout\_height="633dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

# **Activity\_Student\_Two.Java**

package com.example.assignments.Task2;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Context;  
import android.content.SharedPreferences;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.AdapterView;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
  
import com.example.assignments.R;  
  
import java.util.ArrayList;  
  
public class Student\_Activity\_Two extends AppCompatActivity  
{  
 SharedPreferences sharedPreferences;  
 private static final String *SHARED\_PREF\_NAME* = "saveddata";  
 ListView myListView;  
 ArrayList<String> arrayList;  
 ArrayAdapter<String> adapter;  
 String[] myList;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState)  
 {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_student\_two*);  
 myListView = findViewById(R.id.*showlistview*);  
  
 sharedPreferences = getSharedPreferences(*SHARED\_PREF\_NAME*, Context.*MODE\_PRIVATE*);  
  
  
 String name = sharedPreferences.getString("data\_key\_name", null);  
 String cnic = sharedPreferences.getString("data\_key\_cnic", null);  
 String phone = sharedPreferences.getString("data\_key\_phone", null);  
 String sgpa = sharedPreferences.getString("data\_key\_sgpa", null);  
 String cgpa = sharedPreferences.getString("data\_key\_cgpa", null);  
 myList = new String[]{name,cnic,phone,sgpa,cgpa};  
 ArrayAdapter adapter = new ArrayAdapter<String>(Student\_Activity\_Two.this, android.R.layout.*simple\_list\_item\_1*, myList);  
 myListView.setAdapter(adapter);  
  
  
 }  
  
}

**Output**



