Department of Computer Engineering 01CE0513 – Programming for Android – Lab Manual

# **Experiment 6**

Title: Create Sign in and Sign up screen using Toast and Recycler view.

```
MainActivity.java
package com.example.practical3;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
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;
public class MainActivity extends AppCompatActivity {
  Button btn1, btn2;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    EdgeToEdge.enable(this);
    setContentView(R.layout.activity main);
    ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v,
insets) -> {
      Insets systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars());
      v.setPadding(systemBars.left, systemBars.top, systemBars.right,
systemBars.bottom);
      return insets;
    });
    btn1 = findViewById(R.id.toLogin);
    btn2 = findViewById(R.id.toRegister);
    btn1.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
```

Intent intent = new Intent(MainActivity.this, LoginActivity.class);

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```
startActivity(intent);
      }
    });
    btn2.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View v) {
         Intent intent = new Intent(MainActivity.this,
RegistrationActivity.class);
         startActivity(intent);
      }
    });
  }
}
```

## activity main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
android:layout width="match parent"
android:id="@+id/main"
android:layout height="match parent"
android:orientation="vertical"
android:padding="16dp"
android:gravity="center"
tools:context=".MainActivity">
<TextView
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:text="Home"
  android:textSize="40sp"
  android:textStyle="bold"
 android:layout_marginBottom="20dp" />
<LinearLayout
  android:layout_width="wrap_content"
  android:layout height="wrap content"
  android:layout margin="20dp">
```



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```
<Button
    android:id="@+id/toLogin"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout margin="20dp"
    android:background="#f5602f"
    android:text="Login"
    android:textColor="#212121" />
  <Button
    android:id="@+id/toRegister"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout margin="20dp"
    android:background="#f5602f"
    android:text="Register"
    android:textColor="#212121" />
</LinearLayout>
</LinearLayout>
```

LoginActivity.java
Login.xml
RegistrationActivity.java
Registration.xml
These four file is almost same as Practical 3

Build.gradle - implementation 'androidx.recyclerview:recyclerview:1.2.1'

# LandingPageActivity.java

package com.example.practical3;

import android.os.Bundle; import android.view.LayoutInflater; import android.view.View; import android.view.ViewGroup; import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity; import androidx.recyclerview.widget.LinearLayoutManager;

```
import androidx.recyclerview.widget.RecyclerView;
import java.util.ArrayList;
import java.util.List;
public class LandingPageActivity extends AppCompatActivity {
  private RecyclerView recyclerView;
  private List<String> dataList;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.landing page);
    recyclerView = findViewById(R.id.recyclerView2);
    recyclerView.setLayoutManager(new LinearLayoutManager(this));
    initializeData();
    recyclerView.setAdapter(new MyAdapter(dataList));
  }
  private void initializeData() {
    dataList = new ArrayList<>();
    dataList.add("Item 1");
    dataList.add("Item 2");
    dataList.add("Item 3");
    dataList.add("Item 4");
    dataList.add("Item 5");
    dataList.add("Item 6");
    dataList.add("Item 7");
    dataList.add("Item 8");
    dataList.add("Item 9");
    dataList.add("Item 10");
    dataList.add("Item 11");
    dataList.add("Item 12");
    dataList.add("Item 13");
    dataList.add("Item 14");
    dataList.add("Item 15");
    dataList.add("Item 16");
    dataList.add("Item 17");
    dataList.add("Item 18");
    dataList.add("Item 19");
```

```
dataList.add("Item 20");
  }
  public class MyAdapter extends
RecyclerView.Adapter<MyAdapter.MyViewHolder> {
    private List<String> dataList;
    public MyAdapter(List<String> dataList) {
      this.dataList = dataList;
    }
    @Override
    public MyViewHolder onCreateViewHolder(ViewGroup parent, int viewType) {
      View view =
LayoutInflater.from(parent.getContext()).inflate(R.layout.item_text, parent, false);
      return new MyViewHolder(view);
    }
    @Override
    public void onBindViewHolder(MyViewHolder holder, int position) {
      holder.textView.setText(dataList.get(position));
    }
    @Override
    public int getItemCount() {
      return dataList.size();
    public class MyViewHolder extends RecyclerView.ViewHolder {
      TextView textView;
      public MyViewHolder(View itemView) {
        super(itemView);
        textView = itemView.findViewById(R.id.textView);
      }}
}}
Landing_page.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  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:orientation="vertical"
  tools:context=".LandingPageActivity">
  <androidx.recyclerview.widget.RecyclerView
    android:id="@+id/recyclerView2"
    android:layout_width="match_parent"
    android:layout height="10dp"
    android:layout weight="1" />
  <LinearLayout
    android:id="@+id/item_text"
    android:layout width="match parent"
    android:layout height="wrap content"
    android:orientation="vertical"
    android:padding="16dp">
    <TextView
      android:id="@+id/textView"
      android:layout width="wrap content"
      android:layout height="wrap content"
      android:textSize="18sp"
      android:text="My name is Asif Alam" />
  </LinearLayout>
</LinearLayout>
item.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  android:layout width="match parent"
  android:layout height="wrap content"
  android:orientation="vertical"
  android:padding="16dp">
  <TextView
    android:id="@+id/textView"
    android:layout_width="wrap content"
    android:layout height="wrap content"
android:textSize="18sp" />
</LinearLayout>
```

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### AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  xmlns:tools="http://schemas.android.com/tools">
  <application
    android:allowBackup="true"
    android:dataExtractionRules="@xml/data extraction rules"
    android:fullBackupContent="@xml/backup rules"
    android:icon="@mipmap/ic launcher"
    android:label="@string/app name"
    android:roundlcon="@mipmap/ic_launcher_round"
    android:supportsRtl="true"
    android:theme="@style/Theme.Practical3"
    tools:targetApi="31">
    <activity android:name=".LandingPageActivity"
      android:exported="false" />
    <activity android:name=".LoginActivity"
      android:exported="true" />
    <activity android:name=".RegistrationActivity"
      android:exported="true" />
    <activity android:name=".MainActivity"
      android:exported="true">
      <intent-filter>
        <action android:name="android.intent.action.MAIN" />
        <category android:name="android.intent.category.LAUNCHER" />
      </intent-filter>
    </activity>
  </application>
</manifest>
Strings.xml
<resources>
  <string name="app name">Practical 3</string>
  <string-array name="states array">
    <item>Bihar</item>
    <item>Gujarat</item>
    <item>West Bengal</item>
  </string-array>
</resources>
```



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# **Output:**











