LAB9\_RECYCLERVIEW

ACTIVITY\_MAIN.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=".MainActivity">  
  
 <androidx.recyclerview.widget.RecyclerView  
 android:layout\_width="match\_parent"  
 android:id="@+id/recyclerview"  
 android:layout\_height="match\_parent"  
 tools:listitem="@layout/sample\_course"/>  
</androidx.constraintlayout.widget.ConstraintLayout>

ACTIVITY2.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=".MainActivity">  
  
 <androidx.recyclerview.widget.RecyclerView  
 android:layout\_width="match\_parent"  
 android:id="@+id/recyclerview"  
 android:layout\_height="match\_parent"  
 tools:listitem="@layout/sample\_course"/>  
  
 <com.google.android.material.floatingactionbutton.FloatingActionButton  
 android:id="@+id/floatingActionButton"  
 android:layout\_width="65dp"  
 android:layout\_height="54dp"  
 android:clickable="true"  
 android:foregroundGravity="center"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.953"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.976"  
 app:maxImageSize="50dp"  
 app:srcCompat="@drawable/ic\_baseline\_add\_24" />  
</androidx.constraintlayout.widget.ConstraintLayout>

ACTIVITY3.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=".MainActivity3">  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.07"  
 app:srcCompat="@drawable/lab9\_7" />  
  
 <ScrollView  
 android:layout\_width="415dp"  
 android:layout\_height="488dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical">  
  
 <TextView  
 android:id="@+id/fulltext"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_marginTop="166dp"  
 android:fontFamily="@font/aldrich"  
 android:text="@string/newtext"  
 android:textAlignment="gravity"  
 android:textSize="30sp" />  
 </LinearLayout>  
 </ScrollView>  
  
</androidx.constraintlayout.widget.ConstraintLayout>

SAMPLE\_COURSE.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="190dp">  
  
 <androidx.cardview.widget.CardView  
 android:id="@+id/course1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_margin="5dp"  
 app:cardCornerRadius="8dp"  
 app:cardElevation="5dp"  
 tools:layout\_editor\_absoluteX="5dp"  
 tools:layout\_editor\_absoluteY="5dp">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/bookimg"  
 android:layout\_width="match\_parent"  
 android:layout\_height="140dp"  
 android:scaleType="centerCrop"  
 app:srcCompat="@drawable/lab9\_1" />  
  
 <TextView  
 android:id="@+id/booktxt"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="5dp"  
 android:background="#FD5757"  
 android:fontFamily="@font/aclonica"  
 android:gravity="center"  
 android:text="Android Course"  
 android:textColor="#FFFFFF"  
 android:textSize="24sp" />  
 </LinearLayout>  
  
 </androidx.cardview.widget.CardView>  
</androidx.constraintlayout.widget.ConstraintLayout>

MAINACTIVITY.JAVA

package com.example.lab9\_recyclerview;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.Toast;  
  
import com.example.lab9\_recyclerview.Adapters.courseadapter;  
import com.example.lab9\_recyclerview.Clases.RecyclerItemClickListener;  
import com.example.lab9\_recyclerview.Models.coursemodel;  
  
import java.util.ArrayList;  
  
public class MainActivity extends AppCompatActivity {  
 RecyclerView recyclerView;  
// ImageView imageView;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 recyclerView = findViewById(R.id.*recyclerview*);  
// imageView = findViewById(R.id.bookimg);  
// imageView.setOnClickListener(new View.OnClickListener() {  
// @Override  
// public void onClick(View view) {  
// Intent intent = new Intent(MainActivity.this,MainActivity2.class);  
// startActivity(intent);  
// }  
// });  
  
  
  
 ArrayList<coursemodel> list = new ArrayList<>();  
 list.add(new coursemodel(R.drawable.*lab9\_1*,"Android\_JAVA"));  
 list.add(new coursemodel(R.drawable.*lab9\_2*,"Python"));  
 list.add(new coursemodel(R.drawable.*lab9\_3*,"C++"));  
 list.add(new coursemodel(R.drawable.*lab9\_4*,"Operating System"));  
 list.add(new coursemodel(R.drawable.*lab9\_5*,"Networking"));  
 list.add(new coursemodel(R.drawable.*lab9\_6*,"Java"));  
 list.add(new coursemodel(R.drawable.*lab9\_7*,"Software Engineering"));  
 list.add(new coursemodel(R.drawable.*lab9\_8*,"Data Analytics"));  
 list.add(new coursemodel(R.drawable.*lab9\_9*,"HED"));  
  
 courseadapter adapter = new courseadapter(list, this);  
 recyclerView.setAdapter(adapter);  
  
  
  
 LinearLayoutManager layoutManager = new LinearLayoutManager(this);  
 recyclerView.setLayoutManager(layoutManager);  
  
// LinearLayoutManager layoutManager = new LinearLayoutManager(this, recyclerView.HORIZONTAL,true);  
// recyclerView.setLayoutManager(layoutManager);  
  
 recyclerView.addOnItemTouchListener(new RecyclerItemClickListener(  
 this, recyclerView, new RecyclerItemClickListener.OnItemClickListener() {  
 @Override  
 public void onItemClick(View view, int position) {  
 switch (position){  
 case 0:  
 Intent intent =new Intent(MainActivity.this , MainActivity2.class);  
 startActivity(intent);  
 break;  
  
 default:  
  
 }  
 }  
  
 @Override  
 public void onLongItemClick(View view, int position) {  
 switch (position){  
 case 0:  
 Toast.*makeText*(MainActivity.this, "Click once to get to know", Toast.*LENGTH\_SHORT*).show();  
 break;  
  
 case 1:  
  
 break;  
 default:  
 }  
 }  
 }  
 ));  
  
 }  
  
  
}

MAINACTIVITY2.JAVA

package com.example.lab9\_recyclerview;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.GridLayoutManager;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
import androidx.recyclerview.widget.StaggeredGridLayoutManager;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
import com.example.lab9\_recyclerview.Adapters.courseadapter;  
import com.example.lab9\_recyclerview.Models.coursemodel;  
import com.google.android.material.floatingactionbutton.FloatingActionButton;  
  
import java.util.ArrayList;  
  
public class MainActivity2 extends AppCompatActivity {  
 RecyclerView recyclerView2;  
 FloatingActionButton btn;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main2*);  
  
 recyclerView2 = findViewById(R.id.*recyclerview*);  
 btn = findViewById(R.id.*floatingActionButton*);  
  
 ArrayList<coursemodel> list = new ArrayList<>();  
 list.add(new coursemodel(R.drawable.*lab9\_1*,"Android\_JAVA"));  
 list.add(new coursemodel(R.drawable.*lab9\_2*,"Python"));  
 list.add(new coursemodel(R.drawable.*lab9\_3*,"C++"));  
 list.add(new coursemodel(R.drawable.*lab9\_4*,"Operating System"));  
 list.add(new coursemodel(R.drawable.*lab9\_5*,"Networking"));  
 list.add(new coursemodel(R.drawable.*lab9\_6*,"Java"));  
 list.add(new coursemodel(R.drawable.*lab9\_7*,"Software Engineering"));  
 list.add(new coursemodel(R.drawable.*lab9\_8*,"Data Analytics"));  
 list.add(new coursemodel(R.drawable.*lab9\_9*,"HED"));  
  
 courseadapter adapter = new courseadapter(list, this);  
 recyclerView2.setAdapter(adapter);  
  
// GridLayoutManager gridLayoutManager = new GridLayoutManager(this,2);  
// recyclerView2.setLayoutManager(gridLayoutManager);  
  
 StaggeredGridLayoutManager stagger = new StaggeredGridLayoutManager(2,StaggeredGridLayoutManager.*VERTICAL*); //horizontal  
 recyclerView2.setLayoutManager(stagger);  
 btn.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 coursemodel objnew = new coursemodel(R.drawable.*lab9\_10*,"New Added");  
 adapter.list.add(objnew);  
 adapter.notifyItemInserted(adapter.getItemCount() - 1);  
 }  
 });  
  
  
  
// LinearLayoutManager layoutManager = new LinearLayoutManager(this, recyclerView2.HORIZONTAL,true);  
// recyclerView2.setLayoutManager(layoutManager);  
 }  
}

MAINACTIVITY3.JAVA

package com.example.lab9\_recyclerview;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
  
public class MainActivity3 extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main3*);  
 }  
}

ADAPTERS

Courseadapter

package com.example.lab9\_recyclerview.Adapters;  
  
import android.content.Context;  
import android.content.Intent;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.ImageView;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import androidx.annotation.NonNull;  
import androidx.recyclerview.widget.RecyclerView;  
  
import com.example.lab9\_recyclerview.MainActivity;  
import com.example.lab9\_recyclerview.MainActivity2;  
import com.example.lab9\_recyclerview.MainActivity3;  
import com.example.lab9\_recyclerview.Models.coursemodel;  
import com.example.lab9\_recyclerview.R;  
  
import java.time.MonthDay;  
import java.util.ArrayList;  
  
public class courseadapter extends RecyclerView.Adapter<courseadapter.viewHolder>{  
 public ArrayList<coursemodel> list;  
 Context context;  
  
  
 public courseadapter(ArrayList<coursemodel> list, Context context) {  
 this.list = list;  
 this.context = context;  
 }  
  
 @NonNull  
 @Override  
 public courseadapter.viewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  
 View view = LayoutInflater.*from*(context).inflate(R.layout.*sample\_course*,parent,false);  
  
 return new viewHolder(view);  
 }  
  
 @Override  
 public void onBindViewHolder(@NonNull courseadapter.viewHolder holder, int position) {  
  
 coursemodel model = list.get(position);  
 holder.imageView.setImageResource(model.getPic());  
 holder.textView.setText(model.getText());  
  
// holder.imageView.setOnClickListener(new View.OnClickListener() {  
// @Override  
// public void onClick(View v) {  
// Toast.makeText(context,"Clicked Item",Toast.LENGTH\_SHORT).show();  
// }  
// });  
  
 switch (position){  
 case 0:  
 holder.imageView.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 Toast.*makeText*(context,"Clicked Item 1 Image",Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
  
 holder.textView.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 Toast.*makeText*(context,"C1 Text Seleceted",Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 break;  
  
 case 1:  
 holder.imageView.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 Toast.*makeText*(context,"Clicked Item 2 Image",Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
  
 holder.textView.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 Toast.*makeText*(context,"C2 Text Seleceted",Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 break;  
  
 case 2:  
 holder.imageView.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 Intent intent = new Intent(v.getContext(), MainActivity3.class);  
 intent.setFlags(Intent.*FLAG\_ACTIVITY\_NEW\_TASK*);  
 v.getContext().startActivity(intent);  
 }  
 });  
 break;  
 default:  
  
 }  
  
  
 }  
  
 @Override  
 public int getItemCount() {  
 return list.size();  
 }  
  
 public class viewHolder extends RecyclerView.ViewHolder {  
  
 ImageView imageView;  
 TextView textView;  
 public viewHolder(@NonNull View itemView) {  
 super(itemView);  
  
 imageView = itemView.findViewById(R.id.*bookimg*);  
 textView = itemView.findViewById(R.id.*booktxt*);  
  
 }  
 }  
}

CLASS

RecyclerItemClickListener

package com.example.lab9\_recyclerview.Clases;  
  
import android.content.Context;  
  
import android.view.GestureDetector;  
import android.view.MotionEvent;  
import android.view.View;  
  
import androidx.recyclerview.widget.RecyclerView;  
  
public class RecyclerItemClickListener implements RecyclerView.OnItemTouchListener {  
 private OnItemClickListener mListener;  
  
 public interface OnItemClickListener {  
 public void onItemClick(View view, int position);  
  
 public void onLongItemClick(View view, int position);  
 }  
  
 GestureDetector mGestureDetector;  
  
 public RecyclerItemClickListener(Context context, final RecyclerView recyclerView, OnItemClickListener listener) {  
 mListener = listener;  
 mGestureDetector = new GestureDetector(context, new GestureDetector.SimpleOnGestureListener() {  
 @Override  
 public boolean onSingleTapUp(MotionEvent e) {  
 return true;  
 }  
  
 @Override  
 public void onLongPress(MotionEvent e) {  
 View child = recyclerView.findChildViewUnder(e.getX(), e.getY());  
 if (child != null && mListener != null) {  
 mListener.onLongItemClick(child, recyclerView.getChildAdapterPosition(child));  
 }  
 }  
 });  
 }  
  
 @Override public boolean onInterceptTouchEvent(RecyclerView view, MotionEvent e) {  
 View childView = view.findChildViewUnder(e.getX(), e.getY());  
 if (childView != null && mListener != null && mGestureDetector.onTouchEvent(e)) {  
 mListener.onItemClick(childView, view.getChildAdapterPosition(childView));  
 return true;  
 }  
 return false;  
 }  
  
 @Override public void onTouchEvent(RecyclerView view, MotionEvent motionEvent) { }  
  
 @Override  
 public void onRequestDisallowInterceptTouchEvent (boolean disallowIntercept){}  
}

MODELS

Coursemodel

package com.example.lab9\_recyclerview.Models;  
  
public class coursemodel {  
 int pic;  
 String text;  
  
 public coursemodel(int pic, String text) {  
 this.pic = pic;  
 this.text = text;  
 }  
  
 public int getPic() {  
 return pic;  
 }  
  
 public void setPic(int pic) {  
 this.pic = pic;  
 }  
  
 public String getText() {  
 return text;  
 }  
  
 public void setText(String text) {  
 this.text = text;  
 }  
}

MANIFEST

<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 package="com.example.lab9\_recyclerview">  
  
 <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:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/Theme.Lab9\_recyclerview"  
 tools:targetApi="31">  
 <activity  
 android:name=".MainActivity3"  
 android:exported="false" />  
 <activity  
 android:name=".MainActivity2"  
 android:exported="false" />  
 <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>  
  
 <meta-data  
 android:name="preloaded\_fonts"  
 android:resource="@array/preloaded\_fonts" />  
 </application>  
  
</manifest>

STRINGS.XML

<resources>  
 <string name="app\_name">lab9\_recyclerview</string>  
 <string name="newtext">Android Intent is the message that is passed between components such as activities, content providers, broadcast receivers, services etc.  
  
It is generally used with startActivity() method to invoke activity, broadcast receivers etc.  
  
The dictionary meaning of intent is intention or purpose. So, it can be described as the intention to do action.  
  
The LabeledIntent is the subclass of android.content.Intent class.Android Intent is the message that is passed between components such as activities, content providers, broadcast receivers, services etc.  
  
It is generally used with startActivity() method to invoke activity, broadcast receivers etc.  
  
The dictionary meaning of intent is intention or purpose. So, it can be described as the intention to do action.  
  
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It is generally used with startActivity() method to invoke activity, broadcast receivers etc.  
  
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It is generally used with startActivity() method to invoke activity, broadcast receivers etc.  
  
The dictionary meaning of intent is intention or purpose. So, it can be described as the intention to do action.  
  
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It is generally used with startActivity() method to invoke activity, broadcast receivers etc.  
  
The dictionary meaning of intent is intention or purpose. So, it can be described as the intention to do action.  
  
The LabeledIntent is the subclass of android.content.Intent class.</string>  
</resources>