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**SE(6A) | 19F-0916**

Software For Mobile Devices

Assignment 4: RecyclerView

**MAIN ACTIVITY CODE**

**package** com.example.lab\_work\_smd\_section\_bsse\_6a.RecyclerViewExample;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
**import** androidx.recyclerview.widget.DefaultItemAnimator;  
**import** androidx.recyclerview.widget.LinearLayoutManager;  
**import** androidx.recyclerview.widget.RecyclerView;  
  
**import** android.os.Bundle;  
  
**import** com.example.lab\_work\_smd\_section\_bsse\_6a.R;  
  
**import** java.util.ArrayList;  
  
**public class** RecyclerViewMainActivity **extends** AppCompatActivity {  
  
 **int**[] **Images** = {R.drawable.***p1***,R.drawable.***p2***,R.drawable.***p3***,R.drawable.***p4***};  
 String[] **Name** = {**"Omen"**,**"Raze"**,**"Sage"**,**"Sova"**,**"Yoru"**,**"BrimStone"**,**"Jett"**,**"Skye"**};  
 String[] **Messages**= {**"From The Shadows!"**,**"Lets Gooo!"**,**"Your Duty Is Not Over!"**,**"I'm The Hunter!"**,**"I'll Handle This!"**, **"Open Up The Sky!"**,**"Watch This!"**,**"Find Them All!"**};  
 RecyclerView **recyclerView**;  
 ArrayList<WhatsApp> **whatsAppList** = **new** ArrayList<>();  
 WhatsAppRecyclerAdapter **adapter**;  
 RecyclerView.LayoutManager **layoutManager**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_recycler\_view\_main***);  
 **recyclerView** = findViewById(R.id.***myrecyclerview***);  
 String[] myMobiles = getResources().getStringArray(R.array.***MyMobiles***);  
 **adapter** = **new** WhatsAppRecyclerAdapter(**whatsAppList**);  
 insert();  
 **layoutManager** = **new** LinearLayoutManager(getApplicationContext());  
 **recyclerView**.setLayoutManager(**layoutManager**);  
 **recyclerView**.setItemAnimator(**new** DefaultItemAnimator());  
 **recyclerView**.setAdapter(**adapter**);  
  
 }  
 **public void** insert() {  
 WhatsApp whatsApp = **new** WhatsApp(**Images**[0],**Name**[0],**Messages**[0]);  
 **whatsAppList**.add(whatsApp);  
 whatsApp = **new** WhatsApp(**Images**[1],**Name**[1],**Messages**[1]);  
 **whatsAppList**.add(whatsApp);  
 whatsApp = **new** WhatsApp(**Images**[2],**Name**[2],**Messages**[2]);  
 **whatsAppList**.add(whatsApp);  
 whatsApp = **new** WhatsApp(**Images**[3],**Name**[3],**Messages**[3]);  
 **whatsAppList**.add(whatsApp);  
 whatsApp = **new** WhatsApp(**Images**[0],**Name**[4],**Messages**[4]);  
 **whatsAppList**.add(whatsApp);  
 whatsApp = **new** WhatsApp(**Images**[1],**Name**[5],**Messages**[5]);  
 **whatsAppList**.add(whatsApp);  
 whatsApp = **new** WhatsApp(**Images**[2],**Name**[6],**Messages**[6]);  
 **whatsAppList**.add(whatsApp);  
 whatsApp = **new** WhatsApp(**Images**[3],**Name**[7],**Messages**[7]);  
 **whatsAppList**.add(whatsApp);  
 **adapter**.notifyDataSetChanged();  
 }  
}

**MAIN ACTIVITY LAYOUT**

**Graphical user interface, application

Description automatically generated**

**WHATSAPP CLASS CODE**

**package** com.example.lab\_work\_smd\_section\_bsse\_6a.RecyclerViewExample;  
  
**public class** WhatsApp {  
 String **Name**, **Message**;  
 **int Image**;  
  
 **public** WhatsApp(**int** image, String name, String message) {  
 **Name** = name;  
 **Message** = message;  
 **Image** = image;  
 }  
  
 **public** WhatsApp() {  
 }  
  
 **public** String getName() {  
 **return Name**;  
 }  
  
 **public void** setName(String name) {  
 **Name** = name;  
 }  
  
 **public** String getMessage() {  
 **return Message**;  
 }  
  
 **public void** setMessage(String message) {  
 **Message** = message;  
 }  
  
 **public int** getImage() {  
 **return Image**;  
 }  
  
 **public void** setImage(**int** image) {  
 **Image** = image;  
 }  
}

**WHATSAPP CLASS LAYOUT**

**Graphical user interface

Description automatically generated with medium confidence**

**ADAPTER CLASS CODE**

**package** com.example.lab\_work\_smd\_section\_bsse\_6a.RecyclerViewExample;  
  
**import** android.graphics.Bitmap;  
**import** android.graphics.drawable.Drawable;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.widget.ImageView;  
**import** android.widget.TextView;  
  
**import** androidx.annotation.NonNull;  
**import** androidx.recyclerview.widget.RecyclerView;  
  
**import** com.example.lab\_work\_smd\_section\_bsse\_6a.R;  
  
**import** java.util.ArrayList;  
  
**public class** WhatsAppRecyclerAdapter **extends** RecyclerView.Adapter<WhatsAppRecyclerAdapter.ViewHolder>{  
 ArrayList<WhatsApp> **whatsAppList**;  
 String[] **data**;  
  
 **public** WhatsAppRecyclerAdapter(ArrayList<WhatsApp> whatsAppList) {  
 **this**.**whatsAppList** = whatsAppList;  
 }  
  
 @NonNull  
 @Override  
 **public** ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, **int** viewType) {  
 View view = LayoutInflater.*from*(parent.getContext()).inflate(R.layout.***mobile\_row***,parent,**false**);  
 **return new** ViewHolder(view);  
 }  
  
 @Override  
 **public void** onBindViewHolder(@NonNull ViewHolder holder, **int** position) {  
 WhatsApp whatsApp = **whatsAppList**.get(position);  
 holder.**W\_Name**.setText(whatsApp.getName());  
 holder.**W\_Message**.setText(whatsApp.getMessage());  
 holder.**W\_Image**.setImageResource(whatsApp.getImage());  
 }  
  
 @Override  
 **public int** getItemCount() {  
 **return whatsAppList**.size();  
 }  
  
 **public class** ViewHolder **extends** RecyclerView.ViewHolder{  
  
 TextView **W\_Name**, **W\_Message**;  
 ImageView **W\_Image**;  
 **public** ViewHolder(@NonNull View view) {  
 **super**(view);  
 **W\_Name** = view.findViewById(R.id.***txtwhatsappName***);  
 **W\_Message** = view.findViewById(R.id.***txtwhatsappMessage***);  
 **W\_Image** = view.findViewById(R.id.***imgwhatsappLogo***);  
 }  
 }  
}

**RUNNING APPLICATION**

**Graphical user interface, application

Description automatically generated**