**TUGAS PRATIKUM MOBILE 5**

**Dosen Pengampu: Nurfiah, S.ST, M.Kom**



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**A. Model**

**ModelPelanggan:**

package id.myryan.connecttojson;  
  
public class ModelPelanggan  
String id, nama, email, hp;  
public String getId() { return id; }  
public void setId(String id) { this.id = id; }  
public String getNama() { return nama; }  
public void setNama (String nama) { this.nama = nama; }  
public String getEmail() { return email; }  
public void setEmail(String email) { this.email email; }  
public String getHp() { return hp; }  
public void setHp (String hp) { this.hp = hp; }

**B. Adapter**

**Adapter Pelanggan:**

package id.myryan.connecttojson;  
  
import android.content.Context;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.TextView;  
  
import androidx.recyclerview.widget.RecyclerView;  
  
  
import java.util.List;  
  
public class AdapterPelanggan extends  
 RecyclerView.Adapter<AdapterPelanggan.ViewHolder> {  
 private static final String *TAG* =  
 AdapterPelanggan.class.getSimpleName();  
 private Context context;  
 private List<ModelPelanggan> list;  
 private View.OnClickListener onItemClicked;  
 public void setOnItemClickListener(View.OnClickListener  
 itemClickListener) {  
 onItemClicked = itemClickListener;  
 }  
 public AdapterPelanggan(Context context, List<ModelPelanggan> list) {  
 this.context = context;  
 this.list = list;  
 }  
 @Override  
 public ViewHolder onCreateViewHolder(ViewGroup parent, int viewType) {  
 View view =  
 LayoutInflater.*from*(parent.getContext()).inflate(R.layout.item\_pelanggan,  
 parent, false);  
 return new ViewHolder(view);  
 }  
 @Override  
 public void onBindViewHolder(ViewHolder holder, int position) {  
 ModelPelanggan item = list.get(position);  
 holder.tvNama.setText(item.getNama());  
 holder.tvHp.setText(item.getHp());  
 }  
 @Override  
 public int getItemCount() {  
 return list.size();  
 }  
 public void clear() {  
 int size = this.list.size();  
 this.list.clear();  
 notifyItemRangeRemoved(0, size);  
 }  
 public class ViewHolder extends RecyclerView.ViewHolder {  
 TextView tvNama, tvHp;  
 public ViewHolder(View itemView) {  
 super(itemView);  
 tvNama = (TextView) itemView.findViewById(R.id.tvItemPelNama);  
 tvHp = (TextView) itemView.findViewById(R.id.tvItemPelHp);  
 itemView.setTag(this);  
 itemView.setOnClickListener(onItemClicked);  
 }  
 }  
}

**C. MainActivity**

**Kodingan:**

package id.myryan.connecttojson;  
  
import android.app.ProgressDialog;  
import android.content.Intent;  
import android.os.Bundle;  
import android.util.Log;  
import android.view.View;  
import android.view.animation.AlphaAnimation;  
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;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
  
import com.android.volley.Request;  
import com.android.volley.RequestQueue;  
import com.android.volley.Response;  
import com.android.volley.VolleyError;  
import com.android.volley.toolbox.JsonObjectRequest;  
import com.android.volley.toolbox.Volley;  
  
import org.json.JSONArray;  
import org.json.JSONException;  
import org.json.JSONObject;  
  
import java.util.ArrayList;  
  
public class MainActivity extends AppCompatActivity {  
 // buat variable volley untuk mengirim request ke json  
 RequestQueue requestQueue;  
 String base\_url="http://10.44.9.130/belajar\_api/costumer.php";  
 RecyclerView rvPelanggan; // RecyclerView untuk menampilkan data pelanggan  
 AdapterPelanggan adapterPelanggan; // Adapter untuk RecyclerView  
 ArrayList<ModelPelanggan> list; // List untuk menyimpan data pelanggan  
 ProgressDialog progressDialog; // Untuk menampilkan loading dialog  
 AlphaAnimation btnAnimasi = new AlphaAnimation(1F, 0.5F); // Animasi tombol  
 Button btnAdd;  
  
 @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;  
 });  
 setView();  
 requestQueue = Volley.*newRequestQueue*(this);  
 getData();  
 btnAdd.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent a = new Intent(MainActivity.this, AddActivity.class);  
 a.putExtra("param", "add");  
 startActivity(a);  
 }  
 });  
 }  
  
 private void setView() {  
 progressDialog = new ProgressDialog(this); // Inisialisasi ProgressDialog  
 rvPelanggan = findViewById(R.id.*rvPelanggan*); // Temukan RecyclerView dari layout  
 btnAdd = (Button) findViewById(R.id.*btnAdd*);  
 list = new ArrayList<>(); // Inisialisasi list untuk menampung data pelanggan  
  
 // Inisialisasi LinearLayoutManager untuk RecyclerView  
 LinearLayoutManager llm = new LinearLayoutManager(this);  
 llm.setOrientation(LinearLayoutManager.*VERTICAL*); // Mengatur orientasi menjadi vertikal  
 rvPelanggan.setHasFixedSize(true); // Optimalkan ukuran RecyclerView  
 rvPelanggan.setLayoutManager(llm); // Set layout manager ke RecyclerView  
 }  
  
 private void showMsg() {  
 if (progressDialog == null) {  
 progressDialog = new ProgressDialog(this);  
 progressDialog.setTitle("Informasi");  
 progressDialog.setMessage("Loading Data...");  
 progressDialog.setCancelable(false); // Tidak bisa dibatalkan dengan menekan di luar  
 }  
 progressDialog.show(); // Tampilkan dialog  
 }  
  
 private void getData() {  
 JsonObjectRequest jsonObjectRequest = new JsonObjectRequest(Request.Method.*GET*, base\_url, null, new Response.Listener<JSONObject>() {  
 @Override  
 public void onResponse(JSONObject jsonObject) {  
 try {  
 String status = jsonObject.getString("status");  
 String message = jsonObject.getString("message");  
 if(status.equalsIgnoreCase("true")){  
 // ambil json array dari object data  
 JSONArray jsonArray = jsonObject.getJSONArray("data");  
  
 for (int a=0; a<jsonArray.length(); a++){  
 JSONObject jsonObject1 = jsonArray.getJSONObject(a);  
 ModelPelanggan mp = new ModelPelanggan();  
 mp.setId(jsonObject1.getString("id"));  
 mp.setNama(jsonObject1.getString("nama"));  
 mp.setEmail(jsonObject1.getString("alamat"));  
 mp.setHp(jsonObject1.getString("hp"));  
 list.add(mp);  
 }  
 adapterPelanggan = new AdapterPelanggan(MainActivity.this, list);  
 adapterPelanggan.notifyDataSetChanged();  
 rvPelanggan.setAdapter(adapterPelanggan);  
 Toast.*makeText*(MainActivity.this, ""+jsonArray.toString(), Toast.*LENGTH\_SHORT*).show();  
  
 }else {  
 Toast.*makeText*(MainActivity.this, ""+message, Toast.*LENGTH\_SHORT*).show();  
 }  
 } catch (JSONException e) {  
 throw new RuntimeException(e);  
 }  
  
 }  
 }, new Response.ErrorListener() {  
 @Override  
 public void onErrorResponse(VolleyError error) {  
  
 }  
 });  
 requestQueue.add(jsonObjectRequest);  
 }  
}

1. **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">  
<uses-permission android:name="android.permission.INTERNET"/>  
<application  
android:allowBackup="true"  
android:dataExtraction Rules="@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.ConnectToJson  
android:uses CleartextTraffic="true"  
tools:targetApi="31">  
<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>

**D. Data Postman**

[

"status": true,

"message": "Data Costumer",

"data": [

{

"id": "1",

"nama": "Ryan",

"alamat": "Padang",

"hp": "123"

},

{

"id": "2",

"nama": "Koji",

"alamat": "Padang",

"hp": "321"

},

{

"id": "3",

"nama": "Rusdi",

"alamat": "Ngawi",

"hp": "234"

}

]