LAPORAN 5 PRAKTIKUM APLIKASI MOBILE

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A. Model
- Java

  "ModelPelanggan" berisi fungsi getter dan setter untuk mengubah dan mengambil nilai dari model.

```java
package model;

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

Kelas "AdapterPelanggan" digunakan untuk menampung data dari pelanggan yang nantinya akan ditampilkan menggunakan "RecyclerView" dan data akan tampil dalam bentuk list.

```java
import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
```

```java
import android.widget.TextView;

import androidx.recyclerview.widget.RecyclerView;
import com.spin.laundry.R;
import java.util.List;
import model.ModelPelanggan;

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.activity_ite
m_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

Pada class "MainActivity" kita perlu mendeklarasikan url yang dituju menggunakan ip address, RecycleView, adapter, model, dan lainnya yang nantinya akan ditampilkan pada layout xml-nya.

```java
package com.example.connecttojson;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.Bundle;
import android.provider.ContactsContract;
import android.view.View;
import android.view.animation.AlphaAnimation;
import android.widget.LinearLayout;
import android.widget.TextView;
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 variabel volley untuk mengirim request ke jsno
    RequestQueue requestQueue;

    String base_url ="http//BelajarAPI" ;
    RecyclerView rvPelanggan;
    AdapterPelanggan adapterPelanggan;
    ArrayList<ModelPelanggan> list;
    ProgressDialog progressDialog;
    AlphaAnimation btnAnimasi = new AlphaAnimation(1F, 0,5F);
    TextView btnAdd;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView((R.layout.activity_main);
        View.setonapplywindowInsertsListener(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.setOnClickLitsener() {
            @Override
            public void onClick (View v){
                Intent intent = new Intent(MainActivity.this,
AddActivity.class);
                startActivity(intent);
            }
        });
    }
    private void setView () {

        progressDialog = new progressDialog (this) ;
        btnAdd = (TextView) findViewById(R.id.btnAdd) ;
        rvPelanggan = findViewById (R.id.rvPelanggan) ;
        list = new ArrayList<>();

        LinearLayoutManager llm = new LinearLayoutManager(this) ;
        llm.setOrientation(LinearLayoutManager.VERTICAL);
        rvPelanggan.setLayoutManager(llm) ;
        rvPelanggan.setHasFixedSize(true);
    }

    private View.OnClickListener onClickListener = new
View.OnClickListener() {
        @Override
        public void onClick(View v) {
            v.startAnimation(btnAnimasi);
            RecyclerView.ViewHolder viewHolder =
(RecyclerView.ViewHolder) v.getTag();
            int position = viewHolder.getAdapterPosition();
            ModelPelanggan np = list.get(position);

            Intent a = new Intent(MainActivity.this,
AddActivity.class);
            a.putExtra("param","edit");
            startActivity(a);
        }
    };

    private void showMsg() {
        progressDialog.setTitle("Informasi");
        progressDialog.setMessage("Loading Data..");
```

```java
        progressDialog.setCancelable(false);
        progressDialog.show();
    }

    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 objek 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);

                        //
adapterPelanggan.setOnItemClickListener(onClickListener);
                        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 volleyError){

            }
        });

        requestQueue.add(jsonObjectRequest);
```

```
        }

}
```

Activity_main.xml

```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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/rvPelanggan"
        android:layout_width="match_parent"
        android:layout_height="0dp"
        android:layout_weight= "1"
        android:padding="16dp"
        tools:ignore="MissingConstraints">

    </androidx.recyclerview.widget.RecyclerView>


</androidx.constraintlayout.widget.ConstraintLayout>
```

D. Manifest

```xml
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <uses-permission
android:name="android.permission.READ_EXTERNAL_STORAGE" />

    <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.Laundry"
        tools:targetApi="31">
        <activity
```

```xml
                android:name="pelanggan.PelangganAddActivity"
                android:exported="false" />
            <activity
                android:name="com.spin.Spinlaundry.PromoActivity"
                android:exported="false" />
            <activity
                android:name="pelanggan.PelangganActivity"
                android:exported="false" />
            <activity
                android:name="com.spin.Spinlaundry.LayananActivity"
                android:exported="false" />
            <activity
                android:name="com.spin.Spinlaundry.AddLaundry"
                android:exported="false" />
            <activity
                android:name="com.spin.Spinlaundry.DetailLaundryActivity"
                android:exported="false" />
            <activity
                android:name="com.spin.Spinlaundry.LaundryActivity"
                android:exported="false" />
            <activity
                android:name="com.spin.Spinlaundry.Dashboard"
                android:exported="false" />
            <activity
                android:name="com.spin.Spinlaundry.LoginActivity"
                android:exported="true">
                <intent-filter>
                    <action android:name="android.intent.action.MAIN" />

                    <category
android:name="android.intent.category.LAUNCHER" />
                </intent-filter>
            </activity>
        </application>

</manifest>
```