

1. Buatlah java class konfigurasi.java

```
public class konfigurasi{
//Dibawah ini merupakan Pengalamatan dimana Lokasi Skrip CRUD PHP disimpan
//Pada tutorial Kali ini, karena kita membuat localhost maka alamatnya tertuju ke IP komputer
//dimana File PHP tersebut berada
//PENTING! JANGAN LUPA GANTI IP SESUAI DENGAN IP KOMPUTER DIMANA DATA PHP BERADA

    public static final String URL_ADD="http://192.168.43.39/pegawai/tambahpgw.php";
    public static final String URL_GET_ALL = "http://192.168.43.39/pegawai/tampilsemuapgw.php";
    public static final String URL_GET_EMP = "http://192.168.43.39/pegawai/tampilpgw.php?id=";
    public static final String URL_UPDATE_EMP = "http://192.168.43.39/pegawai/updatepgw.php?id=";
    public static final String URL_DELETE_EMP = "http://192.168.43.39/pegawai/hapuspgw.php?id=";

    //Dibawah ini merupakan Kunci yang akan digunakan untuk mengirim permintaan ke Skrip PHP
    public static final String KEY_EMP_ID = "id";
    public static final String KEY_EMP_NAMA = "name";
    public static final String KEY_EMP_POSISI = "position"; //desg itu variabel untuk posisi
    public static final String KEY_EMP_GAJIH = "salary"; //salary itu variabel untuk gaji

    //JSON Tags
    public static final String TAG_JSON_ARRAY="result";
    public static final String TAG_ID = "id";
    public static final String TAG_NAMA = "name";
    public static final String TAG_POSISI = "position"; //desg
    public static final String TAG_GAJIH = "salary";

    //ID karyawan
    //emp itu singkatan dari Employee
    public static final String EMP_ID = "emp_id";
}
```

2. Buat activity → Main_Activity

```
import androidx.appcompat.app.AppCompatActivity;

import android.app.ProgressDialog;
import android.content.Intent;
import android.os.AsyncTask;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import java.util.HashMap;

import static com.example.evipratiwi.mycrud.konfigurasi.URL_ADD;
```

```

public class MainActivity extends AppCompatActivity implements View.OnClickListener{
    //Dibawah ini merupakan perintah untuk mendefinikan View
    private EditText editTextName;
    private EditText editTextDesg;
    private EditText editTextSal;

    private Button buttonAdd;
    private Button buttonView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        //Inisialisasi dari View
        editTextName = (EditText) findViewById(R.id.editTextName);
        editTextDesg = (EditText) findViewById(R.id.editTextDesg);
        editTextSal = (EditText) findViewById(R.id.editTextSalary);

        buttonAdd = (Button) findViewById(R.id.buttonAdd);
        buttonView = (Button) findViewById(R.id.buttonView);

        //Setting listeners to button
        buttonAdd.setOnClickListener(this);
        buttonView.setOnClickListener(this);
    }
    //Dibawah ini merupakan perintah untuk Menambahkan Pegawai (CREATE)
    private void addEmployee() {

        final String name = editTextName.getText().toString().trim();
        final String desg = editTextDesg.getText().toString().trim();
        final String sal = editTextSal.getText().toString().trim();

        class AddEmployee extends AsyncTask<Void,Void,String> {

            ProgressDialog loading;

            @Override
            protected void onPreExecute() {
                super.onPreExecute();
                loading = ProgressDialog.show(MainActivity.this, "Menambahkan...", "Tunggu...", false, false);
            }

            @Override
            protected void onPostExecute(String s) {
                super.onPostExecute(s);
                loading.dismiss();
                Toast.makeText(MainActivity.this, s, Toast.LENGTH_LONG).show();
            }

            @Override

```

```

        protected String doInBackground(Void... v){
            HashMap<String, String> params = new HashMap<>();
            params.put(konfigurasi.KEY_EMP_NAMA, name);
            params.put(konfigurasi.KEY_EMP_POSISI, desg);
            params.put(konfigurasi.KEY_EMP_GAJIH, sal);

            RequestHandler rh = new RequestHandler();
            String res = rh.sendPostRequest(konfigurasi.URL_ADD, params);
            return res;
        }
    }

    AddEmployee ae = new AddEmployee();
    ae.execute();
}

@Override
public void onClick(View v) {
    if(v == buttonAdd){
        addEmployee();
    }

    if(v == buttonView){
        startActivity(new Intent(this, TampilanSemuaPegawai.class));
    }
}
}

```

3. Silahkan masukkan activity_main.xml

```

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Nama Pegawai" />

<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/editTextName" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Posisi" />

<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"

```

```

        android:id="@+id/editTextDesg" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Gaji" />

<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/editTextSalary" />

<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Tambah Pegawai"
    android:id="@+id/buttonAdd" />

<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Daftar Pegawai"
    android:id="@+id/buttonView" />

```

4. Buat file RequestHandler.java

```

import java.io.BufferedReader;
import java.io.BufferedWriter;
import java.io.InputStreamReader;
import java.io.OutputStream;
import java.io.OutputStreamWriter;
import java.io.UnsupportedEncodingException;
import java.io.Writer;
import java.net.HttpURLConnection;
import java.net.URI;
import java.net.URL;
import java.net.URLEncoder;
import java.util.HashMap;
import java.util.Map;

import javax.net.ssl.HttpsURLConnection;

public class RequestHandler {
    //Metode Untuk mengirim httpPostRequest
    //Metode ini mengambil 2 Argumen
    //Metode Pertama adalah URL dari Skrip yang digunakan untuk mengirimkan permintaan
    //Yang lainnya adalah HashMap dengan nilai pasangan nama yang berisi data yang akan dikirim dengan permintaan

    public String sendPostRequest(String requestURL, HashMap<String, String> postDataParams){
        //membuat URL

```

```

URL url;

//Objek StringBuilder untuk menyimpan pesan diambil dari server
StringBuilder sb = new StringBuilder();
try {
    //inisiasi URL
    url = new URL(requestURL);

    //Membuat Koneksi HttpURLConnection
    HttpURLConnection conn = (HttpURLConnection) url.openConnection();

    //konfigurasi koneksi
    conn.setReadTimeout(15000);
    conn.setConnectTimeout(15000);
    conn.setRequestMethod("POST");
    conn.setDoInput(true);
    conn.setDoOutput(true);

    //membuat keluaran Stream
    OutputStream os = conn.getOutputStream();

    //Menulis Parameter Untuk Permintaan
    //Kita menggunakan metode getPostDataString yang didefinisikan di bawah ini
    BufferedWriter writer = new BufferedWriter(new OutputStreamWriter(os, "UTF-8"));
    writer.write(getPostDataString(postDataParams));

    writer.flush();
    writer.close();
    os.close();
    int responseCode = conn.getResponseCode();

    if (responseCode == HttpURLConnection.HTTP_OK) {
        BufferedReader br = new BufferedReader(new InputStreamReader(conn.getInputStream()));
        sb = new StringBuilder();
        String response;
        //Reading server response
        while ((response = br.readLine()) != null){
            sb.append(response);
        }
    }
} catch (Exception e) {
    e.printStackTrace();
}
return sb.toString();
}

public String sendGetRequest(String requestURL){
    StringBuilder sb = new StringBuilder();
    try {
        URL url = new URL(requestURL);
        HttpURLConnection con = (HttpURLConnection) url.openConnection();
    }

```

```

        BufferedReader bufferedReader = new BufferedReader(new InputStreamReader(con.getInputStream()));

        String s;
        while((s=bufferedReader.readLine())!=null){
            sb.append(s+"\n");
        }
    }catch(Exception e){
    }
    return sb.toString();
}

public String sendGetRequestParam(String requestURL, String id){
    StringBuilder sb =new StringBuilder();
    try {
        URL url = new URL(requestURL+id);
        HttpURLConnection con = (HttpURLConnection) url.openConnection();
        BufferedReader bufferedReader = new BufferedReader(new InputStreamReader(con.getInputStream()));

        String s;
        while((s=bufferedReader.readLine())!=null){
            sb.append(s+"\n");
        }
    }catch(Exception e){
    }
    return sb.toString();
}

private String getPostDataString(HashMap<String, String> params) throws UnsupportedEncodingException {
    StringBuilder result = new StringBuilder();
    boolean first = true;
    for (Map.Entry<String, String> entry : params.entrySet()) {
        if (first)
            first = false;
        else
            result.append("&");

        result.append(URLEncoder.encode(entry.getKey(), "UTF-8"));
        result.append("=");
        result.append(URLEncoder.encode(entry.getValue(), "UTF-8"));
    }

    return result.toString();
}
}

```

5. Buat Activity → TampilanSemuaPegawai

```
import androidx.appcompat.app.AppCompatActivity;

import android.app.ProgressDialog;
import android.content.Intent;
import android.os.AsyncTask;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ListAdapter;
import android.widget.ListView;
import android.widget.SimpleAdapter;

import org.json.JSONArray;
import org.json.JSONException;
import org.json.JSONObject;

import java.util.ArrayList;
import java.util.HashMap;

public class TampilanSemuaPegawai extends AppCompatActivity implements ListView.OnItemClickListener{
    private ListView listView;

    private String JSON_STRING;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_tampilan_semua_pegawai);

        listView = (ListView) findViewById(R.id.listView);
        //listView.setOnItemClickListener(this);
        listView.setOnItemClickListener(this);
        getJSON();
    }
    private void showEmployee(){
        JSONObject jsonObject = null;
        ArrayList<HashMap<String,String>> list = new ArrayList<HashMap<String, String>>();
        try {
            jsonObject = new JSONObject(JSON_STRING);
            JSONArray result = jsonObject.getJSONArray(konfigurasi.TAG_JSON_ARRAY);

            for(int i = 0; i<result.length(); i++){
                JSONObject jo = result.getJSONObject(i);
                String id = jo.getString(konfigurasi.TAG_ID);
                String name = jo.getString(konfigurasi.TAG_NAMA);

                HashMap<String,String> employees = new HashMap<>();
                employees.put(konfigurasi.TAG_ID,id);
```

```

        employees.put(konfigurasi.TAG_NAMA, name);
        list.add(employees);
    }

} catch (JSONException e) {
    e.printStackTrace();
}

ListAdapter adapter = new SimpleAdapter(
    TampilanSemuaPegawai.this, list, R.layout.list_item,
    new String[]{konfigurasi.TAG_ID, konfigurasi.TAG_NAMA},
    new int[]{R.id.id, R.id.name});

listView.setAdapter(adapter);
}

private void getJSON() {
    class GetJSON extends AsyncTask<Void, Void, String> {

        ProgressDialog loading;
        @Override
        protected void onPreExecute() {
            super.onPreExecute();
            loading = ProgressDialog.show(TampilanSemuaPegawai.this, "Mengambil Data", "Mohon Tunggu...", false, false);
        }

        @Override
        protected void onPostExecute(String s) {
            super.onPostExecute(s);
            loading.dismiss();
            JSON_STRING = s;
            showEmployee();
        }

        @Override
        protected String doInBackground(Void... params) {
            RequestHandler rh = new RequestHandler();
            String s = rh.sendGetRequest(konfigurasi.URL_GET_ALL);
            return s;
        }
    }

    GetJSON gj = new GetJSON();
    gj.execute();
}

@Override
public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
    Intent intent = new Intent(this, tampilPegawai.class);
    HashMap<String, String> map = (HashMap) parent.getItemAtPosition(position);
    String empId = map.get(konfigurasi.TAG_ID).toString();
    intent.putExtra(konfigurasi.EMP_ID, empId);
}

```



```
        startActivity(intent);  
    }  
}
```

6. activity_tampilan_semua_pegawai.xml

```
<ListView  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:id="@+id/listView" />
```

7. buatlah activity → tampilPegawai

```
import androidx.appcompat.app.AppCompatActivity;  
  
import android.app.AlertDialog;  
import android.app.ProgressDialog;  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.os.AsyncTask;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
import org.json.JSONArray;  
import org.json.JSONException;  
import org.json.JSONObject;  
  
import java.util.HashMap;  
  
public class tampilPegawai extends AppCompatActivity implements View.OnClickListener{  
    private EditText editTextId;  
    private EditText editTextName;  
    private EditText editTextDesg;  
    private EditText editTextSalary;  
  
    private Button buttonUpdate;  
    private Button buttonDelete;  
  
    private String id;  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {
```

```

super.onCreate(savedInstanceState);
setContentView(R.layout.activity_tampil_pegawai);

Intent intent = getIntent();

id = intent.getStringExtra(konfigurasi.EMP_ID);

editTextId = (EditText) findViewById(R.id.editTextId);
editTextName = (EditText) findViewById(R.id.editTextName);
editTextDesg = (EditText) findViewById(R.id.editTextDesg);
editTextSalary = (EditText) findViewById(R.id.editTextSalary);

buttonUpdate = (Button) findViewById(R.id.buttonUpdate);
buttonDelete = (Button) findViewById(R.id.buttonDelete);

buttonUpdate.setOnClickListener(this);
buttonDelete.setOnClickListener(this);

editTextId.setText(id);

getEmployee();
}
private void getEmployee() {
    class GetEmployee extends AsyncTask<Void, Void, String> {
        ProgressDialog loading;
        @Override
        protected void onPreExecute() {
            super.onPreExecute();
            loading = ProgressDialog.show(tampilPegawai.this, "Fetching...", "Wait...", false, false);
        }

        @Override
        protected void onPostExecute(String s) {
            super.onPostExecute(s);
            loading.dismiss();
            showEmployee(s);
        }

        @Override
        protected String doInBackground(Void... params) {
            RequestHandler rh = new RequestHandler();
            String s = rh.sendGetRequestParam(konfigurasi.URL_GET_EMP, id);
            return s;
        }
    }
    GetEmployee ge = new GetEmployee();
    ge.execute();
}
private void showEmployee(String json) {
    try {
        JSONObject jsonObject = new JSONObject(json);

```

```

JSONArray result = jsonObject.getJSONArray(konfigurasi.TAG_JSON_ARRAY);
JSONObject c = result.getJSONObject(0);
String name = c.getString(konfigurasi.TAG_NAMA);
String desg = c.getString(konfigurasi.TAG_POSISI);
String sal = c.getString(konfigurasi.TAG_GAJIH);

editTextName.setText(name);
editTextDesg.setText(desg);
editTextSalary.setText(sal);

} catch (JSONException e) {
    e.printStackTrace();
}

}

private void updateEmployee() {
    final String name = editTextName.getText().toString().trim();
    final String desg = editTextDesg.getText().toString().trim();
    final String salary = editTextSalary.getText().toString().trim();

    class UpdateEmployee extends AsyncTask<Void,Void,String>{
        ProgressDialog loading;
        @Override
        protected void onPreExecute() {
            super.onPreExecute();
            loading = ProgressDialog.show(tampilPegawai.this, "Updating...", "Wait...", false, false);
        }

        @Override
        protected void onPostExecute(String s) {
            super.onPostExecute(s);
            loading.dismiss();
            Toast.makeText(tampilPegawai.this, s, Toast.LENGTH_LONG).show();
        }

        @Override
        protected String doInBackground(Void... params) {
            HashMap<String,String> hashMap = new HashMap<>();
            hashMap.put(konfigurasi.KEY_EMP_ID, id);
            hashMap.put(konfigurasi.KEY_EMP_NAMA, name);
            hashMap.put(konfigurasi.KEY_EMP_POSISI, desg);
            hashMap.put(konfigurasi.KEY_EMP_GAJIH, salary);

            RequestHandler rh = new RequestHandler();

            String s = rh.sendPostRequest(konfigurasi.URL_UPDATE_EMP, hashMap);

            return s;
        }
    }

    UpdateEmployee ue = new UpdateEmployee();

```

```

        ue.execute();
    }
    private void deleteEmployee(){
        class DeleteEmployee extends AsyncTask<Void,Void,String> {
            ProgressDialog loading;

            @Override
            protected void onPreExecute() {
                super.onPreExecute();
                loading = ProgressDialog.show(tampilPegawai.this, "Updating...", "Tunggu...", false, false);
            }

            @Override
            protected void onPostExecute(String s) {
                super.onPostExecute(s);
                loading.dismiss();
                Toast.makeText(tampilPegawai.this, s, Toast.LENGTH_LONG).show();
            }

            @Override
            protected String doInBackground(Void... params) {
                RequestHandler rh = new RequestHandler();
                String s = rh.sendGetRequestParam(konfigurasi.URL_DELETE_EMP, id);
                return s;
            }
        }

        DeleteEmployee de = new DeleteEmployee();
        de.execute();
    }
    private void confirmDeleteEmployee(){
        AlertDialog.Builder alertDialogBuilder = new AlertDialog.Builder(this);
        alertDialogBuilder.setMessage("Apakah Kamu Yakin Ingin Menghapus Pegawai ini?");

        alertDialogBuilder.setPositiveButton("Ya",
            new DialogInterface.OnClickListener() {
                @Override
                public void onClick(DialogInterface arg0, int arg1) {
                    deleteEmployee();
                    startActivity(new Intent(tampilPegawai.this, TampilanSemuaPegawai.class));
                }
            });

        alertDialogBuilder.setNegativeButton("Tidak",
            new DialogInterface.OnClickListener() {
                @Override
                public void onClick(DialogInterface arg0, int arg1) {
                }
            });
    }

```

```

        AlertDialog alertDialog = alertDialogBuilder.create();
        alertDialog.show();
    }

    @Override
    public void onClick(View v) {
        if (v == buttonUpdate) {
            updateEmployee();
        }

        if (v == buttonDelete) {
            confirmDeleteEmployee();
        }
    }
}

```

8. Xml dari activity tersebut dengan LinearLayout orientasi vertical

```

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="ID Pegawai" />

<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/editTextId" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Nama Pegawai" />

<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/editTextName" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Posisi" />

<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/editTextDesg" />

<TextView
    android:layout_width="wrap_content"

```

```
        android:layout_height="wrap_content"
        android:text="Salary" />

<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/editTextSalary" />

<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Update Pegawai"
    android:id="@+id/buttonUpdate" />

<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Hapus Pegawai"
    android:id="@+id/buttonDelete" />
```

9. list_item.xml

```
<TextView
    android:id="@+id/id"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />

<TextView
    android:id="@+id/name"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />
```