

LAPORAN

PEMROGRAMAN MOBILE PRAKTIKUM

Pertemuan 12 – Akses Database MySQL dan Input Data



Disusun oleh:

Nama : Baiq Nurul Azmi

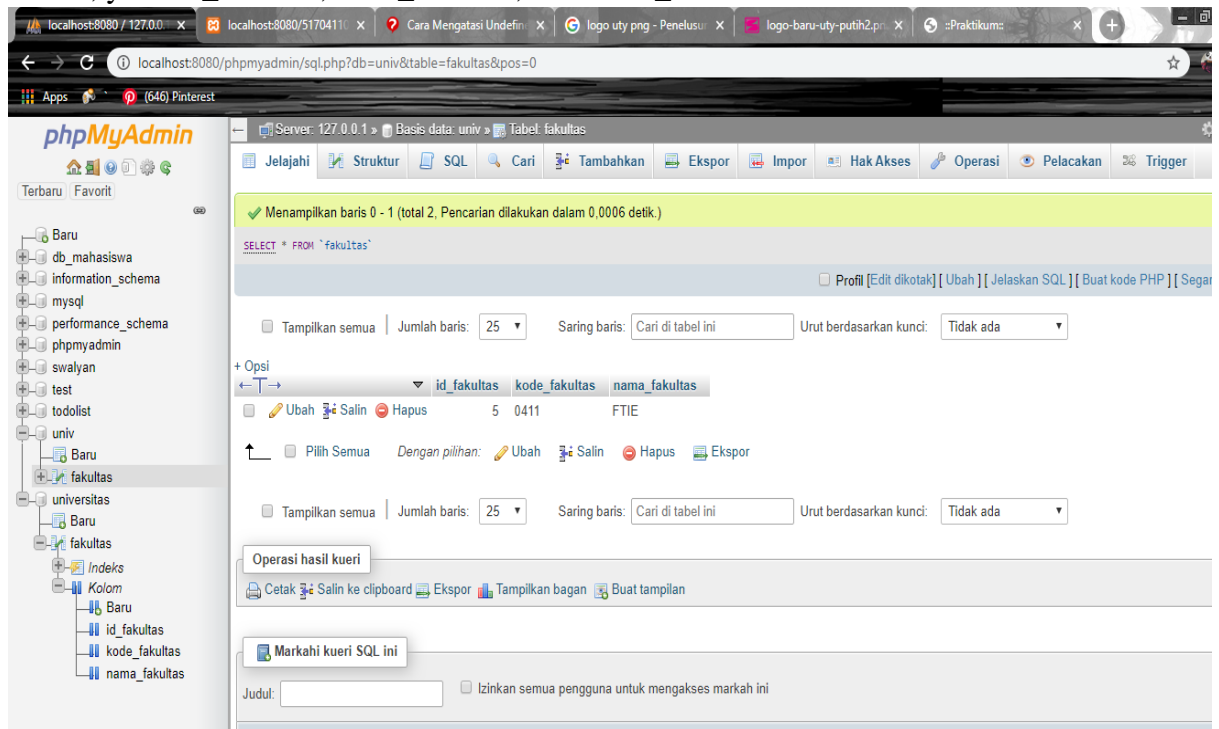
NIM : 5170411045

PROGRAM STUDI TEKNIK INFORMATIKA

FAKULTAS TEKNOLOGI INFORMASI & ELEKTRO

UNIVERSITAS TEKNOLOGI YOGYAKARTA

- A. Membuat database dengan nama univ dengan nama table fakultas dan memiliki 3 kolom, yaitu id_fakultas, kode_fakultas, dan nama_fakultas.



- B. Membuat file php untuk koneksi dengan database, dan lain sebagainya.
Koneksi.php

```
<?php
define('HOST', 'localhost');
define('USER', 'root');
define('PASS', '');
define('DB', 'univ');

$con = mysqli_connect(HOST, USER, PASS, DB) or die('Unable to Connect');

?>
```

Insert.php

```
<?php
include 'koneksi.php';

$kode_fakultas = $_POST['kode_fakultas'];
$nama_fakultas = $_POST['nama_fakultas'];

if(!$kode_fakultas || !$nama_fakultas){
    echo json_encode(array('message' => 'lengkapi data fakultas.'));
}
else{
    $query = "INSERT INTO fakultas (kode_fakultas, nama_fakultas)
VALUES
```

```

        ('$kode_fakultas', '$nama_fakultas');"

$insert = mysqli_query($con, $query);

if($insert){
    echo json_encode(array('message' => 'data fakultas berhasil
1 disimpan.'));
}else{
    echo json_encode(array('message' => 'data fakultas gagal d
isimpan.'));
}
}
}

?>

```

Select.php

```

<?php
include 'koneksi.php';

$result = array();
$query = "SELECT * FROM fakultas ORDER BY id_fakultas DESC";

$select = mysqli_query($con, $query);

while($row = mysqli_fetch_assoc($select)){
    $result[] = $row;
}

echo json_encode(array('result' => $result));

?>

```

C. Membuat project android studio dengan nama project Koneksi Database

Activity_main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <androidx.core.widget.NestedScrollView
        android:layout_width="match_parent"
        android:layout_height="wrap_content">

```

```

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="vertical">

            <androidx.recyclerview.widget.RecyclerView
                android:id="@+id/ryFakultas"
                android:layout_width="match_parent"
                android:padding="10dp"
                android:layout_height="50dp"/>

        </LinearLayout>
    </androidx.core.widget.NestedScrollView>

</RelativeLayout>

```

Fakultas_layout.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.cardview.widget.CardView
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:orientation="vertical"
    android:layout_width="match_parent"
    app:cardUseCompatPadding="true"
    android:layout_height="wrap_content">

    <LinearLayout
        android:layout_width="match_parent"
        android:orientation="vertical"
        android:layout_height="wrap_content">

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

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/namaFakultas"
            android:layout_marginTop="5dp"
            android:textSize="16sp"
            android:textStyle="bold"

        />
    </LinearLayout>

</androidx.cardview.widget.CardView>

```

FakultasModel.kt

```

package com.lepji.koneksidatabase

data class FakultasModel(val id_fakultas: Int, val kode_fakultas:
String, val nama_fakultas: String) {

}

```

FakultasAdapter.kt

```
package com.lepji.koneksidatabase

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

class FakultasAdapter (val context: Context, val listFakultas:
ArrayList<FakultasModel>)
    : RecyclerView.Adapter<FakultasAdapter.FakultasViewHolder>() {
    override fun onCreateViewHolder(parent: ViewGroup, viewType:
Int): FakultasViewHolder {
        val view =
LayoutInflater.from(parent.context).inflate(R.layout.fakultas_layou
t, parent, false)

        return FakultasViewHolder(view)
    }

    override fun getItemCount(): Int = listFakultas!!.size

    override fun onBindViewHolder(holder: FakultasViewHolder,
position: Int) {
        val currentPosition = listFakultas[position]

        holder.kodeFakultas.text = currentPosition.kode_fakultas
        holder.namaFakultas.text = currentPosition.nama_fakultas
    }

    class FakultasViewHolder(itemView: View)
        : RecyclerView.ViewHolder(itemView) {

        val kodeFakultas : TextView =
itemView.findViewById<TextView>(R.id.kodeFakultas)
        val namaFakultas : TextView =
itemView.findViewById<TextView>(R.id.namaFakultas)

    }
}
```

ApiEndPoint.kt

```
package com.lepji.koneksidatabase

class ApiEndPoint {
    companion object{
        private val SERVER = "http://10.0.2.2/univ/"
        val SELECT : String = SERVER + "select.php"
        val INSERT : String = SERVER + "insert.php"
    }
}
```

MainActivity.kt

```
package com.lepji.koneksidatabase

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.util.Log
import android.widget.LinearLayout
import android.widget.Toast
import androidx.recyclerview.widget.LinearLayoutManager
import com.androidnetworking.AndroidNetworking
import com.androidnetworking.common.Priority
import com.androidnetworking.error.ANError
import com.androidnetworking.interfaces.JSONObjectRequestListener
import kotlinx.android.synthetic.main.activity_main.*
import org.json.JSONObject

class MainActivity : AppCompatActivity() {

    private val listFakultas = ArrayList<FakultasModel>()

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        ryFakultas.layoutManager = LinearLayoutManager(this)
        ryFakultas.setHasFixedSize(true)

        AndroidNetworking.get(ApiEndPoint.SELECT)
            .setPriority(Priority.MEDIUM)
            .build()
            .getAsJSONObject(object: JSONObjectRequestListener{
                override fun onResponse(response: JSONObject?) {
                    listFakultas.clear()
                    val daftarFakultas =
response?.optJSONArray("result")
                    for(i in 0 until daftarFakultas?.length()!!){
                        val tiapFakultas =
daftarFakultas?.optJSONObject(i)
                        val model =
FakultasModel(tiapFakultas.getInt("id_fakultas"),
tiapFakultas.getString("kode_fakultas"),
tiapFakultas.getString("nama_fakultas"))

                        listFakultas.add(model)

                        if(daftarFakultas.length()-1 == i){
                            val adapter =
FakultasAdapter(this@MainActivity, listFakultas)

                            ryFakultas.adapter = adapter
                        }
                    }
                }

                override fun onError(anError: ANError?) {
                    Log.d("Error", anError?.errorDetail.toString())
                    Toast.makeText(this@MainActivity,
```

```
                "Connection Failure",  
Toast.LENGTH_SHORT).show()  
            }  
  
        })  
    }  
}
```

Pada Gradle Scripts -> build.gradle (Module: app) tambahkan:

```
implementation 'com.amitshekhar.android:jackson-android-  
networking:1.0.1'
```

Pada AndroidManifest.xml, tambahkan :

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