**Praktikum 10**

**Android MySQL Create dan Multi Read**

1. Sebelum memulai dengan proyek Android, nyalakan XAMPP yang terpasang di komputer masing-masing. Lalu cek apakah localhost bisa diakses atau tidak.

2. Jika berhasil mengakses, gunakan PHPMyAdmin untuk membuat database “android” dan tabel “databarang” baru.

3. Kolom-kolom di tabel “users”:

| +------------+--------------+------+-----+---------+----------------+  | Field | Type | Null | Key | Default | Extra |  +------------+--------------+------+-----+---------+----------------+  | id | int(11) | NO | PRI | NULL | auto\_increment |  | kodebarang | varchar(100) | NO | UNI | NULL | |  | namabarang | varchar(100) | NO | | NULL | |  | kuantitas | int(11) | NO | | NULL | |  +------------+--------------+------+-----+---------+----------------+ |
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4. Hasil dari Database dan Tabel:

| **DB android** |
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| +--------------------+  | Database |  +--------------------+  | **android** |  | information\_schema |  | mysql |  | performance\_schema |  +--------------------+ |
| **Tabel databarang** |
| +-------------------+  | Tables\_in\_android |  +-------------------+  | **users** |  +-------------------+ |

5. Isilah dengan data Dummy untuk menguji Aplikasi Android nanti, contoh:

| +----+---------+----------+----------+  | id | nama | username | password |  +----+---------+----------+----------+  | 1 | Maulana | maulana | maulana |  +----+---------+----------+----------+ |
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6. Berikutnya adalah membuat file PHP di htdocs (Pastikan file bisa diakses nanti!)

| **connect.php** |
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| <?php  $HOST = 'localhost';  $USER = 'root';  $PASS = 'root';  $DB = 'android';  $CON = mysqli\_connect($HOST,$USER,$PASS,$DB) or die(mysqli\_error($CON));  ?> |
| **read.php** |
| <?php  require\_once('connect.php');    $id = $\_GET['id'];  // $id = '1'    $result = array();  $query = mysqli\_query($CON,"SELECT \* FROM users WHERE id=".$id.";") or die(mysqli\_error($CON));  while($row = mysqli\_fetch\_assoc($query)){  $result[] = $row;  }  echo json\_encode(array('result'=>$result));  ?> |

7. Tes koneksi ke PHP dengan menggunakan Web Browser, gunakan <http://localhost/read.php?id=1> (tergantung dari letak file!!!). Jika benar akan muncul gambar berikut:

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8. Lalu buatlah proyek baru dengan Android Studio

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9. Pilih Empty Activity untuk memulai aplikasi baru

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10. Bukalah file build.gradle (Module: app) lalu tambahkan tulisan tebal putih berikut:

| dependencies {  implementation fileTree(dir: 'libs', include: ['\*.jar'])  implementation"org.jetbrains.kotlin:kotlin-stdlib-jdk7:$kotlin\_version"  implementation 'androidx.appcompat:appcompat:1.0.2'  implementation 'androidx.core:core-ktx:1.0.2'  implementation 'androidx.constraintlayout:constraintlayout:1.1.3'  testImplementation 'junit:junit:4.12'  androidTestImplementation 'androidx.test:runner:1.1.1'  androidTestImplementation 'androidx.test.espresso:espresso-core:3.1.1'  **implementation 'com.amitshekhar.android:jackson-android-networking:1.0.2'** } |
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11. Sync Project, lalu tambahkan kode berikut ke AndroidManifest.xml

| <?xml version="1.0" encoding="utf-8"?> <manifest xmlns:android="http://schemas.android.com/apk/res/android"  package="com.example.sqlquery">  **<uses-permission android:name="android.permission.INTERNET"/>** |
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12. Kemudian buatlah Layout sebagai berikut:

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13. Kemudian edit MainActivity.kt

| package com.example.sqlquery  import android.app.ProgressDialog import androidx.appcompat.app.AppCompatActivity import android.os.Bundle import android.util.Log import android.widget.Button import android.widget.EditText import android.widget.TextView import android.widget.Toast import com.androidnetworking.AndroidNetworking import com.androidnetworking.common.Priority import com.androidnetworking.error.ANError import com.androidnetworking.interfaces.JSONObjectRequestListener import org.json.JSONObject import okhttp3.OkHttpClient import androidx.core.app.ComponentActivity import androidx.core.app.ComponentActivity.ExtraData import androidx.core.content.ContextCompat.getSystemService import android.icu.lang.UCharacter.GraphemeClusterBreak.*T* class MainActivity : AppCompatActivity() {   override fun onCreate(savedInstanceState: Bundle?) {  super.onCreate(savedInstanceState)  setContentView(R.layout.*activity\_main*)   **// Inisialisasi View  val btnGetID = findViewById<Button>(R.id.*btnBaca*)  var editGetID = findViewById<EditText>(R.id.*editGetID*)  var editID = findViewById<TextView>(R.id.*txtID*)  var editNama = findViewById<TextView>(R.id.*txtNama*)  var editUserName = findViewById<TextView>(R.id.*txtUserName*)  var editPassword = findViewById<TextView>(R.id.*txtPassword*)  AndroidNetworking.initialize(*applicationContext*)   // Definisi Alamat Web Service  val SERVER = "http://*192.168.xxx.xxx*/android/"   // Aksi BUtton  btnGetID.setOnClickListener {  editID.*text* = "memuat..."  editNama.*text* = "memuat..."  editUserName.*text* = "memuat..."  editPassword.*text* = "memuat..."   // Panggil PHP read.php  var READ = SERVER+"read.php?id="+editGetID.getText().toString()   // Gunakan URL READ untuk Ambil JSON  AndroidNetworking.get(READ)  .setPriority(Priority.MEDIUM)  .build()  .getAsJSONObject(object : JSONObjectRequestListener  {  // Jika Berhasil  override fun onResponse(response: JSONObject?) {  val jsonArray = response?.optJSONArray("result")   // Jika Data Kosong  if(jsonArray?.length() == 0){  editID.*text* = " "  editNama.*text* = " "**   **editUserName.*text* = " "  editPassword.*text* = " "  Toast.makeText(*applicationContext*,"Data Kosong",Toast.*LENGTH\_SHORT*).show()  }   // Tarik Data dari JSON  for(i in 0 *until* jsonArray?.length()!!){  val jsonObject = jsonArray?.optJSONObject(i)  editID.*text* = "ID : " + jsonObject.getString("id")  editNama.*text* = "Nama : " + jsonObject.getString("nama")  editUserName.*text* = "UserName : " + jsonObject.getString("username")  editPassword.*text* = "Password : " + jsonObject.getString("password")  }  }   // Jika Terjadi Error  override fun onError(anError: ANError?) {  editID.*text* = " "  editNama.*text* = " "  editUserName.*text* = " "  editPassword.*text* = " "  Log.d("ONERROR",anError?.*errorDetail*?.toString())  Log.d("Info:",READ)  Toast.makeText(*applicationContext*,"Connection Failure",Toast.*LENGTH\_SHORT*).show()  }  })  }** } } |
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14. Kompile Kode dan Jalankan