

LAPORAN PRAKTIKUM
PRAKTIKUM 9:
“PERSISTENT OBJECT”



Disusun Oleh :

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PRAKTIKUM PEMROGRAMAN BERORIENTASI OBJEK
LAB B1

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SEMARANG
2023

A. Program pada Java

1. PersonDAO.java

```
/*
 * Nama File: PersonDAO.java
 * Pembuat: Aretha Khansa Maritza
 * NIM: 24060121140147
 * Tanggal: 31 Mei 2023
 * Deskripsi: Interface untuk person access object
 * Lab: B1
 */

public interface PersonDAO{
    public void savePerson(Person p) throws
Exception;
}
```

2. Person.java

```
/*
 * Nama File: Person.java
 * Pembuat: Aretha Khansa Maritza
 * NIM: 24060121140147
 * Tanggal: 31 Mei 2023
 * Deskripsi: Person database model
 * Lab: B1
 */

public class Person{
    private int id;
    private String name;

    public Person(String n){
        name = n;
    }

    public Person(int i, String n){
        id = i;
        name = n;
    }

    public int getId(){
        return id;
    }
}
```

```
        public String getName() {  
            return name;  
        }  
    }  
}
```

3. MySQLPersonDAO.java

```
/*  
 * Nama File: MySQLPersonDAO.java  
 * Pembuat: Aretha Khansa Maritza  
 * NIM: 24060121140147  
 * Tanggal: 31 Mei 2023  
 * Deskripsi: Implementasi PersonDAO untuk MySQL  
 * Lab: B1  
 */  
  
import java.sql.*;  
  
public class MySQLPersonDAO implements PersonDAO{  
    public void savePerson(Person person) throws  
    Exception{  
        String name = person.getName();  
        // membuat koneksi, nama db, user, password  
        menyesuaikan  
        Class.forName("com.mysql.jdbc.Driver");  
        Connection con =  
        DriverManager.getConnection(  
        "jdbc:mysql://localhost/pbo","root","Upin_Ipin_24");  
        // kerjakan mysql query  
        String query = "INSERT INTO person(name)  
VALUES ('"+name+"')";  
        System.out.println(query);  
        Statement s = con.createStatement();  
        s.executeUpdate(query);  
        // tutup koneksi database  
        con.close();  
    }  
}
```

4. DAOManager.java

```
/*  
 * Nama File: DAOManager.java  
 * Pembuat: Aretha Khansa Maritza  
 * NIM: 24060121140147
```

```

/*
 * Tanggal: 31 Mei 2023
 * Deskripsi: Pengelola DAO dalam program
 * Lab: B1
 */

public class DAOManager{
    private PersonDAO personDAO;

    public void setPersonDAO(PersonDAO person){
        personDAO = person;
    }
    public PersonDAO getPersonDAO(){
        return personDAO;
    }
}

```

5. MainDAO.java

```

/*
 * Nama File: MainDAO.java
 * Pembuat: Aretha Khansa Maritza
 * NIM: 24060121140147
 * Tanggal: 31 Mei 2023
 * Deskripsi: Main program untuk akses DAO
 * Lab: B1
 */

public class MainDAO{
    public static void main(String args[]){
        Person person = new Person("Indra");
        DAOManager m = new DAOManager();
        m.setPersonDAO(new MySQLPersonDAO());
        try{
            m.getPersonDAO().savePerson(person);
        }catch(Exception e){
            e.printStackTrace();
        }
    }
}

```

B. Pembuatan Database “pbo” dan Tabel “person” di MySQL Command Line Client

```
MySQL 8.0 Command Line Client
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 8.0.31 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> prompt Aretha>
PROMPT set to 'Aretha>'
Aretha> use pbo;
Database changed
Aretha> CREATE TABLE person(
  -> id INT PRIMARY KEY AUTO_INCREMENT NOT NULL,
  -> name VARCHAR(100));
Query OK, 0 rows affected (0.07 sec)

Aretha> select * from person;
Empty set (0.02 sec)
```

C. Hasil Program Setelah Dirun

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.2965]
(c) Microsoft Corporation. All rights reserved.

C:\Users\User-PC\Documents\Pertemuan 9>javac *.java

C:\Users\User-PC\Documents\Pertemuan 9>java -classpath .\mysql-connector-j-8.0.33.jar;. MainDAO
Unrecognized option: -classpath
Error: Could not create the Java Virtual Machine.
Error: A fatal exception has occurred. Program will exit.

C:\Users\User-PC\Documents\Pertemuan 9>java -classpath .\mysql-connector-j-8.0.33.jar;. MainDAO
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI and manual
loading of the driver class is generally unnecessary.
INSERT INTO person(name) VALUES ('Indra')
```

Berikut merupakan hasil pada MySQL Command Line Client:

```
Aretha> select * from person;
+----+-----+
| id | name |
+----+-----+
|  1 | Indra |
+----+-----+
1 row in set (0.01 sec)
```