LAPORAN TUGAS PRAKTIKUM PEMROGRAMAN BERORIENTASI OBJEK

PRAKTIKUM 9

Disusun Oleh:

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**PROGRAM STUDI INFORMATIKA
FAKULTAS SAINS DAN MATEMATIKA
UNIVERSITAS DIPONEGORO
SEMARANG
2023**

PersonDAO.java

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

Person.java

```java
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;
    }
}
```

MySQLPersonDAO.java

```java
import java.sql.*;

public class MySQLPersonDAO implements PersonDAO {
    public void savePerson(Person person) throws Exception{
        String name = person.getName();
        // membuat koneksi
        Class.forName("com.mysql.jdbc.Driver");
        Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/pbo", "root", "");
        // mysql query
        String query = "INSERT INTO person(name) VALUES('"+name+"')";
        System.out.println(query);
        Statement s = con.createStatement();
        s.executeUpdate(query);
        // tutup koneksi
        con.close();
    }
}
```

DAOManager.java

```java
public class DAOManager {
    private PersonDAO personDAO;

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

    public PersonDAO getPersonDAO(){
        return personDAO;
    }
}
```

MainDAO.java

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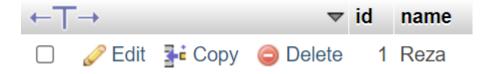
Database PBO:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(11)			No	None		AUTO_INCREMENT
2	name	varchar(100)	utf8mb4_general_ci		Yes	NULL		

Setelah mengeksekusi perintah:

```
tasi Objek\Praktikum 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 automati
cally registered via the SPI and manual loading of the driver class is generally unnecessary.
INSERT INTO person(name) VALUES('Reza')
```

←T→		id	name
☐ 🖊 Edit 📋 Copy ⊖ Delete		1	Reza

SerializePerson.java

```java
import java.io.*;
//class Person
class Person implements Serializable{
    private String name;
    public Person(String n){
        name = n;
    }
    public String getName(){
        return name;
    }
}
//class SerializePerson
public class SerializePerson{
    public static void main (String[] args){
        Person person = new Person("Panji");
        try{
            FileOutputStream f = new FileOutputStream("person.ser");
            ObjectOutputStream s = new ObjectOutputStream(f);
            s.writeObject(person);
            System.out.println("selesai menulis objek person");
            s.close();
        }catch(IOException e){
            e.printStackTrace();
        }
    }
}
```

ReadSerializedPerson.java

```java
import java.io.*;
public class ReadSerializedPerson{
    public static void main(String[] args){
        Person person = null;
        try{
            FileInputStream f = new FileInputStream("person.ser");
            ObjectInputStream s = new ObjectInputStream(f);
            person  = (Person)s.readObject();
            s.close();
            System.out.println("serialized person name =
"+person.getName());
        }catch(Exception ioe){
            ioe.printStackTrace();
        }
    }
}
```

Hasil Eksekusi:

```
PS C:\Users\Fahreza\OneDrive - Universitas Diponegoro\Documents\Dokumen Kuliah\Tugas Praktikum Kuliah\Semester 4\Pemrograman Berorien
tasi Objek\Praktikum 9> javac SerializePerson.java
PS C:\Users\Fahreza\OneDrive - Universitas Diponegoro\Documents\Dokumen Kuliah\Tugas Praktikum Kuliah\Semester 4\Pemrograman Berorien
tasi Objek\Praktikum 9> java SerializePerson
selesai menulis objek person
PS C:\Users\Fahreza\OneDrive - Universitas Diponegoro\Documents\Dokumen Kuliah\Tugas Praktikum Kuliah\Semester 4\Pemrograman Berorien
tasi Objek\Praktikum 9> javac ReadSerializedPerson.java
PS C:\Users\Fahreza\OneDrive - Universitas Diponegoro\Documents\Dokumen Kuliah\Tugas Praktikum Kuliah\Semester 4\Pemrograman Berorien
tasi Objek\Praktikum 9> java ReadSerializedPerson
serialized person name = Panji
PS C:\Users\Fahreza\OneDrive - Universitas Diponegoro\Documents\Dokumen Kuliah\Tugas Praktikum Kuliah\Semester 4\Pemrograman Berorien
tasi Objek\Praktikum 9> []
```