Nama : Taufik Hidayat

NIM   : 301200032

Kelas : IF Pagi

Tugas Pemrograman Berorientasi Objek: Encapsulation pada Java dan PHP

A. Java

1. Source Code

   - Mahasiswa.java

```java
package Encapsulation;

public class Mahasiswa {
  private String nama, nim, prodi, email;

  public void setNama(String nama) {
    this.nama = nama;
  }

  public void setNim(String nim) {
    this.nim = nim;
  }

  public void setProdi(String prodi) {
    this.prodi = prodi;
  }

  public void setEmail(String email) {
    this.email = email;
  }

  public String getNama() {
    return this.nama;
  }

  public String getNim() {
    return this.nim;
  }
```

```
   public String getProdi() {
     return this.prodi;
   }


   public String getEmail() {
     return this.email;
   }
}
```

- Main.java

```java
package Encapsulation;
import java.util.Scanner;

public class Main {

  public static void main(String[] args) {
    Mahasiswa mhs = new Mahasiswa();
    Scanner in = new Scanner(System.in);


    System.out.print("Masukkan Nama Anda  : ");
    mhs.setNama(in.nextLine());


    System.out.print("Masukkan NIM Anda   : ");
    mhs.setNim(in.nextLine());


    System.out.print("Masukkan Prodi Anda : ");
    mhs.setProdi(in.nextLine());


    System.out.print("Masukkan Email Anda : ");
    mhs.setEmail(in.nextLine());


    System.out.println("============ Data Mahasiswa
============");


    System.out.println("Nama  : " + mhs.getNama());
    System.out.println("NIM   : " + mhs.getNim());
    System.out.println("Prodi : " + mhs.getProdi());
    System.out.println("Email : " + mhs.getEmail());
```

```
    in.close();
  }
}
```

2. Output


```
Masukkan Nama Anda  : Taufik Hidayat
Masukkan NIM Anda   : 301200032
Masukkan Prodi Anda : Teknik Informatika
Masukkan Email Anda : tfkhdyt@pm.me
=========== Data Mahasiswa ===========
Nama  : Taufik Hidayat
NIM   : 301200032
Prodi : Teknik Informatika
Email : tfkhdyt@pm.me
```

B. PHP

1. Source Code

- index.php

```php
<?php
error_reporting(E_ERROR | E_PARSE);
$input = $_GET["input"] || null;
$tampil = $_GET["tampil"] || null;
$_404 = $_GET["404"] || null;
?>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Encapsulation pada PHP</title>
  <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.4/css/all.min.css" integrity="sha512-1ycn6IcaQQ40/MKBW2W4Rhis/DbILU74C1vSrLJxCq57o941Ym01SwNsOMqvEB
```

```
FlcgUa6xLiPY/NS5R+E6ztJQ==" crossorigin="anonymous"
referrerpolicy="no-referrer" />
  <!--<link rel="stylesheet"
href="node_modules/bootstrap/dist/css/bootstrap.min.css" />-->
  <link rel="stylesheet" href="dist/css/bootstrap.min.css" />
  <link rel="stylesheet" href="dist/css/style.css" />
  <link rel="icon"
href="https://raw.githubusercontent.com/tfkhdyt/tfkhdyt-
portfolio/main/assets/img/favicon.ico" />
</head>
<body>
  <?php require "views/navbar.php"; ?>
  <?php if (isset($input) || $_GET == null) {
      require "views/input.php";
  } elseif (isset($tampil)) {
      require "views/tampil.php";
  } elseif (isset($_404)) {
      require "views/404.php";
  } ?>
  <script src="dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

- views/navbar.php

```
<?php
// error_reporting(E_ERROR | E_PARSE);
$input = $_GET["input"];
$tampil = $_GET["tampil"];
?>
<nav class="navbar navbar-expand-md navbar-dark bg-dark">
  <div class="container-fluid">
    <a class="navbar-brand" href="?input">
      <img src="https://tfkhdyt.my.id/assets/img/profile-
img.jpg" class="rounded-circle mx-2 d-inline-block align-text-
top" width="30"/>
      Encapsulation
    </a>
    <button class="navbar-toggler" type="button" data-bs-
toggle="collapse" data-bs-target="#navbarSupportedContent"
```

```
aria-controls="navbarSupportedContent" aria-expanded="false"
aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse"
id="navbarSupportedContent">
      <ul class="navbar-nav me-auto mb-2 mb-md-0">
        <li class="nav-item">
          <a class="nav-link
            <?php if (isset($input) || $_GET == null) {
                echo "active";
            } ?>" aria-current="page" href="/?input"><i
class="fas fa-plus-square"></i> Input Data</a>
        </li>
        <li class="nav-item">
          <a class="nav-link
            <?php if (isset($tampil)) {
                echo "active";
            } ?>" href="/?tampil"><i class="fas fa-th-
list"></i> Tampil Data</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="https://tfkhdyt.my.id/"
target="_blank"><i class="fas fa-user"></i> About Me</a>
        </li>
        <li class="nav-item">
          <a class="nav-link"
href="https://github.com/tfkhdyt/tugas-
kuliah/tree/main/Semester%203/Pemrograman%20Berorientasi%20Obj
ek/Encapsulation/Source%20Code/PHP" target="_blank"><i
class="fas fa-code"></i> Source Code</a>
        </li>
      </ul>
    </div>
  </div>
</nav>
```

- views/input.php

```html
<div class="container">
  <div class="row">
    <div class="col col-md-6 m-3 mx-md-0">
      <h4>Input Data Mahasiswa</h4>
      <?php if (isset($_GET["error"])): ?>
      <div class="alert alert-danger alert-dismissible fade
show" role="alert">
        <i class="fas fa-exclamation-triangle"></i> Anda harus
menginput data terlebih dahulu!
        <button type="button" class="btn-close" data-bs-
dismiss="alert" aria-label="Close"></button>
      </div>
      <?php endif; ?>
      <form action="?tampil" method="post" autocomplete="off">
        <div class="mb-3">
          <label for="nama">Nama</label>
          <input type="text" class="form-control" id="nama"
name="nama" placeholder=" " required>
        </div>
        <div class="mb-3">
          <label for="nim">NIM</label>
          <input type="number" class="form-control" id="nim"
name="nim" placeholder=" " required>
        </div>
        <div class="mb-3">
          <label for="prodi">Prodi</label>
          <!--<input type="text" class="form-control"
id="prodi" name="prodi" placeholder=" ">-->
          <select required class="form-select" aria-
label="Default select example" id="prodi" name="prodi">
            <option selected disabled value="">--- Pilih ---
</option>
            <option value="Sistem Informasi">Sistem
Informasi</option>
            <option value="Teknik Informatika">Teknik
Informatika</option>
          </select>
        </div>
        <div class="mb-3">
          <label for="email">Email</label>
```

```
        <input type="email" class="form-control" id="email"
name="email" placeholder=" " required>
        </div>
        <button type="submit" class="btn btn-primary mt-1"><i
class="fas fa-sign-in-alt"></i> Submit</button>
      </form>
    </div>
  </div>
</div>
```

- views/tampil.php

```php
<?php
class Mahasiswa {
    private $nama, $nim, $prodi, $email;
    public function setNama($nama) {
        $this->nama = $nama;
    }
    public function setNim($nim) {
        $this->nim = $nim;
    }
    public function setProdi($prodi) {
        $this->prodi = $prodi;
    }
    public function setEmail($email) {
        $this->email = $email;
    }
    public function getNama() {
        return $this->nama;
    }
    public function getNim() {
        return $this->nim;
    }
    public function getProdi() {
        return $this->prodi;
    }
    public function getEmail() {
        return $this->email;
    }
}
$mhs = new Mahasiswa();
```

```php
$mhs->setNama($_POST["nama"]);

$mhs->setNim($_POST["nim"]);

$mhs->setProdi($_POST["prodi"]);

$mhs->setEmail($_POST["email"]);


if (empty($_POST["nama"])): ?>
<script>location.replace("?input&error")</script>
<?php endif;
?>
<div class="container">
  <div class="row">
    <div class="col col-md-6 m-3 mx-md-0">
      <h4>Data Mahasiswa</h4>
      <!-- Nama -->
      <div class="row mb-2">
        <div class="col fw-bold">
          Nama
        </div>
        <div class="col-9">
          : <?= $mhs->getNama() ?>
        </div>
      </div>
      <!-- NIM -->
      <div class="row mb-2">
        <div class="col fw-bold">
          NIM
        </div>
        <div class="col-9">
          : <?= $mhs->getNim() ?>
        </div>
      </div>
      <!-- Prodi -->
      <div class="row mb-2">
        <div class="col fw-bold">
          Prodi
        </div>
        <div class="col-9">
          : <?= $mhs->getProdi() ?>
        </div>
      </div>
      <!-- Email -->
```

```
      <div class="row mb-3">
        <div class="col fw-bold">
          Email
        </div>
        <div class="col-9">
          : <?= $mhs->getEmail() ?>
        </div>
      </div>
      <div class="row">
        <div class="col">
          <a class="btn btn-primary btn-sm" href="/?input"><i
class="fas fa-chevron-left"></i> Kembali</a>
        </div>
      </div>
    </div>
  </div>
</div>
```
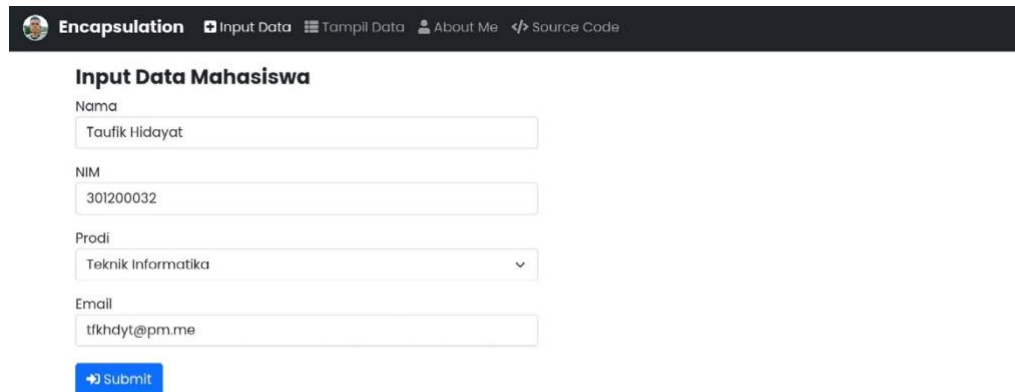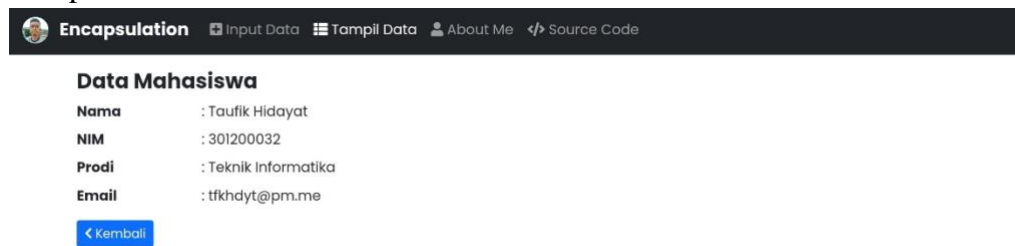
- views/404.php

```
<div class="container">
  <div class="row">
    <div class="col col-md-6 m-3 mx-md-0">
      <h1>404 Not Found</h1>
      <div class="row mt-3">
        <div class="col">
          <a class="btn btn-primary btn-sm" href="/?input"><i
class="fas fa-chevron-left"></i> Kembali</a>
        </div>
      </div>
    </div>
  </div>
</div>
```

2. Output

- Screenshots
  o Input data

  o Tampil data

o Jika masuk ke halaman tampil data tanpa input data terlebih dahulu

- Demo

  https://encapsulation-tfkhdyt.herokuapp.com