LAPORAN PRAKTIKUM 5

PEMROGRAMAN BERBASIS WEB - A

Mahasiswa:

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Dosen:

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TEKNIK INFORMATIKA
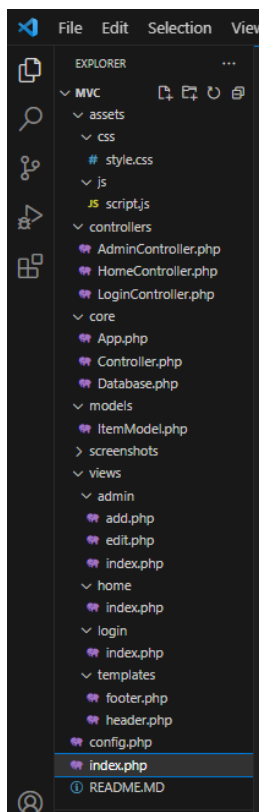
UNIVERSITAS PANCASILA

2024

Membuat Database dan tabelnya:

CREATE DATABASE IF NOT EXISTS projectmvc;

USE projectmvc;

CREATE TABLE IF NOT EXISTS `items` (

`id` int(11) NOT NULL AUTO_INCREMENT,

`nama` varchar(255) NOT NULL,

`stok` int(11) NOT NULL,

`harga` decimal(15,2) NOT NULL,

PRIMARY KEY (`id`)

);

Add source code, dengan struktur seperti gambar di bawah.

mvc/controllers/AdminController.php

```php
<?php
class AdminController extends Controller {
    public function __construct() {
        if (!isset($_SESSION['user'])) {
            header('Location: ' . BASEURL . 'index.php?url=login/index');
            exit;
        }
    }

    public function index() {
        $data['title'] = 'Admin';
        $data['items'] = $this->model('ItemModel')->getAllItems();
        $this->view('templates/header', $data);
        $this->view('admin/index', $data);
        $this->view('templates/footer');
    }

    public function add() {
        $data['title'] = 'Tambah Barang';
        $this->view('templates/header', $data);
        $this->view('admin/add');
        $this->view('templates/footer');
    }

    public function store() {
        if ($this->model('ItemModel')->addItem($_POST) > 0) {
            header('Location: ' . BASEURL . 'index.php?url=admin/index');
        } else {
            echo "Gagal menambahkan data.";
        }
    }

    public function edit($id) {
        $data['title'] = 'Edit Barang';
        $data['item'] = $this->model('ItemModel')->getItemById($id);
        $this->view('templates/header', $data);
        $this->view('admin/edit', $data);
        $this->view('templates/footer');
    }

    public function update() {
        if ($this->model('ItemModel')->updateItem($_POST) > 0) {
            header('Location: ' . BASEURL . 'index.php?url=admin/index');
        } else {
            echo "Gagal mengubah data.";
        }
    }
}
```

```php
    public function delete($id) {
        if ($this->model('ItemModel')->deleteItem($id) > 0) {
            header('Location: ' . BASEURL . 'index.php?url=admin/index');
        } else {
            echo "Gagal menghapus data.";
        }
    }
}
```

mvc/controllers/HomeController.php

```php
<?php
class HomeController extends Controller {
    public function index() {
        $data['title'] = 'Home';
        $this->view('templates/header', $data);
        $this->view('home/index', $data);
        $this->view('templates/footer');
    }
}
```

mvc/controllers/LoginController.php

```php
<?php
class LoginController extends Controller {
    public function index() {
        $data['title'] = 'Login';
        $this->view('templates/header', $data);
        $this->view('login/index');
        $this->view('templates/footer');
    }

    public function auth() {
        $username = $_POST['username'];
        $password = $_POST['password'];

        // Misal autentikasi sederhana tanpa database
        if ($username === 'admin' && $password === 'admin') {
            $_SESSION['user'] = $username;
            header('Location: ' . BASEURL . 'index.php?url=admin/index');
        } else {
            header('Location: ' . BASEURL . 'index.php?url=login/index');
        }
    }

    public function logout() {
        session_destroy();
```

```
        header('Location: ' . BASEURL . 'index.php');
    }
}
```

mvc/core/App.php

```php
<?php
class App {
    protected $controller = 'HomeController';
    protected $method = 'index';
    protected $params = [];

    public function __construct() {
        $url = $this->parseURL();

        // Controller
        if (isset($url[0]) && file_exists('controllers/' . $url[0] .
'Controller.php')) {
            $this->controller = $url[0] . 'Controller';
            unset($url[0]);
        }
        require_once 'controllers/' . $this->controller . '.php';
        $this->controller = new $this->controller;

        // Method
        if (isset($url[1])) {
            if (method_exists($this->controller, $url[1])) {
                $this->method = $url[1];
                unset($url[1]);
            }
        }

        // Parameters
        $this->params = $url ? array_values($url) : [];

        // Call method and pass parameters
        call_user_func_array([$this->controller, $this->method], $this-
>params);
    }

    public function parseURL() {
        if (isset($_GET['url'])) {
            $url = rtrim($_GET['url'], '/');
            $url = filter_var($url, FILTER_SANITIZE_URL);
            $url = explode('/', $url);
            return $url;
        }
        return [];
```

```
        }
}
```

mvc/core/Controller.php

```php
<?php
class Controller {
    public function model($model) {
        require_once 'models/' . $model . '.php';
        return new $model();
    }

    public function view($view, $data = []) {
        require_once 'views/' . $view . '.php';
    }
}
```

mvc/core/Database.php

```php
<?php
class Database {
    private $host = DB_HOST;
    private $user = DB_USER;
    private $pass = DB_PASS;
    private $dbname = DB_NAME;

    private $dbh;
    private $stmt;

    public function __construct() {
        $dsn = 'mysql:host=' . $this->host . ';dbname=' . $this->dbname;
        $options = [
            PDO::ATTR_PERSISTENT => true,
            PDO::ATTR_ERRMODE => PDO::ERRMODE_EXCEPTION
        ];

        try {
            $this->dbh = new PDO($dsn, $this->user, $this->pass, $options);
        } catch (PDOException $e) {
            die($e->getMessage());
        }
    }

    public function query($query) {
        $this->stmt = $this->dbh->prepare($query);
    }

    public function bind($param, $value, $type = null) {
```

```php
        if (is_null($type)) {
            switch (true) {
                case is_int($value):
                    $type = PDO::PARAM_INT;
                    break;
                case is_bool($value):
                    $type = PDO::PARAM_BOOL;
                    break;
                case is_null($value):
                    $type = PDO::PARAM_NULL;
                    break;
                default:
                    $type = PDO::PARAM_STR;
            }
        }
        $this->stmt->bindValue($param, $value, $type);
    }

    public function execute() {
        $this->stmt->execute();
    }

    public function resultSet() {
        $this->execute();
        return $this->stmt->fetchAll(PDO::FETCH_ASSOC);
    }

    public function single() {
        $this->execute();
        return $this->stmt->fetch(PDO::FETCH_ASSOC);
    }

    public function rowCount() {
        return $this->stmt->rowCount();
    }
}
```

mvc/models/ItemModel.php

```php
<?php
class ItemModel {
    private $table = 'items';
    private $db;

    public function __construct() {
        $this->db = new Database();
    }
```

```php
    public function getAllItems() {
        $this->db->query("SELECT * FROM " . $this->table);
        return $this->db->resultSet();
    }

    public function addItem($data) {
        $query = "INSERT INTO " . $this->table . " (nama, stok, harga) VALUES
(:nama, :stok, :harga)";
        $this->db->query($query);
        $this->db->bind('nama', $data['nama']);
        $this->db->bind('stok', $data['stok']);
        $this->db->bind('harga', $data['harga']);
        $this->db->execute();
        return $this->db->rowCount();
    }

    public function getItemById($id) {
        $this->db->query("SELECT * FROM " . $this->table . " WHERE id = :id");
        $this->db->bind('id', $id);
        return $this->db->single();
    }

    public function updateItem($data) {
        $query = "UPDATE " . $this->table . " SET nama = :nama, stok = :stok,
harga = :harga WHERE id = :id";
        $this->db->query($query);
        $this->db->bind('nama', $data['nama']);
        $this->db->bind('stok', $data['stok']);
        $this->db->bind('harga', $data['harga']);
        $this->db->bind('id', $data['id']);
        $this->db->execute();
        return $this->db->rowCount();
    }

    public function deleteItem($id) {
        $query = "DELETE FROM " . $this->table . " WHERE id = :id";
        $this->db->query($query);
        $this->db->bind('id', $id);
        $this->db->execute();
        return $this->db->rowCount();
    }
}
```

mvc/views/admin/add.php

```php
<h2>Tambah Barang</h2>
<form action="<?= BASEURL; ?>index.php?url=admin/store" method="POST">
    <label for="nama">Nama:</label><br>
    <input type="text" name="nama" id="nama" required><br><br>
    <label for="stok">Stok:</label><br>
    <input type="number" name="stok" id="stok" required><br><br>
    <label for="harga">Harga:</label><br>
    <input type="number" name="harga" id="harga" required><br><br>
    <button type="submit">Simpan</button>
</form>
```

mvc/views/admin/edit.php

```php
<h2>Tambah Barang</h2>
<form action="<?= BASEURL; ?>index.php?url=admin/store" method="POST">
    <label for="nama">Nama:</label><br>
    <input type="text" name="nama" id="nama" required><br><br>
    <label for="stok">Stok:</label><br>
    <input type="number" name="stok" id="stok" required><br><br>
    <label for="harga">Harga:</label><br>
    <input type="number" name="harga" id="harga" required><br><br>
    <button type="submit">Simpan</button>
</form>
```

mvc/views/admin/index.php

```php
<h2>Halaman Admin</h2>
<a href="<?= BASEURL; ?>index.php?url=admin/add">Tambah Barang</a> | <a
href="<?= BASEURL; ?>index.php?url=login/logout">Logout</a>
<table border="1" cellpadding="10" cellspacing="0">
    <tr>
        <th>ID</th>
        <th>Nama</th>
        <th>Stok</th>
        <th>Harga</th>
        <th>Aksi</th>
    </tr>
    <?php foreach ($data['items'] as $item): ?>
    <tr>
        <td><?= $item['id']; ?></td>
        <td><?= $item['nama']; ?></td>
        <td><?= $item['stok']; ?></td>
        <td><?= $item['harga']; ?></td>
        <td>
            <a href="<?= BASEURL; ?>index.php?url=admin/edit/<?= $item['id'];
?>">Edit</a> |
```

```php
            <a href="<?= BASEURL; ?>index.php?url=admin/delete/<?=
$item['id']; ?>" onclick="return confirm('Yakin ingin menghapus data
ini?');">Hapus</a>
        </td>
    </tr>
    <?php endforeach; ?>
</table>
```

mvc/views/home/index.php

```php
<div class="home-container">
    <h1>Selamat Datang di Aplikasi Penjualan Barang</h1>
    <p>Ini adalah halaman home, di mana Anda bisa mengelola barang dengan
mudah.</p>
    <a class="btn-login" href="<?= BASEURL;
?>index.php?url=login/index">Login</a>
</div>
```

mvc/views/login/index.php

```php
<div class="home-container">
    <h1>Selamat Datang di Aplikasi Penjualan Barang</h1>
    <p>Ini adalah halaman home, di mana Anda bisa mengelola barang dengan
mudah.</p>
    <a class="btn-login" href="<?= BASEURL;
?>index.php?url=login/index">Login</a>
</div>
```

mvc/views/templates/footer.php

```php
<footer>
    <p>Copyright &copy; <?= date('Y'); ?> Aplikasi Manajemen Barang</p>
</footer>
</div> <!-- Closing container -->
</body>
</html>
```

mvc/views/templates/header.php

```php
<!DOCTYPE html>
<html>
<head>
    <title><?= $data['title']; ?></title>
    <link rel="stylesheet" href="<?= BASEURL; ?>assets/css/style.css">
</head>
```

```html
<body>
<header>
    <h1><?= $data['title']; ?></h1>
    <nav>
        <a href="<?= BASEURL; ?>index.php">Home</a>
        <a href="<?= BASEURL; ?>index.php?url=login/index">Login</a>
        <a href="<?= BASEURL; ?>index.php?url=admin/index">Admin</a>
    </nav>
</header>
<div class="container">
```

mvc/config.php

```php
<?php
define('DB_HOST', 'localhost');
define('DB_USER', 'root');
define('DB_PASS', '');
define('DB_NAME', 'projectmvc');

// BASEURL untuk memudahkan penulisan URL
define('BASEURL', 'http://localhost/mvc/');
```

mvc/index.php

```php
<?php
session_start();
require_once 'config.php';
require_once 'core/App.php';
require_once 'core/Controller.php';
require_once 'core/Database.php';

$app = new App();
```

mvc/assets/css/style.css

```css
/* Reset margin and padding */
* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

body {
    font-family: 'Arial', sans-serif;
    background-color: #f0f0f0;
    color: #333;
    line-height: 1.6;
}
```

```css
h1, h2 {
    color: #333;
    margin-bottom: 20px;
}

.container {
    width: 80%;
    margin: 0 auto;
    padding: 20px;
    background-color: #fff;
    box-shadow: 0 0 15px rgba(0, 0, 0, 0.1);
    border-radius: 8px;
}

header {
    background-color: #333;
    color: #fff;
    padding: 20px;
    text-align: center;
}

header a {
    color: #fff;
    text-decoration: none;
    margin: 0 15px;
}

header a:hover {
    text-decoration: underline;
}

footer {
    background-color: #333;
    color: #fff;
    padding: 10px;
    text-align: center;
    position: fixed;
    width: 100%;
    bottom: 0;
}

button, input[type="submit"] {
    background-color: #28a745;
    color: #fff;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
```

```css
        cursor: pointer;
}

button:hover, input[type="submit"]:hover {
        background-color: #218838;
}

table {
        width: 100%;
        border-collapse: collapse;
        margin-bottom: 20px;
}

table th, table td {
        padding: 10px;
        border: 1px solid #ddd;
        text-align: center;
}

table th {
        background-color: #333;
        color: #fff;
}

table tr:nth-child(even) {
        background-color: #f9f9f9;
}

a {
        color: #007bff;
        text-decoration: none;
}

a:hover {
        text-decoration: underline;
}

/* Form styling */
form {
        margin-bottom: 20px;
}

form input[type="text"], form input[type="number"], form
input[type="password"] {
        width: 100%;
        padding: 10px;
        margin-bottom: 10px;
        border: 1px solid #ccc;
```

```css
    border-radius: 4px;
}

form label {
    font-weight: bold;
    margin-bottom: 5px;
    display: inline-block;
}
```

mvc/assets/js/script.js

```javascript
// Simple confirmation for delete action
document.addEventListener('DOMContentLoaded', function () {
    const deleteLinks = document.querySelectorAll('a[onclick]');

    deleteLinks.forEach(link => {
        link.addEventListener('click', function (event) {
            const confirmDelete = confirm('Yakin ingin menghapus data ini?');
            if (!confirmDelete) {
                event.preventDefault();
            }
        });
    });
});
```
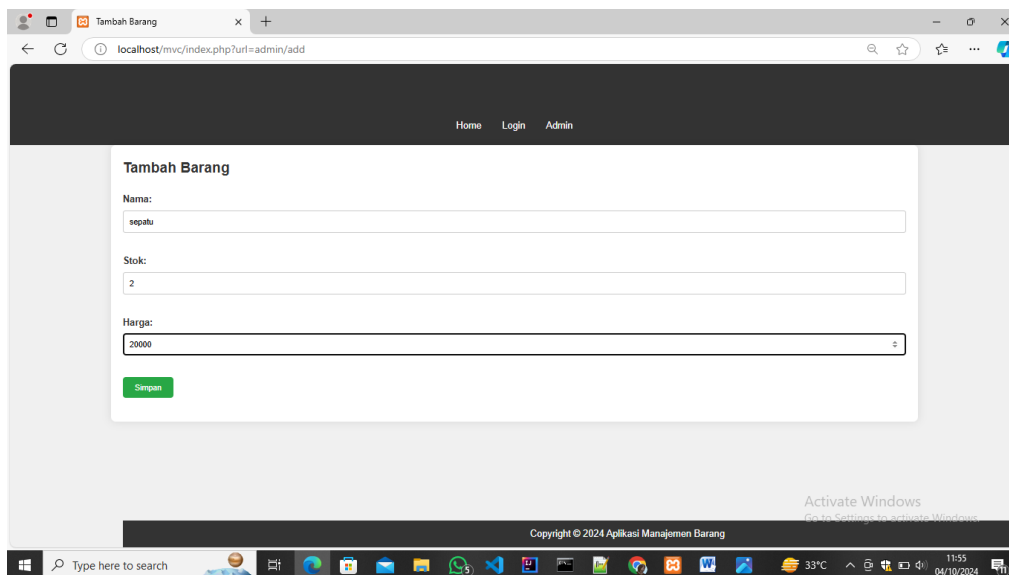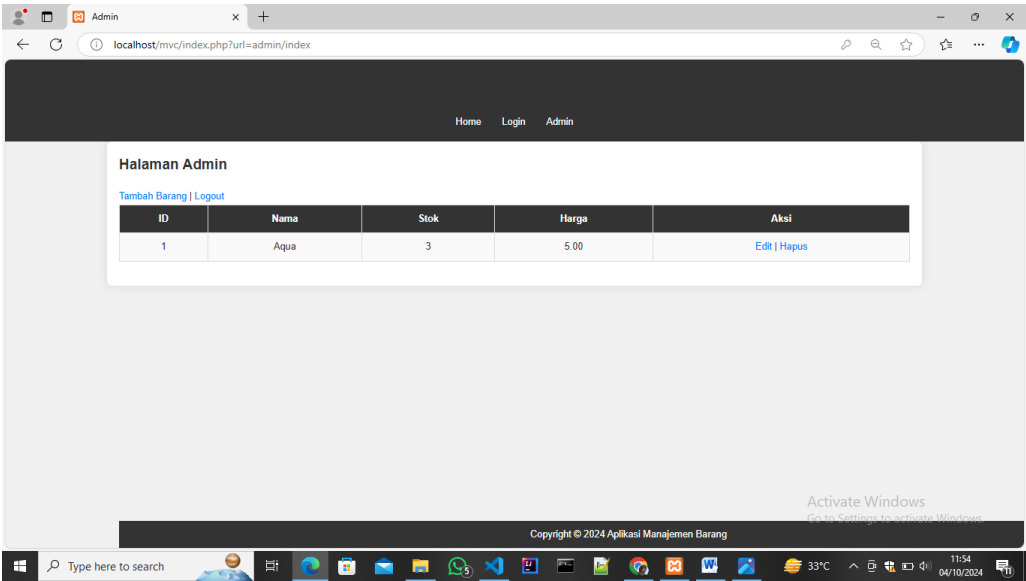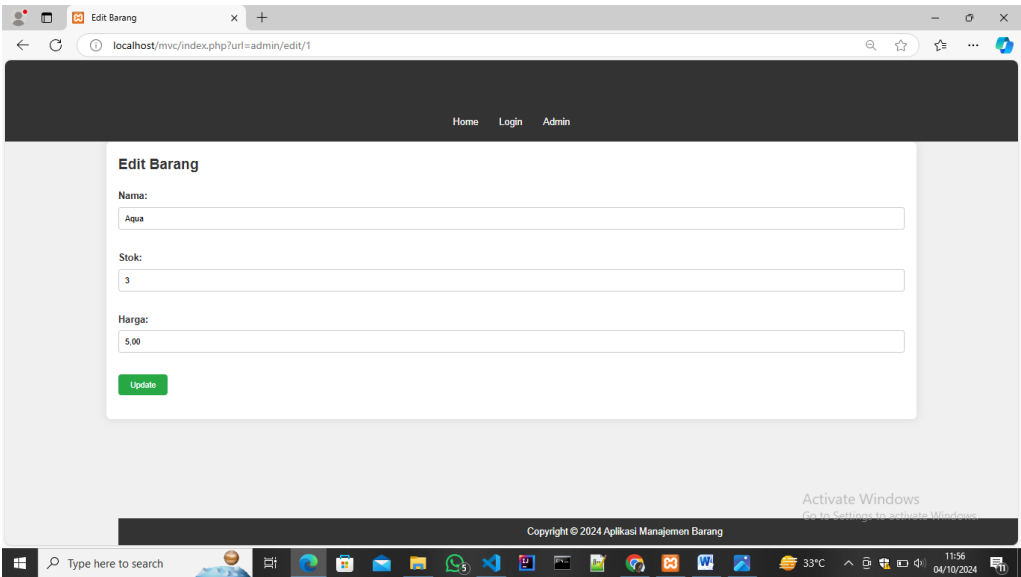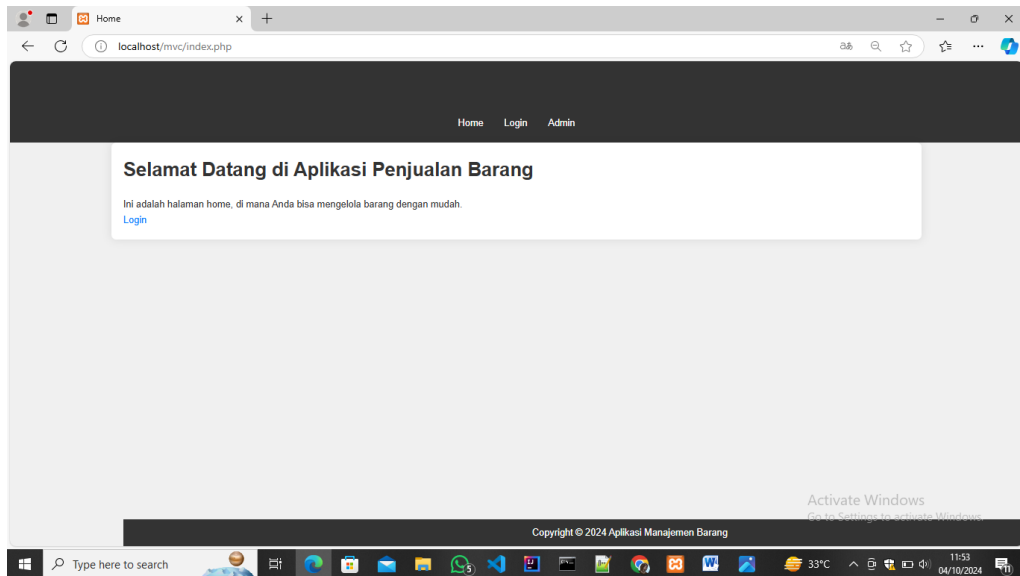
mvc/screenshots/add.jpg

mvc/screenshots/admin.jpg

mvc/screenshots/edit.jpg

mvc/screenshots/home.jpg

mvc/screenshots/login.jpg