

Latihan Mandiri 6

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Portofolion sertifikasi kompetensi, Impentasikan Unit Kompetensi Software Development pada Membuat Dokumen Kode Program.

1. Deskripsi Singkat Proyek:

TokoOnline adalah aplikasi e-commerce berbasis web yang dibangun menggunakan kerangka kerja Laravel. Sistem ini menyediakan fungsionalitas administrasi backend dengan kontrol akses berbasis peran..

Technology:

- **Framework:** Laravel 10.x
- **Authentication:** Laravel Sanctum
- **Template Engine:** Blade
- **Database:** MySQL
- **Security:** Middleware Authentication, CSRF Protection

Key Features:

- User Authentication & Authorization
- Role-based Access Control (Admin, SuperAdmin, Customer)
- Session Management
- Secure Password Hashing
- User Status Management

2. System Architecture

Database Schema

Field	Type	Constraints	Description
id	BIGINT	Primary Key, Auto Increment	User identifier
nama	VARCHAR(255)	Not Null	User full name
email	VARCHAR(255)	Unique	User email address
role	ENUM(0,1,2)	Default: 0	Access role (0=Admin, 1=SuperAdmin, 2=Customer)
status	BOOLEAN	Not Null	Account status (0=Inactive, 1=Active)
password	VARCHAR(255)	Not Null	Hashed password
hp	VARCHAR(13)	Not Null	Phone number
foto	VARCHAR(255)	Nullable	Profile photo
timestamps	TIMESTAMP	Auto	Created & Updated timestamps

3. Pedoman Implementasi

Authentication System

Login Process Flow

1. User mengakses /backend/login (GET)
2. Sistem menampilkan formulir login
3. Pengguna mengirimkan kredensial (POST)
4. Sistem memvalidasi:
 - Format email dan harus ada
 - harus ada kata sandi

5. Jika kredensial valid:

- Periksa status pengguna
 - Jika aktif: Buat sesi, arahkan ke beranda
 - Jika tidak aktif: Tampilkan pesan kesalahan
6. Jika tidak valid: Tampilkan kesalahan login

Langkah-Langkah Keamanan

- Hashing kata sandi menggunakan bcrypt
- Regenerasi sesi setelah login
- Perlindungan token CSRF
- Perlindungan middleware autentikasi

Role Management

User Roles Definition

Role Value	Role Name	Permissions
1	Super Admin	Full system access
0	Admin	Limited administrative access
2	Customer	Frontend customer access

Pemeriksaan Role di view

```
@if (Auth::user()->role ==1)
    Super Admin
@elseif(Auth::user()->role ==0)
    Admin
@endif
```

4. Kode Dokumentasi

Controller Specifications

BerandaController:

File: app/Http/Controllers/BerandaController.php

Methods:

berandaBackend(): Renders backend dashboard view

Parameters: None

Returns: View with 'judul' data

Access: Authenticated users only

LoginController

File: app/Http/Controllers/LoginController.php

Methods:

loginBackend(): Displays login form

authenticateBackend(Request \$request): Processes login authentication

logoutBackend(): Menghandle user logout

Validasi rules

```
$credentials = $request->validate([
    'email' => 'required|email',
    'password' => 'required'
]);
```

Spesifikasi Model

User Model

File: app/Models/User.php

Properties:

- \$table = 'user': Custom table name
- \$fillable: Mass-assignable fields
- \$hidden: Sensitive hidden fields
- \$casts: Attribute casting

Security Features:

- Password auto-hashing
- Remember token handling
- Email verification casting

5. View Templates Documentation

Layout Template

File: resources/views/backend/v_layouts/app.blade.php

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>tokoonline</title>
</head>

<body>
    <a href="{{ route('backend.beranda') }}>Beranda</a> |
    <a href="#">User</a> |
    <a href="" onclick="event.preventDefault(); document.getElementById('keluarapp').submit();">Keluar</a>
    <p></p>

    <!-- @yieldAwal -->
    @yield('content')
    <!-- @yieldAkhir-->

    <!-- keluarApp -->
    <form id="keluar-app" action="{{ route('backend.logout') }}" method="POST" class="d
    <none">
        @csrf
    </form>
    <!-- keluarAppEnd -->
</body>

</html>
```

Components:

- Basic HTML structure
- Navigation menu
- Content yield section
- Logout form with CSRF protection

Navigation Structure:

- Beranda link
- User link (placeholder)
- Logout functionality

Page Templates

Login Page

```

<form action="{{ route('backend.login') }}" method="post">
    @csrf
    <label>User</label><br>
    <input type="text" name="email" id="" value="{{ old('email') }}" class="form-control"
        @error('email') is-invalid @enderror placeholder="Masukkan Email">
        @error('email')
            <span class="invalid-feedback alert-danger" role="alert">
                {{$message}}
            </span>
        @enderror
        <p></p>

    <label>Password</label><br>
    <input type="password" name="password" id="" value="{{ old('password') }}"
        class="form-control @error('password') is-invalid @enderror placeholder="Masukkan
        Password">
        @error('password')
            <span class="invalid-feedback alert-danger" role="alert">
                {{$message}}
            </span>
        @enderror
        <p></p>

    <button type="submit">Login</button>
</form>

```

Features:

- Error message display
- Form validation errors
- Email and password fields
- CSRF token protection

Beranda Page

```
@extends('backend.v_layouts.app')
@section('content')
    <!-- contentAwal -->

    <h3> {{$judul}} </h3>
    <p>
        Selamat Datang, <b>{{ Auth::user()->nama }}</b> pada aplikasi Toko Online dengan hak
        akses yang anda miliki sebagai
        <b>
            @if (Auth::user()->role ==1)
                Super Admin
            @elseif(Auth::user()->role ==0)
                Admin
            @endif
        </b>
        ini adalah halaman utama dari aplikasi ini.
    </p>

    <!-- contentAkhir -->
@endsection
```

Features:

- Welcome message with user name
- Role-based greeting
- Dynamic title display

6.Route Configuration

Route Definitions

File: routes/web.php

Public Routes

Method	URI	Controller	Action	Name
GET	/backend/login	LoginController	loginBackend	backend.login
POST	/backend/login	LoginController	authenticateBackend	backend.login

Protected Routes (Auth Middleware)

Method	URI	Controller	Action	Name
GET	/backend/beranda	BerandaController	berandaBackend	backend.beranda

POST	/backend/logout	LoginController	logoutBackend	backend.logout
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Middleware Protection

- auth middleware applied to dashboard and logout routes
- Automatic redirect to login for unauthenticated users
- Session management for authenticated users

7. Database Configuration

Migration Setup

File: database/migrations/2025_10_20_063352_create_user_table.php

```
no usages

public function up(): void
{
    Schema::create('user', function (Blueprint $table) {
        $table->id();
        $table->string('nama');
        $table->string('email')->unique();
        $table->enum('role', [0, 1, 2])->default('0'); // 0 = Belum aktif, 1=Aktif
        $table->boolean('status'); // 0 = Belum aktif, 1=Aktif
        $table->string('password');
        $table->string('hp', length: 13);
        $table->string('foto')->nullable();
        $table->timestamps();
    });
}
```

Key Features:

- Custom user table (not default 'users')
- Enum role field with default value
- Boolean status field
- Nullable photo field

- Phone number length constraint (13 characters)

Seeder Data

File: database/seeders/DatabaseSeeder.php

```
public function run(): void
{
    User::create([
        'nama' => 'Administrator',
        'email' => 'admin@gmail.com',
        'role' => '1',
        'status' => 1,
        'hp' => '0812345678901',
        'password' => bcrypt('P@55word'),
    ]);

    User::create([
        'nama' => 'Sopian Aji',
        'email' => 'sopian4ji@gmail.com',
        'role' => '0',
        'status' => 1,
        'hp' => '081234567892',
        'password' => bcrypt('P@55word'),
    ]);
}
```

Default Users:

1. Super Administrator

- Email: admin@gmail.com
- Password: P@55word
- Role: 1 (Super Admin)
- Status: Active

2. Administrator

- Email: sopian4ji@gmail.com
- Password: P@55word
- Role: 0 (Admin)

- Status: Active

8. Pedoman Keamanan

Keamanan Autentikasi

- Hashing kata sandi yang kuat
- Regenerasi sesi setelah login
- Perlindungan CSRF pada semua formulir
- Middleware autentikasi
- Logout aman dengan pembatalan sesi

Input Validasi

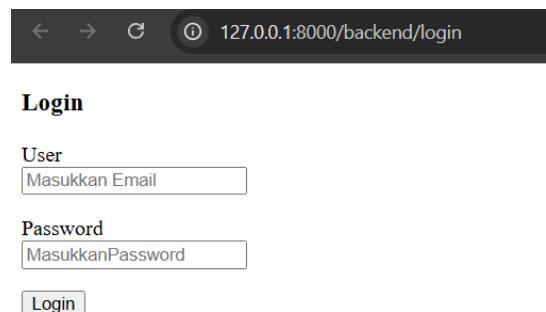
```
// Login validation
'email' => 'required|email'
'password' => 'required'

// Database constraints
'email' => 'unique'
'role' => enum validation
'status' => boolean validation
```

Manajemen Sesi

- Sesi diregenerasi saat masuk
- Sesi dibatalkan saat keluar
- Regenerasi token saat keluar
- Waktu habis sesi otomatis (default Laravel)

Result



The screenshot shows a browser window with the URL 127.0.0.1:8000/backend/login. The page title is "Login". There are two input fields: one labeled "User" with placeholder "Masukkan Email" and another labeled "Password" with placeholder "Masukkan Password". Below the password field is a "Login" button.

← → ⌂ 127.0.0.1:8000/backend/beranda

[Beranda](#) | [User](#) | [Keluar](#)

Halaman Beranda

Selamat Datang, **Administrator** pada aplikasi Toko Online dengan hak akses yang anda miliki sebagai **Super Admin** ini adalah halaman utama dari aplikasi ini.