Practical Assessment: Clinic Booking System

Scenario Overview

You are tasked with designing and implementing a simplified Clinic Booking System for the Department of Health and Wellness. The system should allow patients to book appointments at clinics, view available time slots, and receive confirmation.

Assessment Tasks

- 1. Implementation
 - Build a solution using Blazor WASM
 - Implement:
 - Booking logic
 - Time slot availability
 - Confirmation messages
 - Basic validation (e.g., no double bookings)
- 2. Code Quality
 - Follow SOLID principles.
 - Use meaningful naming conventions.
 - Implement basic unit test

Technology Stack Overview

Backend (ASP.NET Core Web API):

The backend would be a single controller with a method for booking. It would use a local database with Entity Framework Core. The booking logic would need to handle basic availability and validation to prevent a double booking.

Frontend (Blazor WASM)

The frontend would be a single page. It would have a form for a patient to select a clinic and a date. The UI would then display available time slots. The developer would use a library like MudBlazor for components to save time and

- HttpClient to communicate with the backend.
- JWT Token for Authentication
- Focus on clean, readable code with meaningful naming conventions.
- Only a single, critical unit test for the booking logic would be required using a framework like xUnit and a mocking library like Moq.