



Intermediate Level Assessment

Description

You are tasked The objective of this assessment project is to build upon the existing Doctor Appointment Booking System and incorporate additional concepts such as unit and integration testing, authorization, logging, and modular monolith architecture.

Requirements:

Enhance the Doctor Appointment Booking System by incorporating the following additional features/concepts:

1. Appointment Confirmation:

- a. Once a patient schedules an appointment, the system should send a confirmation notification to both the patient and the doctor.
- b. The confirmation notification should include the appointment details, such as the patient's name, appointment time, and Doctor's name.
- c. For the sake of this assessment, the notification could be just a Log message

2. Authentication and Authorization:

- a. Implement an authentication mechanism to secure the application's APIs.
- b. Only authorized users should be able to access the appointment booking and management functionality.

3. Logging:

- a. Enhance the logging functionality to capture detailed information about the system's activities.
- b. Utilize the Serilog logging framework to log in to the console as well as in seq
- c. Include log messages for significant events, errors, and important user actions.

4. Modular Monolith Architecture:

- a. Refactor the existing system into a modular monolith architecture
- b. The system should consist of four modules each with diff architecture as follows:
 - i. **Booking Module:** to handle patient booking (Clean architecture and DDD)
 - ii. **Notification Module:** to send notifications once an appointment is scheduled (Simplest architecture possible)
 - iii. **Management Module:** to manage doctor slots (Traditional Layered Architecture)
 - iv. **Authentication Module:** to handle authentication and authorization (Simplest architecture possible)

Deliverables

Modify and push to the same GitHub/Gitlab repo you used

Ensure that your commits are done incrementally and reflect your progress throughout the development process.

Make regular and meaningful commitments to showcase your implementation approach and demonstrate how you have broken down the project into smaller steps.

Evaluation Criteria

Your project will be evaluated based on the following criteria:

1. Correct implementation of all the required business requirements.
2. Code quality, including readability, maintainability, and adherence to best practices.
3. Effective implementation of the business logic and error handling.

Good luck!