

Code Academy

Full stack development stream - Batch 3

Homework 2 – Week5 Due Date: Dec 18th. 2023 @11:59 pm

Project Proposal: Clinic Registration and Management System

Project Overview

1. Introduction

The Clinic Registration and Management System is a console application built using C# and Entity Framework Core. This system aims to provide a user-friendly platform for patients to register, select a medical specialization, and book appointments. Additionally, an admin module is included to review and manage all appointments efficiently.

2. Project Scope

The system will allow users to choose from various medical specializations offered by the clinic.

Patients can book appointments within the clinic's operating hours (12 hours a day), with each appointment lasting 30 minutes.

All user data, including appointments, will be stored and managed using Entity Framework Core connected to a relational database.

3. Features

For Patients:

- a. Registration:
 - Users can register by providing necessary personal information (name, contact details, etc.).
- b. Specialization Selection:
 - Patients can choose from a list of medical specializations available in the clinic.
- c. Appointment Booking:
- Users can schedule appointments by selecting a preferred date and time within the clinic's operating hours.





For Admin:

- a. Appointment Overview:
 - Admins can view a comprehensive list of all appointments made by patients.
- b. Appointment Management:
 - Admins can approve, reschedule, or cancel appointments as needed.
- 4. Database Entity Structure

Patient Entity:

Attributes: PatientID (Primary Key), Name, ContactDetails, etc.

Specialization Entity:

Attributes: SpecializationID (Primary Key), SpecializationName, Description, etc.

Appointment Entity:

Attributes: AppointmentID (Primary Key), PatientID (Foreign Key), SpecializationID

(Foreign Key), Date, Time, Status, etc.

5. Technical Stack

Language: C#

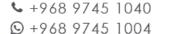
Database: Entity Framework Core (Code First Approach)

Frameworks: .NET Core

Design Pattern: Object-Oriented Programming (OOP)

User Interface: Console Application









- 6. Additional Features (Optional)
 - a. Email Notification:
 - Send automated email notifications to patients regarding their upcoming appointments.
 - b. Data Validation:
 - Implement robust data validation to ensure the integrity of user inputs.







