

Code Academy: Space Booking System
Full Stack Development Stream - Batch 3
Homework 1 – Week 5 Due Date: Dec 17th, 2023 @11:59 pm

Problem Statement: Code Academy Space Booking System

Welcome to the Code Academy Space Booking System project! Your task is to create a comprehensive application that seamlessly connects to a database using Entity Framework, displaying data on an HTML page.

Project Overview:

1. Database Setup:

- Draw the ER Diagram and Schema of the database
- Initialize a dedicated database, named `CodeAcademyBookingDB`, to store crucial information concerning space bookings.

Main Entity Classes:

- Design and implement two central entity classes: `Space` and `Booking`. Define pertinent attributes and relationships. The `Space` class signifies available spaces, while the `Booking` class encapsulates reservation details.

2. Entity Framework Integration:

- Leverage **Entity Framework's Code First approach** to seamlessly integrating the application with the database. Allow the database schema to be generated based on the defined entity classes.

3. Controller Implementation:

- Create a dedicated controller, `BookingController`, responsible for handling space booking operations. Ensure it communicates effectively with the database using the established DbContext.

4. HTML View Creation:

- Craft an aesthetically pleasing HTML page to display information about available spaces and existing bookings.
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5. Database Connectivity:

- Implement functionalities within the web application to query the database and retrieve relevant information about available spaces and their booking status.

6. User Interaction:

- Enable users to view a comprehensive list of available spaces along with details about existing bookings. Create an intuitive and user-friendly interface to navigate through the space booking system.

7. Testing and Validation:

- test the application to ensure seamless database connectivity and accurate display of space booking data on the HTML page.

8. Documentation:

- Provide clear and concise documentation detailing the project structure, database schema, and any additional considerations for future maintenance and development.

Upon successful completion of this project, you will have gained practical experience in creating a web application, connecting it to a database using Entity Framework, and presenting dynamic data on HTML pages.

Feel free to adjust or expand upon these instructions based on your specific preferences or requirements!