

67-272 Spring 2020

Midterm Exam #2

Sections W and X

You will be making a simple hotel booking application for the exam. You have exactly THREE hours to complete this project. Given the supporting testing files provided under test/models as well as the ERD.

1. Create and write the code for the User, Room and Bookings models that satisfy all the tests provided. Make sure you pass all the unit tests. More details about these models are given below.
2. Create and write the code for UsersController, RoomsController and BookingsController.
3. Create all the templates corresponding to the actions defined in each Controller.
4. The index action in each controller should list all the model objects using pagination.
5. Add a footer that should be displayed in all the templates containing the following:

Copyright 2020, exam 2, YOUR_NAME, Your Section

Hint: The footer is to be defined as a partial.

6. Add the all the routes that provide the mapping between HTTP verbs and URLs to controller actions. **YOU ARE NOT ALLOWED TO USE the resource METHOD.** All the routes have to be defined manually.
7. For unit testing, you are provided with contexts (test/context.rb). You will have to create the factories that create default objects for a User, a Room and a Booking (in test/factories).

The base of the application is already made with tests already written against which you will write code. Clone the code from: https://github.com/ladyhodhod/Exam2_HotelApp_starter.git.

You will find the ERD for this application, in the end of this document. In the ERD, an * means it must be present. For each model, you'll need to complete the code (associations, validations, scopes, callbacks, etc.) as specified in the testing files.

User

This model is linked to bookings and has a transitive association with rooms. The first name, last name, phone, and email all must be present, with the phone being validated to be 10 digits and delimited with dashes or dots, but saved as just the 10 digits in the database. The email must be validated to ensure it is in a valid format as well. Check the Testing files to determine which scopes and methods you should define in this model to pass all the tests.

Room

This model is linked to bookings and has a transitive association with users. The room numbers must be present and be integer values between 100 and 500 (which are the hotel room numbers). The room type must also be present as it indicates whether the room is a single, double, or suite. There is only a single scope for Room (booked). The scope *booked* should return a listing of all rooms that are currently booked (occupied).

Booking

This model is linked to both the User and the Room models (see ERD). You must validate that the foreign keys are present and integer values greater than 0. The *start_date* and *end_date* must both be present and the start date has to be today or later and the *end_date* must be on or after the start date. There must be three scopes for Booking:

1. *chronological*: should return all bookings ordered by the start date and then the end date.
2. *upcoming*: should show bookings starting today or later.
3. *past*: should return all bookings that ended before today.

ERD:

Hotel Application

