

Assignment - WEB API

Due Date: 14th January, 2021

In this assignment, you will develop a set of REST APIs capable of reading a JSON and returning information by using a collection of simple HTTP requests. Use postman to test API and save collection of APIs with parameters in postman.

Overview

Create web API to hotel management to booking particular room and check availability.

Specification

Your RESTful APIs should be able to respond, with the appropriate data, to the following requests:

- POST 5-10 hotels with details of hotel and 3-5 rooms in each hotel with different price and different category.
- GET all hotels sort by alphabetic order. Response: List of hotels
- GET all rooms of hotels with optional parameter by hotel city, pin code, Price, Category. (Default sort by price of room low to high)
- GET availability of room on some particular date (parameter), Response: should be return True False only
- POST Booked the room of hotel for particular date with (*optional status*)
- PUT update booking date for any room by Id
- PUT update booking status by booking Id (*optional status to Definitive or Cancelled*)
- DELETE delete booking by booking Id (change status Deleted – soft delete)

Entities:

Hotels with details like Hotel Name, Address, City, Pin code, Contact Number, contact person, Website, Facebook, Twitter, IsActive, created date, Created By, Updated Date, Updated By

Room with Associated hotel ID (FK), Room Name, Room Category, Room Price, IsActive, created date, Created By, Updated Date, Updated By

Bookings with booking date, room Id, Status of bookings,

Room Category: (Static or Enum)

Categories 1 size <35 m2
Categories 2 size 36-50 m2
Categories 3 size 51-100 m2

Status of bookings: (Static or Enum)

Optional (Default)
Definitive
Cancelled
Deleted

Requirements

1. The system will consist of two main components: back end, Front end testing using Postman rest client tool be implementing the REST APIs.
2. Create **multitier** project with use of **unity.webapi** or **Unity** for dependency resolver (must), AutoMapper (optional) NuGet package for model mapping.
3. All API should return response with IHttpActionResult or HttpResponseMessage class.
4. API should be with basic authentication (by using authorization attribute)
5. Use Attribute routing, CORS and should be return JSON only.
6. Use Postman rest tool and save the collection. Use same collection during submission.
7. DB script is optional,

Instructions:

Submit assignment in zip format with folder name as your name and with Id.