Altir - Hotel Booking Backend API

Developer Details:

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Application Overview

Altir-Hotel Booking Backend API is a simple Prototype of Hotel Booking API which hosts endpoints for multiple Admin operations and user operations.

Using API Endpoints, a Admin can

1. View all Rooms
2. View all Available Rooms
3. View all Booked Room
4. Add a Room
5. View all Rooms Based on Hotel name
6. Delete Rooms of a Hotel based on Hotel Name
7. Update Room Details based on Hotel ID(Primary Key in DB)
8. Update Room Details based on Hotel name and Room Number
9. View all Users who Booked Rooms
10. View Total Price of Booked Rooms by a User based on User name
11. View Total Revenue

And, using API Endpoints, a User can

1. Signup/Register
2. Book a Room using Room ID(Primary Key in DB)
3. Book a Room for single Day using Hotel name and Room number
4. Book a Room for Multiple Dates using Hotel name and Room number
5. View all Available Rooms

Core and Technical Concepts used in the application

1. **Backend** : Spring Boot, Java, Spring Data JPA, Hibernate, MySQL, Maven, Swagger, Lombok
2. **Application Server** : Tomcat
3. **Misc** : Git and GitHub (**I will be hosting the code in GitHub the Contest is finished**)

End Points :

Admin Endpoints

1. **/altir/admin/rooms - GET**

   Result : View All Rooms(both available and not available)

2. **/altir/admin/rooms - POST**

   Result : Admin can Insert new Room Details

3. **/altir/admin/rooms/{hotelName} - GET**

   Result : Admin can View all Rooms of a Hotel

4. **/altir/admin/rooms/{hotelName} - DELETE**

   Result : Admin can Delete Rooms of a Hotel

5. **/altir/admin/rooms/{hotelName}/{roomNumber} - PUT**

   Result : Admin can Update Room details of a Hotel using hotel name and Room Number

6. **/altir/admin/rooms/{id} - PUT**

   Result : Admin can Update Room details of a using Room ID

7. **/altir/admin/rooms/available - GET**

   Result : Admin can view all Available rooms

8. **/altir/admin/rooms/booked - GET**

   Result : Admin can view all Booked rooms

9. **/altir/admin/rooms/totalrevenue - GET**

   Result : Admin can view the Total Revenue

10. **/altir/admin/users - GET**

    Result : Admin can view all the Users who booked hotel rooms

11. **/altir/admin/users/{userName}/booking/price - GET**

    Result : Admin can view total price of Booked room/s of a User using username

Note : Only Admin(Admin credentials) can access the above links

User Endpoints

1. **/altir/users/{userName}/rooms/{hotelName}/{roomNumber}?date=1&date=2& date=3 - POST**

   Result : User can Book a room for Multiple Dates or Book for any Random date

   Note: For multiple dates, there will many **date** parameters in the request URI and for random or single date there will be only one **date** parameter

2. **/altir/users/{userName}/rooms/{id} - POST**

   Result : User can Book a room for by using Room ID(Primary key of room from DB) and date will be added as current date

3. **/altir/users/rooms - GET**

   Result : User can view all the Rooms (both available and not available rooms)

4. **/altir/users/rooms/available - GET**

   Result : User can view all the Available Rooms (only available rooms)

5. **/altir/users/signup - GET**

   Result : User can Register or Sign Up

Data Storage :

All the Rooms, Users and Booking details are stored in the Backend Database and in this project we are using MySQL DB.

Result Screenshots :

All the Endpoints are tested in REST Client i.e.., Postman and screenshots for few results are added in the **Screenshots** folder of Source code

Project Structure

- Altir_Hotel_Room_Booking_Service [boot] [devtools]
  - src/main/java
    - com.hotelroombooking
      - AltairHotelRoomBookingServiceApplication.java
    - com.hotelroombooking.configuration
      - RoomBookingSecurityConfiguration.java
      - SwaggerConfiguration.java
    - com.hotelroombooking.controller
      - AdminController.java
      - UserController.java
    - com.hotelroombooking.model
      - Booking.java
      - Room.java
      - User.java
    - com.hotelroombooking.repository
      - BookingRespository.java
      - RoomRespository.java
      - UserRespository.java
    - com.hotelroombooking.service
      - BookingService.java
      - RoomService.java
      - UserService.java
  - src/main/resources
  - src/test/java
    - com.hotelroombooking
  - JRE System Library [JavaSE-1.8]
  - Maven Dependencies
  - Screenshots
  - src
  - target
  - HELP.md
  - mvnw
  - mvnw.cmd
  - pom.xml

Source Code

Source code of the app is hosted or maintained in GitHub. Below is the link to the GitHub repository

GitHub Repo link : https://github.com/bsangamesh/altir-hotel-room-booking-services

(Note : As mentioned, I will be hosting the code to GitHub after the Contest is Finished)