Technical Design Document

Assumptions:

UI sends roomId and userId as Path Variables in POST request when user tries to book room.

Database :

In Memory h2 database

Classes:

com.roombooking.RoomBookingApplication .java: Main class

com.roombooking.configuration.SwaggerConfiguration.java : Swagger configuration for API documentation

com.roombooking.controller.RoomBookingController.java : Rest Controller class

com.roombooking.models.Room.java : Room Entity class mapped to ROOM table

com.roombooking.models.User.java : User entity class mapped to USER table

com.roombooking.models.RoomRequest.java : Request class for incoming request (not used)

com.roombooking.models.RoomResponse.java : Response class to be sent to UI.

com.roombooking.models.RoomRepository.java : Repository interface for Room objects extends CRUD Repository

com.roombooking.models.UserRepository.class: Repository interface for User objects extends CRUD Repository.

com.roombooking.models.IBookingService.class : Service interface class

com.roombooking.models.IBookingServiceImpl.class : Service Implementation class.

Methods:

findllUsers : GET method for getting all the users

bookRoom : POST method for booking room accepts roomId and userId and sends back respose object showing status of room or error.

Resources:

Application.properties : H2 database properties

data.sql : scripts to create and insert values in db.

Swagger UI :

<http://localhost:8080/swagger-ui.html>

H2 Database UI:

<http://localhost:8080/h2-console/>

jdbc url : jdbc:h2:mem:testdb

username: nik

password: chi

Application :

Sample POST request:

<http://localhost:8080/v1/booking/100/book/1001>

{

"roomId": "1001",

"userId": "100",

"roomStatus": "BOOKED",

"error": null

}

Sample GET request:

http://localhost:8080/v1/booking/users

Sample GET response:

{

"userId": "100",

"userName": "Aliko",

"userPoints": 500

},

{

"userId": "104",

"userName": "Bill",

"userPoints": 600

},

{

"userId": "201",

"userName": "Folrunsho",

"userPoints": 800

}

]