

Code Challenge

Problem Statement

Business Requirement to develop a Room Booking Management System for a Hotel chain with following business entity definitions

1. Customer - is a person dealing with the Hotel chain to book rooms for a period
 - a. Each customer uniquely identified by the user name during registration
 - b. Persisted details are

Data field name	Data field type	Comment
id	long	Unique id per customer for bookkeeping
firstname	varchar (50)	Customer's First Name
lastname	varchar (50)	Customer's Last Name
dob	Date	Customer's Date Of Birth
email	varchar (50)	Customer's Email Id to uniquely identify and contact the customer
password	varchar (10)	Customer's password to login / enter into the booking system. <u>Should</u> be between 8 to 10 characters

Design and develop REST APIs that can perform CRUD operations for Customer details using Spring Boot framework that can be DOCKER'ized and deployed.

Expected solution

1. Create entity for storage of customer as above
2. Create one of the following Create / Read operations for a customer through REST API as follows:
 - a. POST request /api/customer to accept first name, last name, username and password as JSON in the POST body.
 - i. Should return HTTP response 201 for successful creation

- ii. Should return HTTP response 400 (bad request) when password does not fit the criteria or user name already exists
- b. GET request /api/customer/{id} to retrieve matching customer details
 - i. Should return HTTP response 200 with retrieved customer information for successful match
 - ii. Should return HTTP response 404 (resource not found) for non matching username

Evaluation Level for Developer

We are looking forward to find your solution has

1. Functionally complete and implementation for at least one REST API
2. Fulfils the “should” criteria verified through unit tests for at least one of the REST API

We will be delighted to find your solution has

1. Well formatted code with clear and proper annotations used code
2. Code execution flow clear and well commented
3. With unit tests covering all the business requirements for the implemented REST API

Evaluation Level for Senior Developer

We are looking forward to find your solution has

1. Functionally complete and implementation for at least one REST API
2. Fulfils all the “should” criteria verified through unit tests for at least one of the REST API
3. Well formatted and commented code with clear and proper annotated code

We will be delighted to find your solution has

1. Executable test cases covering all the business requirements for the implemented REST API
2. Good code coverage for 50% of the written code