## **Project Implementation Details**

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**Project:** Hotel Reservation System

## **Implementation details:**

Dynamo DB used for database layer

For web service — Maven project created HotelReservationSystem\_webservice

For web client — Maven project created HotelReservationSystem\_webapp

To run these projects locally AWS account details are required. For security details these credentials are removed from code. Hence instead both web client and web service are hosted on AWS. These can be tested according to the steps mentioned below.

## **Steps to run the project:**

The web service and web client are both hosted on AWS ElasticBeanStalk service. Hence anyone can access the application using the following links. Web client can be tested using browser and web service can be tested using Postman application.

**Note:** For checking availability and making bookings use dates from current day (2022-05-25) to 2022-06-27. Maintaining only 1-month dates in order to maintain within AWS free tier and avoid extra charges. If further dates added application displays error message.

### For web client:

Access using Browser:

http://hotelreservationsystemwebapplication-env.eba-s5mbyyt6.us-west-2.elasticbeanstalk.com/home

### For web service:

#### Can be accessed and tested

Base URL:

http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-2.elasticbeanstalk.com

To verify web service following URIs can be appended with above base URL and the services can be tested using POSTMAN application:

# 1. To verify functions of Room Service:

- a. To fetch all room types listed by the hotel:
  - Operation GET
  - URI /Rooms

e.g.:

http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-2.elasticbeanstalk.com/Rooms

- b. To fetch details about specific room-type:
  - Operation GET
  - URI /Room?roomType={roomtype}

{roomType} can take these values -SINGLE, DELUXE, SUITE

e.g.:

 $\frac{http://hotel reservation system webservice-env.eba-yqwetpz 5.us-west-}{2.elastic bean stalk.com/Room?roomType=SINGLE}$ 

- c. To add new room type to the database:
  - Operation POST
  - URI /Room

```
e.g.: <a href="http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-2.elasticbeanstalk.com/Room">http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-2.elasticbeanstalk.com/Room</a>
JSON body input

{
    "roomType": "Dorm",
    "facilities": "Single-Bed",
    "capacity": 1,
    "price": 50.0,
    "totalRooms": 15
}
```

# 2. To verify functions of Room Booking Service:

- a. To add a new booking to database:
  - Operation POST
  - URI /Bookings

e.g.:

http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-2.elasticbeanstalk.com/Bookings JSON body input

```
"bookingID": "BKD476899",
  "firstName": "ABCD",
  "lastName": "N",
  "address": "Apt 6",
  "city": "Seattle",
  "state": "WA",
  "country": "USA",
  "pincode": "98011",
  "phone": "67889088",
  "email": "poojanadagouda95@gmail.com",
  "rooms booked": 1,
  "roomType": "DELUXE",
  "adults_count": 1,
  "check_in": "2022-06-08",
  "check_out": "2022-06-10",
  "total_price": 200.0
}
```

b. To fetch booking details of a booking:

- Operation GET
- URI /Bookings?bookingID={bookingid}

{bookingID} – enter a booking ID from the email sent if you have done any bookings using POST service else you can use example bookingID = BKD317897

### e.g.:

 $\frac{http://hotel reservation system webservice-env.eba-yqwetpz 5.us-west-}{2.elastic bean stalk.com/Bookings?booking ID=BKD 317897}$ 

# 3. To verify functions of Room Availability Service:

- a. To fetch availability details for specific dates
  - Operation GET
  - URI /Availability?checkin={date}&checkout={date}

### e.g.:

http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-2.elasticbeanstalk.com/Availability?check\_in=2022-06-08&check\_out=2022-06-10

- b. To add new availability to database
  - Operation POST
  - URI /Availability

e.g.: <a href="http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-">http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-</a>

2.elasticbeanstalk.com/Availability

```
JSON body input {
    "date":"2022-06-20"
}
```

- c. To update an existing availability
  - Operation PUT
  - URI /Availability?checkin?{date}&checkout={date}

### e.g.:

http://hotelreservationsystemwebservice-env.eba-yqwetpz5.us-west-2.elasticbeanstalk.com/Availability JSON body input

```
"check_in": "2022-06-08",
"check_out": "2022-06-10",
"roomType": "SINGLE",
"roomCount": 2
}
```