Event Reservation REST API: Take Home Challenge

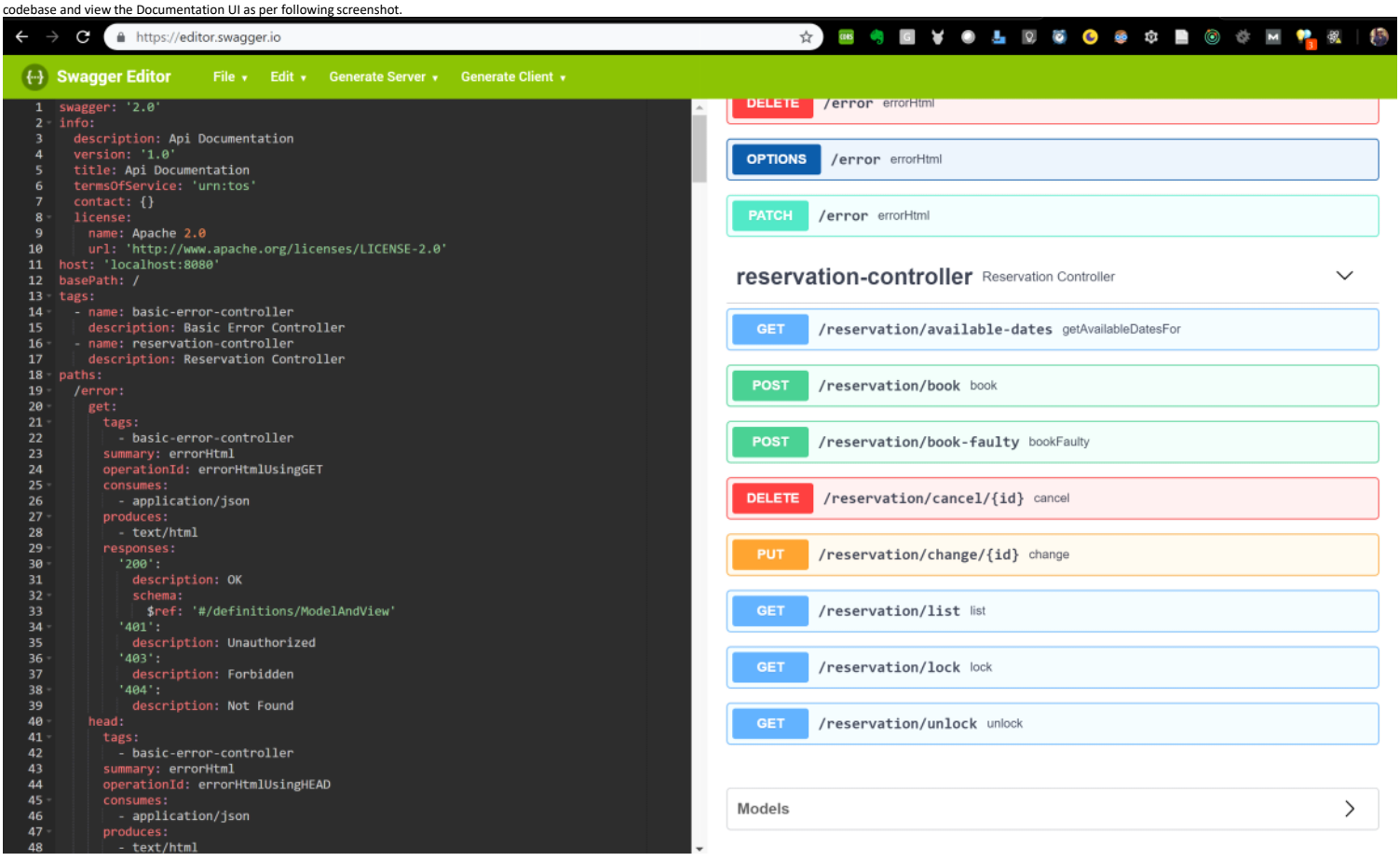
Friday, October 19, 2018 5:24 PM

Introduction

1. Java Version: 1.8
2. Framework: Spring Boot
3. Database: H2 (In-memory)
4. URLs
   a. **REST API hosted** at http://localhost:8080/
   b. **H2 DB Console**: http://localhost:8080/h2-console
   c. **Swagger JSON**: http://localhost:8080/v2/api-docs
5. Unit Tests for the Repositories, Service & Controller are written. See Testing section for additional details.
6. Integration Tests to verify appropriate handling of Race Condition(s) are written. See Testing section for additional details.

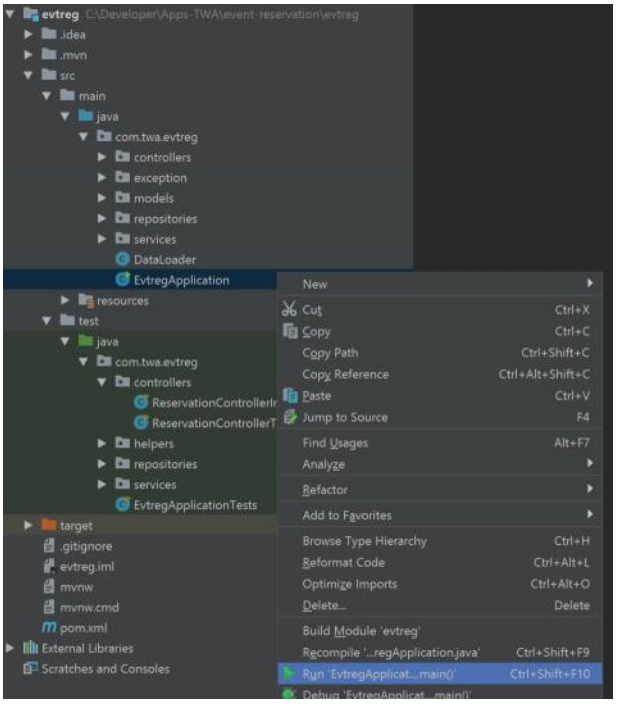
API Documentation

1. Open the online Swagger Editor by navigating to the following URL https://editor.swagger.io/
2. Import the REST API Swagger v2 JSON (event-reservation-api-swagger-v2.json), included in the codebase and view the Documentation UI as per following screenshot.



Launch Application

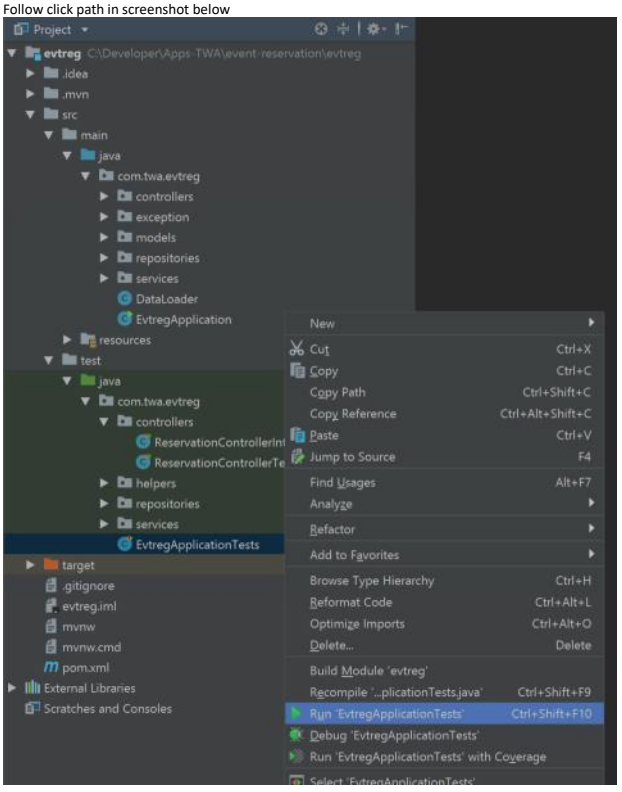
1. Open the project in IntelliJ
2. Follow the click path shown in the screenshot below to launch the application
3. This will launch the application on http://localhost:8080/
4. In addition, you can access the H2 console at http://localhost:8080/h2-console/



Running Testing

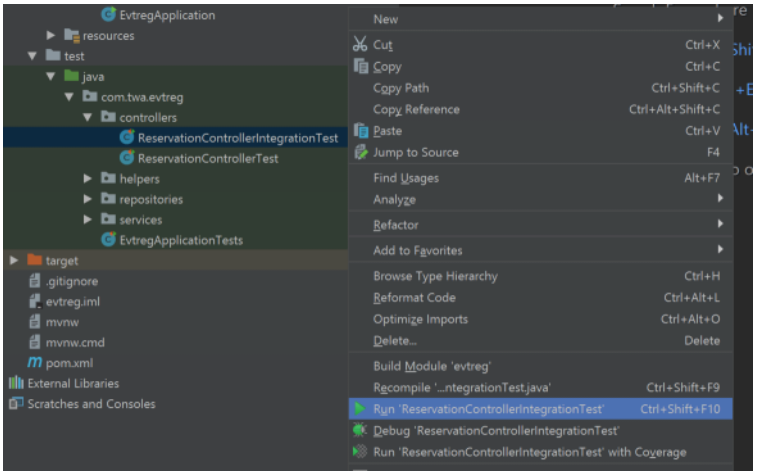
How to run Unit Tests

1. Follow click path in screenshot below



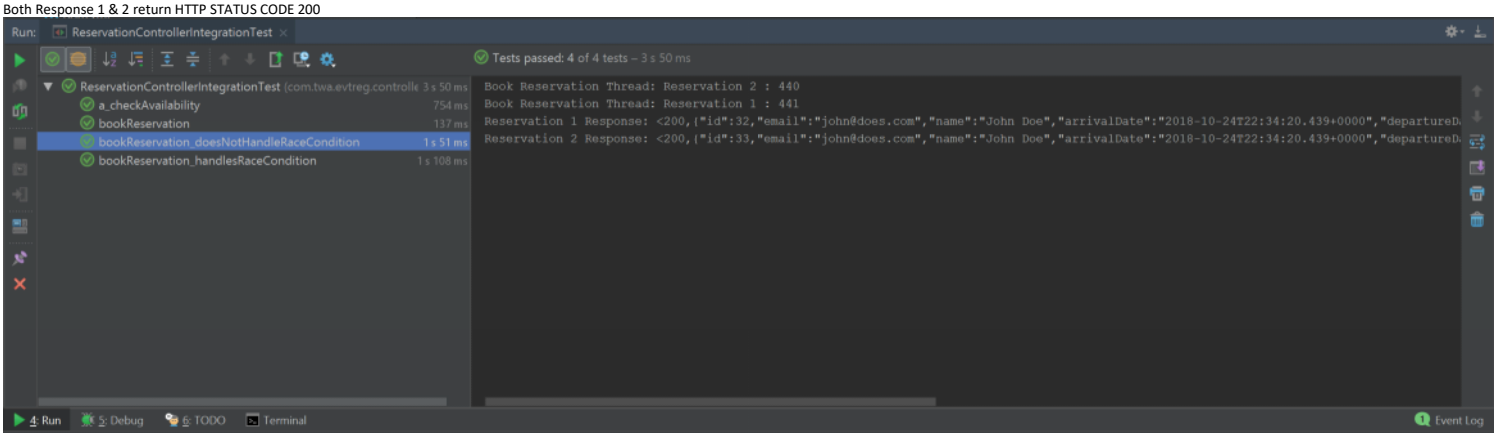
How To Test Race Condition

1. IDE: IntelliJ
2. The Integration Tests are defined in **com.twa.evtreg.ReservationControllerIntegrationTest**
3. Right Click on the above mentioned Java Class and choose "Run" from the Context Menu
4. This should trigger the Tests as shown in the below
5. Then click on the appropriate Test to see the corresponding **Response** logged in the **Console**.



Race Condition Not Handled

1. Both Response 1 & 2 return HTTP STATUS CODE 200



Race Condition Handled

1. Response 2 returns HTTP STATUS CODE 200
2. Response 1 returns HTTP STATUS CODE 404