# **SPECIFICATION DOCUMENT**

Title: RAILWAY RESERVATION APP

## Introduction

## **Purpose:**

The purpose of Railway Reservation app is to create Reservation, Cancel Reservation, View Train Information, Payment of Reservation, View and Update Passenger Details by Passenger.

## **Software Requirement:**

- JDK 11
- Spring Tool Suite (STS) IDE
- Postman
- MongoDB
- JUNIT & Mockito
- Eureka
- Spring Suite Tool

# **Hardware Requirement:**

- RAM-4GB
- HDD-10GB or Above
- CPU-2GHz Processor

### **User Story:**

### Registration and Login:

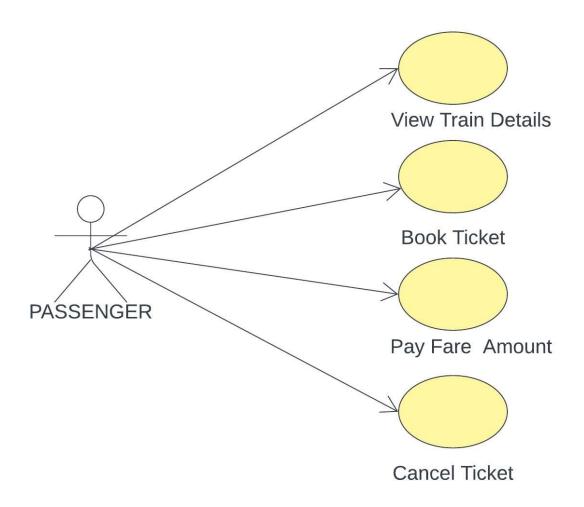
- The user of the system should first register for any interaction with the system.
- Once registered, he/she will be provided with username and password for the user to login.
- After logging the user should select the kind of activity he would like to perform like booking a ticket, canceling a ticket.

#### Reservation:

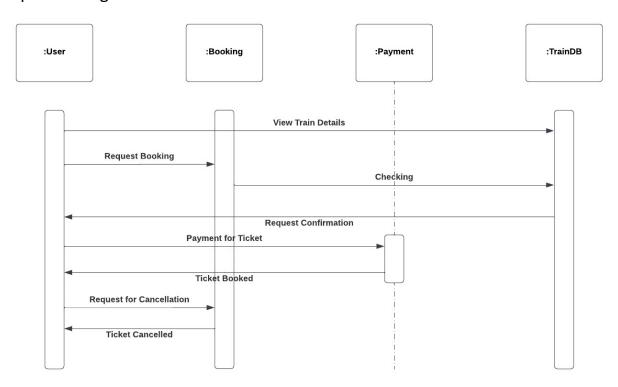
- User first checks train details if train is available or not.
- If the train is available the user can reserve ticket by filling all the Booking Details such as Date of Journey, Train Number, Seat number, Passenger details such as (name, age, gender, phone number).
- After Successful booking he/she can use Payment Service to confirm the reservation.

### Cancellation:

- The passenger can also perform cancellation of the ticket which he/she had reserved by entering PRN number.
- The PRN no. will be checked with the prn no. in the data base. If it exists then it will be cancelled otherwise exception will be thrown.

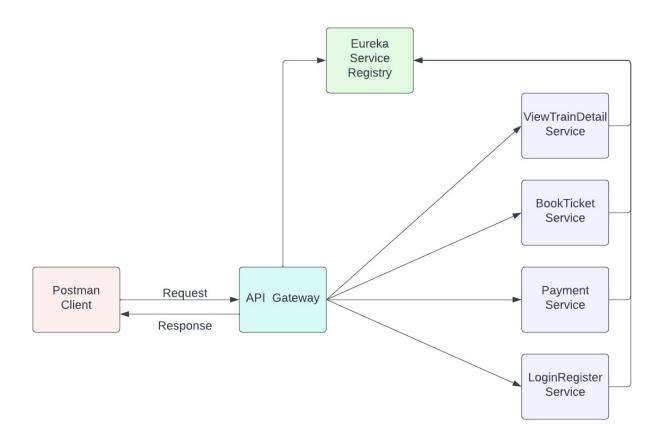


### Sequence Diagram:



### Modules in App:

- Registration& Login Module: If the User is using the app first time he/she should register. Used for User Login before accessing the services of app.
- View Train Detail Module: Used to Search Train Details.
- Booking Module: Used to Book the Train for Passenger.
- Payment Module: Used to pay fare for the ticket.



# **Further Enhancement:**

- We can add Food Service in future as railway provides catering services.
- We can also add Ticket Print Service.
- GUI needs to be created so that user can easily access all these services using webpages.
- If anyone wants to extend this project then he/she can make an additional database of Train Fare. And database for updated availability of seats which is available after the cancellation of ticket on that specific train.

## **Conclusion:**

As all the Microservices in this project are independently manageable services. It can enable more and more services as the need arises. It is possible to change or upgrade each service individually rather than upgrading in the entire application.