

Java Mini Assignment

“Railway Booking System”

Duration- 4-5 hours

**Problem statement**

Create a Railway Booking System and show the dynamic pricing to the user with all the details.

**Use Case:**

1-Each Train will have 10 coaches.

2-Each Coach will have 60 seats.

3-20 Upper Berth, 20 Lower Berth, 20 Middle Berth

4-Try to have 2 train or routes

The system needs to be designed in following manner:  

1- The Coaches should be filled in sequence 1,3,5,7,9,10 first and then 2,4,6,8.

2- The user will be able to set the preference for berth selection.

3- The base price for every seat is 2000 Rs

4- The price will increase dynamically based on the below use case.

4.1- if coach is 20 % filled increase price by 10% of the previous base price.

4.2- if coach is 30 % filled increase price by 12% of the previous base price.

4.3- if coach is 35 % filled increase price by 15% of the previous base price.

4.4- if coach is 40 % filled increase price by 18% of the previous base price.

5- Based on the User Meal Preference add the Veg and Non-Veg Options.

6- The Admin User will be able to see the status of the coach.

7- Once User Enter all the details after 5 seconds timer display the seat details, user details, time details and price.

**Technologies to be considered: Java 8 or Any   
Uses the best coding practices and Design patterns.**