

Railway Reservation System

Console Application

Introduction

The railway reservation system facilitates the passengers to enquiry about the trains available on the basis of source and destination, booking and cancellation of tickets, enquiry about the status of the booked ticket, etc. It is the computerized system of reserving the seats of train seats in advance. It is mainly used for a long route. Online reservation has made the process for the reservation of seats very much easier than ever before.

Features

User Features

- ☆ Book Ticket
- ☆ Cancel Ticket
- ☆ Download Ticket
- ☆ View Bookings

Admin Features

- ☆ Book Ticket
- ☆ Cancel Ticket
- ☆ Print Ticket
- ☆ View Passengers
- ☆ Prepare Chart
- ☆ Add Trains

Book Ticket

Here we can view available trains by giving start, destination and date of travel of user. If any Trains found, then based on user berth preference a ticket will be generated after giving all required input details like name and age. If Trains not found user can search again on different dates or different start and destinations.

How ticket is generated?

- Checks for available berth in already booked tickets.
- If not found already booked tickets then new berth will be allocated based on berth preference.
- Ticket entity will be created with allocated berth.
- Added to passenger list and if user added to user bookings list.

Cancel Ticket

Here we can cancel ticket allocated by given ticket and train id.

How ticket will be cancelled?

- Checks weather ticket id and train id is valid.
- If yes then it checks ticket status (CNF or RAC or WL).
- If it is CNF then it will be added to cancelled ticket list.
- If it is RAC then ticket reference will be removed from RAC waiting list.
- Checks of any waiting list queue is there if yes then 1st queued waiting list will be added to RAC waiting list and then all waiting count will be decreased from cancelled ticket.
- If it is WL then ticket reference will be removed from waiting list and then all waiting count will be decreased from cancelled ticket.

Prepare Chart

- ☆ Admin can view chart prepared. Like gets whole passenger list with seats allocated for them.

How chart is prepared?

- Frees up all cancelled tickets.
- Allocates available tickets to RAC first.
- Then allocates available tickets to WL tickets.
- Then all rac waiting list is filled from WL queue.
- Finally for all RAC tickets side lower seats are allocated.

Add Train

- ☆ Admin can add new trains along with all stops, no.of compartments and seats per compartment.

How new train is added?

- Takes all start, destination and date of train.
- Takes all stops and seats and compartment details
- New Train entity will be created with all given details.
- Reference of this train will be added to trains list.

The background of the slide is a deep blue space scene. On the right side, a bright, glowing arc represents the horizon of the Earth, with a thin layer of white clouds visible just above it. The rest of the background is filled with numerous small, white stars of varying brightness.

Thank You
