

## **Railway Reservation system problem description:**

Railway Reservation system is a computerized system used to store and retrieve information and conduct transactions. It provide a secure and easy way to book train tickets. The purpose of Railway Reservation System is to provide the train timing details, reservation, billing and cancellation. Using these systems Ticket Counter person can perform operations like finding out the train timings and to know information about PNR status, seats availability and costs of each ticket, etc. The admin can manage trains, add new trains and delete the entry of train from the database.

## **Functional Requirements**

### ***FR1: Login***

#### ***FR1.1: Customer Login***

The Customer clicks the log-in button on the Home Page. The system displays the log-in page. The customer enters his login Id with password. The customer clicks on the confirm button. The system checks that all of the required information was entered. If the entered information is wrong then system asks customer to reenter the details. The system validates the entered information against the tables stored in the database.

#### ***FR1.2: Admin Login***

The admin clicks the log-in button on the Home Page. The system displays the log-in page. The admin enters his login Id with password. The admin clicks on the confirm button. The system checks that all of the required information was entered. If the entered information is wrong then system asks Admin to reenter the details. The system validates the entered information against the tables stored in the database.

### ***FR2 : Train identification and order tickets***

#### ***FR2.1 Search Train***

The customer already has navigated to the main options screen. The customer enters the details of source station, destination station, date to get the best possible trains. The customer also enters the type of train he wants to book. Customer enters all the information. The customer can use help facility to know how to fill the information. HelpFacility usecase is carried out. He clicks the "Search" button. If all the required information is not entered by the customer then the system highlights the blank fields to be entered. After searching, the System displays a list of all the trains that matches the customer's input, each train in the list has an associated price.

#### ***FR2.2: Purchase Tickets***

Customer selects the "Purchase Ticket" link from the list of options. The system displays a screen with an input field for a reservation number. The customer enters a reservation number. He clicks the "Submit" button. System displays the details of the reservation and the customer selects the "Purchase Ticket" option. System displays a screen with input fields for: a credit card number, cardholder name, credit card expiration date. Customer enters the details for the credit card number, the cardholder name , the credit card expiration date and he clicks the "Submit" button. If customer is stuck in the process then he can use help facility to know how to fill the information. HelpFacility usecase is carried out. System displays the

success message.

#### *FR2.3: Reservation cancellation*

A reservation has already been made and customer must have successfully navigated to the main options screen. Customer Selects the "Cancel Reservation" option. System displays a screen with an input field for a reservation number and Customer enters a reservation number and he clicks the "Submit" button. The customer can use help facility. HelpFacility use case is carried out. System displays the details of the reservation. Customer Selects the "Process Cancellation" option and then system displays the main options screen again.

#### *FR3: Help facility*

The website provides instructions to the customers on how to book tickets, search trains, cancel reservation. The customer clicks on help facility. The system displays a list of facilities. The customer clicks on the type of help required. The system shows the instructions.

#### *FR4: Manage Train*

The admin manages the train. The system asks Admin whether he wants to Add Train or Remove train. The Admin selects to add train. AddTrain usecase is carried out. If Admin selects to remove train, then RemoveTrain usecase is carried out.

##### *FR4.1: Add Train*

The Admin already has navigated to the main options screen. The system validates the log in information. The admin selects on adding the trains. The system asks admin to fill all the required information for adding a train in the database. The admin fills the information. The system displays a success message on the screen. If all the required information is not filled by Admin then the system shows an error message.

##### *FR4.2: Remove Train*

The Admin already has navigated to the main options screen. The system validates the log in information. The admin selects on remove trains. The system asks admin to fill all the required information for removing a train in the database. The admin fills all the required information. The system displays a success message on the screen. If all the required information is not filled by Admin then the system shows an error message.

