**Online Bus Reservation system problem description:**

Online Bus Reservation system is a computerized system used to store and retrieve information and conduct transactions. It provides a secure and easy way to book buses. The purpose of it is to provide the bus timing details, reservation, billing and cancellation. Using these systems Ticket Counter person can perform operations like finding out the bus timings and to know information about PNR status, seats availability and costs of each ticket, etc. The admin can manage buses, add new buses and delete the entry of buses 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 : *Bus identification and order tickets***

*FR2.1: Search Bus*

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 buses. The customer also enters the type of bus he wants to book. Customer enters all the information- name,age,number of passengers,source station, destination station. 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 buses that matches the customer’s input, each bus 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 buses, cancel reservation. The customer clicks on help facility. The system displays a list of facilities. The customer clicks on the type of heal required. The system shows the instructions.

***FR4: Manage Buses***

The admin manages the bus. The system asks Admin whether he wants to Add Bus or Remove Bus. The Admin selects to add bus, AddBus usecase is carried out. If Admin selects to remove bus, then RemoveBus usecase is carried out.

*FR4.1: Add Bus*

The Admin already has navigated to the main options screen. The system validates the log in information. The admin selects on adding the bus. The system asks admin to fill all the required information for adding a bus 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 Bus*

The Admin already has navigated to the main options screen. The system validates the log in information. The admin selects on remove bus. The system asks admin to fill all the required information for removing a bus 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.

