**BUS TICKET BOOKING APPLICATION**

BusEasy is a software application that allows users to book bus tickets online. This application typically allow users to search for bus routes, view bus schedules, and book tickets. Some applications also allow users to track the status of their bookings and to cancel or reschedule tickets.

USE CASES:

* **LOGIN**
* **Use Case:** Login
* **Brief Description:** The login module presents a user interface where Users/Admin can enter to the Application using their login credentials.
* **Actors:** User, Admin
* **Pre-Conditions:** 
  + - **Basic Flows**
* User is Logged into the system.
* User logs into the system using credentials.
* Admin is Logged into the system.
* Admin logs into the system using credentials.
* **Alternate Flows:**
* **Invalid User**

**-**The username/password entered is wrong.

* **Forgot Password**

- User clicks on the "Forgot Password" link.

- User is redirected to a password reset page.

- System verifies the email address and sends a reset link to the user's email.

- User clicks the password reset link and they can set a new password.

* **Post Conditions:**
* After successful Login, the User is redirected to the user’s home page.
* The admin is redirected to the Admin Dashboard.
* **REGISTRATION**
* **Use Case:** Registration
* **Brief Description:** Enables users to create new accounts and become registered users of the system.
* **Actors:** User
* **Pre-Conditions:** 
  + - **Basic Flows**
* User is Registered to the Application
* User enters the username, password, confirm password phone number, email id, age.
* **Alternate Flows:**
* **Invalid Email Id:**

**-**The entered email id is wrong.

* **Password Mismatch:**

**-** Password and Confirm password don’t match.

* **Invalid Phone**

- The entered phone number is not valid, the OPT was not received.

* **Post Conditions:**
* After successful Registration the User is redirected to the login page.
* The user account is created.
* Verification of account by sending OTP.
* **SEARCH BUS**
* **Use Case:** Search Bus
* **Brief Description:** The user wants to find bus schedules to plan their journey using the Bus Schedule System.
* **Actors:** User
* **Pre-Conditions:**
* The user has access to the Bus Schedule System.
* The bus schedule data is available and up to date in the system.
* **Basic Flows:**

-The user enters the origin and destination locations for their journey.

-The user selects the desired travel date and time.

-Before proceeding with the booking, review the summary of your selected bus, seats, and passenger information.

* **Alternate Flows:**
* **Invalid search criteria:**

**-** If the user enters invalid search criteria, such as an incorrect source or destination, the system should display an error message and prompt the user to enter the correct information.

* **No buses found:**

**-** If no buses are found that match the user's search criteria, the system should display a message indicating that no buses were found.

* **Bus is full:**

- If the bus that the user wants to book is full, the system should display a message indicating that the bus is full.

* **Post Conditions:**
* The user must be presented with a list of buses that match their search criteria.
* The user must be able to view the details of each bus, including the departure time, arrival time, price, and number of available seats.
* The user must be able to book a bus ticket.
* **BOOK BUS**
* **Use Case:** Book Bus
* **Brief Description:** Enables users to book Bus tickets.
* **Actors:** User
* **Pre-Conditions:**

-The customer must have an account with the bus ticket booking system.

- The customer must have selected a bus and a seat.

* + - **Basic Flows**

**-**The customer enters their login credentials.

-The customer selects a bus and a seat.

-The customer enters their personal information, such as their name, email address, and contact information.

-The customer enters their payment information.

-The customer clicks on the "Book Bus" button.

* **Alternate Flows:**
* **No seats available:**

**-**If there are no seats available on the bus that the customer wants to book, the system will display a message indicating that no seats are available.

* **Post Conditions:**
* The customer's bus ticket is booked.
* The customer receives a confirmation of their booking.
* **MAKE PAYMENT**
* **Use Case:** Make Payment
* **Brief Description:** To make a payment for a bus ticket.
* **Actors:** User
* **Pre-Conditions:**

- The customer must have a bus ticket booked.

- The customer must have a valid payment method.

* + - **Basic Flows**

**-** The customer selects a payment method.

- The customer enters their payment information.

- The customer clicks on the "Pay" button.

* **Alternate Flows:**
* **Invalid payment method:**

**-** If the customer enters an invalid payment method, the system will display an error message and prompt the customer to enter a different payment method.

* **Payment declined:**

**-** If the customer's payment is declined, the system will display an error message.

* **Post Conditions:**
* The customer's payment is processed.
* The customer's bus ticket is confirmed.
* **CANCEL TICKET**
* **Use Case:** Cancel Ticket
* **Brief Description:** User cancels the Bus Ticket.
* **Actors:** User
* **Pre-Conditions:**

- The customer must have a bus ticket booked.

- The customer must cancel the ticket before the bus departs.

* + - **Basic Flows**

- The customer selects the ticket that they want to cancel.

-The customer clicks on the "Cancel Ticket" button.

-The system displays a confirmation message.

* **Alternate Flows:**
* **Ticket has already departed:**

**-** If the customer tries to cancel a ticket that has already departed, the system will display a message indicating that the ticket cannot be canceled.

* **Post Conditions:**
* The customer's bus ticket is canceled.
* The customer may be eligible for a refund.
* **ADD BUS**
* **Use Case:** Add Bus
* **Brief Description:** To add a bus to the bus ticket booking system.
* **Actors:** Admin
* **Pre-Conditions:**

- The admin must be logged into the bus ticket booking system.

- The admin must have the appropriate permissions to add a bus.

* + - **Basic Flows**

- The admin enters the bus information, such as the bus number, the bus route, the departure time, and the arrival time.

- The admin clicks on the "Add Bus" button."

- The system displays a confirmation message.

* **Alternate Flows:**
* **Invalid bus information:**

**-** If the admin enters invalid bus information, the system will display an error message and prompt the admin to enter the correct information.

* **Post Conditions:**
* The bus is added to the bus ticket booking system.
* The bus is available for booking by customers.
* **VIEW BUS**
* **Use Case:** View Bus
* **Brief Description:** To view the details of a bus.
* **Actors:** Admin
* **Pre-Conditions:**

- The admin must be logged into the bus ticket booking system.

* + - **Basic Flows**

- The admin enters the bus number or the bus route.

- The system displays the details of the bus, such as the bus number, the bus route, the departure time, the arrival time, the number of seats available, and the price of a ticket.

* **Alternate Flows:**
* **Bus does not exist:**

**-** If the bus does not exist, the system will display a message indicating that the bus does not exist.

* **Post Conditions:**
* The admin has the information they need about the bus.
* **UPDATE BUS**
* **Use Case:** Update Bus
* **Brief Description:** To update the details of a bus.
* **Actors:** Admin
* **Pre-Conditions:**

- The admin must be logged into the bus ticket booking system.

- The admin must have the appropriate permissions to update a bus.

* + - **Basic Flows**

- The admin enters the bus number or the bus route.

- The system displays the details of the bus.

- The admin updates the details of the bus, such as the bus number, the bus route, the departure time, the arrival time, the number of seats available, and the price of a ticket.

- The admin clicks on the "Update Bus" button.

* **Alternate Flows:**
* **Bus does not exist:**

**-** If the bus does not exist, the system will display a message indicating that the bus does not exist.

* **Post Conditions:**
* The details of the bus are updated in the bus ticket booking system.
* **DELETE BUS**
* **Use Case:** Delete Bus
* **Brief Description:** To delete a bus from the bus ticket booking system.
* **Actors:** Admin
* **Pre-Conditions:**

- The admin must be logged into the bus ticket booking system.

- The admin must have the appropriate permissions to delete a bus.

* + - **Basic Flows**

- The admin enters the bus number or the bus route.

- The system displays the details of the bus.

- The admin clicks on the "Delete Bus" button.

* **Alternate Flows:**
* **Bus does not exist:**

**-** If the bus does not exist, the system will display a message indicating that the bus does not exist.

* **Post Conditions:**
* The bus is deleted from the bus ticket booking system.
* Any tickets that have been booked for the bus are also deleted.

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