BUS RESERVATION SYSTEM
Requirements

Login

Requirement 1:

The user is required to login to the system by passing username and password through a login menu.

Requirement 2:

On login if the user passed valid username and password Enter the system and show the user the main menu that provide following functionalities:

- Show all available buses and trips.
- Book a reservation.
- Cancel a reservation.
- Show all reservations.
- Logout.
- Exit.

Requirement 3:

On login If the user passed either invalid username or password then show the user a message that login failed and stay in the login menu.

Available Buses and Trips Listing

Requirement 4:

If the user selected **Show all available buses and trips** then a list of all available buses and trips will be popped up to the user showing the bus id, bus destination, bus capacity and number of available seats in each bus.

Reservation Booking

Requirement 5:

If the user selected **Book a reservation** then the user will be asked to enter the following:

- Bus id to be reserved
- Number of seats to be reserved

Requirement 6:

If the user entered invalid bus id then pop up a message to the user that states "Invalid Bus Id !"

Requirement 7:

If the user entered number of seats that is greater than number of available seats in the bus then pop up a message to the user that states "There are no available seats in the bus !"

Requirement 8:

If the bus to be reserved has no available seats then pop up a message to the user that states "Bus is fully booked !"

Requirement 9:

If the user entered both valid bus id and number of seats that are either equal or less than available seats in the bus then pop up a message to the user that states "Reservation is done !"

Reservation Cancellation

Requirement 10:

If the user selected **Cancel a reservation** then the user will be asked to enter the id of reservation to be cancelled

Requirement 11:

If reservation list is empty then pop up a message to the user that states "Sorry no reservations to be cancelled !"

Requirement 12:

If reservation list is not empty and the user passed a dummy reservation id that is invalid then pop up a message to the user that states "Invalid Reservation Id !"

Requirement 13:

If reservation list is not empty and the user passed valid id reservation then pop a message to the user that states "Reservation **x** is cancelled !" (x here refers to the cancelled reservation id)

Requirement 14:

If reservation list is not empty having only one reservation left in the list and the user passed valid id reservation then pop a message to the user that states "Reservation **x** is cancelled !" (x here refers to the cancelled reservation id) plus another pop up that states "There are no reservations left"

Reservations Listing

Requirement 15:

If the user selected **Show all reservations** then pop up to the user a list of all reservations booked showing the reservation id, bus id and number of reserved seats of each reservation

Requirement 16:

If the user selected **Show all reservations** and reservation list is empty then pop up to the user a message that states "Sorry no reservations are booked"

Logout

Requirement 17:

If the user selected **Logout** then redirect the user from the main menu to the login menu.

Program Exit

Requirement 18:

If the user selected **Exit** then end the program immediately and pop up to the user the following message "END THE PROGRAM".