# **MYES Bus Ticketing System**

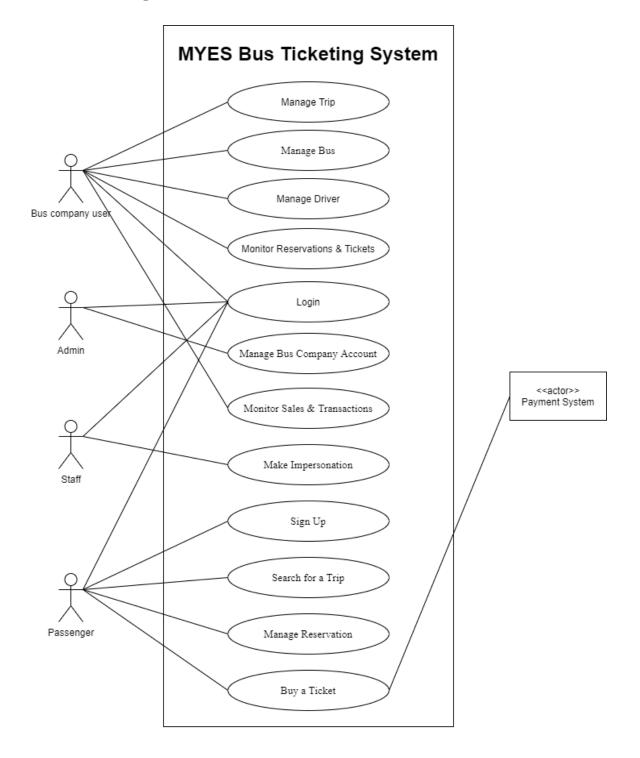


# **Use Case Specification**

# **Revision History**

Date	Author(s)	Description	Version
10/04/2021	Yiğit Erkal Eren Erol	Initial Version	v1.0
17/04/2021	Yiğit Erkal Eren Erol	Use Case diagram and specifications revised based on the feedback given by Review Team	v1.1

# **Use Case Diagram**



# **Brief Descriptions**

Use Case Number	Use Case Name	Actor	Brief Description
UC1	Login	Passenger, Bus company user, Admin, Staff	Passenger, Admin, Staff or Bus company users want to sign in. System requests sign in information. Users fill requested information. System approves and displays successful sign in message and lets the user in.
UC2	Sign Up	Passenger	The Passenger wants to sign up as a user. System shows the sign up page. User fills information provided. System stores the information and displays a success message.
UC3	Manage Trip	Bus company user, Staff	Actor logins to the system and wants to manage a trip. System shows the trip list of the company user. Company user selects a trip from the list and performs a CRUD operation.
UC4	Manage Bus	Bus company user, Staff	Actor logins to the system and wants to manage buses in the system. System shows the bus list of the company user. Company user selects a bus from the list and performs a CRUD operation.
UC5	Manage Driver	Bus company user, Staff	Actor logins to the system and wants to manage a driver. System shows the driver list of the company user. Company user selects a driver from the

			list and performs a CRUD operation.
UC6	Make Impersonation	Staff	Staff logins to the system and wants to manage the driver, manage a bus or manage a trip on behalf of the bus company user.  Staff logins to the system with required credentials. System displays a list of bus company users. Staff chooses one of them and performs required action. System displays a success message and redirects staff to the related page.
UC7	Manage Bus Company Account	Admin	Admin logins to the system and wants to manage a bus company account. System shows bus company list. Admin performs a CRUD operation.
UC8	Search for a Trip	Passenger	Passenger logins to the system and wants to search for a trip. System display search screen. Passenger enters search criteria. System displays a list of the search results.
UC9	Manage reservations	Passenger	Passenger logins to the system and wants to manage reservations. System displays the trip list. Passenger selects a trip. System displays the reservation list. Passenger performs a CRUD operation. System displays a successful message that indicates the operation is done.
UC10	Monitor Sales & Transactions	Bus company user, Staff	Actor logins to the system and wants to monitor sales & transactions. System shows the list of the sales and transactions. Actor selects one

			of the sales or transaction items. System displays the information in detail.
UC11	Buy a ticket	Passenger	Actor logins to the system and lists the reservation to select one of the reservations to buy a ticket. System displays the payment screen and the Actor enters the payment details and the system performs the payment operation through a 3rd party payment vendor and then displays the success message and converts the reservation into a ticket. System displays a success message.
UC12	Monitor Reservations & Tickets	Bus Company User, Staff	Actor logins to the system and wants to monitor reservations & tickets. System shows the list of the trips. Actor selects one of the trips. System shows the list of the selected trips' reservations and tickets.

# **Fully-Dressed Descriptions**

UC1: Login

**Scope:** MYES Bus Ticketing System

**Level:** User Goal

**Primary Actor:** Bus company user, Passenger, Staff, Admin

**Pre-conditions:** User has to be registered to the system previously and knows their

credentials.

**Post-conditions:** User is logged in successfully to the system

## **Main Success Scenario:**

- 1. User wants to login to the system
- 2. System presents a login form
- 3. User enters login credentials
- 4. System checks the user's credentials.

### **Extensions:**

4a System validates the credentials.

1. System shows successfully login message.

**4b** System cannot validate the credentials.

2. System shows an error message.

## Frequency of Occurrence: could be nearly continuous

UC3: Manage Trip

**Scope:** MYES Bus Ticketing System

Level: User Goal

**Primary Actor:** Bus company user, Staff

**<u>Pre-conditions</u>**: User is logged in successfully to the system and authenticated with the

privileges to manage trips.

**Post-conditions:** One or more trips are created/retrieved/updated/deleted.

### **Main Success Scenario:**

1. User wants to manage trips

- 2. System presents a list of company trips
- 3. User may select a trip from the list
- **4**. System presents the details of the selected trip (See Glossary)

Step 3-4 repeated until user indicates it is done

#### **Extensions**

**3a** User wants to add a new trip

- 1. User provides the details of the new trip
- 2. System performs create operation and show successfully created message 2a. There is another trip with the same date, time, departure city, destination city details.
  - 1. System displays a warning message

**4a** User wants to delete a trip

- 1. System asks for confirmation for delete operation
- 2. User confirms
- 3. System checks the trip and found no related reserved or purchased ticket for the selected trip
  - 3a. System found related reserved or purchased ticket to the trip
    - 1. System does not perform a delete operation and shows an error age.
- 4. System performs delete operation and shows success message for deletion **4b** User wants to update a trip
  - 1. User updates trip information
- 2. System validates the details and performs the update operation and shows success message for the update
  - 2a. System does not validate the details
    - 1. System displays the error message for the details

#### Frequency of Occurrence: could be nearly continuous

**UC4:** Manage Available Bus

**Scope:** MYES Bus Ticketing System

Level: User Goal

**Primary Actor:** Bus company user, Staff

**Pre-conditions:** User is logged in successfully to the system and authenticated with the

privileges to manage busses.

**Post-conditions:** One or more buses are created/retrieved/updated/deleted

### **Main Success Scenario:**

- 1. User wants to manage bus
- 2. System presents a list of company buses
- **3**. User may select a bus from the list
- **4**. The system presents the details of the selected bus (See Glossary)

Step 3-4 repeated until user decides it is done

#### **Extensions**

**3a** User wants to add a new bus

- 1. User provides the details of the new bus
- 2. System performs create operation and show successfully created message
  - 2a. There is a bus with the same name
    - 1. System displays a warning message

**4a** User wants to delete a bus

- 1. System asks for confirmation for delete operation
- 2. User confirms
- 3. System checks the bus and found no related trip for the selected bus
  - 3a. System found related trip for the bus
  - 1. System does not perform a delete operation and shows an error message.
- 4. System performs delete operation and shows success message for deletion
- 4b User wants to update a bus
  - 1. User updates bus information.
  - 2. System validates the details and performs the update operation and shows successfully updated message
    - 2a. System does not validate the details
      - 1. System displays the error message for the details

### **Frequency of Occurrence:** Rarely

**UC5:** Manage Driver

**Scope:** MYES Bus Ticketing System

Level: User Goal

**Primary Actor:** Bus company user, Staff

**Pre-conditions:** User is logged in successfully to the system and authenticated with the privileges to manage drivers.

**<u>Post-conditions:</u>** One or more drivers are created/retrieved/updated/deleted.

#### **Main Success Scenario:**

- 1. User wants to manage drivers
- 2. System presents a list of company drivers
- 3. User may select a driver from the list
- 4. System presents the details of the selected driver (See Glossary)

Step 3-4 repeated until user indicates it is done

#### **Extensions:**

**3a** User wants to add a new driver

- 1. User provides the details of the new driver
- 2. System performs create operation and show successfully created message 2a. There is a driver with the same name
  - 1. System displays a warning message

**4a** User wants to delete a driver

- 1. System asks for confirmation for delete operation
- 2. User confirms
- 3. System checks and found no related trip for the selected driver
  - 3a. System found related trip for the driver
  - 1. System does not perform a delete operation and shows an error message.
- 4. System performs delete operation and shows success message for deletion **4b** User wants to update a driver
  - 1. User updates driver information.
  - 2. System validates the details and performs the update operation and shows successfully updated message
    - 2a. System does not validate the details
      - 1. System displays the error message for the details

Frequency of Occurrence: Rarely