



**Department of Computer Science and Engineering**

**Report on**

## **Path-Way Services**

**Prepared for**

**Al Hasib Mahamud, Lecturer**

**Course 3324**

**Information System Design and Software Engineering Lab**

**Prepared by**

**Lab Section: C1**

**Group No: 04**

**Ullash Bhattacharjee , 180104103**

**Mostafizur Rahman , 180104112**

**Kaho Fardin Hasib , 170204063**

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## **List Of The Contents:**

## **Page**

<b>1. Summary Of The Project</b>	<b>3</b>
<b>2. Project Goals &amp; Platforms</b>	<b>4</b>
<b>3. Requirements and Feasibility Analysis</b>	<b>4</b>
<b>4. Data Flow Diagram of the project</b>	<b>5 - 6</b>
<b>5. USE CASE Diagram of the project</b>	<b>7 - 18</b>
<b>6. USE CASE NARRATIVE of the project</b>	<b>7 - 18</b>
<b>7. Entity Relationship Diagram of the Project</b>	<b>19</b>
<b>8. Sequence Diagram</b>	<b>20 - 21</b>
<b>9. Collaboration Diagram</b>	<b>22</b>
<b>10. Opportunities of Developments</b>	<b>23</b>
<b>11. Benchmarking</b>	<b>23</b>

## **Summary Of The Project:**

**The name of our project is PATH-WAY SERVICES. It is basically a website that will help people to purchase tickets of transports. Bus, Train and Launches are the most commonly used public transports. But for now, we develop this website for the bus transport. People can easily book their tickets according to the date and available route. In Our website we have implemented many features separately in admin and user panel.**

**In admin section, the features are: manage route, manage bus, and manage pending tickets. In manage route section, admin can add new route .And after adding admin can update the route and remove also. In manage bus section there are also some sub features. They are adding new bus schedule, adding seat information, view bus schedule, instant ticket booking for the customers. In pending tickets section admin can accept or ignore the tickets that will come from the user online ticket booking. When admin accept the ticket, user now checkout for booking through bklash, rocket, nogod etc.**

**In user panel, users can see their profile, update profile, can see the notification, and finally booking the tickets according to the date and route. Users can also cancel their ticket. A very standard online gateway services users can have for their checkout.**

**Besides some extra features we have implemented are: a contact section (where users and non – users can give their important feedback, ask something they want to know etc.) , an about us section from where visiting people can know the developers basic information, basic website features, and a FAQ section (where people can know the important answers regarding this website). A registration form, from where people can fill up their basic information before getting to the members and booking ticket.**

## **Project Goals & Platforms:**

This project goal is to minimize the sufferings of purchasing tickets. Due to pandemic, this is very tough and risk for the customers to buy their ticket in physically. So we think this website can relief them. Admin will keep the website updated with transport's information, adding new routes, adding seat information handle pending tickets and so on. And for the users they can easily buy tickets, cancel booking, contact with the admin and so on.

Since this is a website, people can use it form any browser they are willing to.

## **Requirements & Feasibility Analysis:**

### **1. Technical**

- We still have internet problem in our country.
- People are not familiar with e-ticketing system.

### **2. Economical**

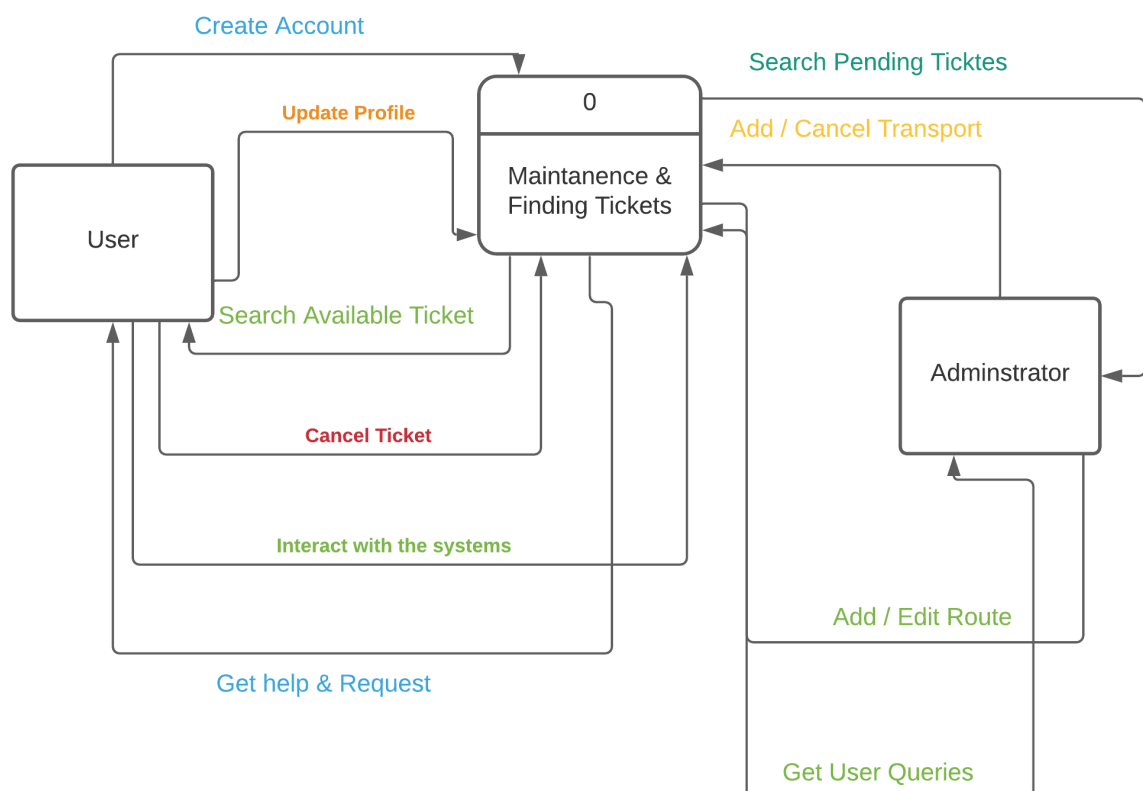
- It will be tough and costly to reach the population.
- Government funding can be helpful to spread this platform.

### **3. Operational**

- It will be difficult to deal with every transport companies.

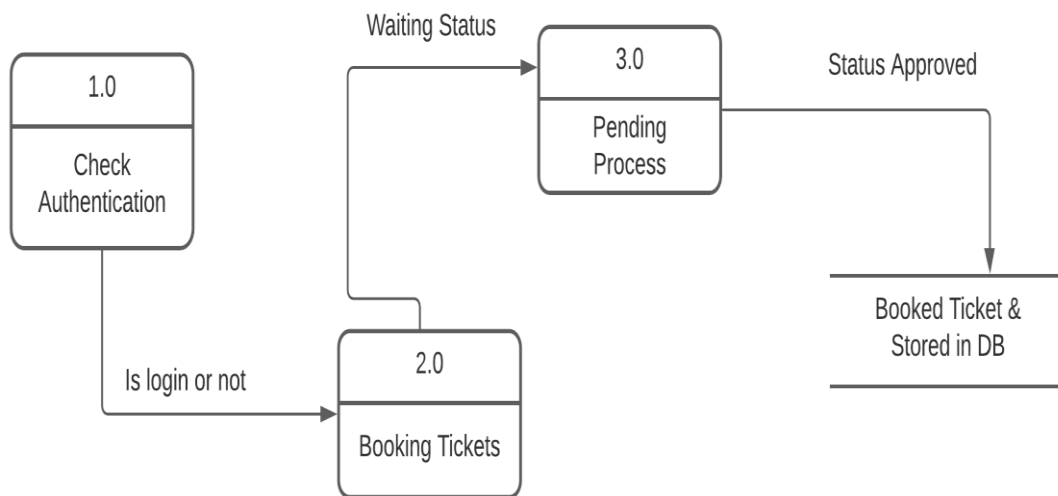
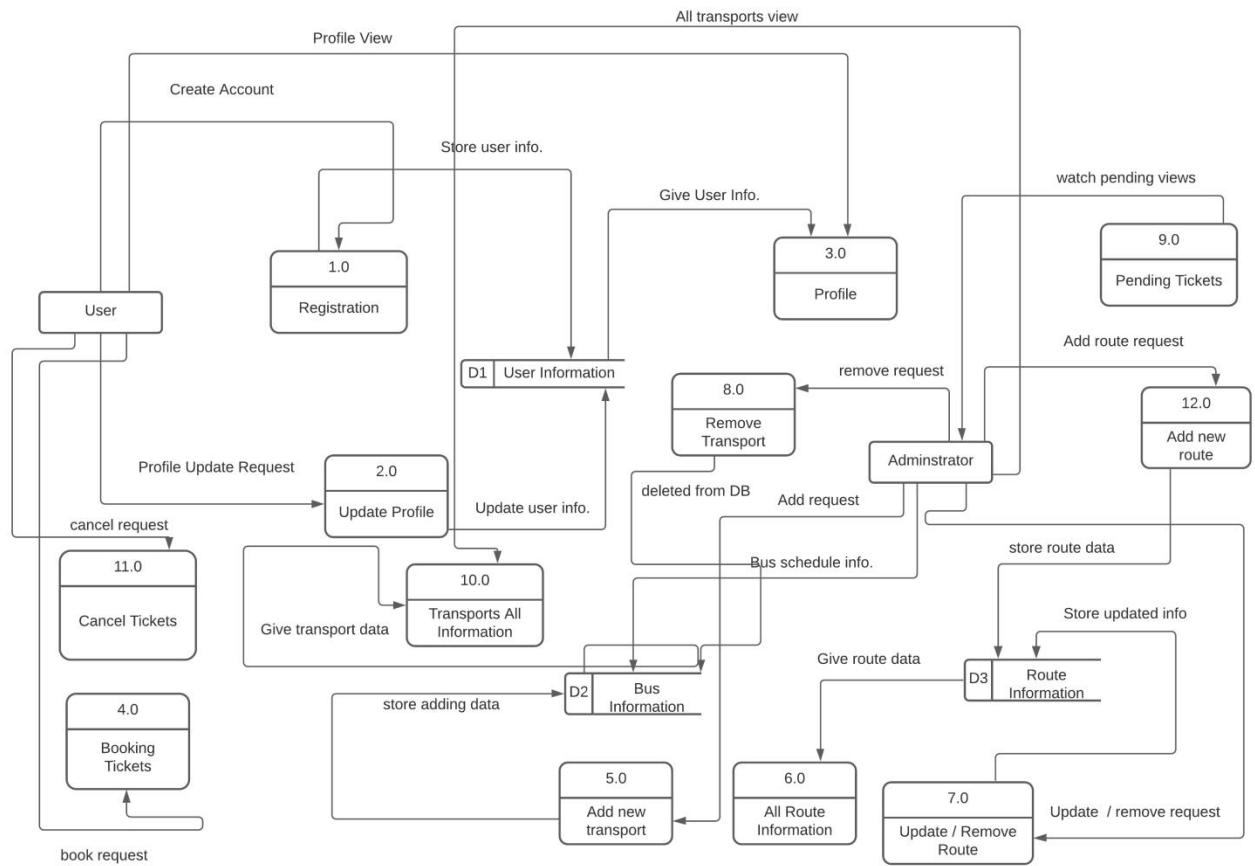
# Data Flow Diagram:

## 1. Construction of the context level diagram:



**Figure: Context Level Diagram**

## 2. Construction of the 0 & 1 level diagram:

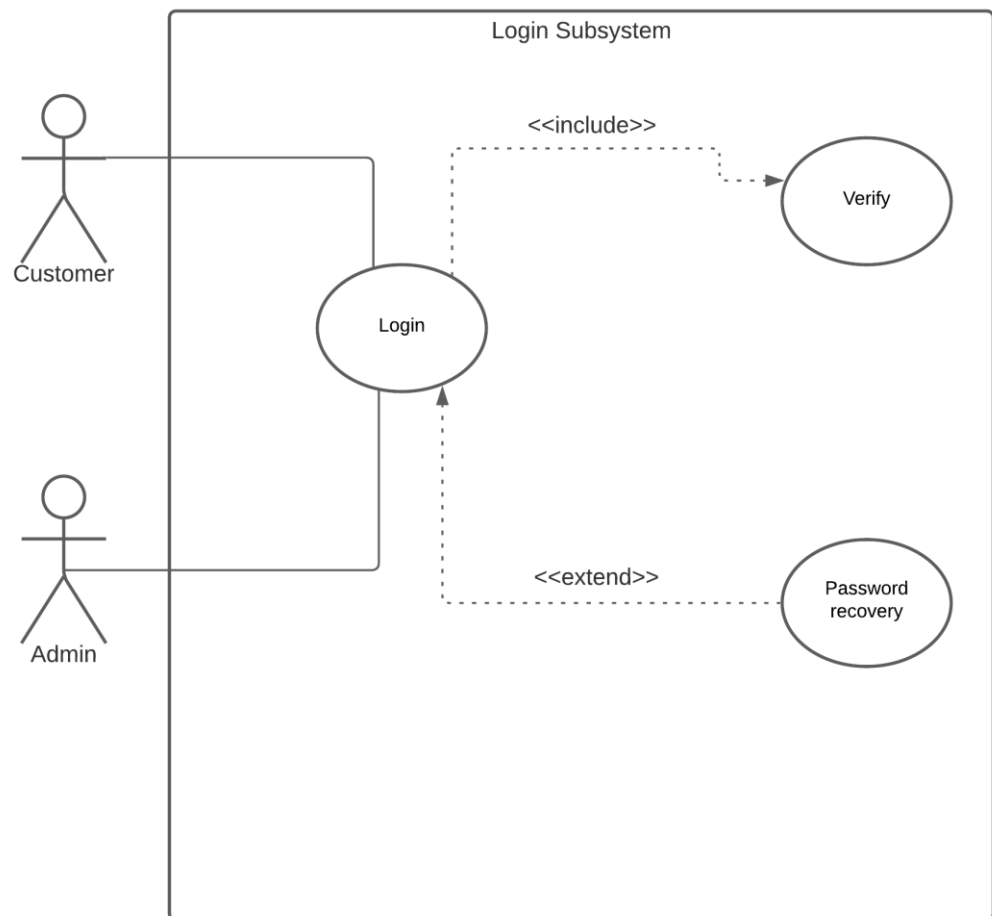


**Figure: 0 - level & 1 - Level Diagram**

## Use Case Diagram:

❑ **Actors:** Admin, User.

❑ **Use Cases:** Login Subsystem



**Figure: Login Subsystem Diagram**

## Use Case Narrative:

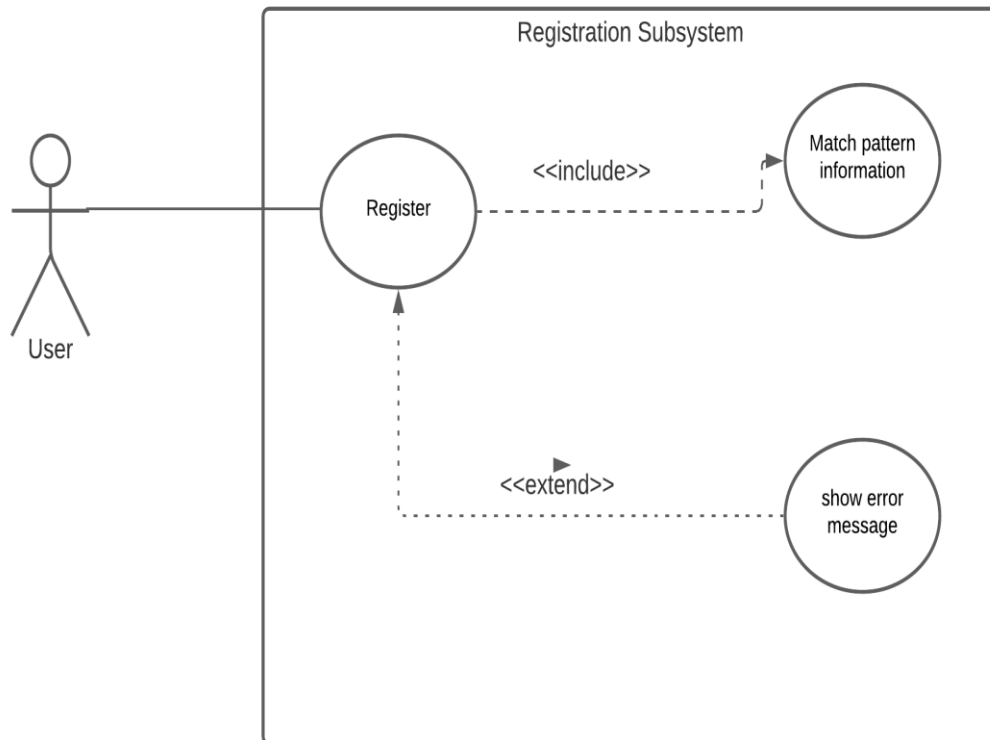
<b>Use Case Title:</b>	<b>Login.</b>
<b>Primary Actor:</b>	<b>User (Officer, Admin).</b>
<b>Goal in Context:</b>	<b>To Register and get username and password for login and get access our website.</b>
<b>Precondition:</b>	<b>Must have to be member by registration and get username for login.</b>
<b>Scenario:</b>	<b>From login page user have to login into the system.</b>
<b>Exception:</b>	<b>Login with correct password or recovery password.</b>
<b>Priority:</b>	<b>High priority.</b>
<b>Channel to actor:</b>	<b>PC – Browser.</b>



## Use Case Diagram:

❑ Actors: Non- User.

❑ Use Cases: Registration Subsystem.



**Figure: Registration Subsystem Diagram**

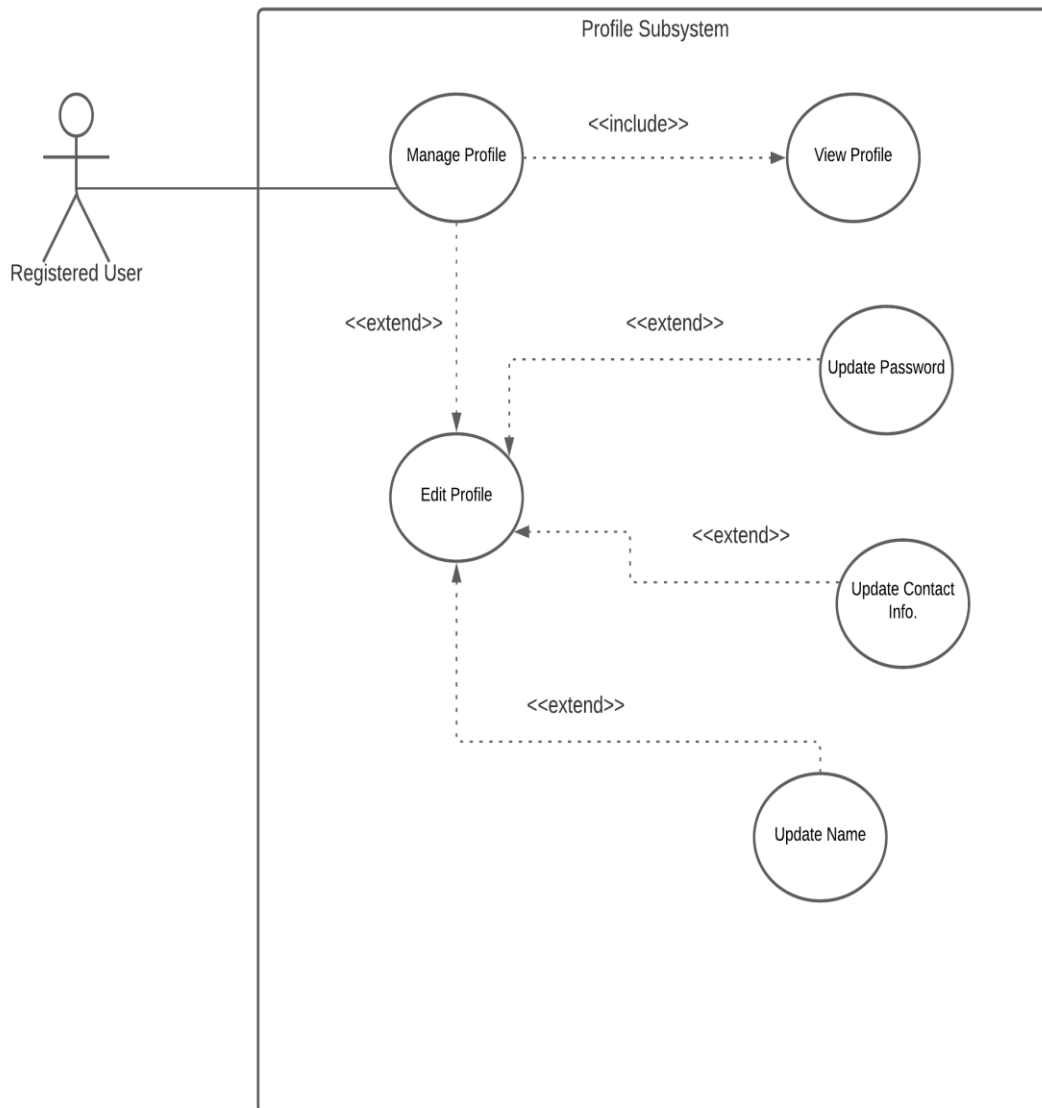
## Use Case Narrative:

<b>Use Case Title:</b>	<b>Registration Subsystem.</b>
<b>Primary Actor:</b>	<b>Non - User.</b>
<b>Goal in Context:</b>	<b>To login and access the website.</b>
<b>Precondition:</b>	<b>Non users should click on the sign up button filling all the information to be regular user.</b>
<b>Scenario:</b>	<b>From registration page non - user can find some text field to fill their information.</b>
<b>Priority:</b>	<b>Low priority (depends on customer mind).</b>
<b>Channel to actor:</b>	<b>PC – Browser.</b>

# Use Case Diagram:

❑ **Actors:** User.

❑ **Use Cases:** Profile Subsystem(manage profile , edit profile).



**Figure: Profile Subsystem Diagram**

## Use Case Narrative:

<b>Use Case Title:</b>	<b>Manage Profile.</b>
<b>Primary Actor:</b>	<b>User.</b>
<b>Goal in Context:</b>	<b>To watch “my profile” information.</b>
<b>Precondition:</b>	<b>Must have an account to the website.</b>
<b>Scenario:</b>	<b>Users can watch their detail information.</b>
<b>Priority:</b>	<b>High priority.</b>
<b>Channel to actor:</b>	<b>PC Browser.</b>

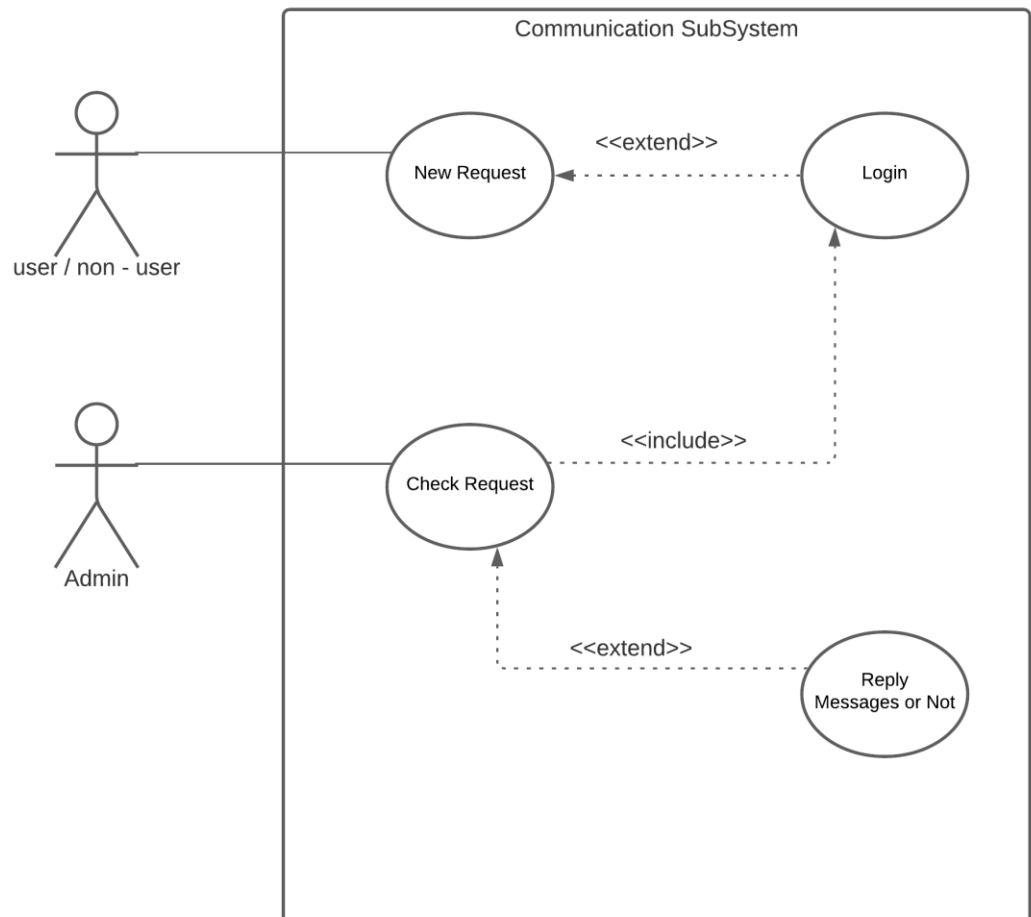
## Use Case Narrative:

<b>Use Case Title:</b>	<b>Edit Profile.</b>
<b>Primary Actor:</b>	<b>User.</b>
<b>Goal in Context:</b>	<b>To edit profile section.</b>
<b>Precondition:</b>	<b>Must have an account to the website.</b>
<b>Scenario:</b>	<b>Users can watch some text field to update their information.</b>
<b>Priority:</b>	<b>Low priority.</b>
<b>Channel to actor:</b>	<b>PC Browser.</b>

## Use Case Diagram:

❑ **Actors:** User , Non – User.

❑ **Use Cases:** Communication Subsystem.



**Figure: Communication Subsystem Diagram**

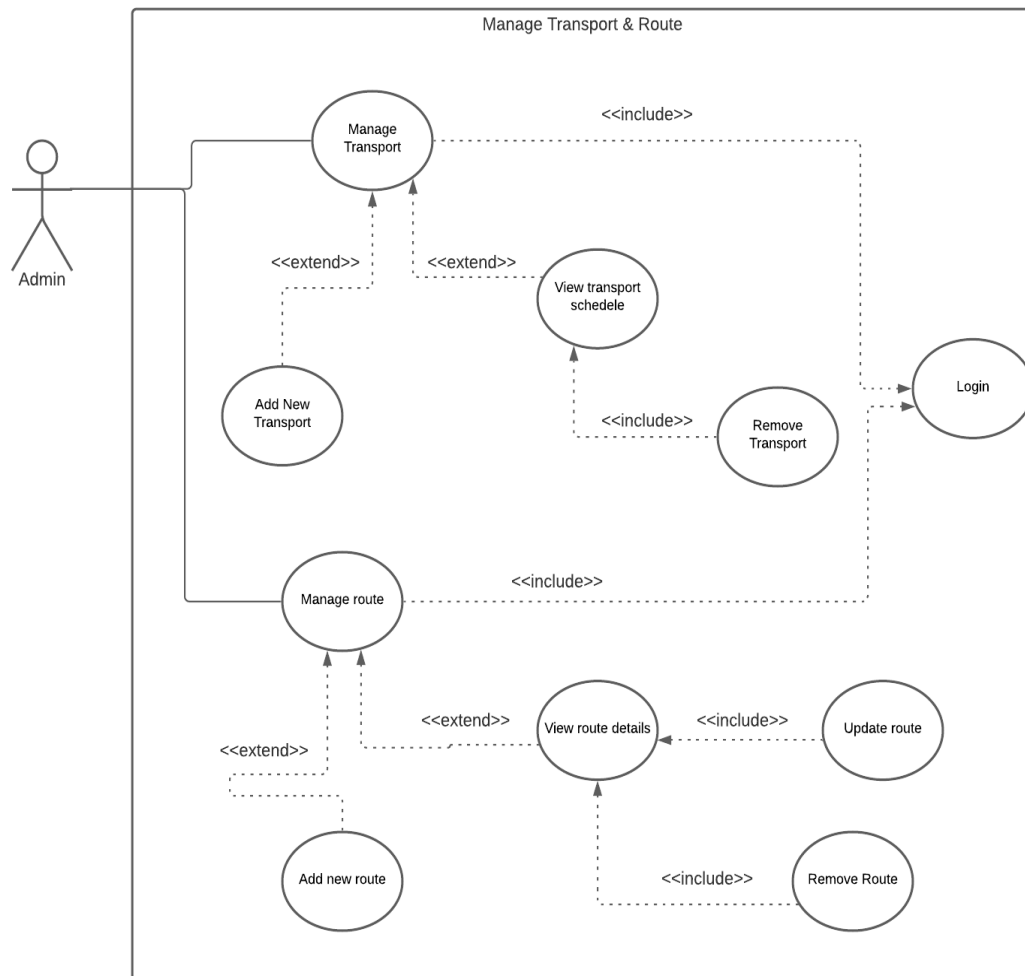
## Use Case Narrative:

<b>Use Case Title:</b>	<b>Communication.</b>
<b>Primary Actor:</b>	<b>User , Non User.</b>
<b>Goal in Context:</b>	<b>To contact with the admin for giving feedback or knowing something.</b>
<b>Scenario:</b>	<b>Showing a contact page with some text field and a button to send the message.</b>
<b>Priority:</b>	<b>Medium priority.</b>
<b>Channel to actor:</b>	<b>PC Browser.</b>

# Use Case Diagram:

❑ Actors: Admin.

❑ Use Cases: Manage System (Transport & Route).



**Figure: Manage System(Transportation & Route)Diagram**

## Use Case Narrative:

<b>Use Case Title:</b>	<b>Manage Transport.</b>
<b>Primary Actor:</b>	<b>Admin.</b>
<b>Goal in Context:</b>	<b>To manage transports every feature related to the E-Ticketing Service.</b>
<b>Precondition:</b>	<b>Must have an account to configure.</b>
<b>Scenario:</b>	<b>From manage page admin can add , remove new transport , transports schedule , users pending tickets etc.</b>
<b>Priority:</b>	<b>High priority</b>
<b>Channel to actor:</b>	<b>PC Browser.</b>

## Use Case Narrative:

<b>Use Case Title:</b>	<b>Manage Route.</b>
<b>Primary Actor:</b>	<b>Admin.</b>
<b>Goal in Context:</b>	<b>To manage newly added route.</b>

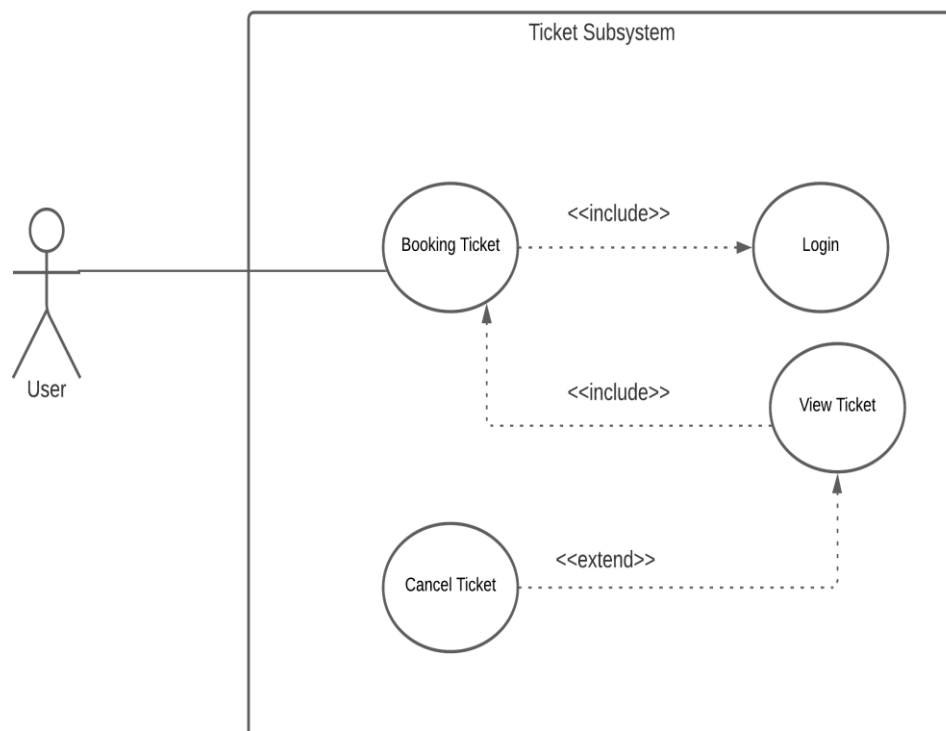


<b>Precondition:</b>	<b>Must have an account to configure.</b>
<b>Scenario:</b>	<b>From manage page admin can add , remove or update new route.</b>
<b>Priority:</b>	<b>High priority.</b>
<b>Channel to actor:</b>	<b>PC Browser.</b>

## Use Case Diagram:

❑ **Actors:** User.

❑ **Use Cases:** Manage Ticket Subsystem.



**Figure: Ticket Subsystem Diagram**

## Use Case Narrative:

<b>Use Case Title:</b>	<b>Manage Ticket.</b>
<b>Primary Actor:</b>	<b>User.</b>
<b>Goal in Context:</b>	<b>To book or cancel tickets.</b>
<b>Precondition:</b>	<b>User must have an account.</b>
<b>Scenario:</b>	<b>From this page , user confirm can book ticket or cancel ticket.</b>
<b>Priority:</b>	<b>High priority.</b>
<b>Channel to actor:</b>	<b>PC Browser.</b>

19

## Sequence Diagram:

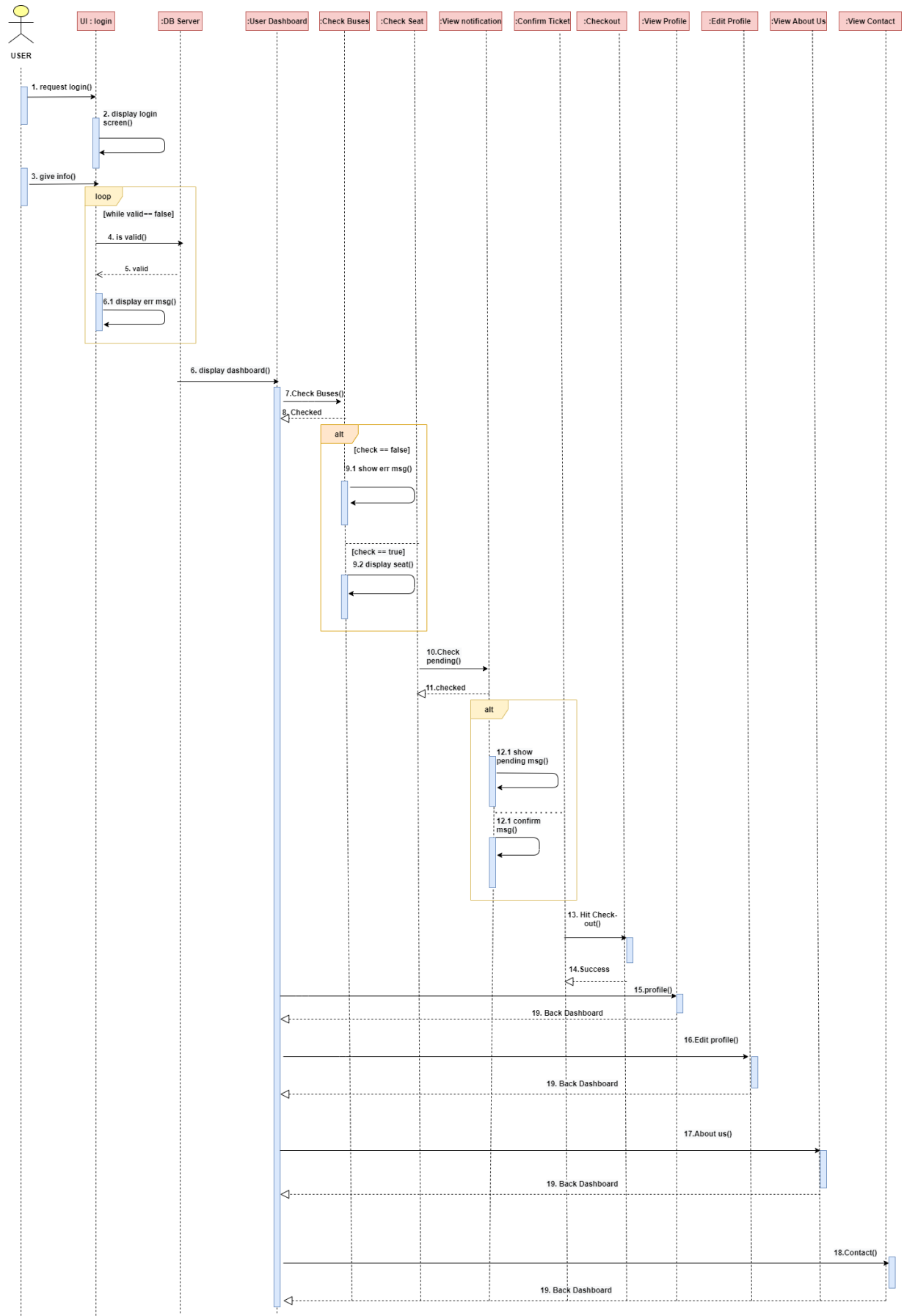
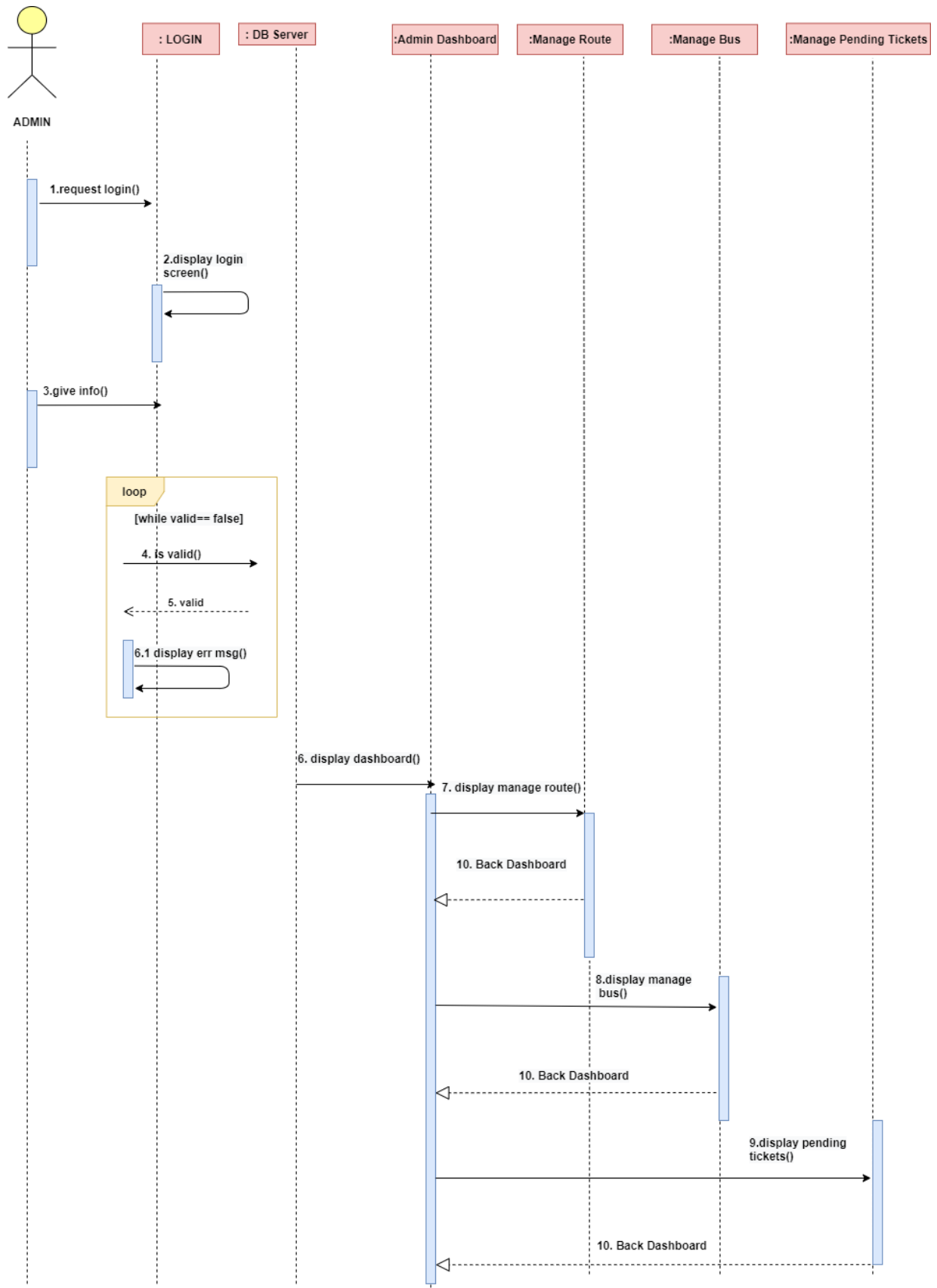
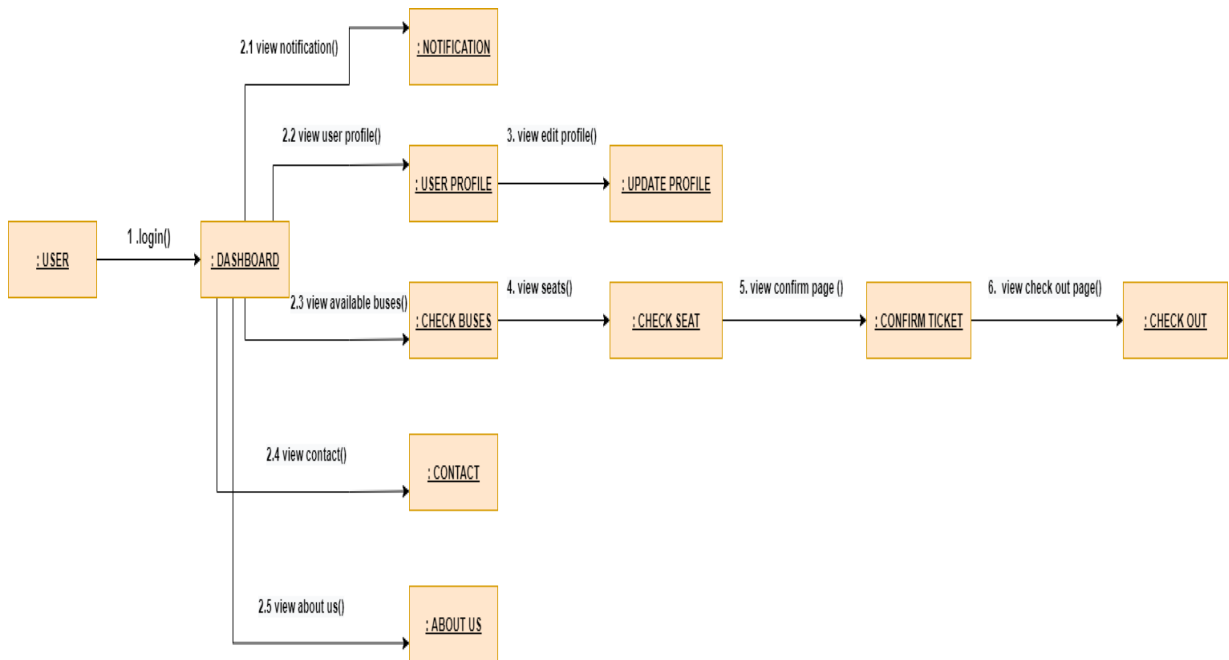


Fig: sequence diagram-1[user]

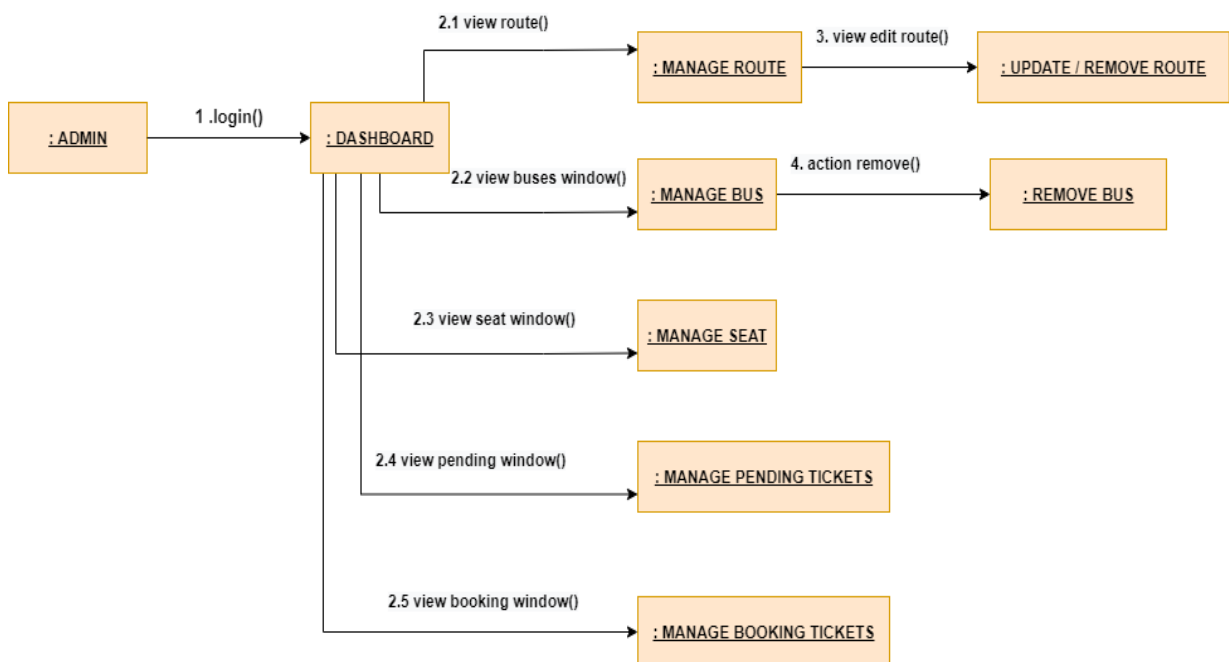


**Fig: sequence diagram-2[admin]**

## Collaboration diagram :



**Fig: collaboration diagram-1[user]**



**Fig: collaboration diagram-2[admin]**

## Opportunities Of Developments :

We have implemented almost every feature that was mentioned earlier. In addition, we have implemented instant ticket booking for the customers. This booking system will be done by the admins whenever customers buy their ticket from counter.

In future we will update our website adding some extra features also. These features will be :

- Responsive Call Center
- Air and Launch Ticket
- Adding Live Map
- Adding Voucher (Special Discount)

## Benchmarking :

<u>ID</u>	<u>Project Work Percentage</u>
180104103	55 %

All the reports (DFD , USE CASE , SEQUENCE , COLLABORATION , ERD diagram) is done by this ID.

Besides all the backend stuffs (Admin & User Panel) is done by this ID. In admin panel the features are (add route , remove route) , (add bus , view bus , add seat info. , instant ticket booking) , handle pending tickets etc.

**In User Panel the features are Book Ticket , Cancel Ticket, View Profile , Update password etc.**

**Contact Page backend code , Registration Page backend Code , Login Page backend code is also done by this ID.**

<b><u>ID</u></b>	<b><u>Project Work Percentage</u></b>
<b>180104112</b>	<b>20%</b>

**About US page design , FAQ page design , forgot page UI design is done by this ID.**

<b>170204063</b>	<b>25%</b>
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**All the presentation slides , contact page UI design , registration UI design , Login UI design is done by this ID.**