



**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**

**Date: 12 - 08 - 2021**

## Data Flow Diagram:

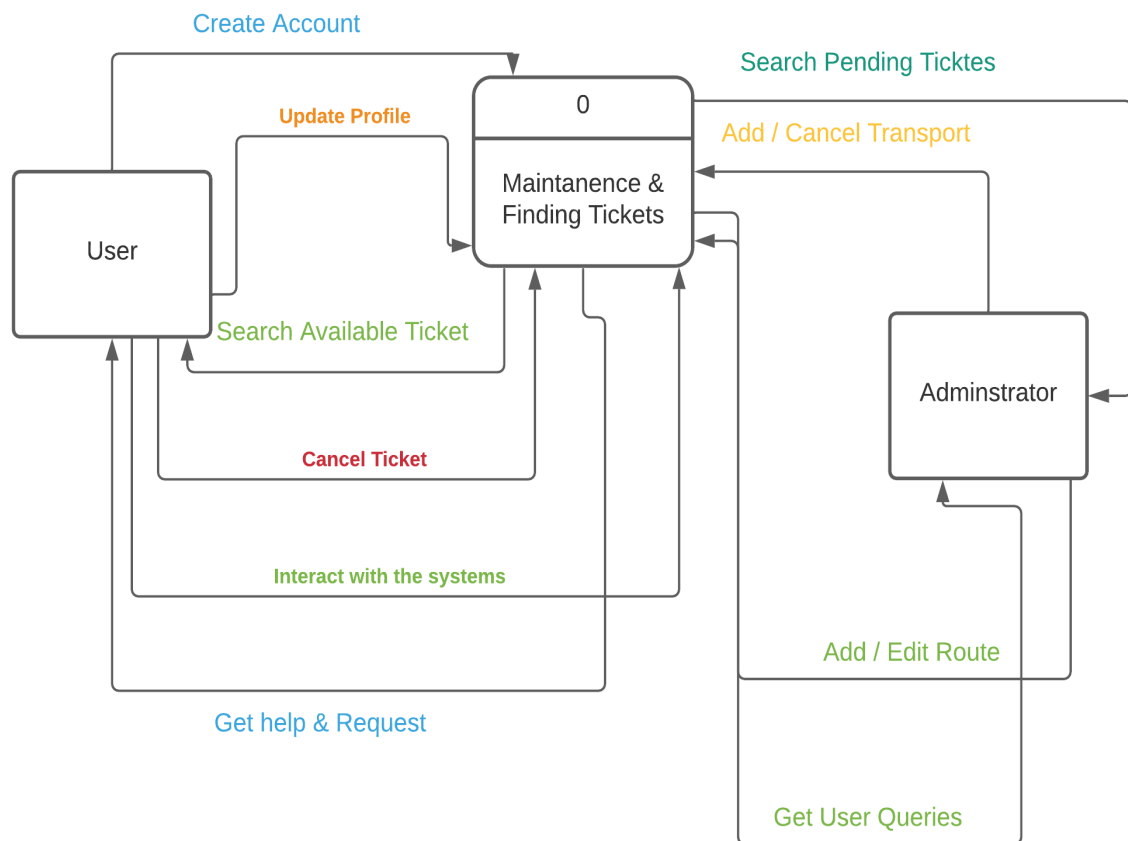
### Activities of the project:

- ☐ User Account (User, Administrator).
- ☐ Login page.
- ☐ Registration page.
- ☐ Password recovery page for user.
- ☐ Users profile section.
- ☐ Check seats for available transports according to the route & date.
- ☐ Booking or cancel Ticket.
- ☐ Contact section with the admin.
- ☐ Add new route, remove or update Route Information.
- ☐ Add new transport or remove transport.
- ☐ Handle pending tickets.

### Name of Process, Entity & DB:

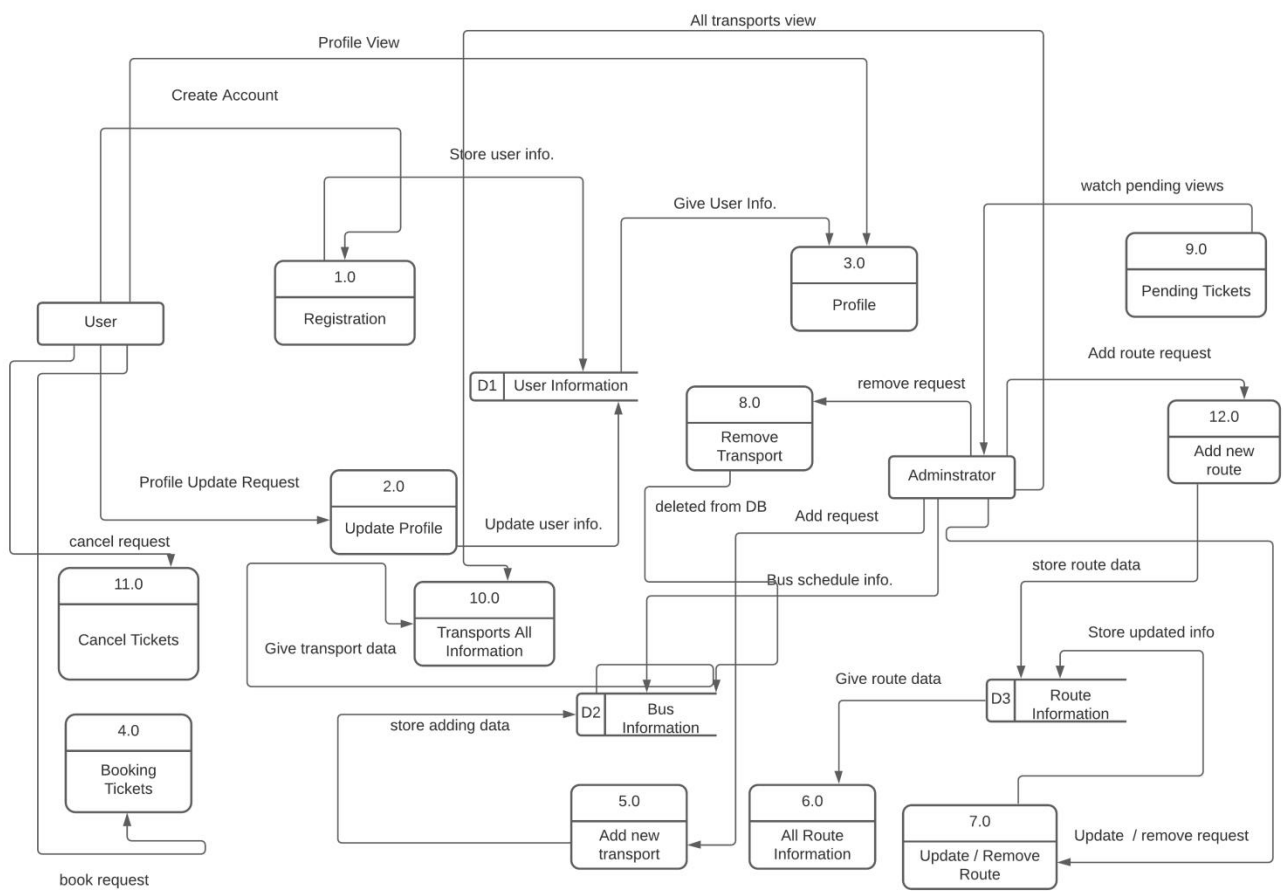
- ☐ **Process** : Authentication , Communication , Login , Registration , Profile (Manage profile , Edit Profile) , Manage Transport(Adding , Remove) , Manage Route (Adding , Update , Remove) , Manage Ticket(Pending).
- ☐ **Entities** : Admin, User, Route , Bus- Schedule, Transaction , Seat-Information .
- ☐ **Databases** : Single database where store every kinds of entities information .

## Construction of the context level diagram:



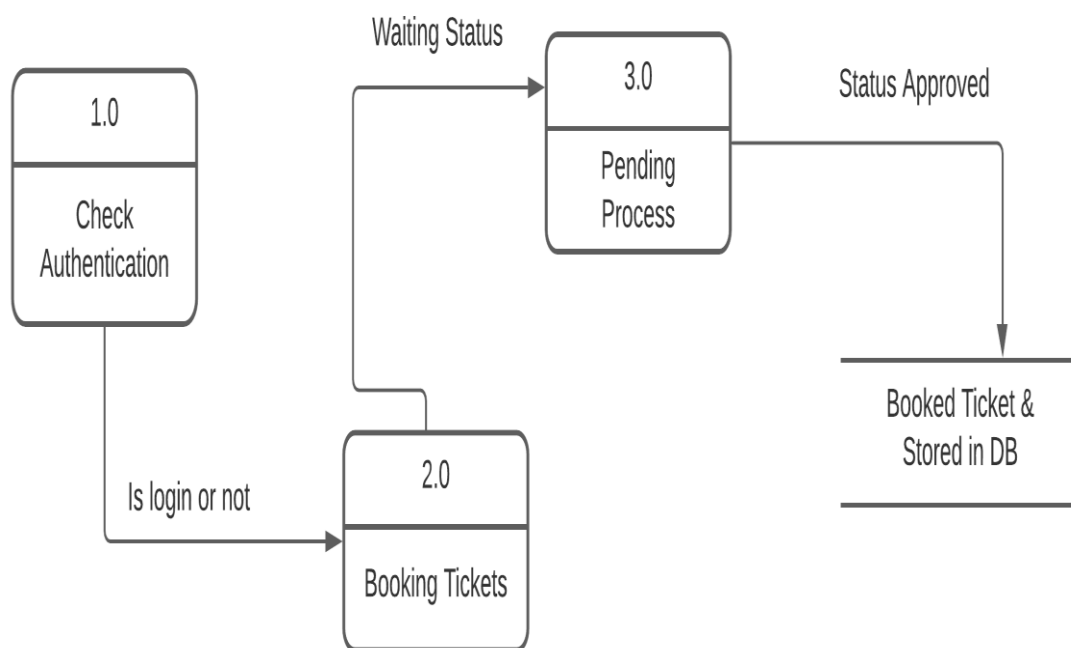
**Figure: Level 0 Diagram**

## Construction of Level 1 diagram:



**Figure: Level 1 Diagram**

## Construction of Level 2 diagram:

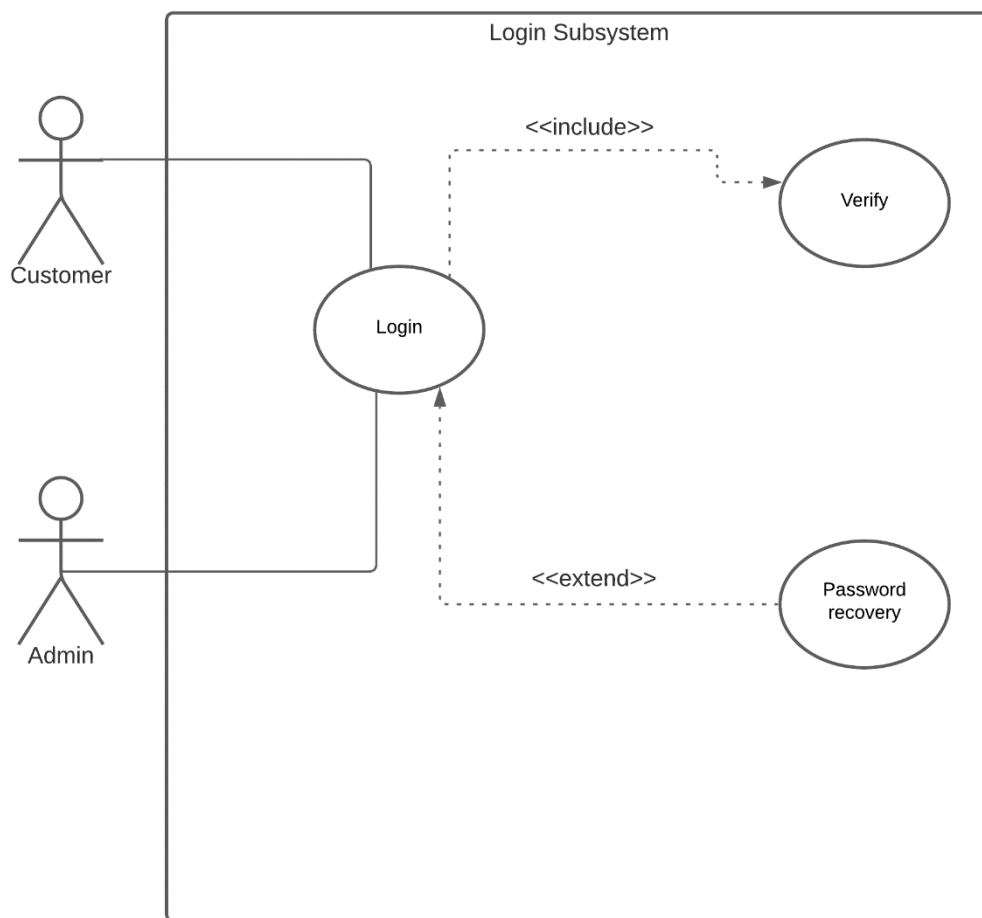


**Figure: Level 2 Diagram**

## Use Case Diagram:

❑ Actors: Admin, User.

❑ Use Cases: Login Subsystem



**Figure: Login Subsystem Diagram**

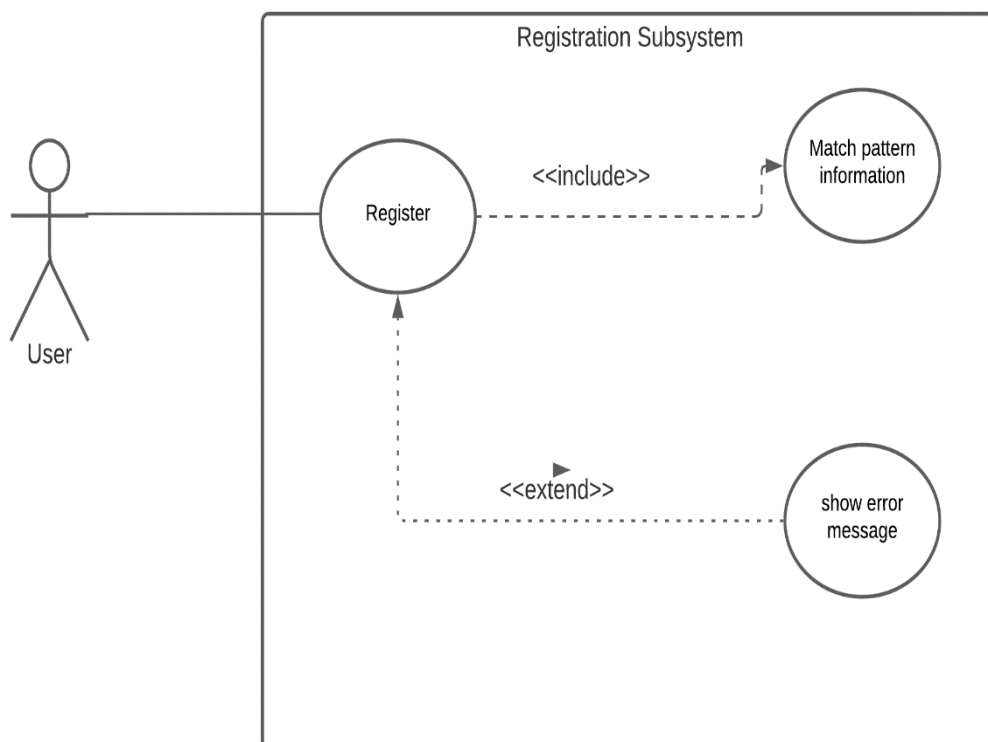
## Use Case Narrative:

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

## Use Case Diagram:

❑ Actors: Non- User.

❑ Use Cases: Registration Subsystem.



**Figure: Registration Subsystem Diagram**



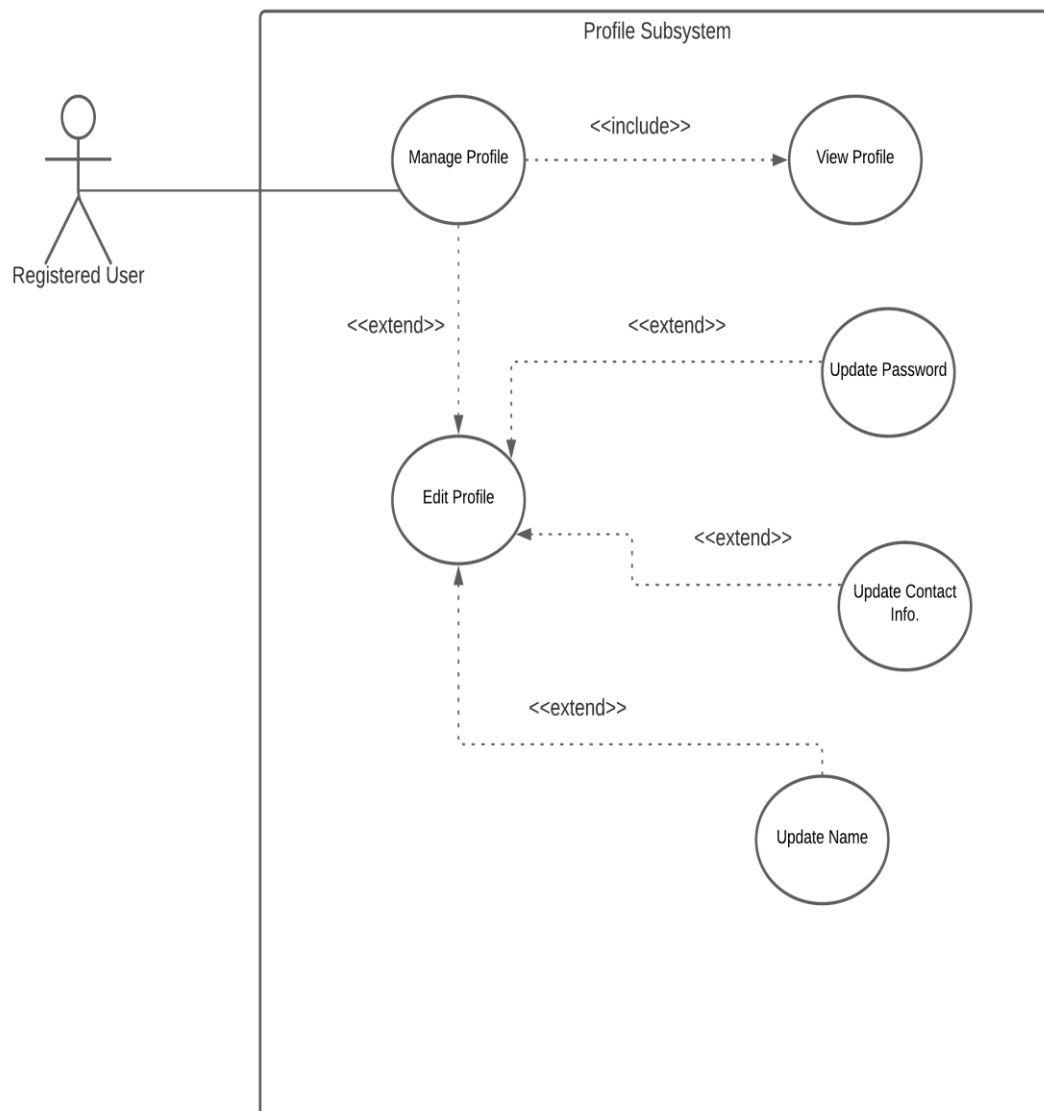
## Use Case Narrative:

<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>

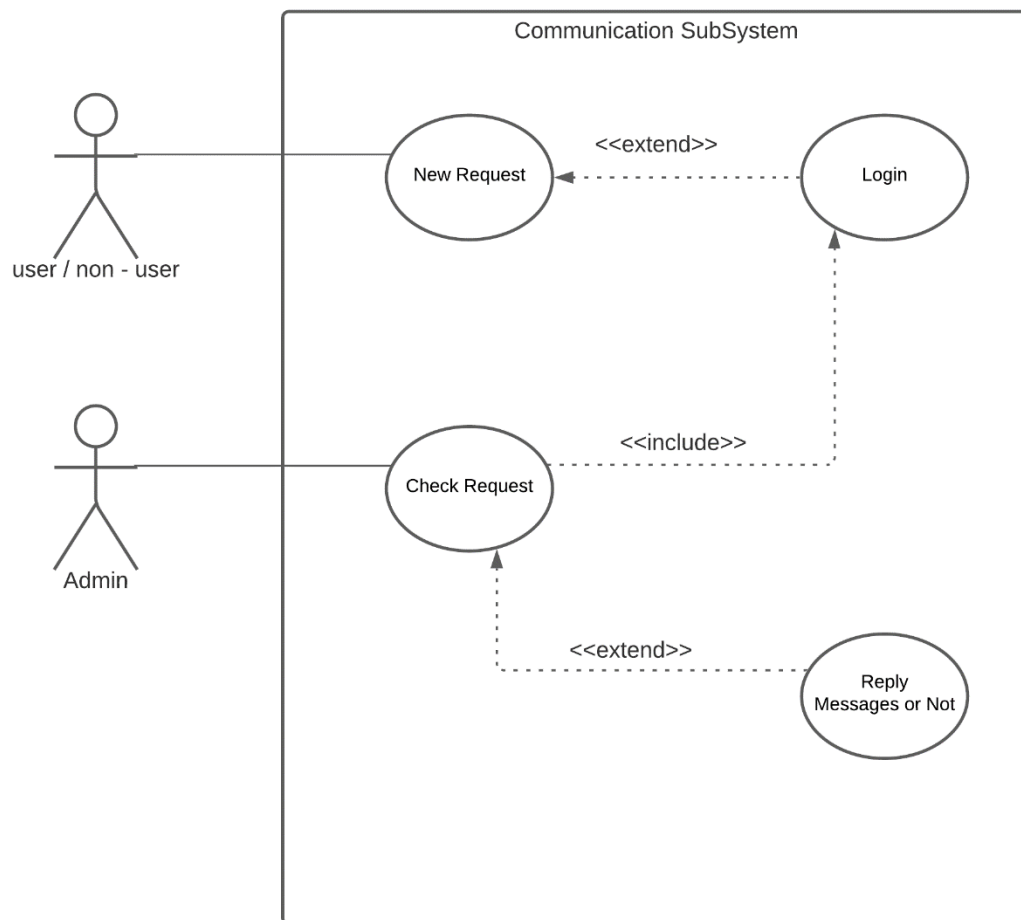
## Use Case Narrative:

<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**

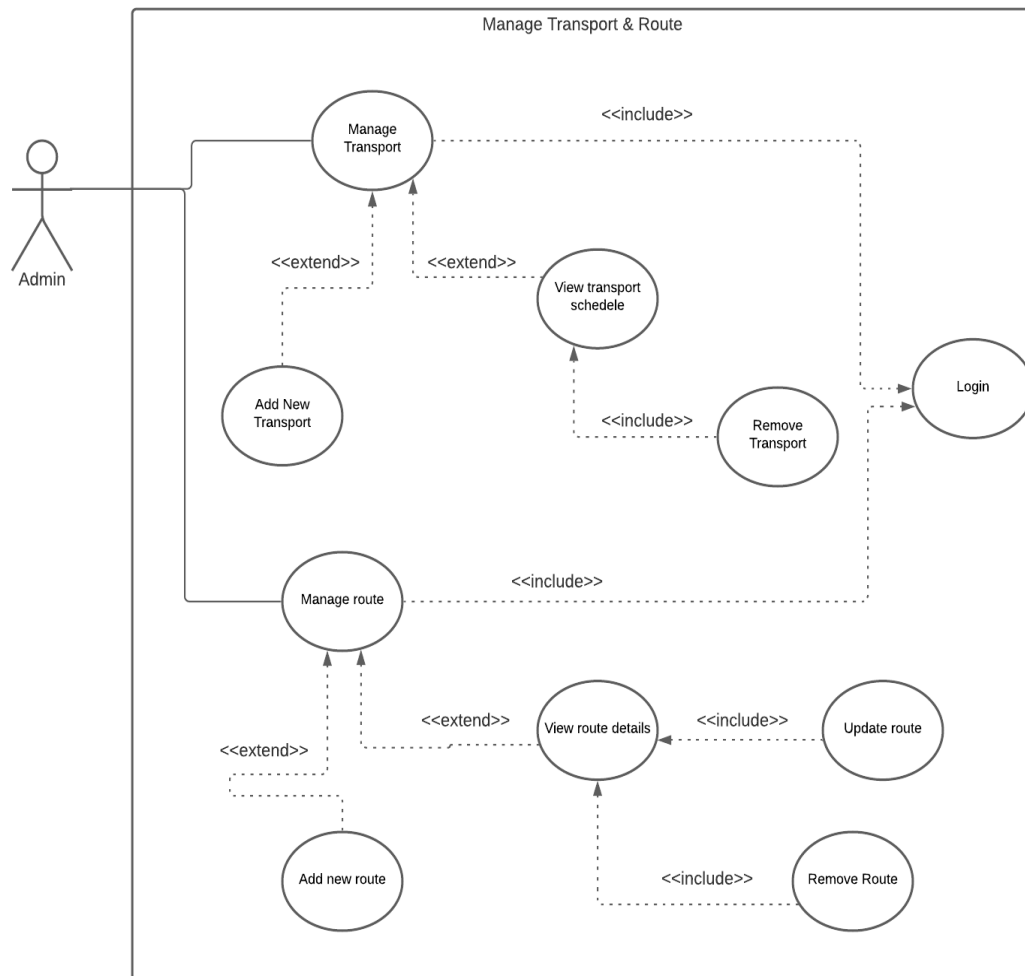
## Use Case Narrative:

<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>

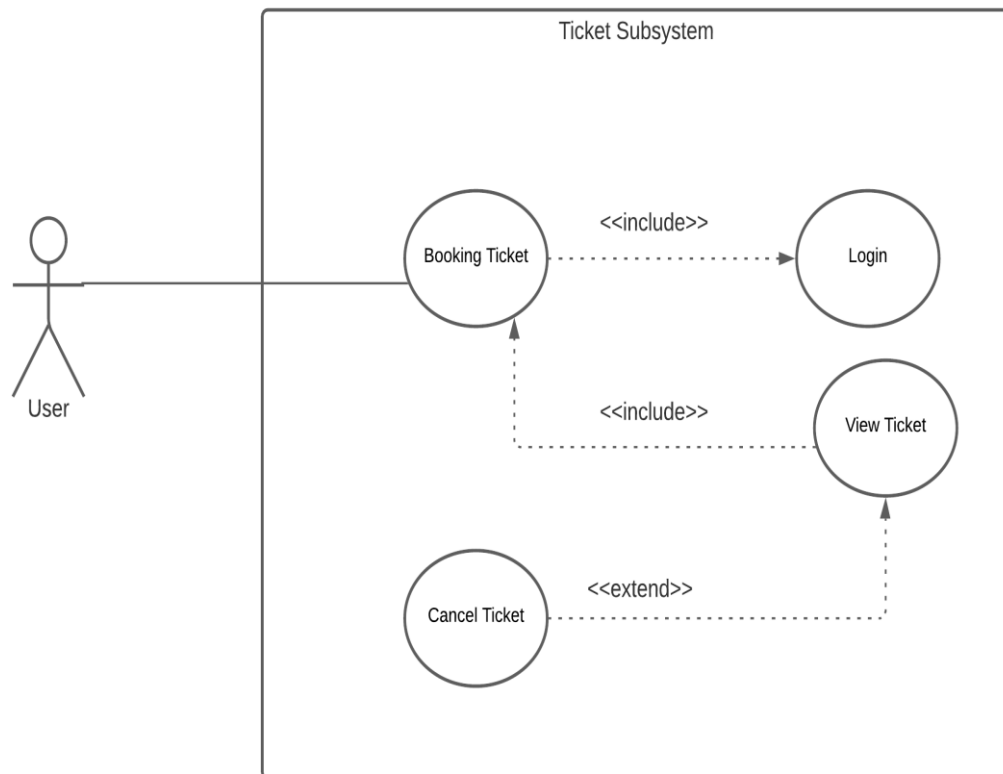
## Use Case Narrative:

<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>

## Conclusion:

By using Data Flow Diagram and Use case we can have an overall view of the whole project. Since data flow diagram (DFD) is a visual representation of the information flow through a process or system and Use-case diagram describe the high-level functions and scope of a system as a result both diagrams make it much more easier to understand and helps us to make a proper structure for this project. It also helps us to identify what is most important for our project. So building a DFD and Use-case for our project is a very important and a fundamental procedure.