



Course Code : CSE 404

Course Title : Software Engineering and ISD Laboratory

Project name : Bus ticket booking management system

Experiment no: 04(b)

Experiment name: **UML Modeling of your Project: Use case diagrams, Class diagrams, Sequence diagrams, Activity diagrams, DFDs**

**Submitted To**

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Group No : 02

Group members :

Sl	Class Roll	Name
01	342	Tama Shil
02	370	Prokash Maitra
03	374	Mubasher adnan jihad
04	375	Pritam Saha

Name: Mubasher Adnan Jihad

Roll : 374

Actor: Customer, Admin

scenario:

- customer will login into system.
- customer will Register into system.
- Admin will Login into system.

Exception: Login page not found

Precondition: Login page from web browser

Post condition:

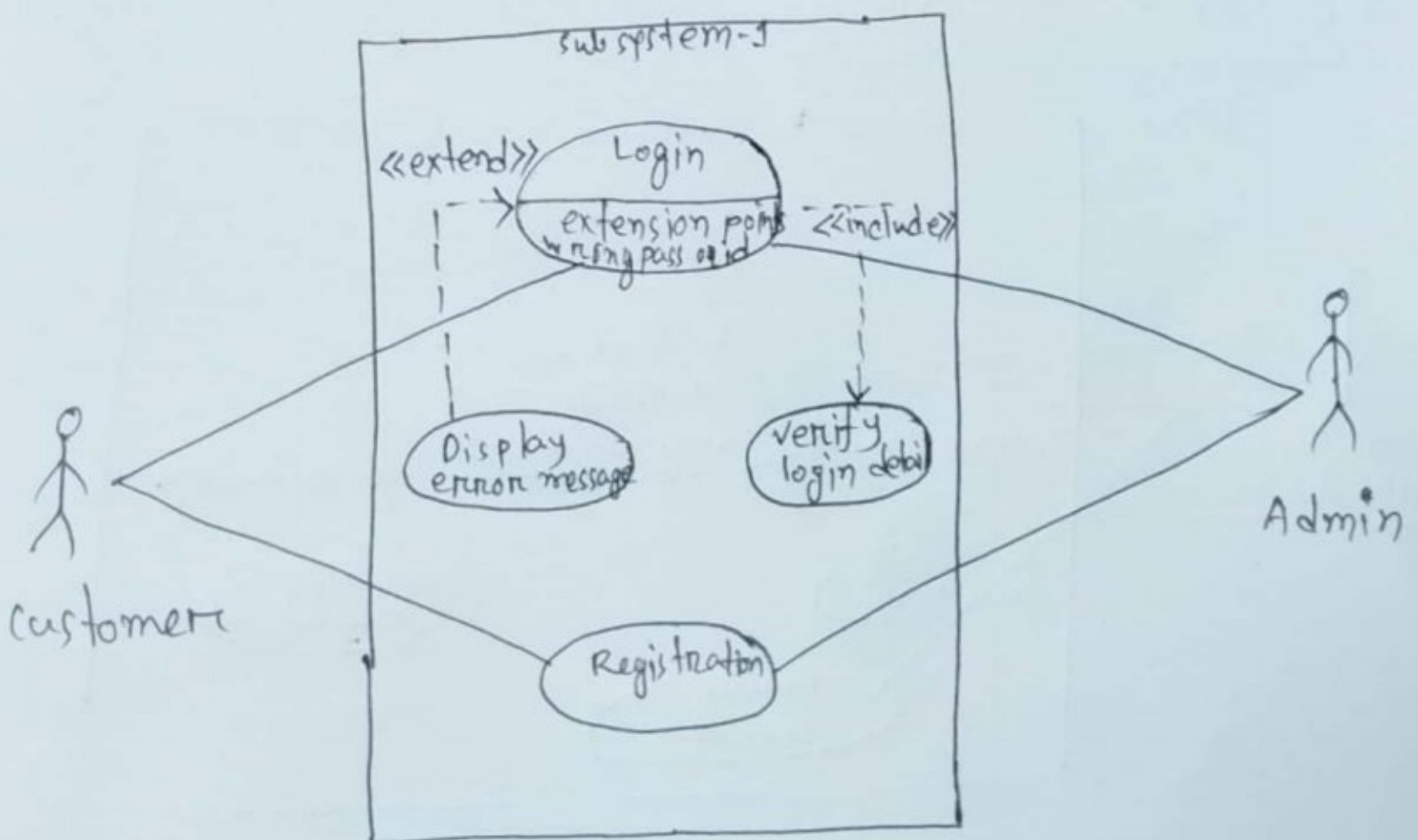
- Successful Login
- Unsuccessful Login
- Page not found

Use case relation:

1. Include

2. Extends

use case diagram :





## Subsystem-2

Actor: Customer, Admin.

Scenario:

- Customer will do the reservation of buses.
- Both Admin and customer can send message to each other.
- Customer will do payment.

Exception: Wrong customer information

Precondition: Only registered customer can reserve ticket.

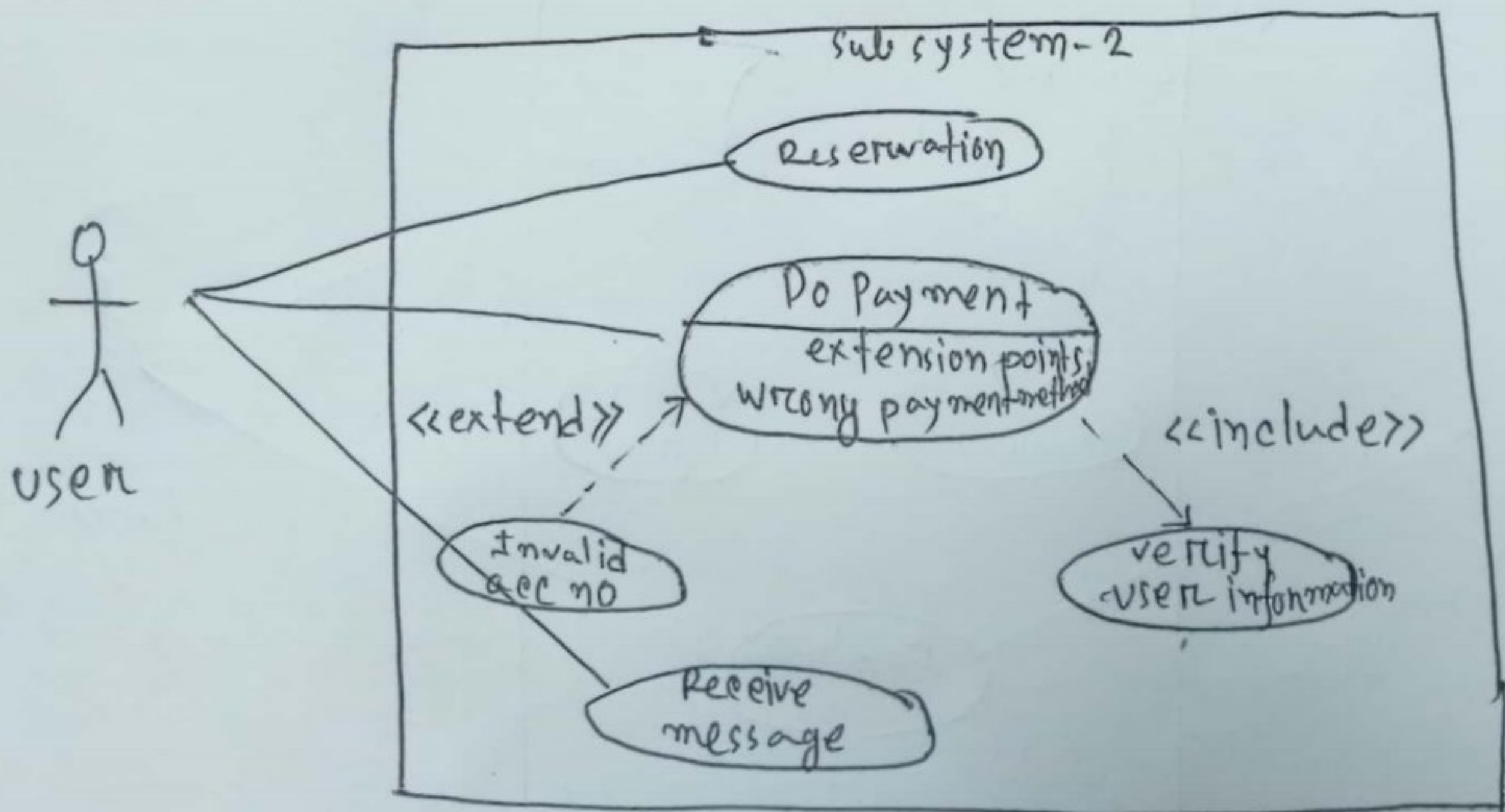
Post condition: Only registered customer can reserve ticket.

• Customer will get a confirmation notification.

Use case relation:

1. Include.
2. Extends.

Use case Diagram:





Name : Pritam Saha

ID : 375

Actor : Admin Subsystem - 3

Scenario :

- Admin will add bus details.
- Admin will input pickup points of all buses so that customers can select pickup points.
- Admin will input bus route and bus name so that these information can be provided to the customer.

Exception : Web page not found.

Precondition :

- Pickup points must be set according to pickup point and time.

Postcondition :

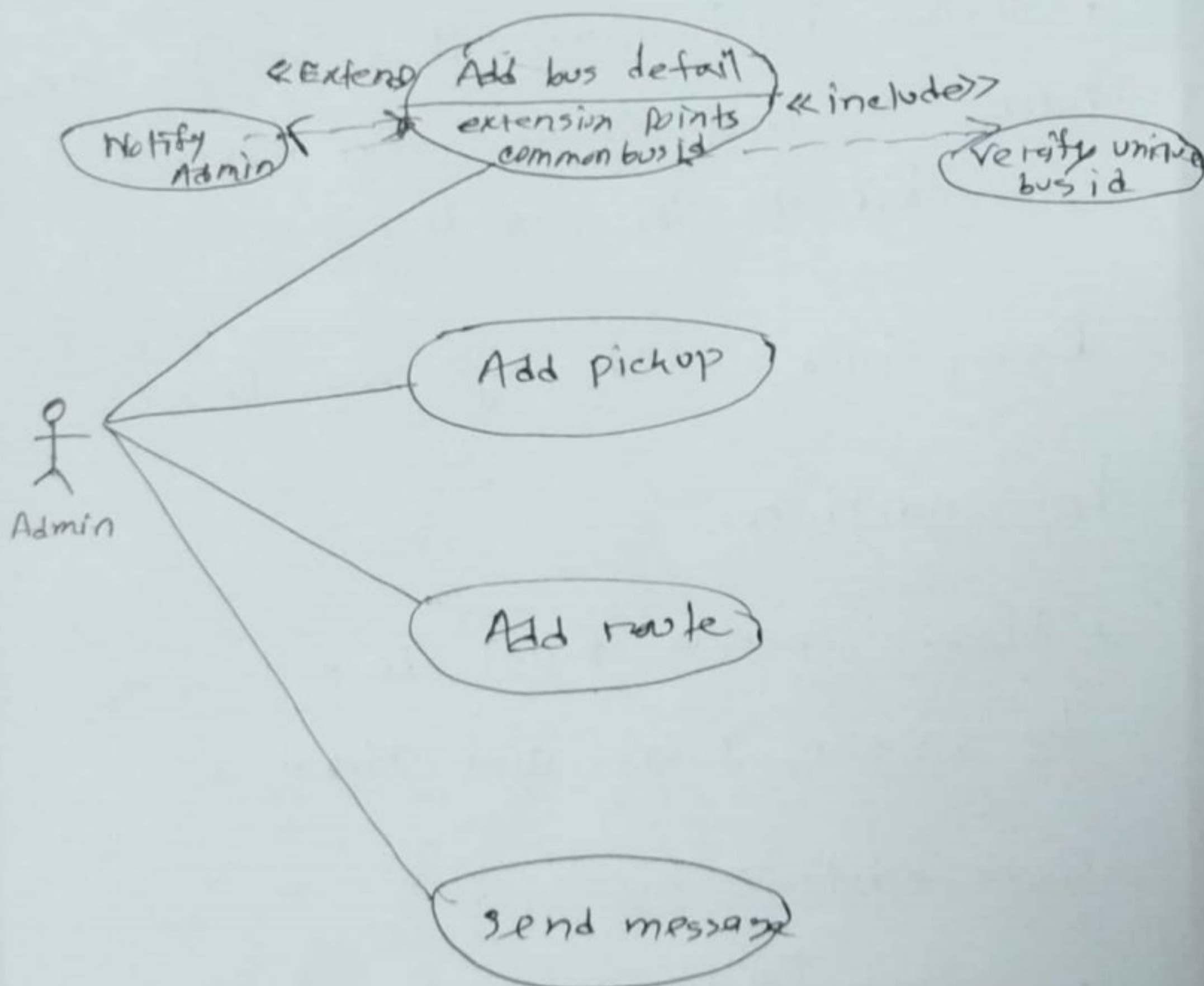
- Admin can provide one pickup time for one bus.
- Admin can provide one bus name and route at a same time.

Use case Relation:

1. Include relation in pickup point about selecting unique time for one bus at a time.
2. Extend relation for notifying about the collision of bus.

Use case diagram:

Sub system - 3

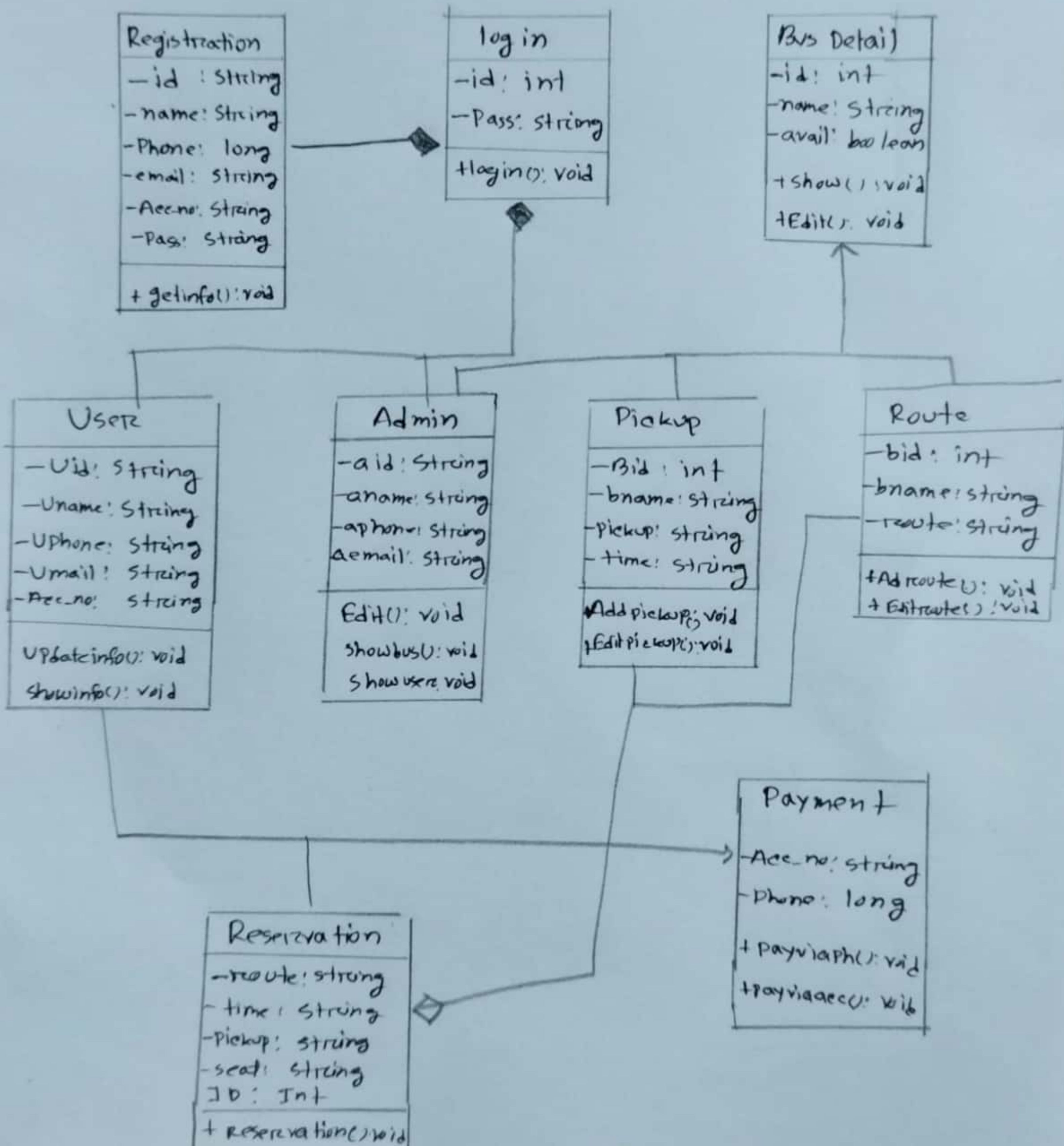




Pritam Saha

ID: 375

Part: class modeling



Name: Prakash Maitra

Roll : 370

Part : Entity Relationship Diagram

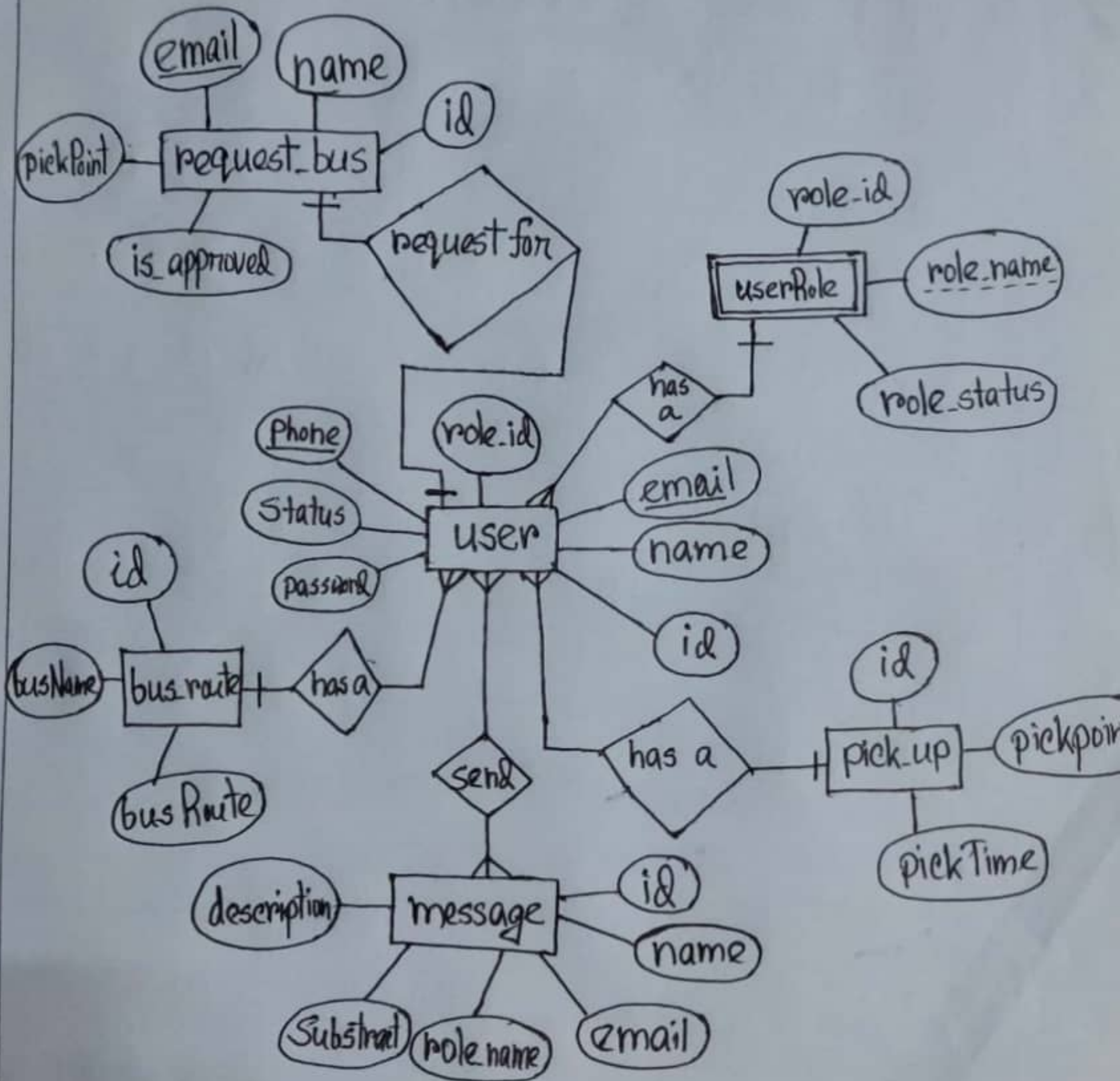


Figure : Entity Relationship Diagram

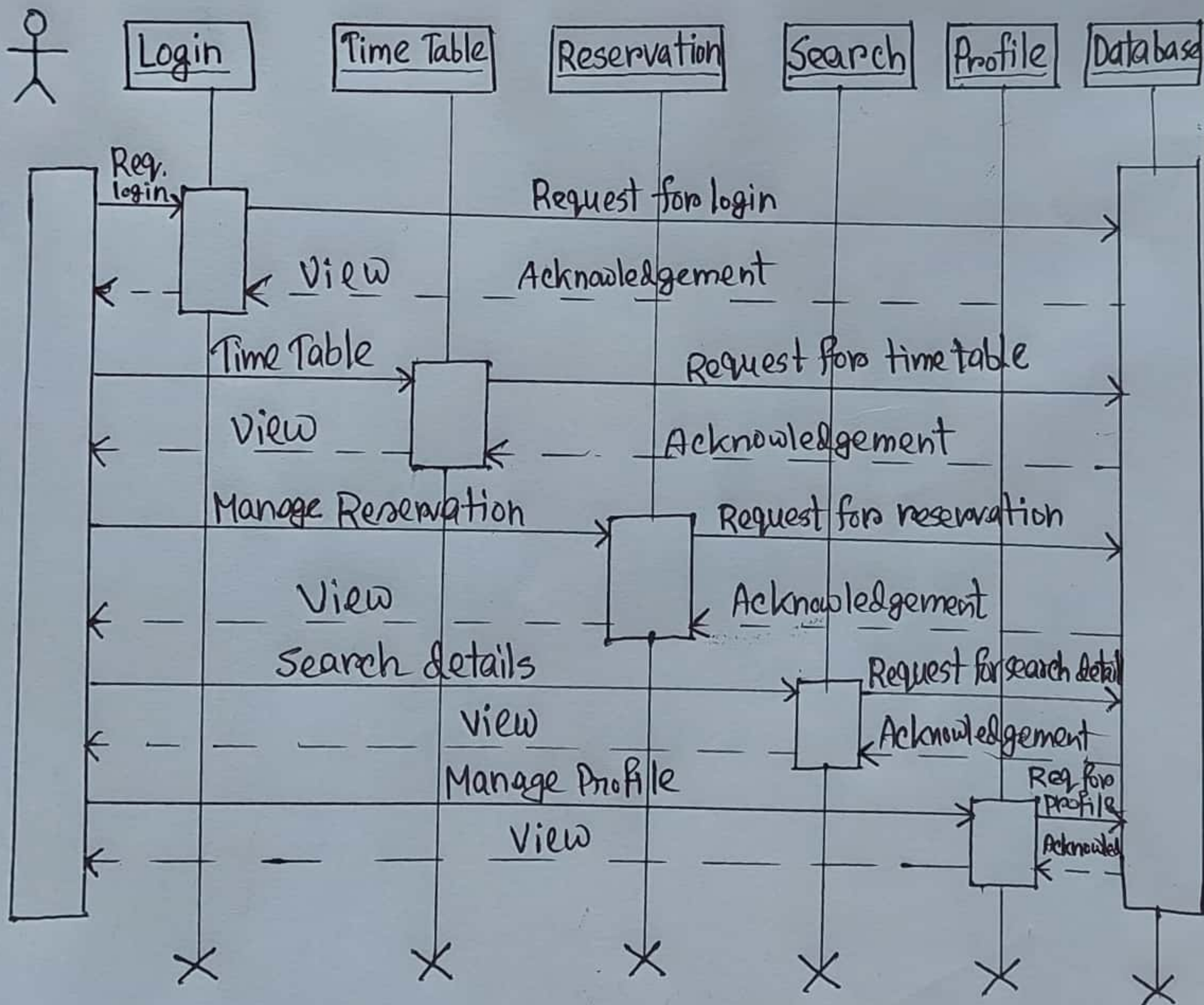


Name: Prokash Maitra

Roll : 370

Part : Sequence Diagram (customer)

## Sequence Diagram of Customer

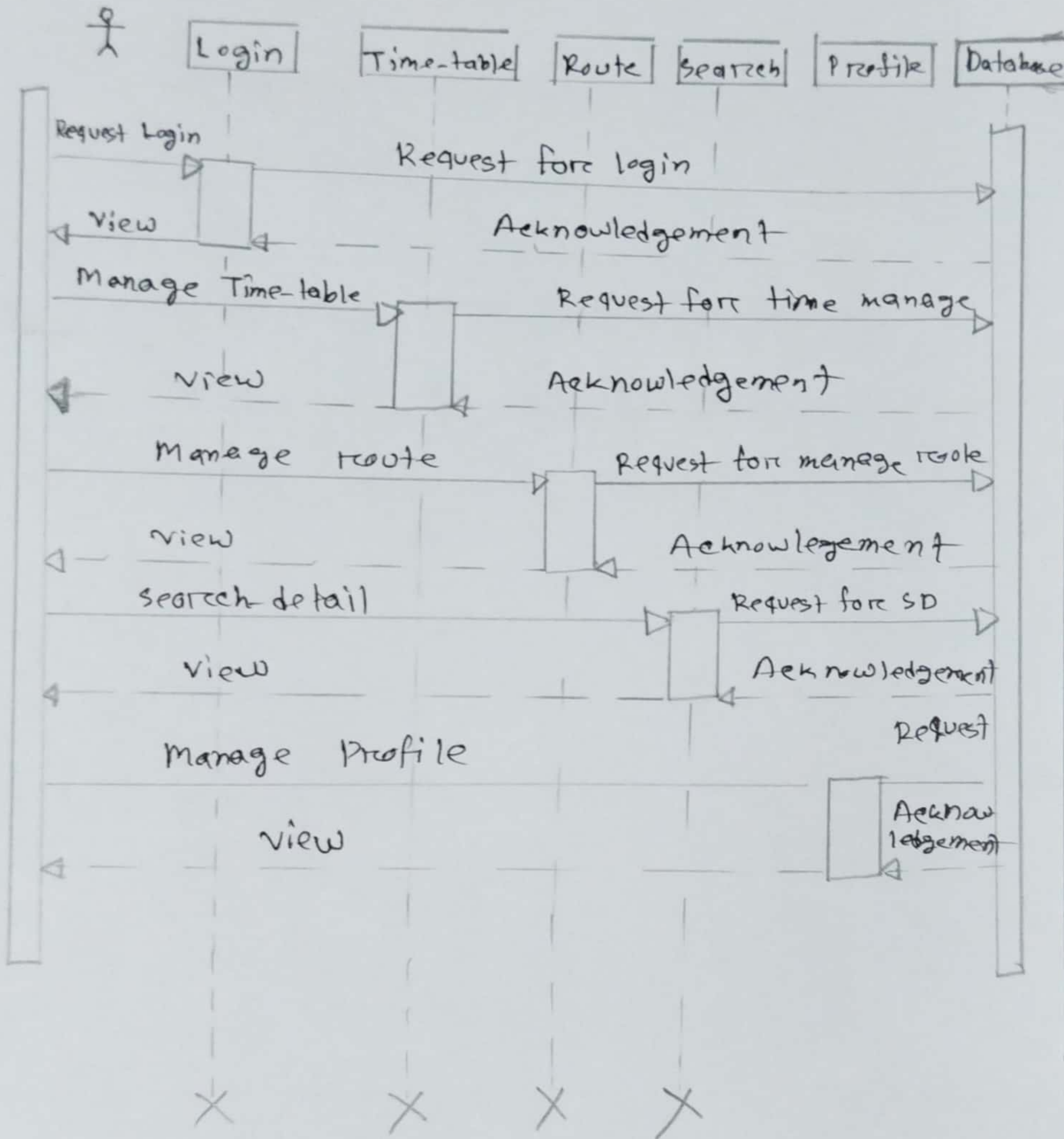




Name: Pritam Saha

ID: 375

my part: Sequence Diagram (Admin)

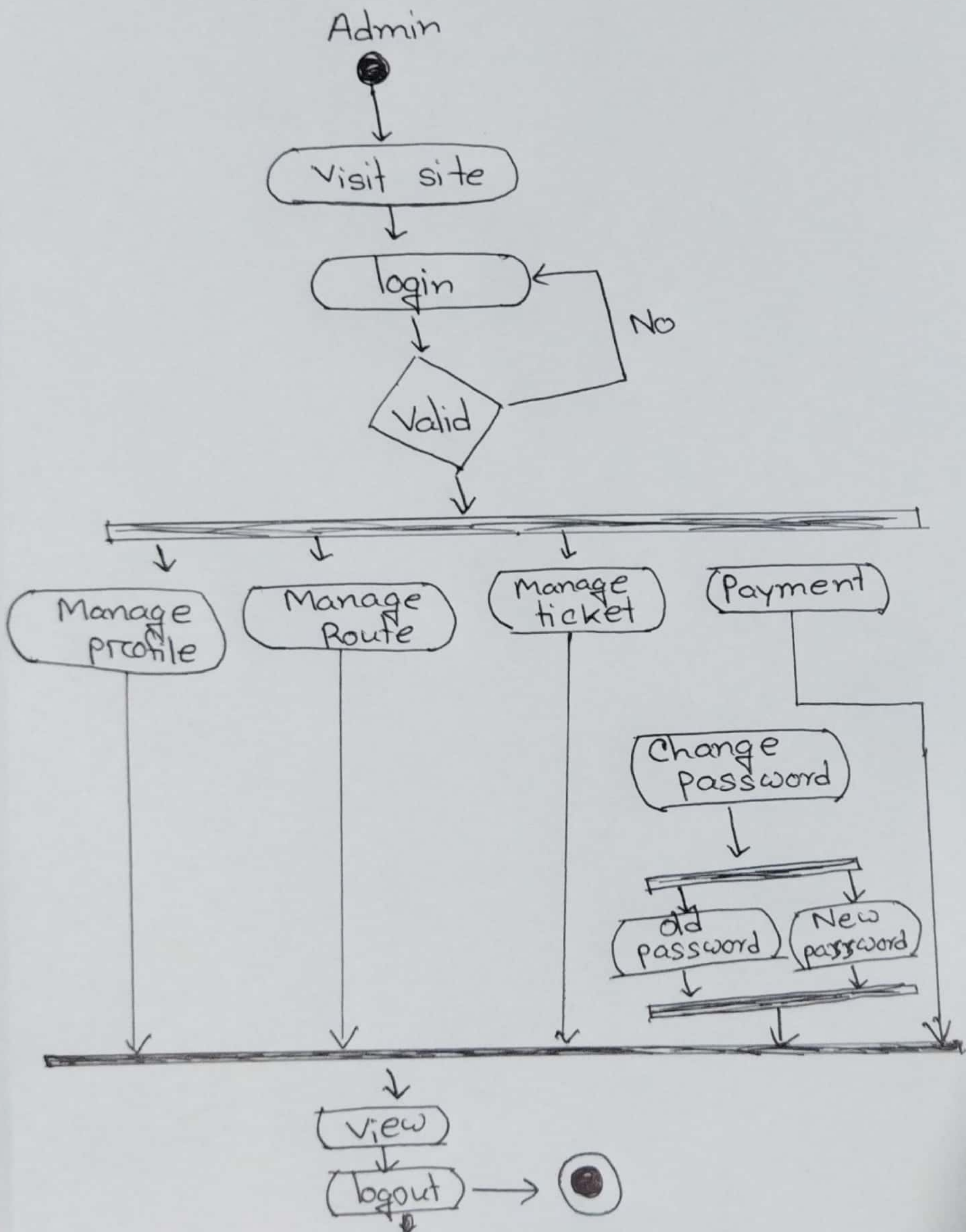




Tama shil

ID - 342

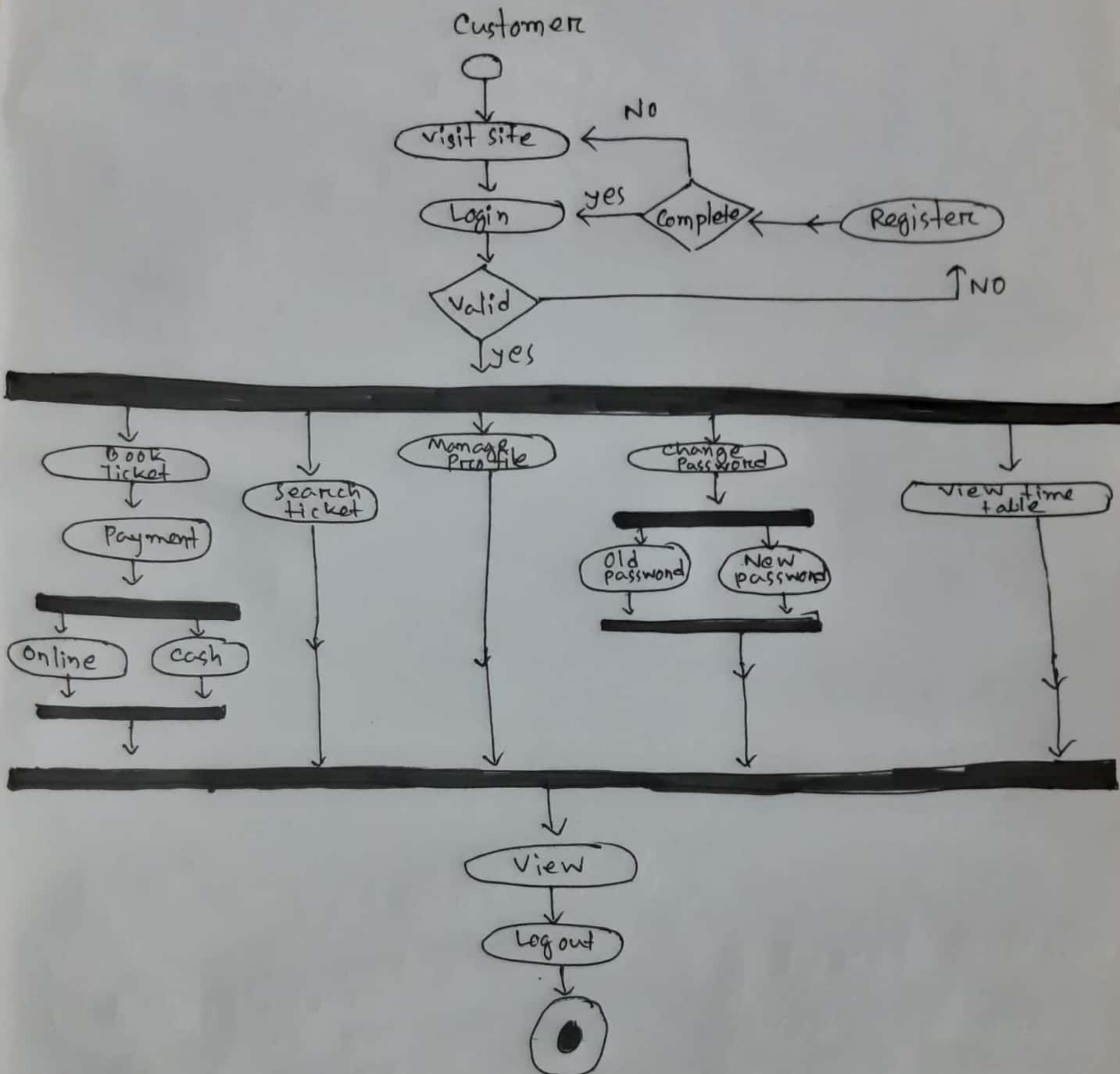
Part : Activity diagram  
for Admin





Name: Mubasher Adnan Jihad  
Roll : 374

## Activity Diagram for Customer





Tama Shil

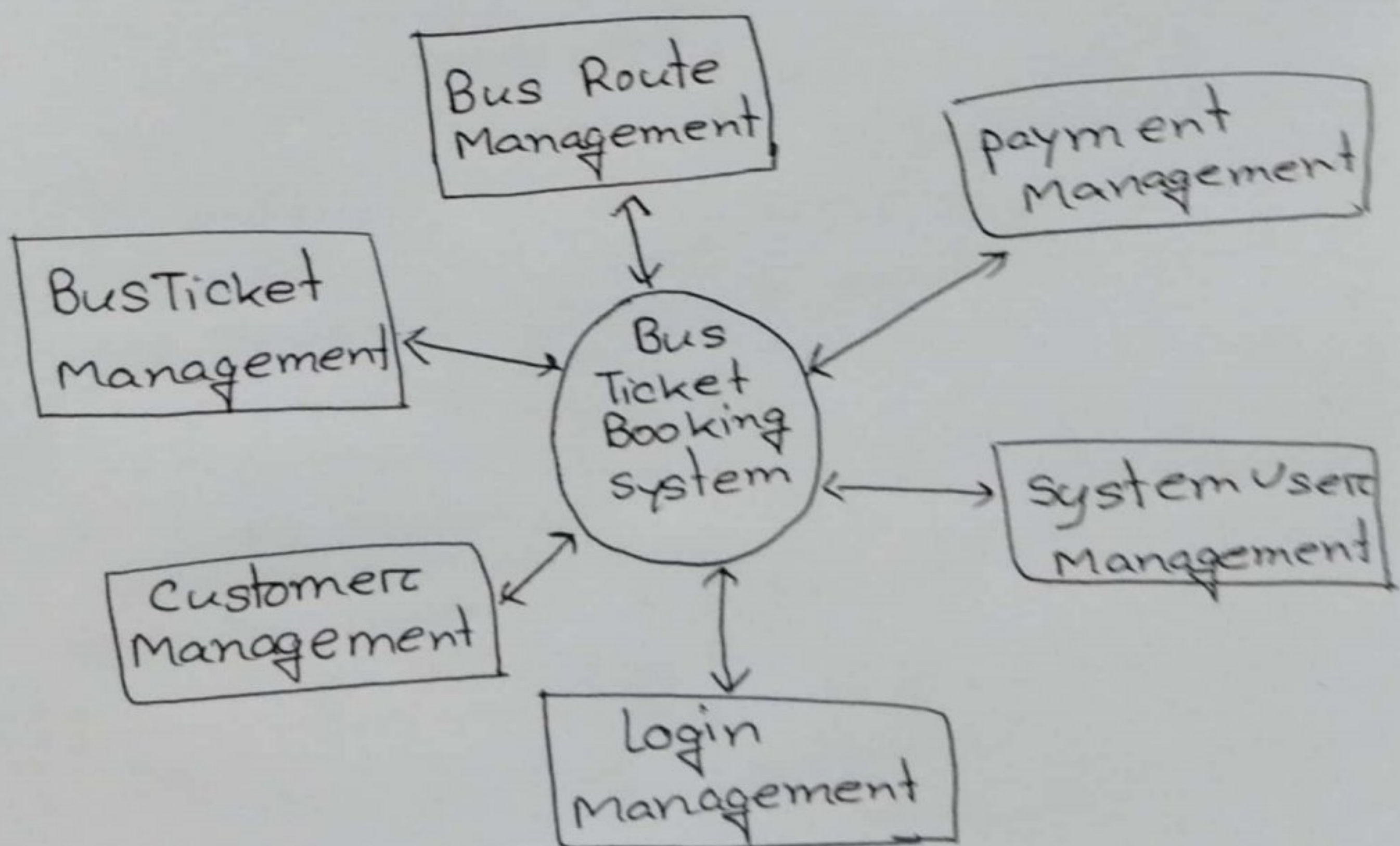
ID: 342

Part: Data flow Diagram

Zero level DataFlowDiagram (0 LEVEL DFD):

High level entries and Process flow of  
Bus ticket Booking system:

- Managing all Bus schedules
- " all Reservations
- " all Tickets
- " all customers
- " all Bus Route
- " all Tickets

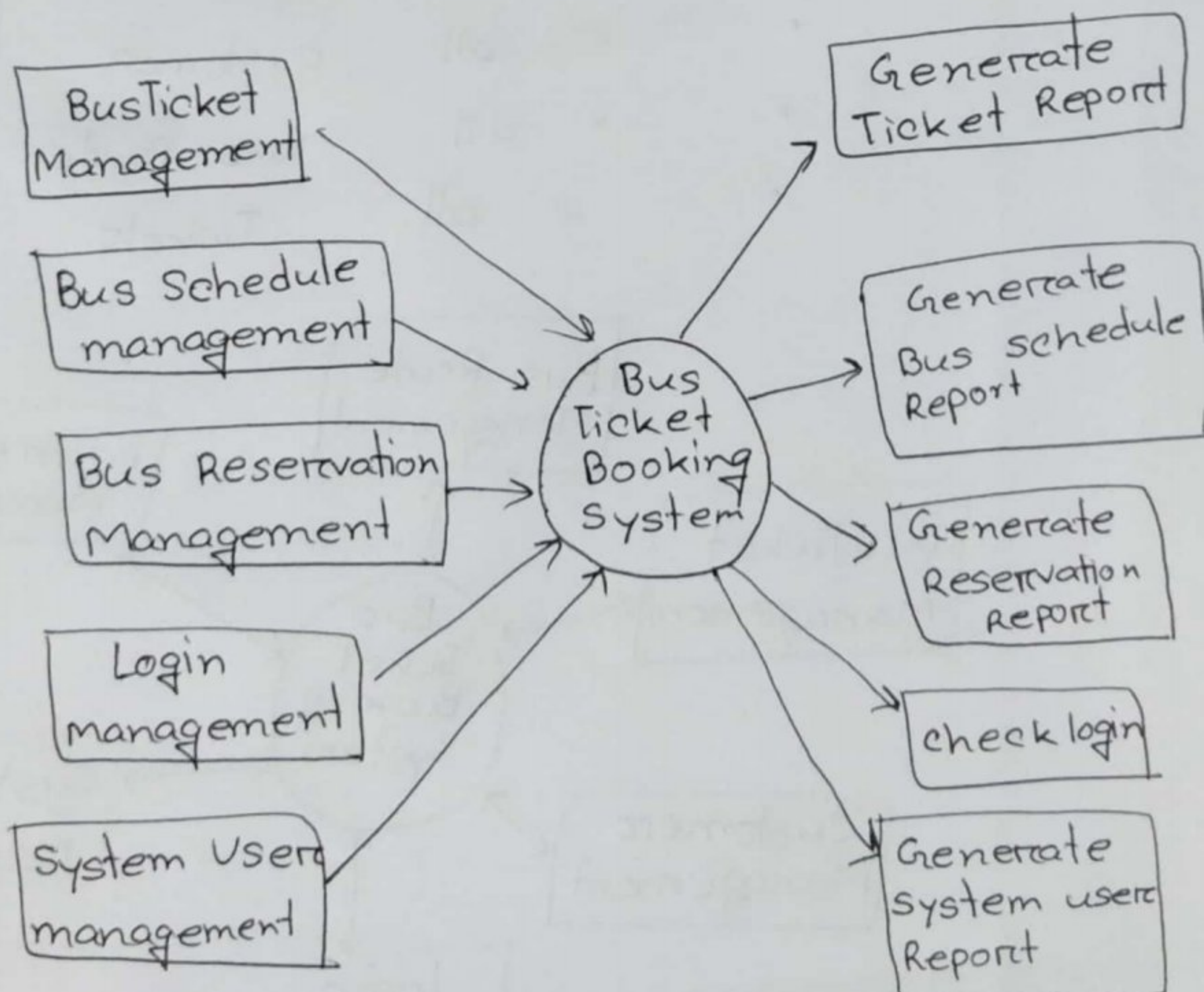




## First Level DFD:

Main entries and outputs of First Level DFD (1st level DFD):

- Processing bus schedules and generating report
- " bus records and generating report <sup>Reservation</sup>
- " Ticket records and generating report.
- " Customer records and generating report of all tickets.
- " Processing bus routes and payment records and generating report.





Second level of DFA.

Low level functionalities of Bus ticket System,

- Admin login to the system and manage all functionalities of Bus system.
- Admin can add buses, schedules, edit, delete and view them.
- Admin can manage all details about ticket payments, reservation and confirmations.
- Admin can search the details of booking, customer details.
- Admin can track detailed information of Booking, Tickets, Customers.



