



Online Vehicle Rental and Hiring Management System

(Easy Rent)

Information Technology Project – ITP2080

ITP_WD_B04_04

Final Report

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Submitted to:

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Date of submission:

Declaration

We declare that this project report or part of it was not a copy of a document done by any organization, university any other institute or a previous student project group at SLIIT and was not copied from the Internet or other sources.

Project Details

Project Title	Online Vehicle Rental and Hiring Management System (EasyRent)
Project ID	ITP_WD_B04_04

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Abstract

Easy Rent is an advanced vehicle renting and hiring management system designed to streamline and enhance the operations of vehicle rental businesses. Our system provides a comprehensive platform for managing the end-to-end rental process, from vehicle inventory management to customer reservations and payments.

The core features of Easy Rent include a user-friendly interface for both customers and administrators, a robust vehicle management module, secure online payment processing, and detailed reporting and analytics. Customers can effortlessly browse available vehicles, make reservations, and manage their bookings through an intuitive online portal.

For administrators, Easy Rent offers powerful tools for managing vehicle fleets, tracking maintenance schedules, and monitoring rental activities. The system supports various types of vehicles, including cars, motorcycles, trucks, and specialty vehicles, ensuring versatility for different business needs.

Easy Rent leverages modern technologies to provide a seamless and secure experience. The system is built with scalability in mind, allowing it to grow with the business and adapt to changing market demands. Our focus on user experience, efficiency, and security ensures that both customers and administrators benefit from a reliable and hassle-free solution.

In conclusion, Easy Rent aims to revolutionize the vehicle rental industry by providing a comprehensive, efficient, and user-friendly management system. By automating and optimizing key processes, Easy Rent helps rental businesses improve their operations, enhance customer satisfaction, and drive growth.

Acknowledgement

We would like to extend our heartfelt gratitude to everyone who has contributed to the development of Easy Rent, our vehicle renting and hiring management system. This project would not have been possible without the unwavering support and guidance of our colleagues.

Firstly, we thank our development team for their dedication, hard work, and innovative approach to solving complex problems. Your expertise and collaboration were crucial in bringing Easy Rent to life.

We are deeply grateful to our lecturer Mr.HarshanathSMB for their invaluable insights, feedback, and encouragement throughout this project. Your experience and wisdom helped shape Easy Rent into a robust and user-friendly system.

Lastly, we appreciate the trust and cooperation of our stakeholders and partners. Your belief in our vision and your constructive collaboration were vital to the success of this project.

Thank you all for being part of this journey. Together, we have created a system that aims to revolutionize the vehicle renting and hiring industry.

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1. Introduction

1.1 Client/Company Background

Our system caters to four main types of clients: Vehicle Owners, Renters, Drivers, and System Employees.

Vehicle Owners have the ability to list their vehicles on our platform, specifying their availability for rent or hire.

System Employees, particularly those in the Maintenance team, perform regular check-ups on these listed vehicles to ensure they are in optimal condition for use.

Renters have the flexibility to book a vehicle for either rent or hire, after checking its availability. For hires, the vehicle owner assigns a driver for the trip.

The system also facilitates seamless transactions. Renters can make payments directly through the system for their bookings. Similarly, Vehicle Owners can use the system to pay the Drivers for their services.

1.2 Problem Statement

1.2.1 Challenges for Vehicle Owners:

- Limited Exposure: Manual systems lack a dedicated platform to list vehicles, hindering their reach to potential renters and limiting their earning potential.
- Inefficient Booking Management: Managing bookings through phone calls or emails is time-consuming, prone to errors, and increases the risk of double bookings.
- Transparency Issues: Tracking earning history and payments from renters is difficult, leading to ambiguity and potential disputes.
- Manual Workload: Generating bills manually is tedious and error-prone, consuming unnecessary time and effort.

1.2.2 Challenges for Renters:

- Limited Search Options: Filtering and selecting vehicles based on preferences and real-time availability is difficult without a proper platform, leading to inefficient searches.
- Inefficient Communication: Constant calls or meetings with vehicle owners to check availability are inconvenient and time-consuming.

- Lack of Visibility: Inability to view booking history and future bookings hinders planning and managing rental schedules.
- Limited Payment Options: Paying in cash or through manual methods can be inconvenient and lack security compared to online options.
- Absence of Reviews and Ratings: Difficulty in assessing the reliability of vehicles and owners due to lack of readily available feedback mechanisms.

1.2.3 Challenges for Drivers:

- Time Management: Drivers need to manage their time effectively to meet rental schedules, pick up and drop off passengers on time.
- Safety and Security: Ensuring the safety and security of passengers and rented vehicles is a critical challenge for drivers.
- Regulatory Compliance: Adhering to local laws, regulations, and licensing requirements related to driving, vehicle operations, and rental services poses a challenge for drivers.
- Navigating Unfamiliar Routes: Drivers often face challenges when navigating unfamiliar routes, areas with complex road networks or heavy traffic.

1.3 Motivations

1.3.1 Motivations for Vehicle Owners:

- Increase earnings: By reaching a wider audience through an online platform, owners can attract more renters and potentially increase their income.
- Save time and effort: A streamlined booking system eliminates the need for manual communication and reduces the risk of errors, freeing up valuable time and resources. Gain transparency: Automatic tracking of earnings and payments provides clear financial records and reduces the potential for disputes.
- Reduce workload: Automated billing eliminates the need for manual work, saving time and minimizing the risk of errors.

1.3.2 Motivations for Renters:

- Find vehicles easily: Advanced search filters allow for efficient searching based on specific criteria, saving time and effort.
- Convenient booking: Online booking eliminates the need for repeated calls or meetings, offering a more convenient and time-saving experience.
- Better planning: Access to booking history and future bookings allows for improved planning and organization of rental schedules.
- Secure payment options: Online payment methods offer convenience and security compared to traditional methods.
- Informed decision-making: Access to customer reviews and ratings helps renters make informed choices about vehicles and owners.

1.3.3 Motivations for Drivers:

- Earning Potential: The potential to earn a decent income, especially during peak rental periods or through bonuses and incentives based on performance.
- Positive Feedback and Recognition: Appreciation from customers, positive reviews, and recognition for good performance can boost drivers' morale and motivation.
- Variety in Work: Driving different types of vehicles, meeting new people, and visiting various locations can provide variety and excitement in the job.
- Independence: Drivers in vehicle rental systems often enjoy a sense of independence and autonomy in their work.

1.4 Aim

To empower individual vehicle owners with limited resources by providing a comprehensive and user-friendly software platform for managing their rental businesses.

1.5 Objectives

1.5.1 For Vehicle Owners:

- Increase reach and visibility: Enhance exposure to potential renters by 70% through the online platform within the first year.
- Simplify rental management: Streamline booking, communication, and financial processes, reducing management time by 50% within six months.

- Gain financial control: Ensure 100% transparency in earnings and payments through automated tracking and reporting.

1.5.2 For Renters:

- Access diverse vehicle options: Expand search options to include vehicles from individual owners, increasing rental availability by 30% within the first year.
- Enjoy a seamless booking experience: Facilitate convenient online booking for all listed vehicles.
- Benefit from competitive pricing: Enable access to potentially lower rental rates offered by individual owners.
- Maintain secure transactions: Integrate secure online payment options for all rental transactions.

1.5.3 For Drivers:

- Safe and Reliable Transportation: The primary objective is to provide safe and reliable transportation services to customers.
- Timely Delivery and Pickup: Drivers should aim to meet rental schedules promptly.
- Excellent Customer Service: Providing excellent customer service by being helpful, and responsive to customer needs.
- Effective Communication: Communicating effectively with customers, support staff, and other stakeholders to coordinate pickups, drop-offs, and any issues.

1.6 The functions handled by the system are

1.6.1 Customer Management System

- The main user is Renter
- Renter can register into the system by using personal information
- Renters can manage their profiles and if they want they can delete the account permanently
- If a renter faced to a accident while the hiring or renting our vehicle those details are saving in our system database.
- Renters can filter vehicles according to their ideas.
- If renters found a vehicle they can add them into the Favorite list

1.6.2 Owner Management System

- The main user is vehicle owner.
- Can register and create profiles by providing personal details.
- Capability to add, update or delete vehicle information as needed and also can assign drivers to the relevant booking.
- Owners receive notifications for new booking requests and other updates including payments and can generate reports about the vehicle details.

1.6.3 Driver Management System

- The main user is the driver.
- Drivers interested in joining the platform can follow the registration process and the system verifies the driver's identity, driving license, and other required credentials. After a successful verification, a driver profile is created in the system.
- The system manages and stores essential documents such as driving licenses.
- Drivers can view the location, reserved date, no. of days through the system.
- Performance metrics, such as driving behavior, response to traffic rules, and customer feedback, are collected and analyzed. Complaints to the drivers will be notified to the relevant driver.

1.6.4 Vehicle Management System

- The main users are renters owners and drivers
- When vehicle approved from the maintenance test add that vehicle into the system
- Investigate all the complains on the specific vehicle when some one put a complain on that.
- If needed remove vehicles from the system database(if done any prohibited tasks)
- Put vehicles Into the maintenance at a specific time period

1.6.5 Booking & Payment Management System

- The main users are vehicle owner and renter.
- Tasks include adding, updating, delete and search booking requests for renter.

- Tasks include approving or rejecting booking requests and add additional cost and generating bill for vehicle owner.
- Using stripe payment gateway renter can pay the bill online.
- Both owner and renter can generate reports showing the billing history and earnings.

1.6.6 Maintenance Management System

- The main user is the maintenance manager.
- Tasks include adding, updating, delete and search vehicle details for maintain vehicles.
- Using a form maintenance manager can update vehicle conditions and view them.
- The maintenance manager can view the oil level, tire condition, engine repair and no of date through the system.

1.6.7 Review and Rating Management System

1.6.8 HR Management System

- The main users are the HR manager, employee.
- Tasks include managing employee records such as adding, updating, and deleting employee information.
- Responsible for tracking employee attendance, calculating working hours and generating payroll.
- Tasks include managing employee leave requests and approvals.
- Generate reports on employee details.

1.4 Project Report Structure

Chapter 1 – Requirement Analysis

The system's requirements and scope are articulated through diagrams. By examining these charts, one can comprehend the functions executed by each user and the sequence of steps undertaken in each section.

Chapter 2 – Design

The system's design details are illustrated. It provides a quick overview of how the system processes each function, using sequence diagrams and state chart diagrams. To help the reader understand the user interface, snapshots of the interfaces are included.

Chapter 3 – Implementation

The discussion revolves around the selection of technology for the project and the rationale behind these choices. It also highlights the benefits that the chosen technologies bring to both the development team and the users.

Chapter 4 – Testing

It incorporates test cases for the main functions to verify that the system operates as intended.

Chapter 5 – Conclusion

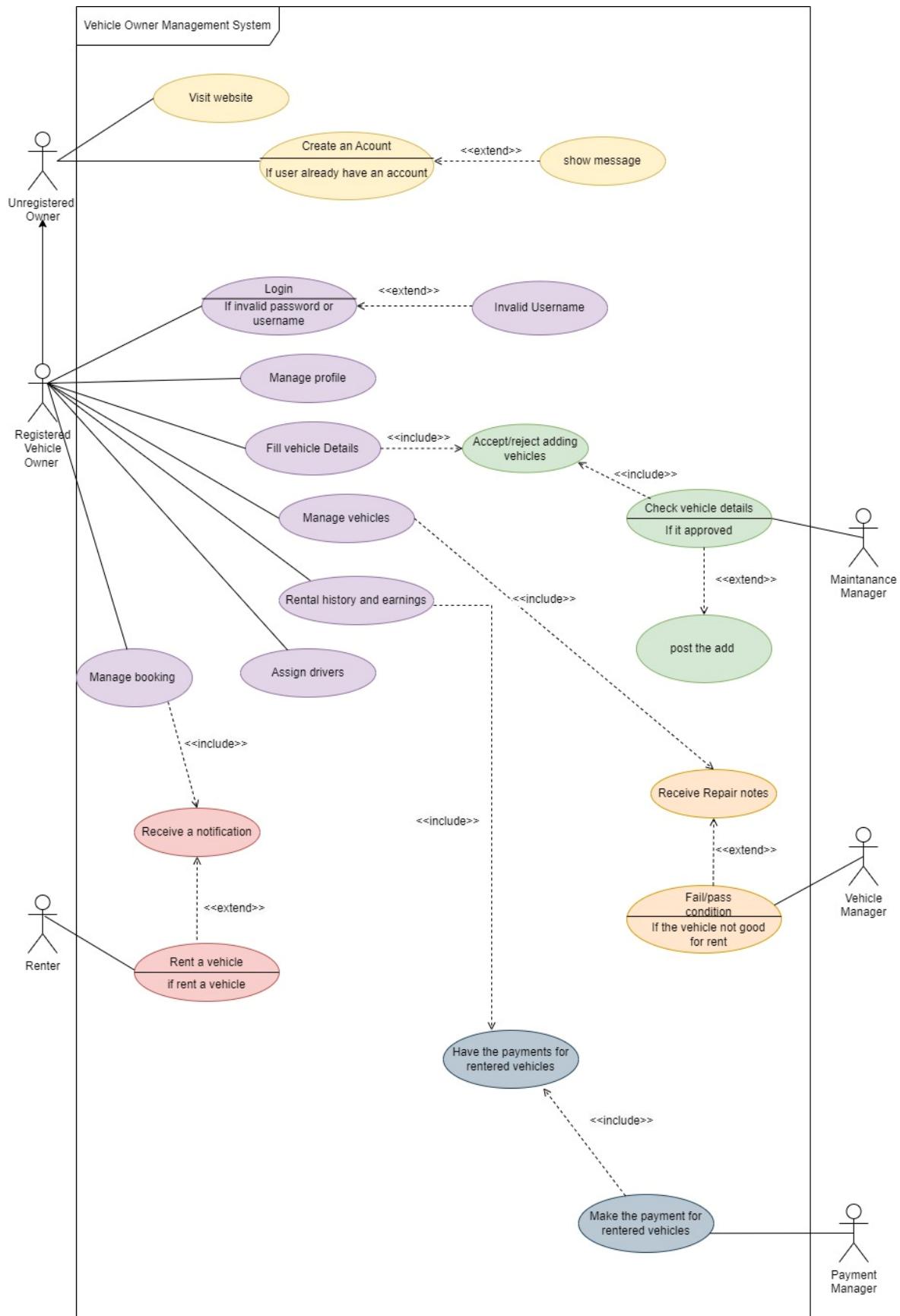
States the conclusion reached by the development team at the end of the project. Discusses both positive and negative points in the developed system and the benefits of the system to the client.

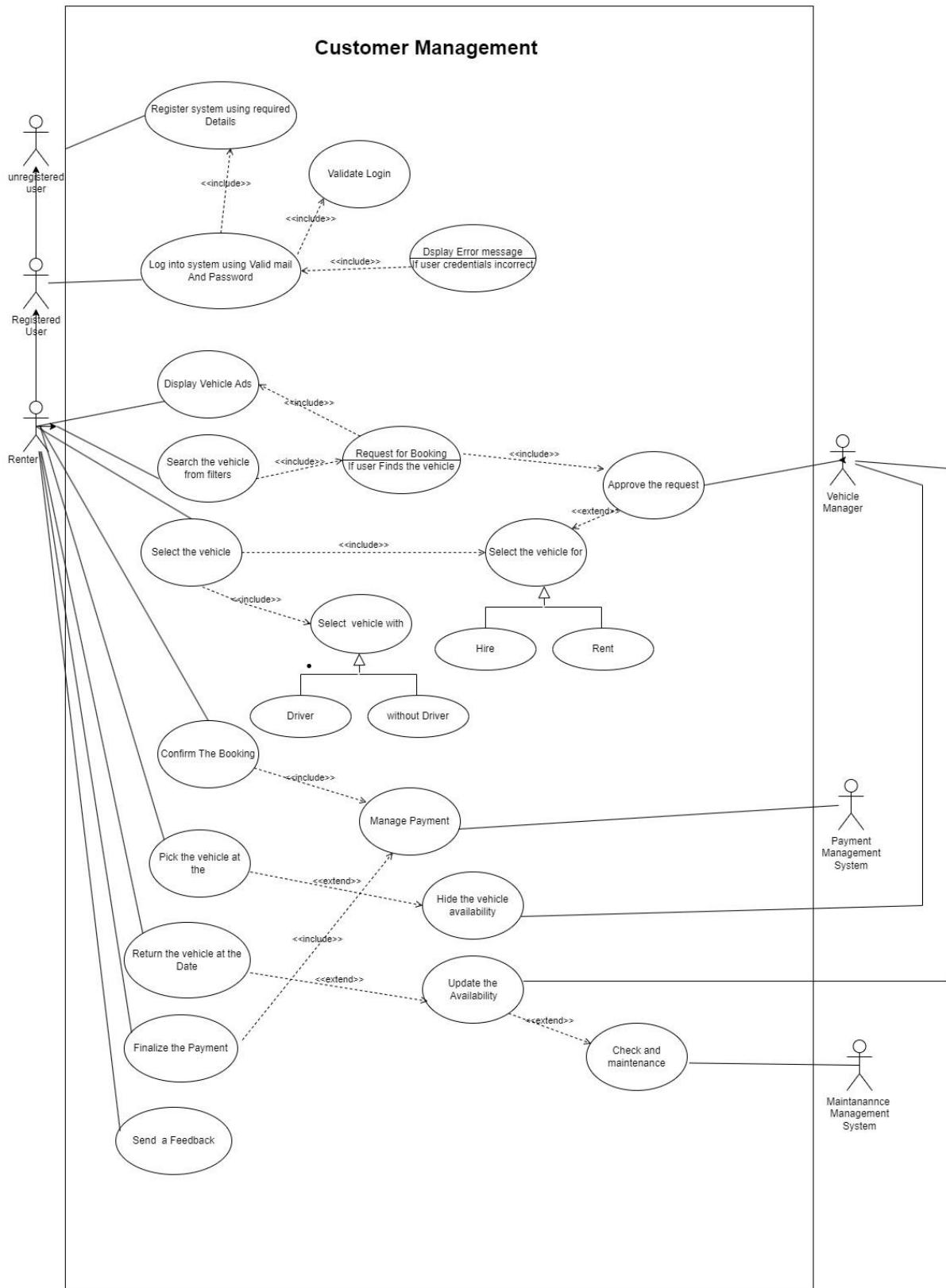
2 Methodology

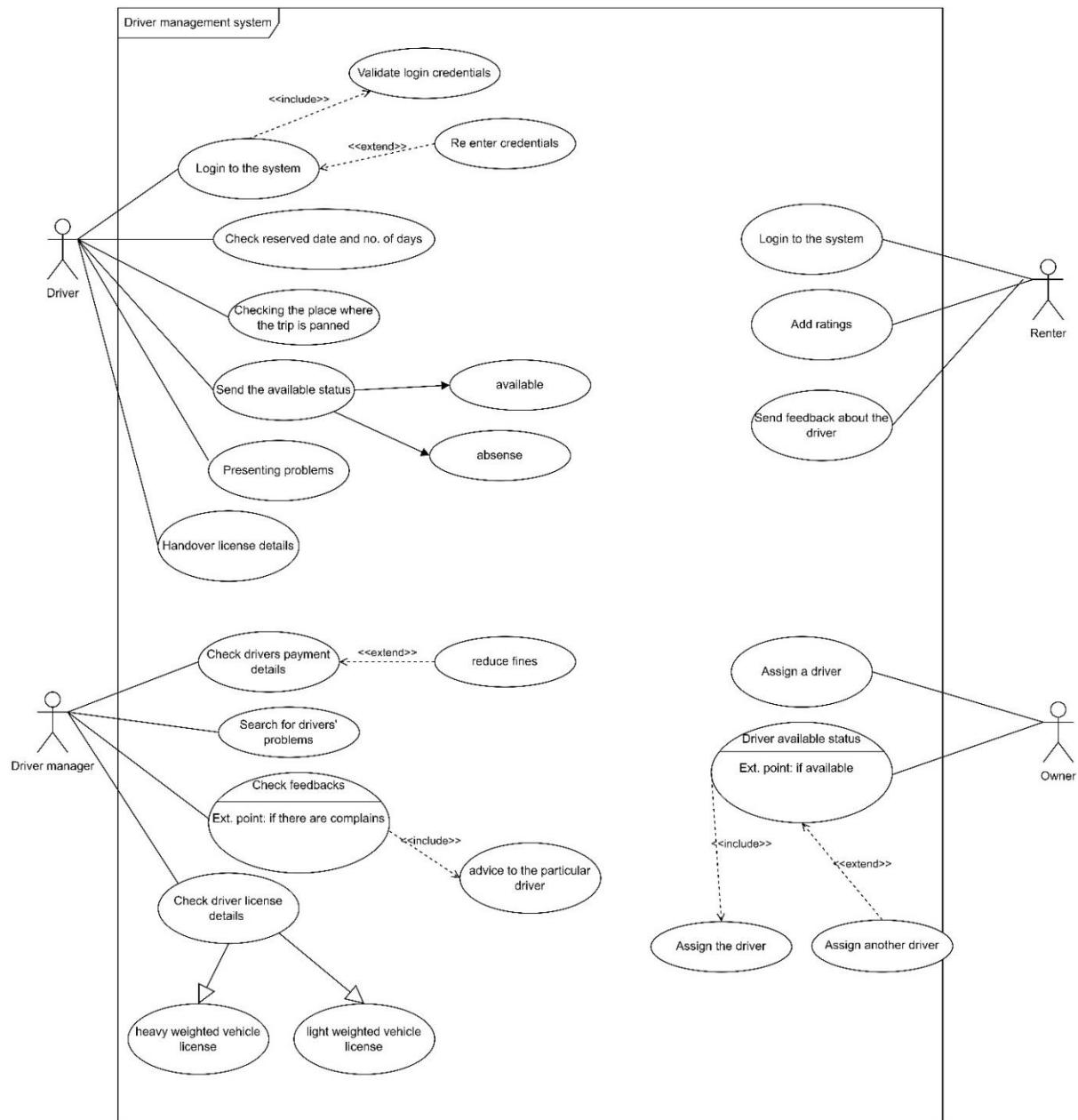
2.1 Requirement Analysis

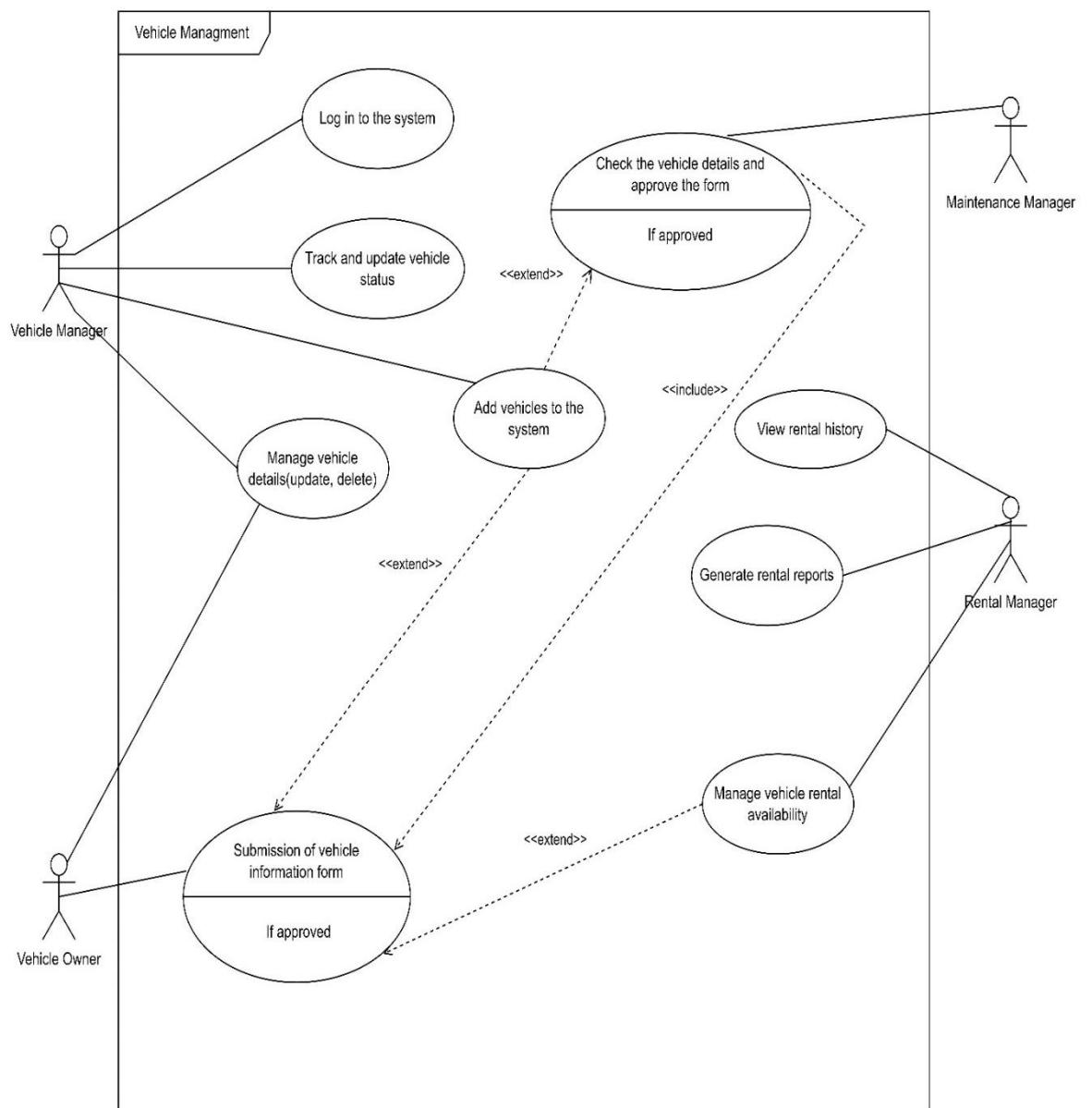
2.1.1 Use Case Diagrams



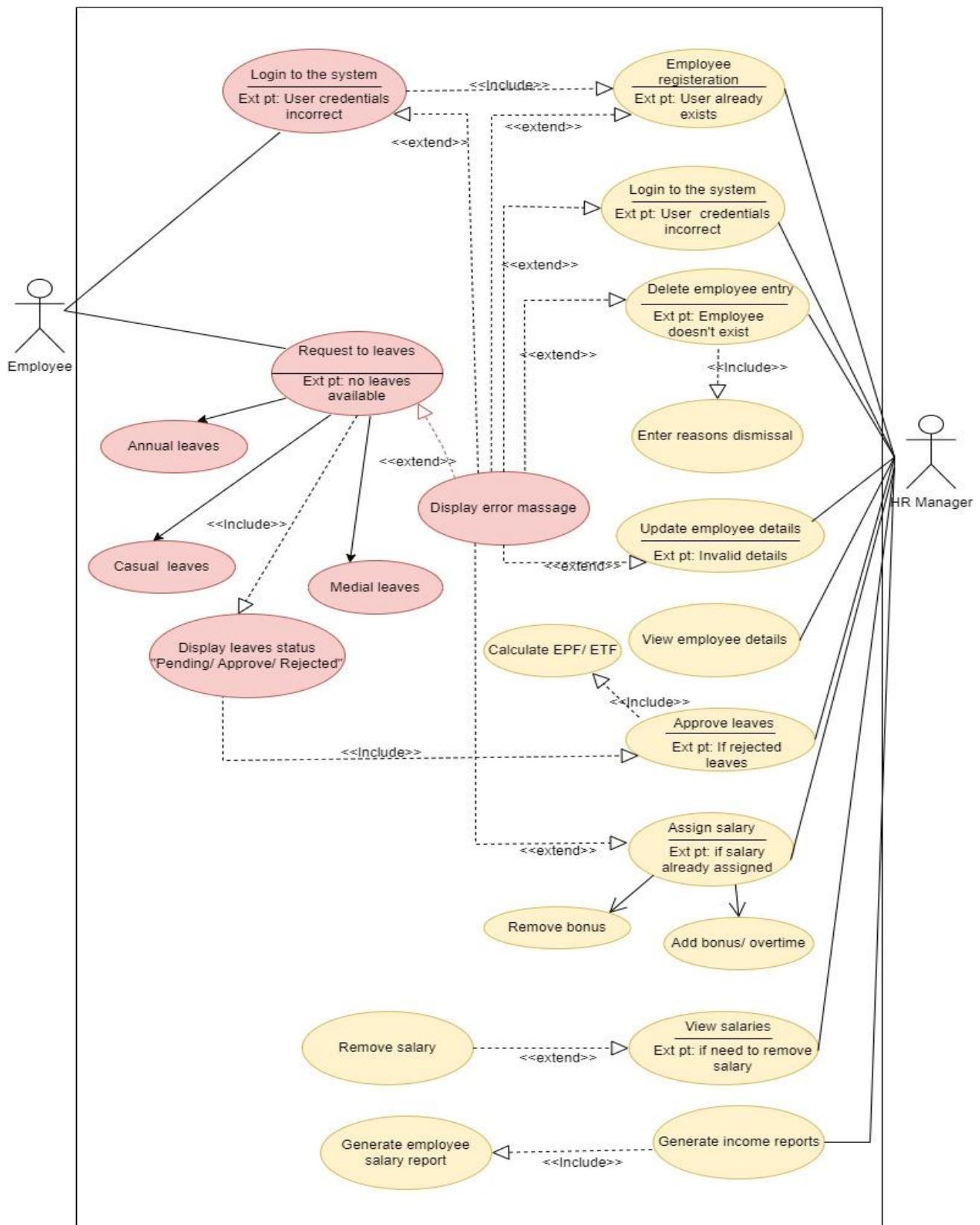


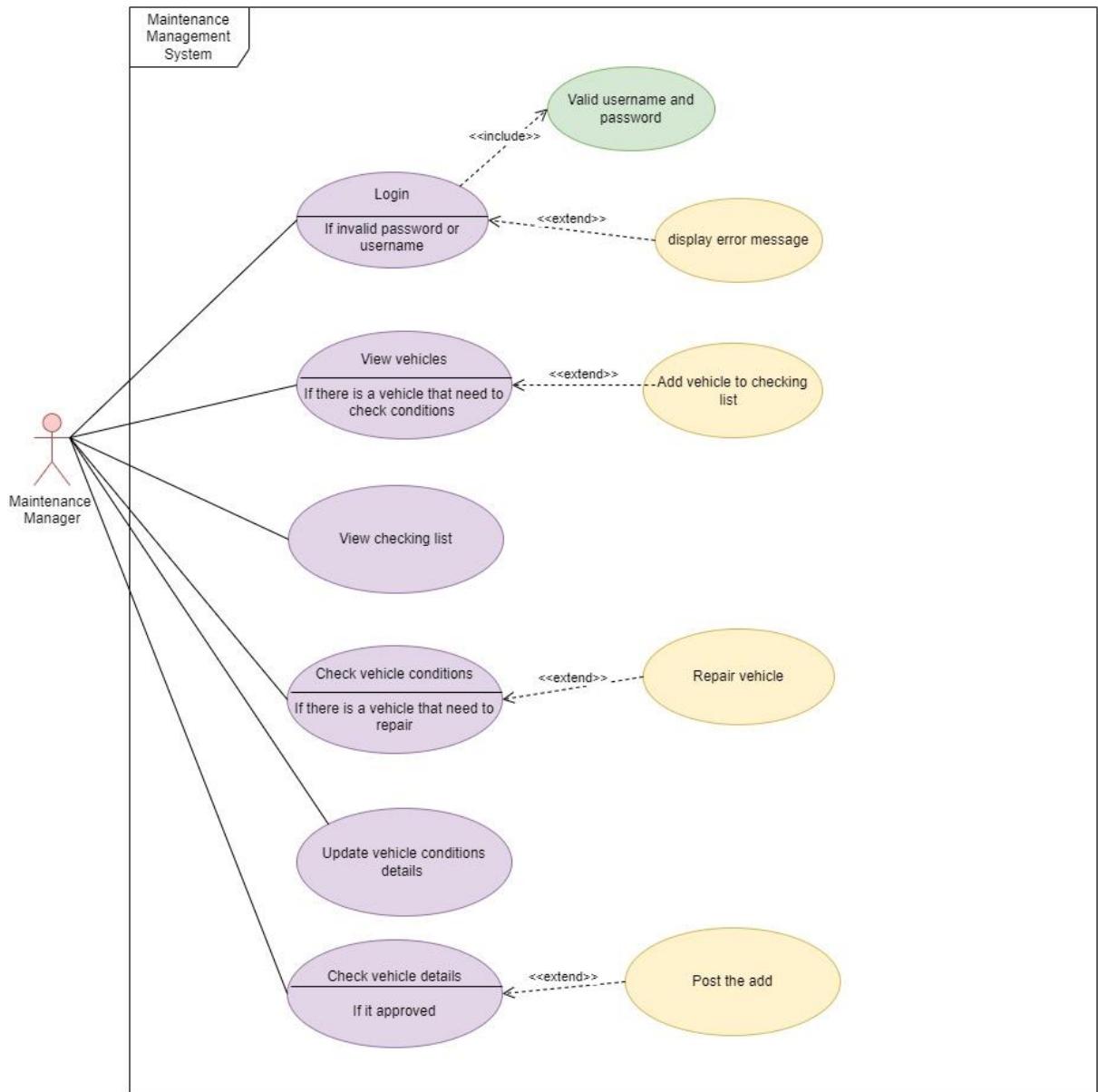


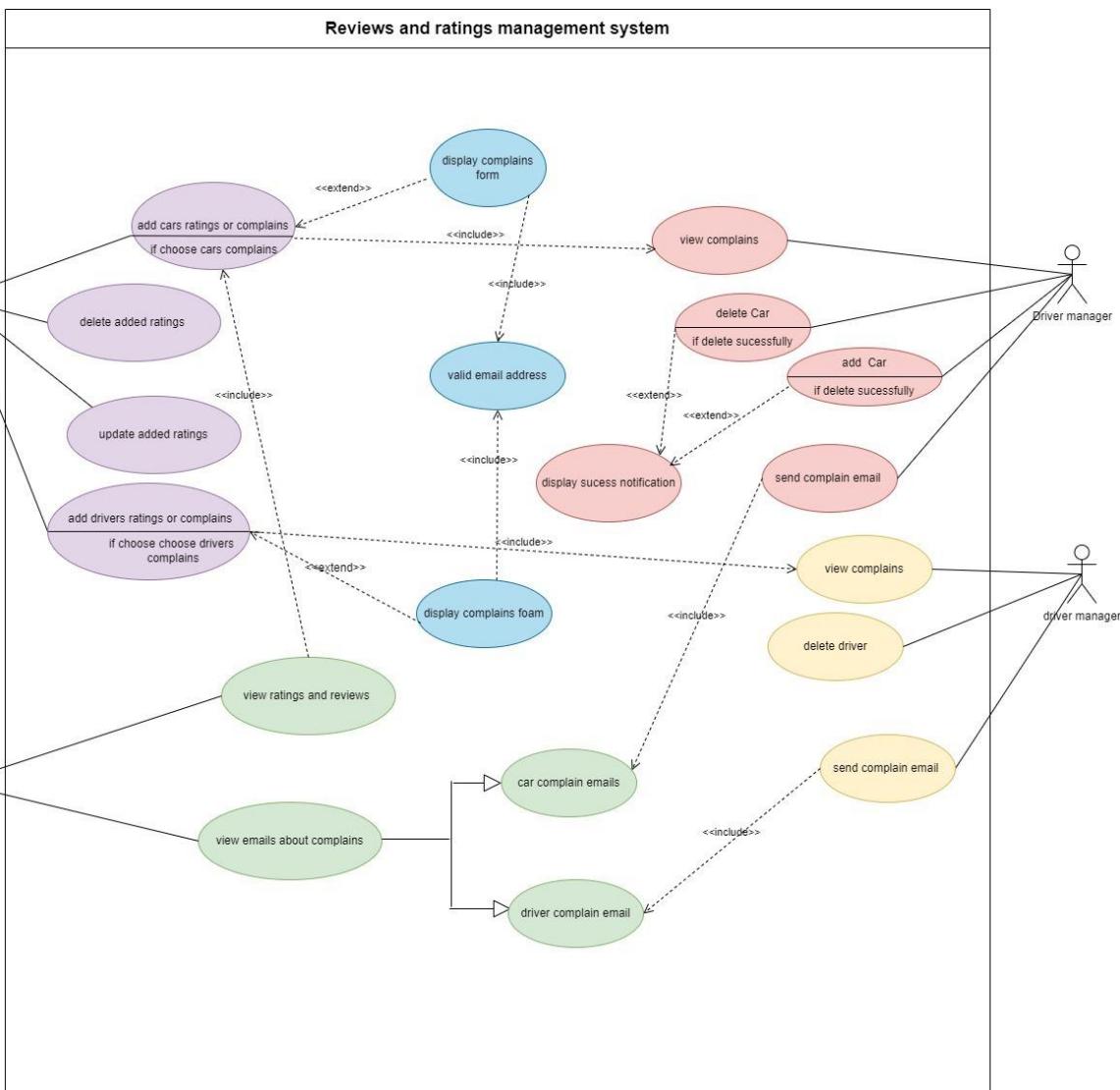




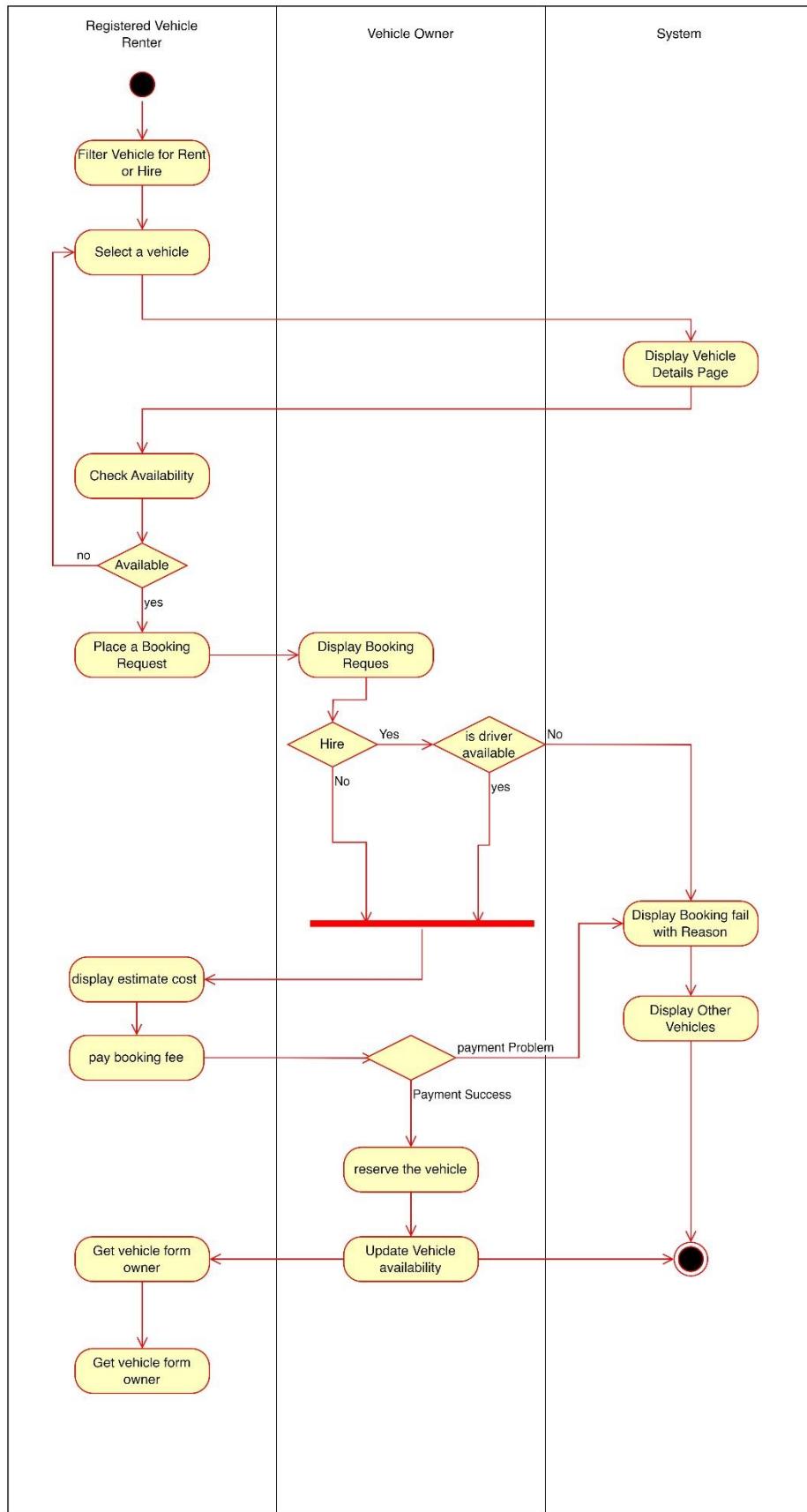
Human Resources Management

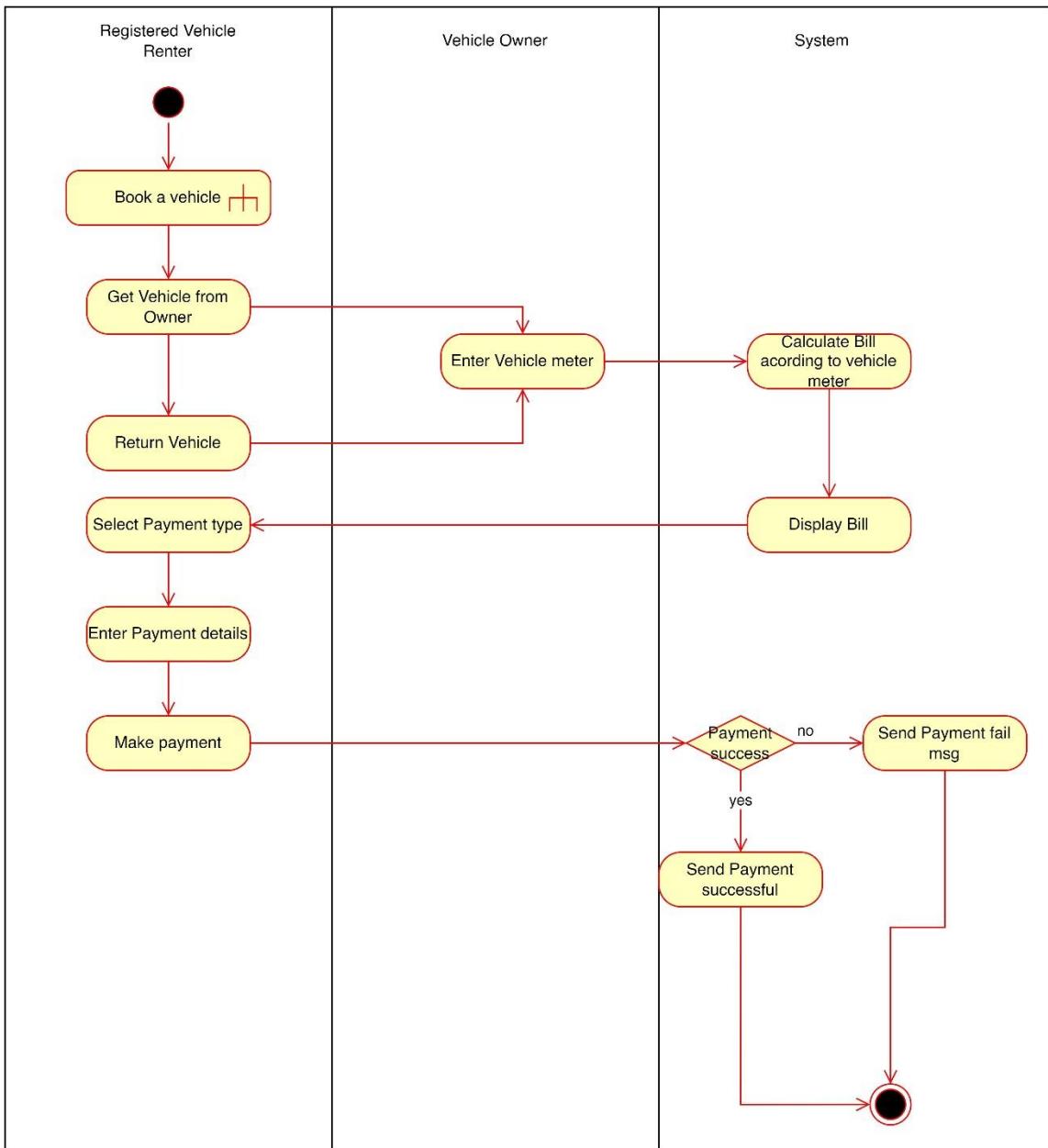


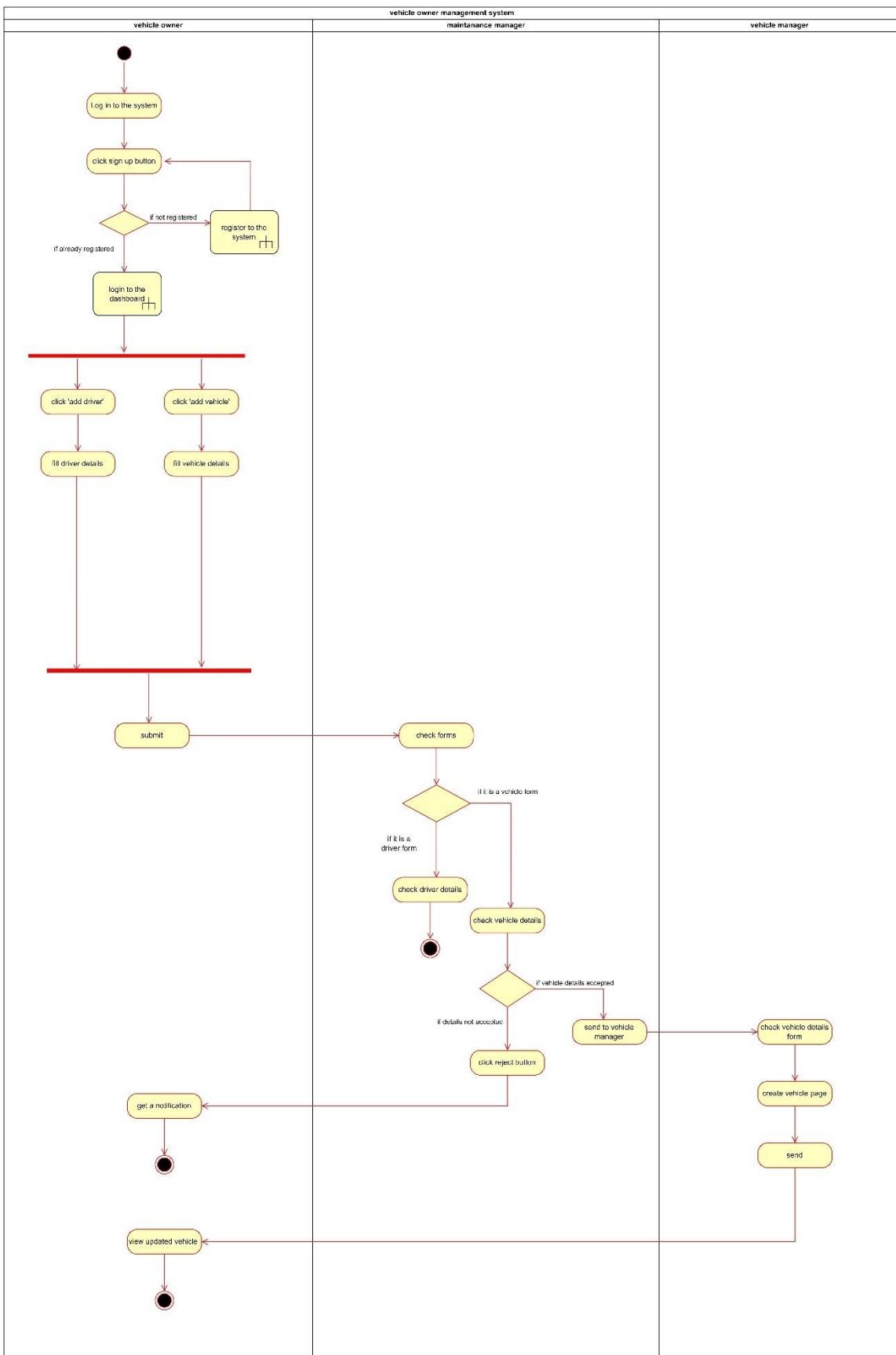


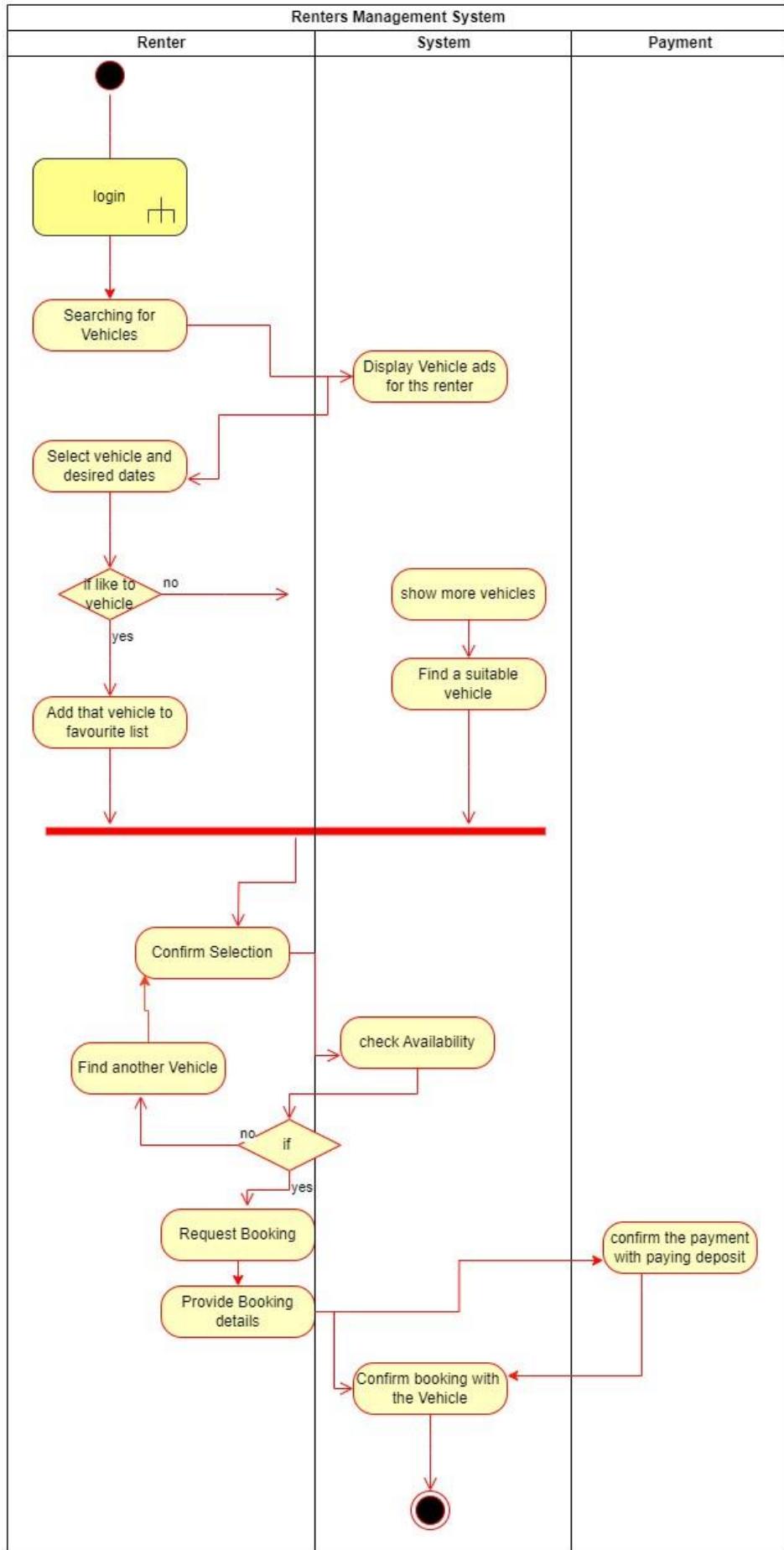


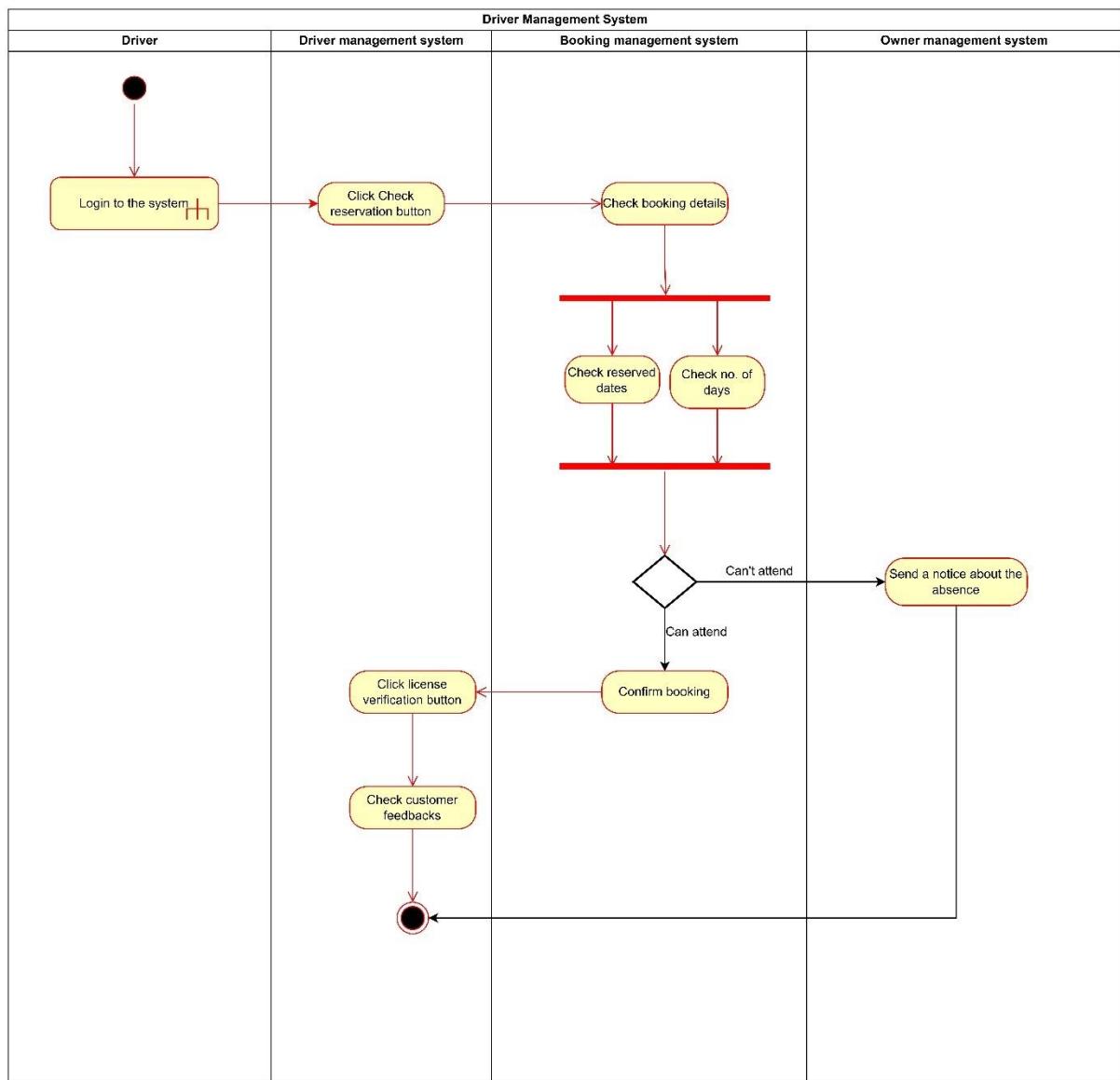
2.1.2 Activity Diagrams

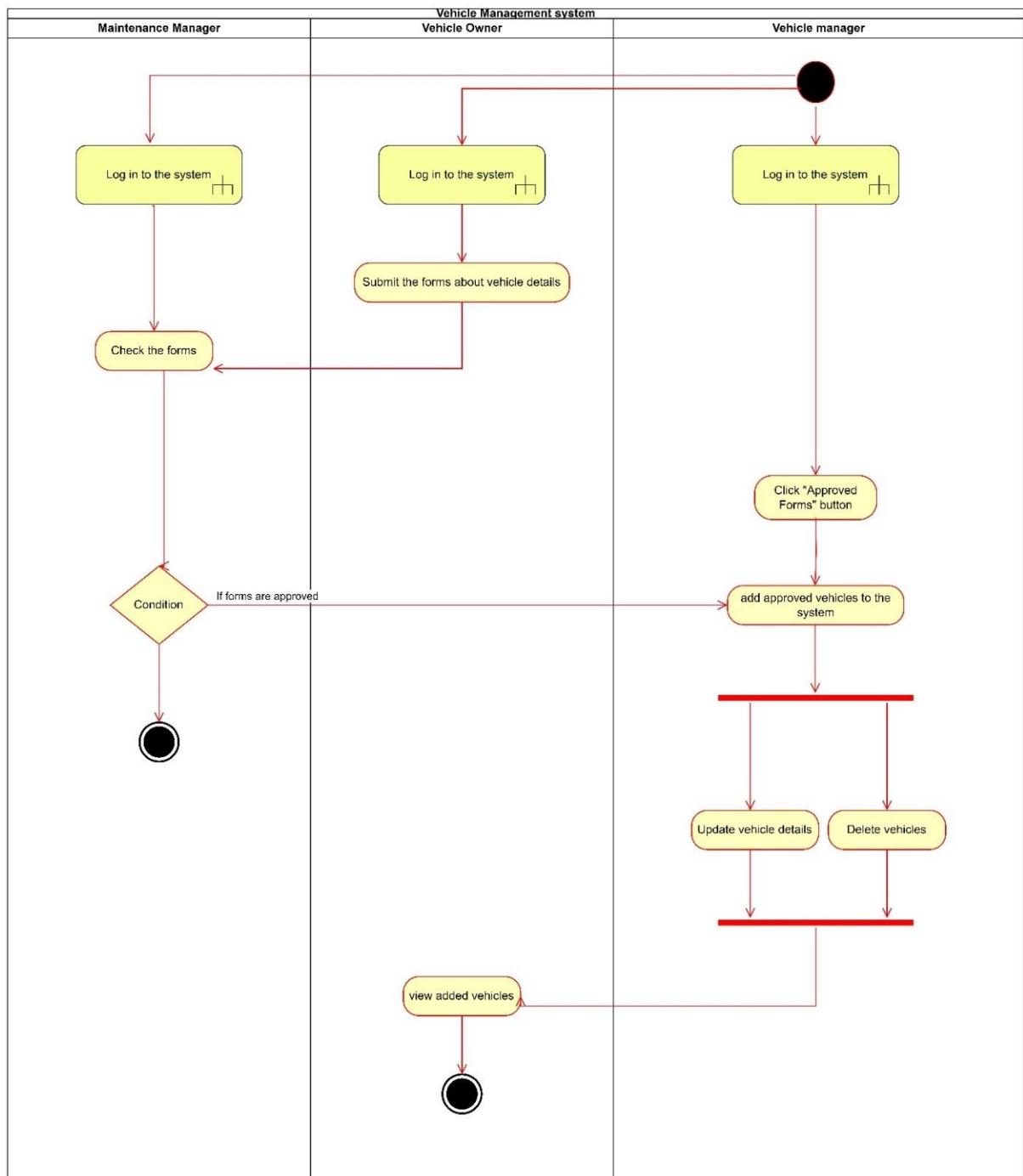


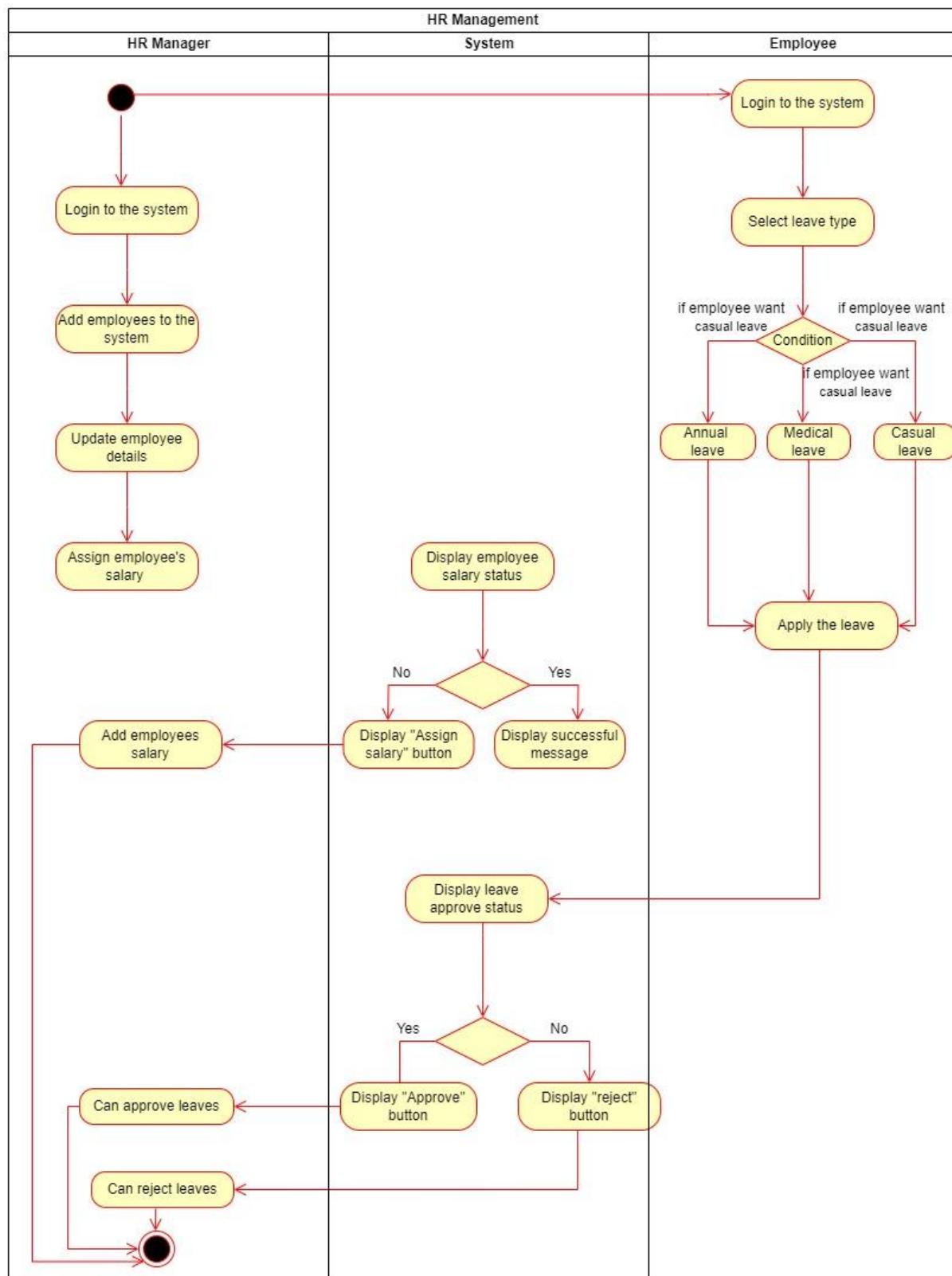


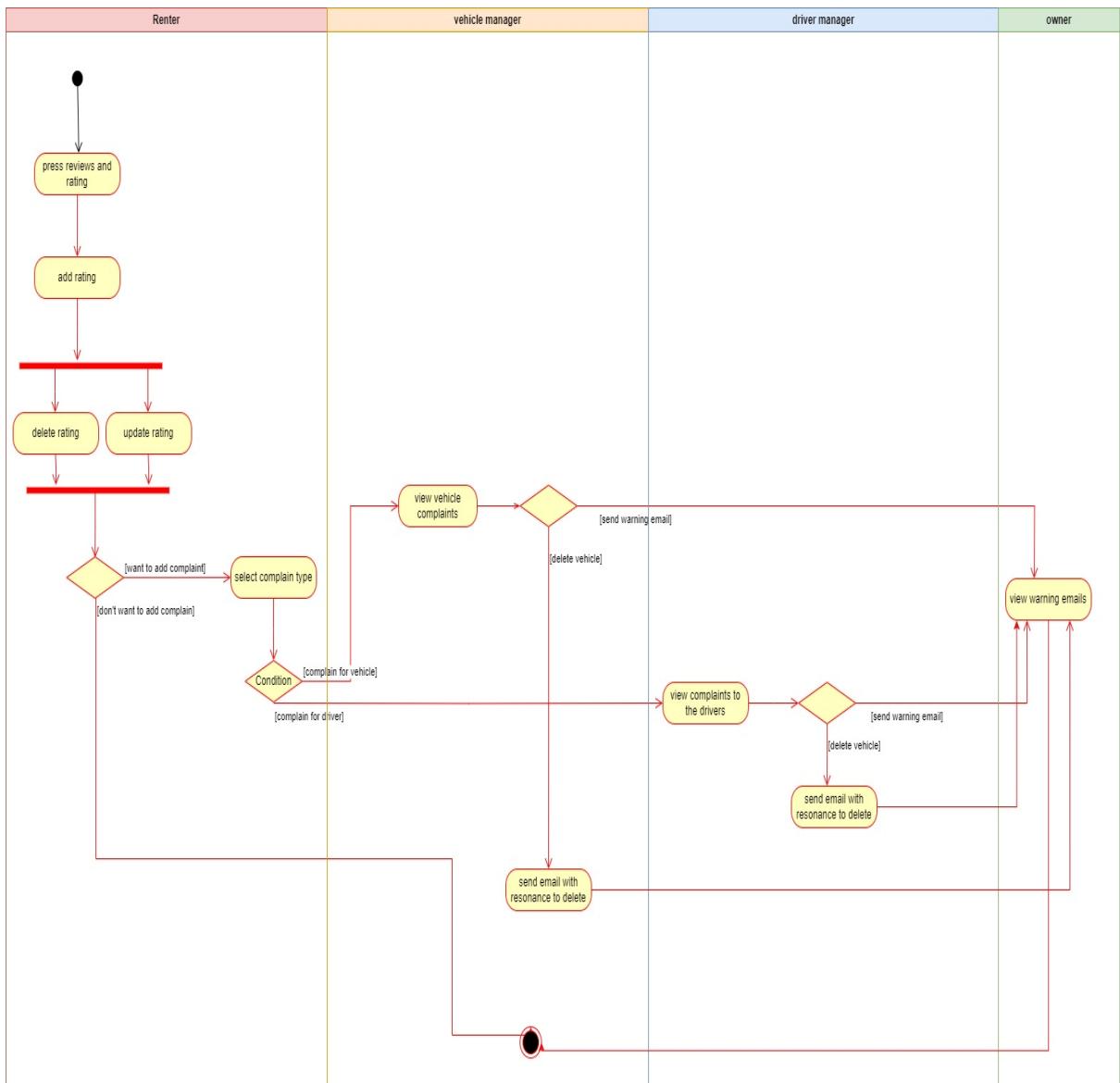






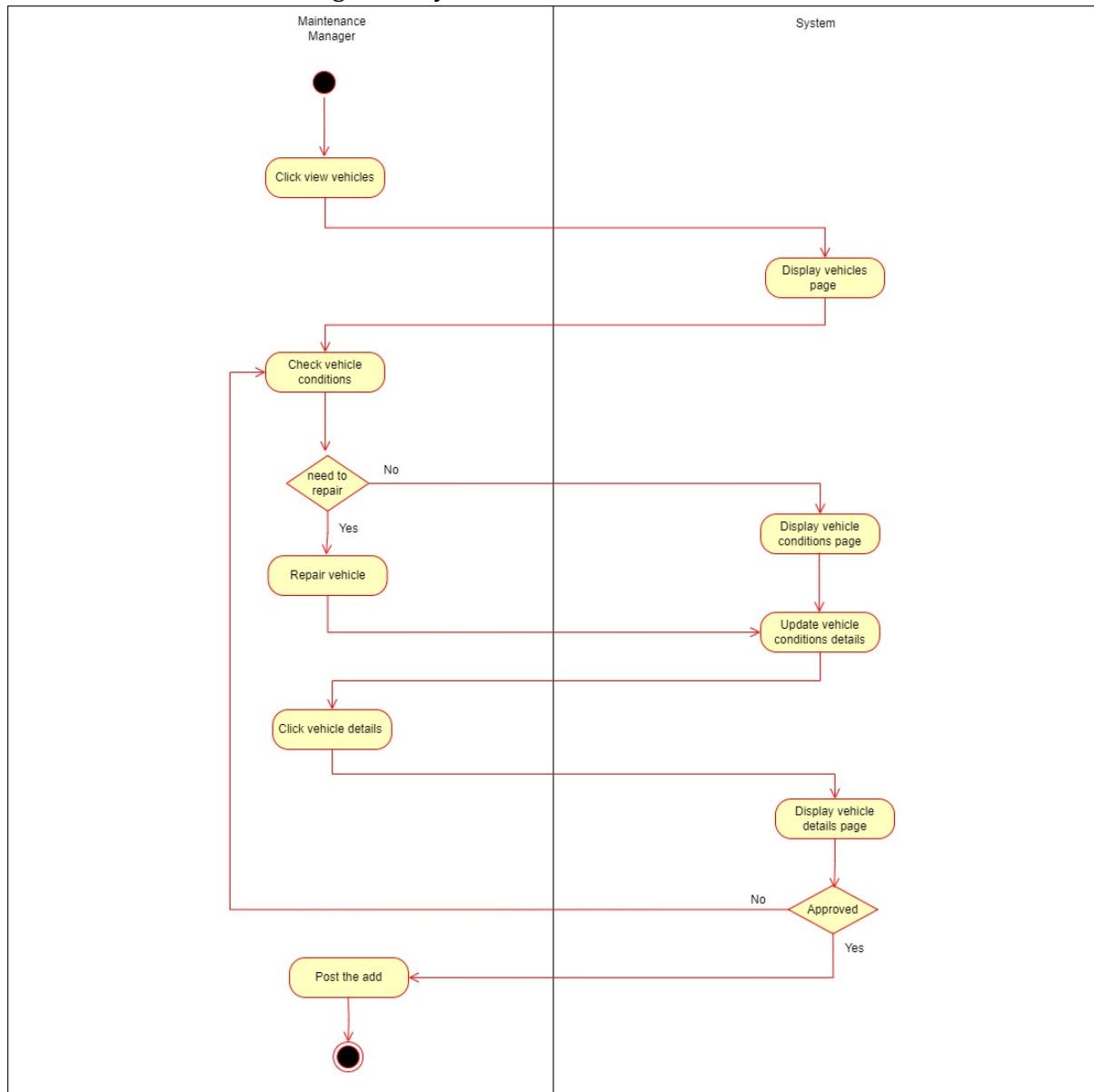






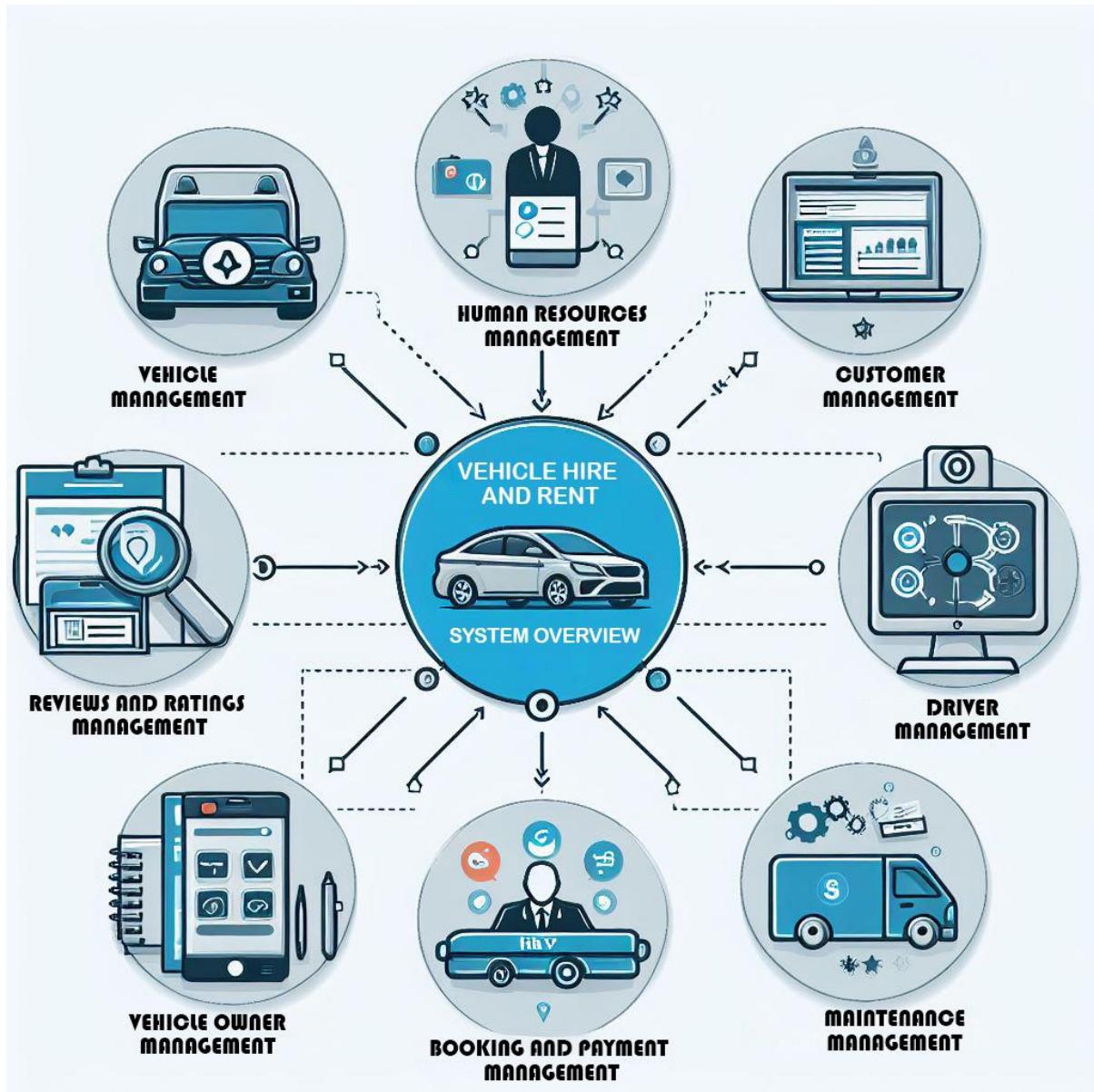
Reviews and Ratings Management system

Maintenance Management system

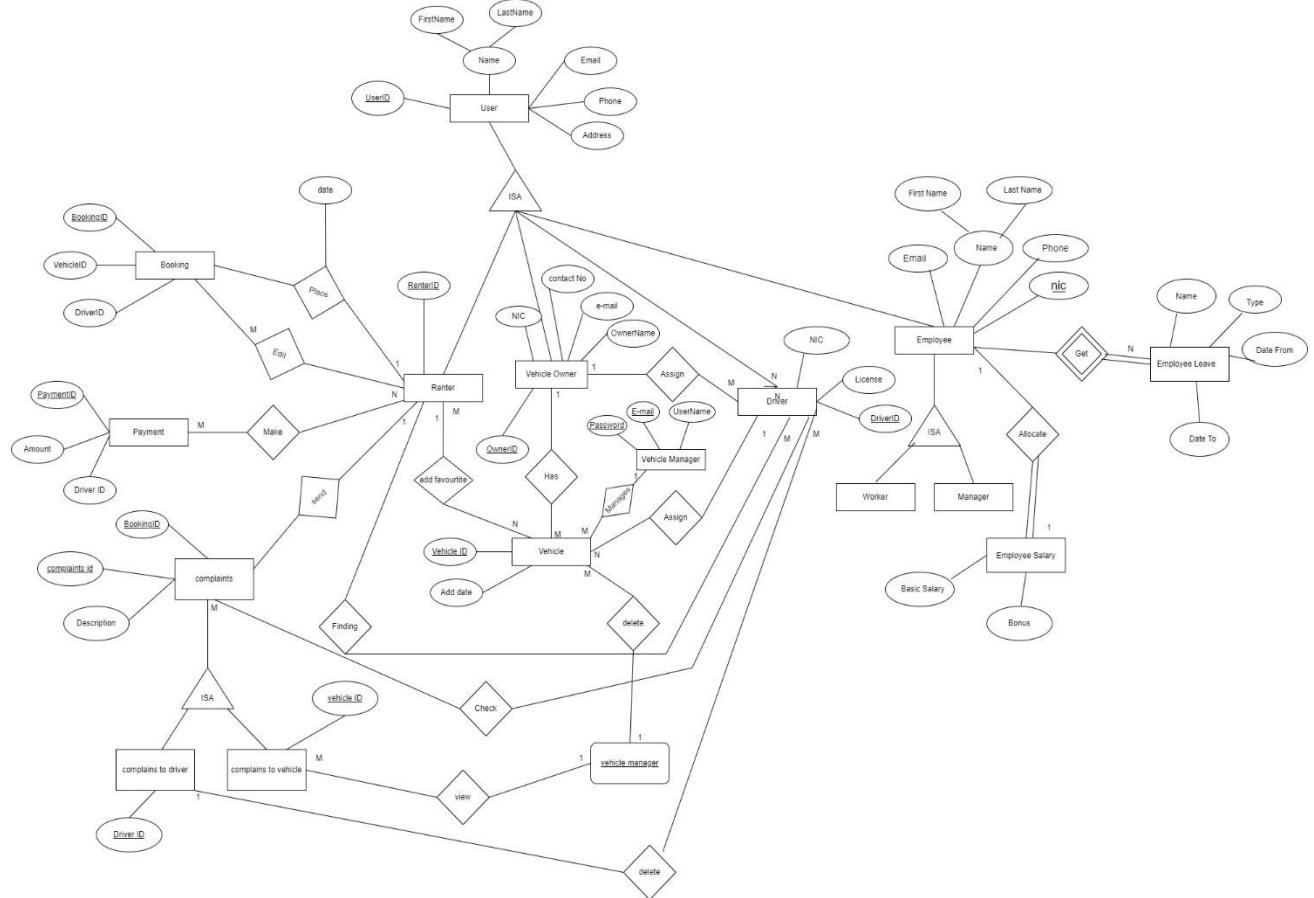


2.2 Design

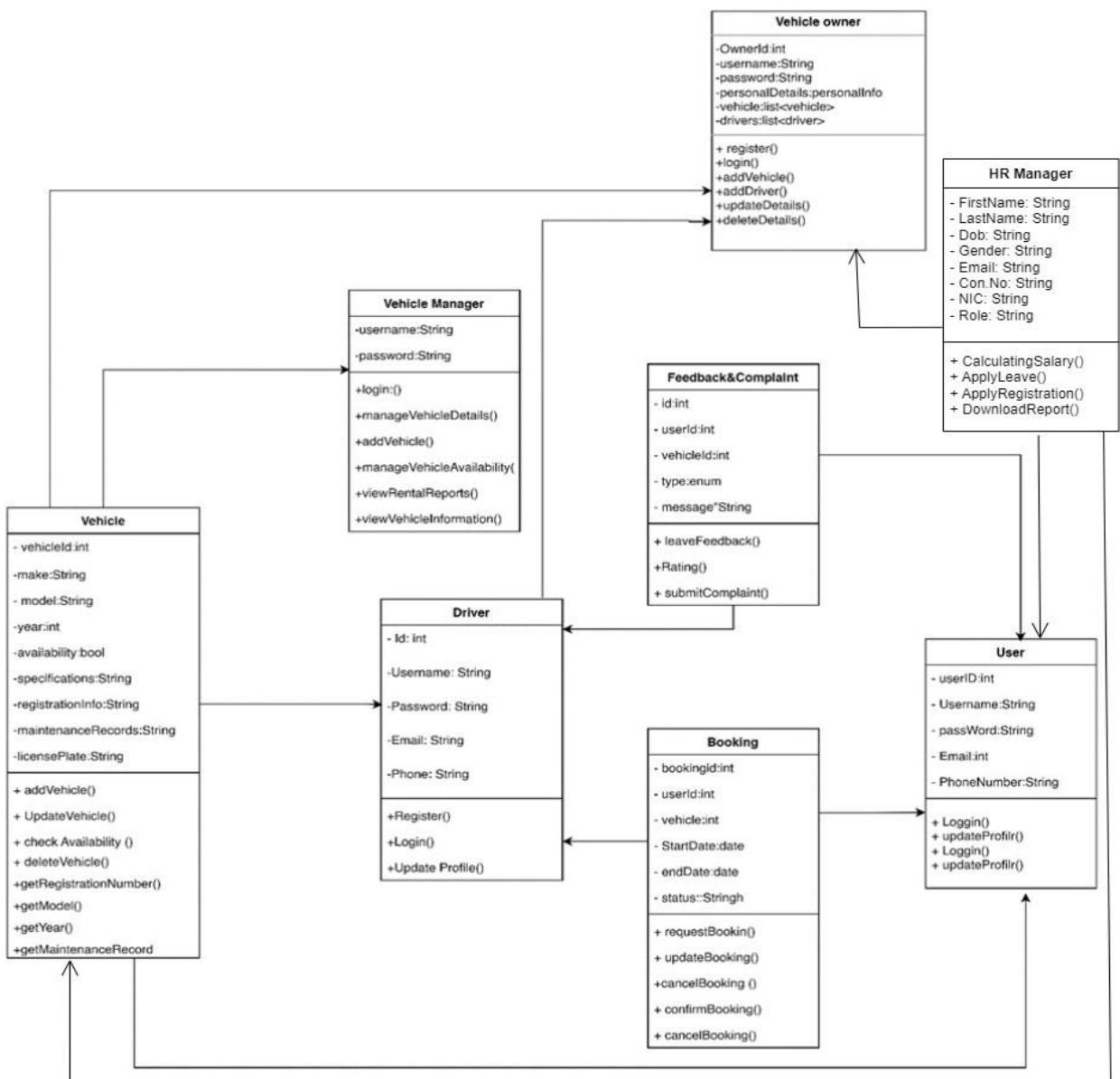
2.2.1 High Level Architecture Diagram



2.2.2 ER Diagram

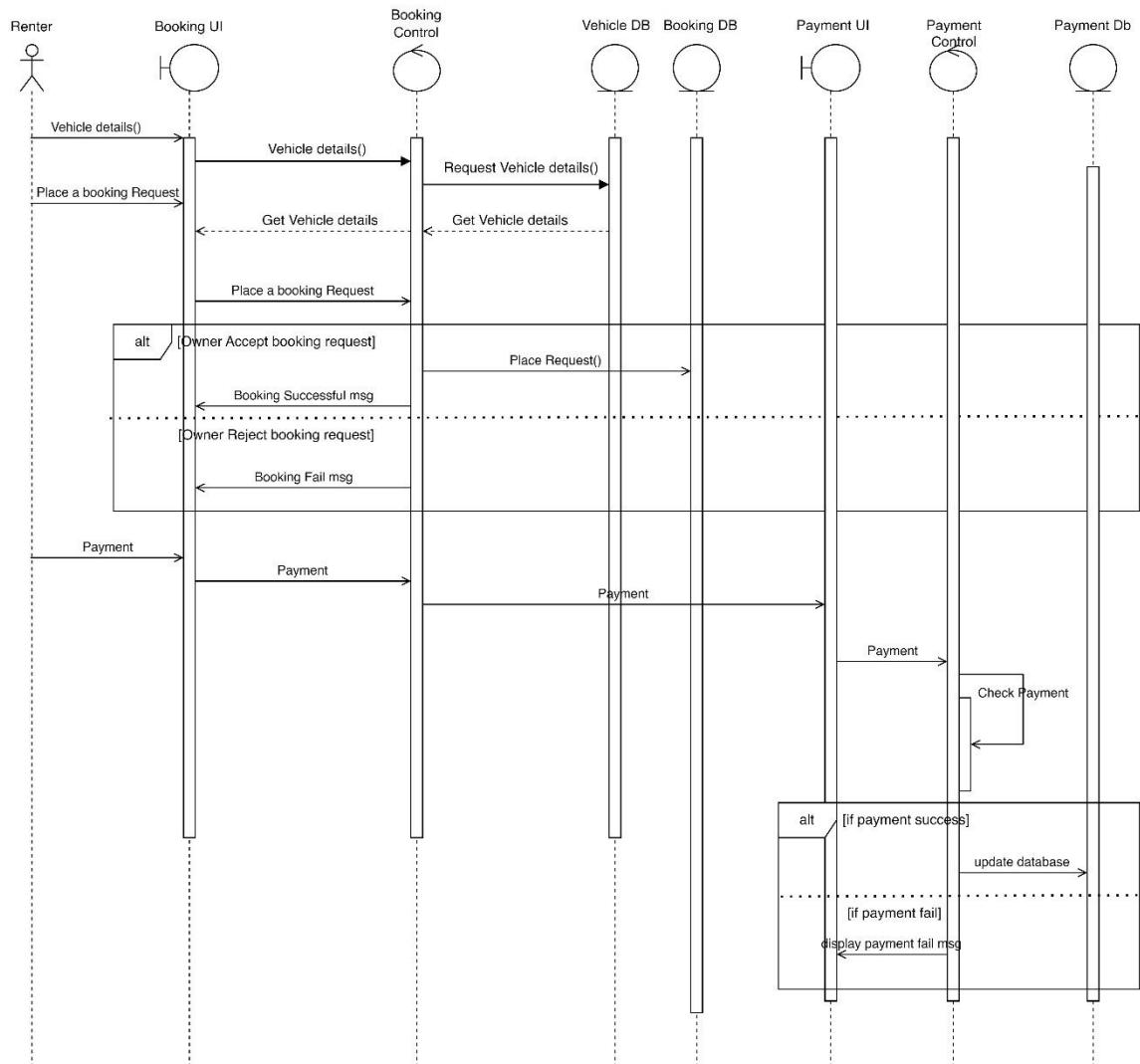


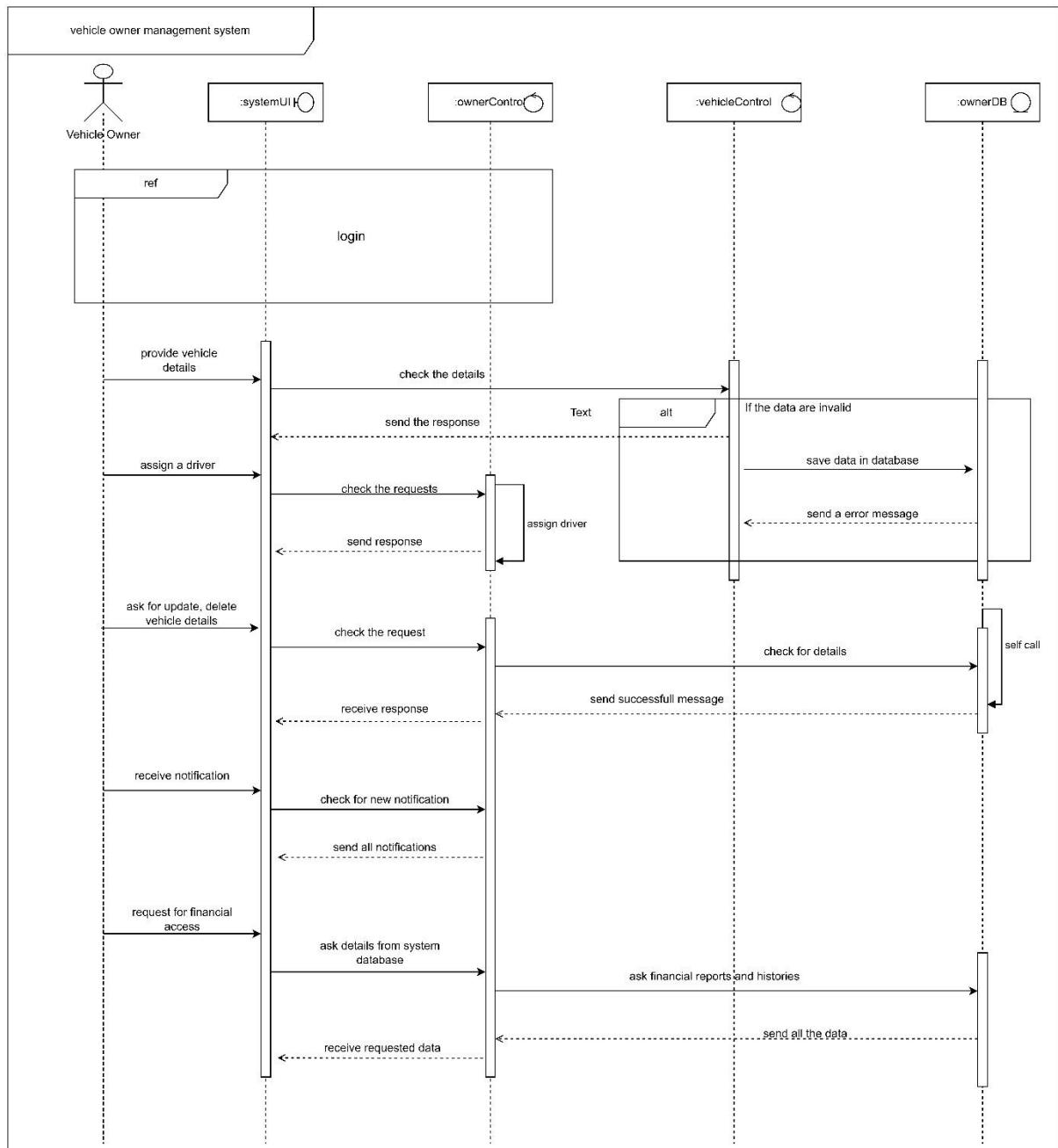
2.2.3 Class Diagram

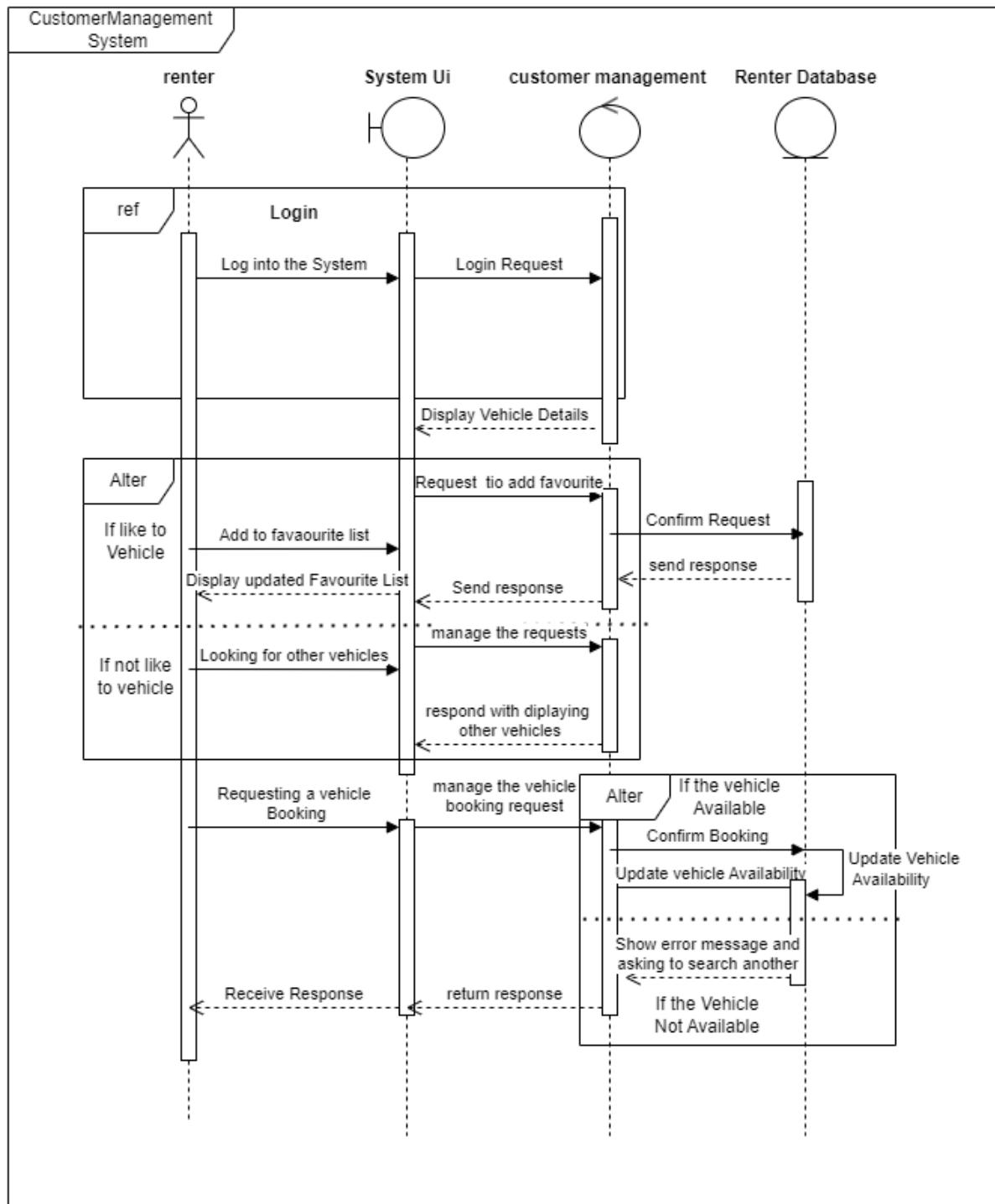


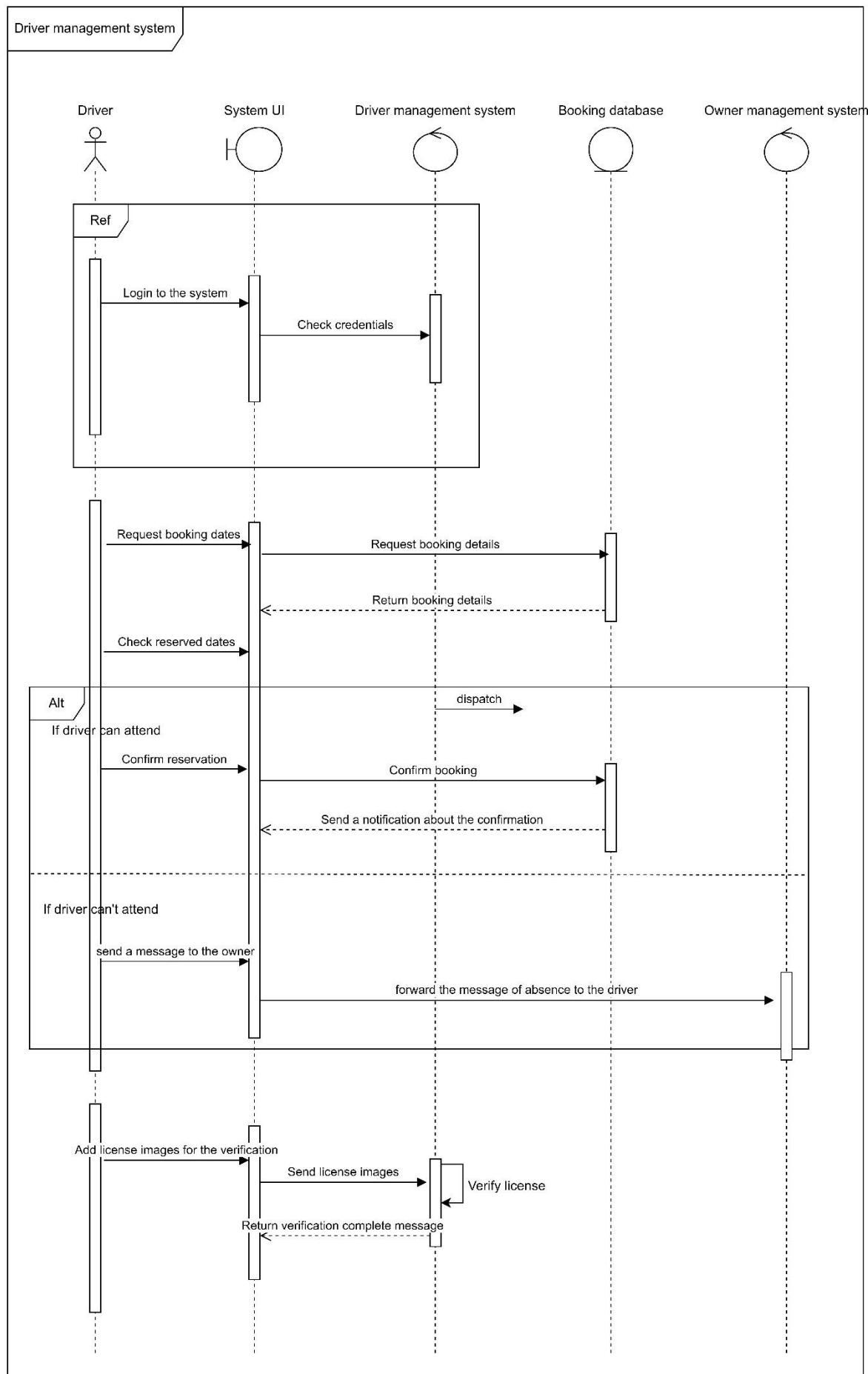
2.2.4 Sequence Diagrams

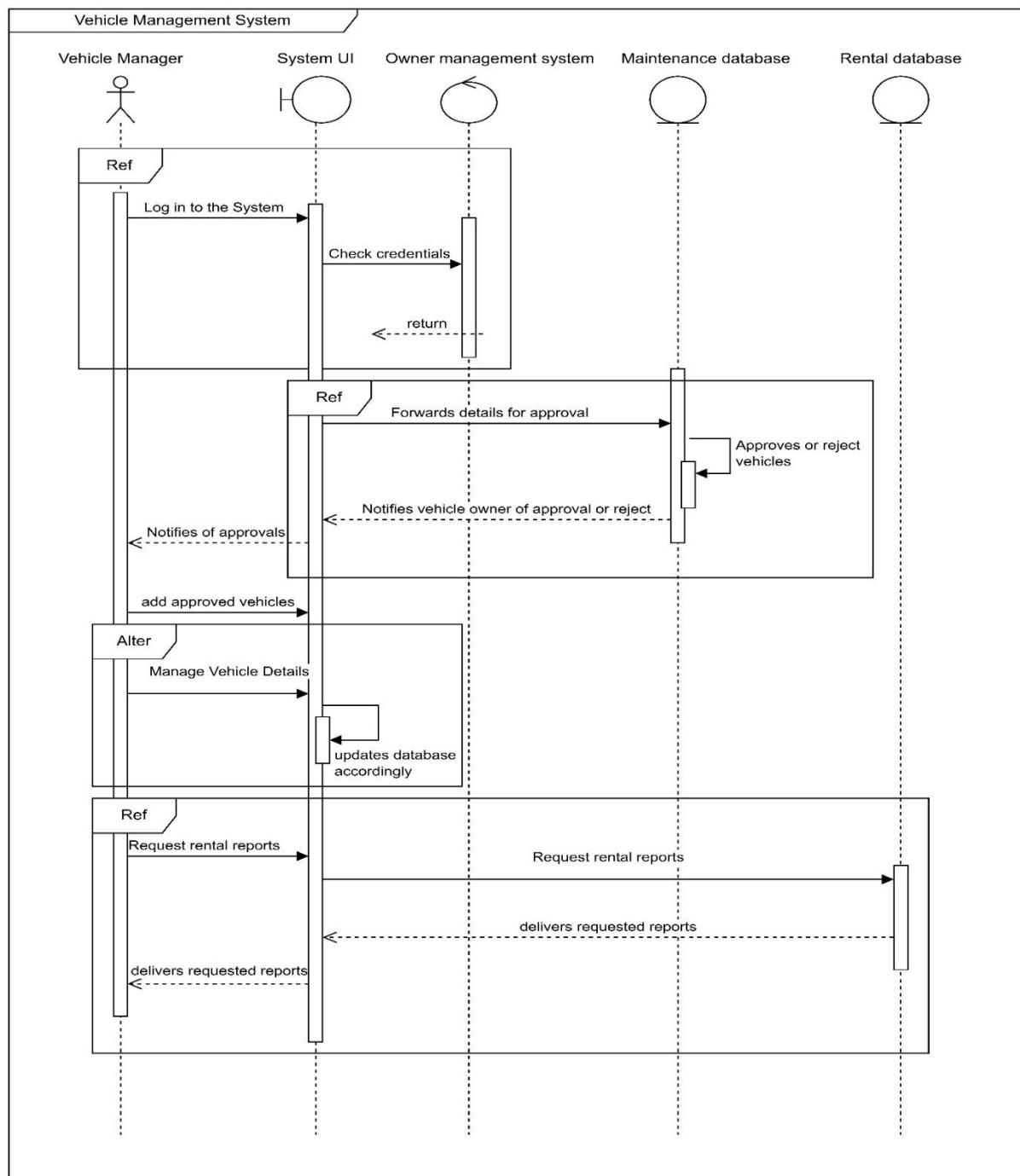
Booking and Payment Management

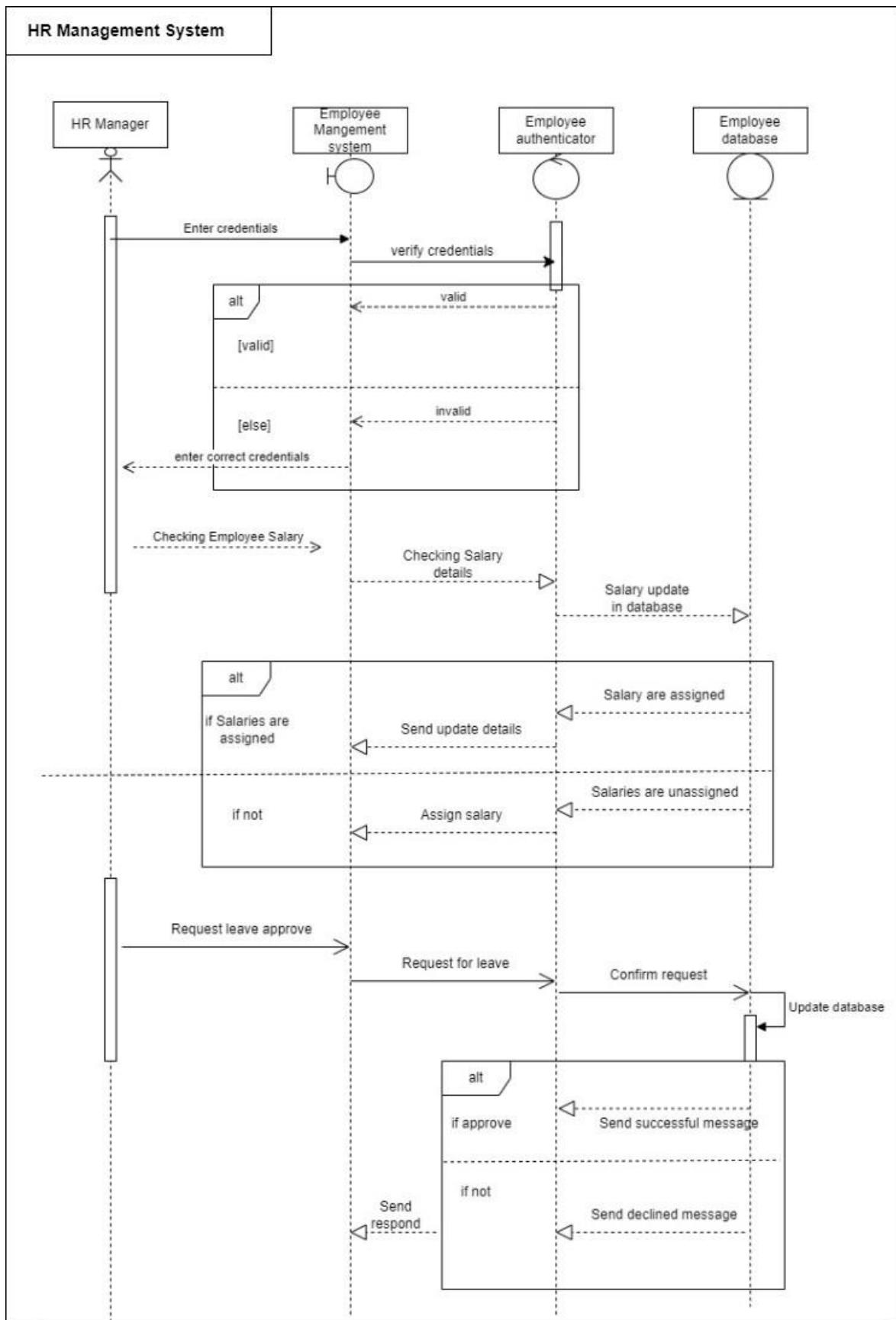


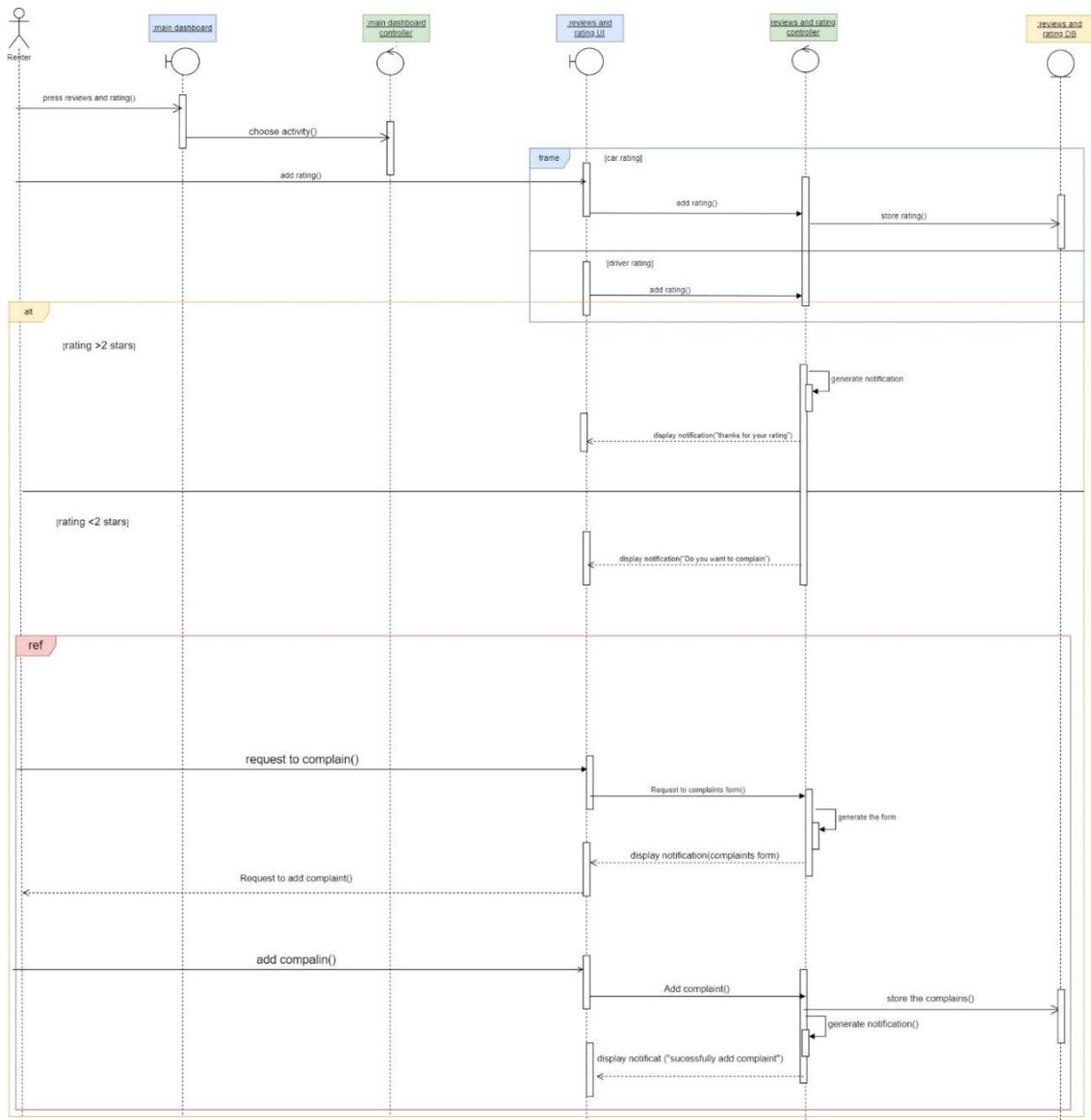




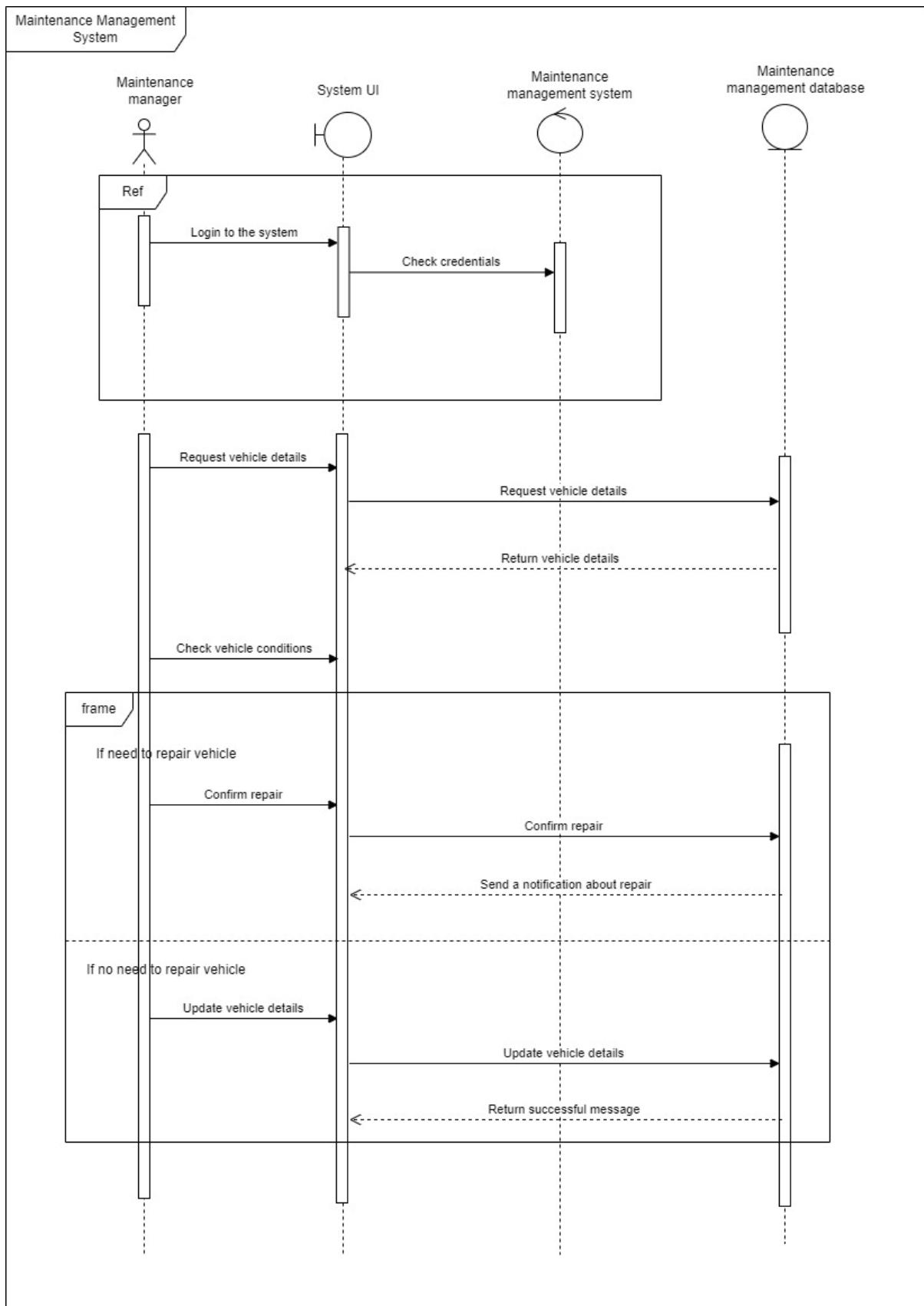






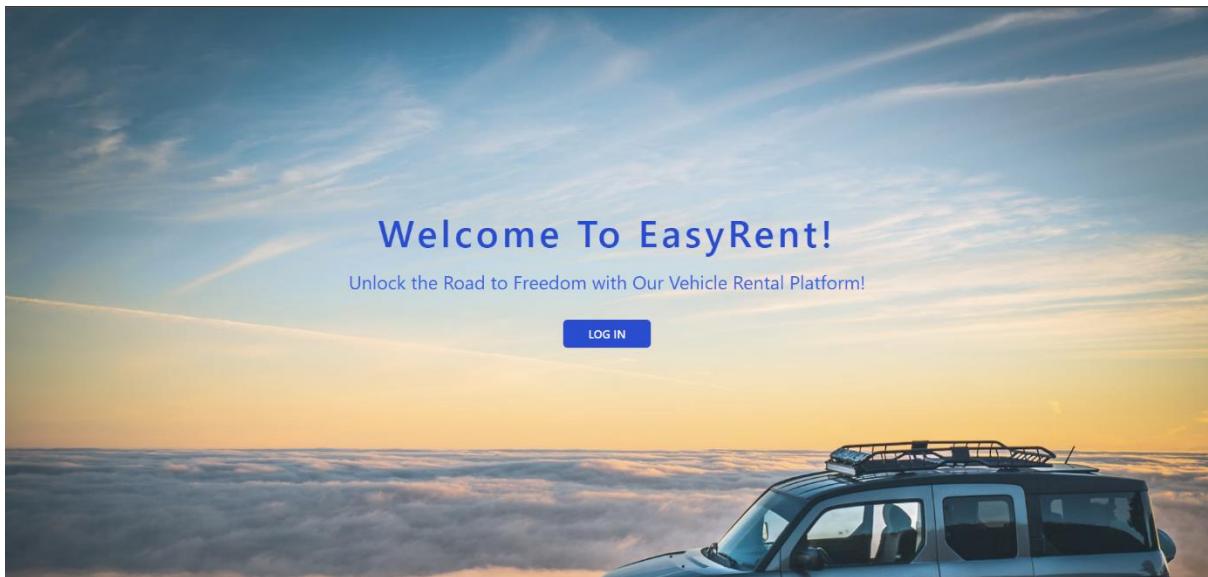


Reviews and Ratings Management System



2.2.5 Interfaces

Landing



Logging & Sign Up

Easy Rent

Are You:
Renter

Username:

Email:

Password:

Confirm Password:

Address:

Phone Number:

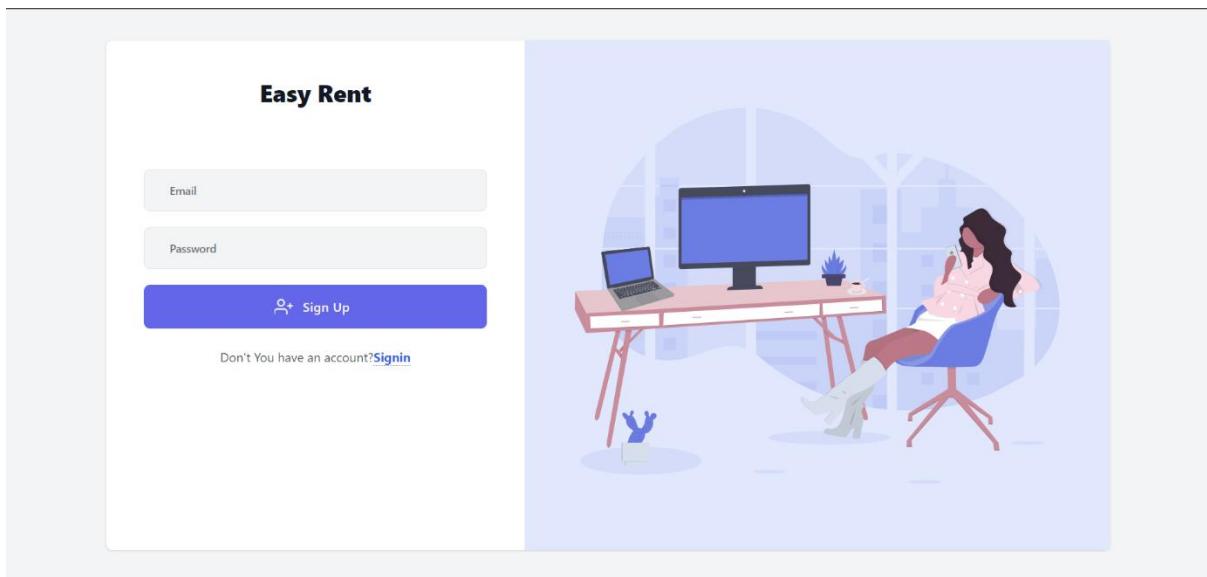
NIC:

Profile Picture:
 Choose a picture

[Register](#)

Already have an account? [Sign up](#)





Home

Booking & Payment Management

Welcome sudila

Profile

All Vehicles

Bookings

viewRenters

My Reviews

renter profile

Logout

EasyRent

Place your Bookings

Brand: BMW
Model: Mini Cooper
Price for a day: Rs.10000

Start Date: 05/29/2024 End Date: 05/31/2024

Service Type: Hire Status: Pending

Location (where do you want to travel): walasmulla

Description: Description

Submit

Approved Documents:

- Driving Licence
- National Identity Card
- Any Kind Of Bill

Generate Estimate Bill
Date Range: 2
Estimate Price for Trip: Rs.20000

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Booking History

ID	MODEL	SERVICE TYPE	START DATE	END DATE	LOCATION	BOOKING STATUS	PAYMENT STATUS	ACTIONS	DISPLAY BILL	
1	Glory	rent	5/8/2024	5/9/2024	Matara	rejected	pending			----
2	Premio	hire	5/15/2024	5/16/2024	Yapanaya	pending	pending			----
3	Glory	rent	5/29/2024	6/8/2024	Elpitiya	approved	pending			Display Bill
4	Vitz	rent	5/9/2024	5/23/2024	Matara	pending	pending			----

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EasyRent

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Booking For Your Vehicles

ID	CUSTOMER	MODEL	BRAND	SERVICE TYPE	LOCATION	ES. START DATE	ES. END DATE	PAYMENT STATUS	BOOKING STATUS
1	sudila	Glory	DFSK	rent	Matara	5/8/2024	5/9/2024	pending	rejected
2	sudila	Glory	DFSK	rent	Elpitiya	5/29/2024	6/8/2024	pending	approved
3	sudila	Premio	Toyota	hire	Yapanaya	5/15/2024	5/16/2024	pending	approved
4	sudila	Premio	Toyota	rent	Watthala	5/16/2024	5/29/2024	pending	pending

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- [Check](#)
- [Approved](#)
- [Pending](#)
- [Rejected](#)
- [owner profile](#)
- [Logout](#)

EasyRent

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Track Your Approved Bookings

ID	CUSTOMER	MODEL	SERVICE TYPE	LOCATION	ES. START DATE	ES. END DATE	PAYMENT STATUS	BOOKING STATUS	GENERATE BILL
1	sudila	Glory	rent	Matara	5/8/2024	5/9/2024	pending	approved	Generate Bill
2	sudila	Glory	rent	Elpitiya	5/29/2024	6/8/2024	pending	approved	Generate Bill
3	sudila	Premio	hire	Yapanaya	5/15/2024	5/16/2024	pending	approved	Generate Bill

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- [Check](#)
- [Approved](#)
- [Pending](#)
- [Rejected](#)

owner profile

[Logout](#)

EasyRent

Generate Bill

Booking Details

Renter Name	Renter Address
sudila	walasmulla
Vehicle Brand	Vehicle Model
DFSK	Glory
Driver ID	Service Type
No driver selected	rent
Start Date	End Date
2024-05-29T00:00:00Z	2024-06-08T00:00:00Z
Status	Location
approved	Elpitiya
Description	
No description available	

Payment Details

Payment Status	Estimate Price
pending	70000
Additional Cost	
9000	
Total Cost	
79000	

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←
TEST MODE

Booking Payment

LKR 79,000.00

Pay with link

Or pay with card

Email

Card information

4242 4242 4242 4242	VISA
04 / 44	444
<input type="checkbox"/> Securely save my information for 1-click checkout <small>Pay faster on this site and everywhere Link is accepted.</small>	

Powered by stripe
Terms
Privacy

Welcome sudila

- Profile
- All Vehicles
- Bookings
- viewRenters
- My Reviews

renter profile

EasyRent

Bill Information

Booking Details

Renter Name	walasmulla
Vehicle Brand	DFSK
Driver ID	No driver selected
Start Date	2024-05-29T00:00:00.000Z
Status	approved
Description	No description available
Vehicle Model	Glory
Service Type	rent
End Date	2024-06-08T00:00:00.000Z
Location	Elpitiya

Payment Details

Payment Status	pending
Estimate Price	70000
Additional Cost	9000
Total Cost	79000

Pay

Vehicle Owner Management System

Welcome Savindi
Himasha

- Profile
- Dashboard
- Bookings
- View Vehicle

EasyRent



Vehicle Details



Driver Details



Payments



Himasha

- [Profile](#)
- [Dashboard](#)
- [Bookings](#)
- [View Vehicle](#)

Public Profile
Vehicle Owner



Username
Savindi Himasha

NIC
200289172833

Phone number

E-mail

Address

[Update Details](#)

[Change picture](#)

[Delete picture](#)

**Welcome Savindi
Himasha**

- [Profile](#)
- [Dashboard](#)
- [Bookings](#)
- [View Vehicle](#)

owner profile

[Logout](#)

EasyRent

[Contact Us](#)


Driver Name	Address	NIC	Phone Number	Actions
Sudila Jayasekara	Walasmulla, Matara	200122580433	0772629286	Assign
Dushan Chanuka	Nathandiya, Marawila	200222137128	0776183693	Assign
Vidumini Chandrasekara	Katukurunda, Horowpathana	200222286246	0762404667	Assign
Raveesha Gimhan	Benthota, Kaluthara	200222271150	0776501141	Assign
Nathasha Perera	Wabada, Udupila	200122230638	0703886818	Assign
KaushalSilva	Weliweiya, Gampaha	200301502633	0777372445	Assign

[Pin it to stay me](#)

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Welcome Savindi
Himasha

Profile
Dashboard
Bookings
View Vehicle

owner profile

Logout

EasyRent

Contact Us 

Booking For Your Vehicles

ID	CUSTOMER	MODEL	BRAND	SERVICE TYPE	LOCATION	ES. START DATE	ES. END DATE	ASSIGN
1	sudila	Vitz	Toyota	rent	Matara	5/9/2024	5/23/2024	<button>Assign Driver</button>

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Total seats

Transmission

Price (Rs)

Posted On

mm/dd/yyyy 

Submit

[BACK](#)



EasyRent

WELCOME

Brand

Model

Vehicle Number

Model Year

Engine Capacity (cc)

Mileage (km)

Welcome Savindi
Himasha

Profile
Dashboard
Bookings
View Vehicle

owner profile

Logout

EasyRent

Contact Us



Search

Download PDF

Toyota

Vitz
ABB2588
2017
1000
72500
4
2024-05-02

Update

Delete

Toyota

Townace
CWD1900
2010
1500
459000
4
2024-05-03

Update

Delete

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Update Vehicle Details

Brand:

Toyota

Model:

Vitz

Vehicle Number:

ABB2588

Total Seats:

4

Model Year:

2017

Engine Capacity (cc):

1000

Mileage (km):

72500

Renter Management System

Welcome DushanChanuka

Profile All Vehicles Bookings viewRenters View Accident Details

Logout

EasyRent

Favourite Vehicles

★4.7(109) Available



Glory
DFSK

Rs.7000 /per Week

auto 5

★4.7(109) Available



Premio
Toyota

Rs.5500 /per Week

auto 4

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Welcome DushanChanuka

Profile All Vehicles Bookings viewRenters View Accident Details

localhost:5173/renterprofile

Filter By: Model Search by model

EasyRent

★4.7(109) Available



Glory
DFSK

Rs.7000 /per Week

auto 5

★4.7(109) Available



Premio
Toyota

Rs.5500 /per Week

auto 4

★4.7(109) Available



Mini Cooper
BMW

Rs.10000 /per Week

auto 4

★4.7(109) Available



★4.7(109) Available



★4.7(109) Available



Welcome Dushantest

- Profile
- All Vehicles
- Bookings
- viewRenters
- View Accident Details

renter profile

[Logout](#)

EasyRent



Renter Details

Name: Dushantest
 Email: testrenter@gmail.com
 Address: Marawila
 Phone Number: 0775678765
 NIC: 200214354466

Accident Records

Accident Date	Accident Happened At
2024-05-09	madampe

[Download Report](#)

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Welcome Dushantest

- Profile
- All Vehicles
- Bookings
- viewRenters
- View Accident Details

Easy Rent

Risk Details

User Details

Name: Dushantest
 Email: testrenter@gmail.com
 Address: Marawila
 Phone Number: 0775678765
 NIC: 200214354466

Accident Details

Accident Happened: madampe
 Date: 2024-05-09
 Time: 13:53
 Accident Description: Happend near the madampe railway Station
 Vehicle Number:CBL2340
 Injuries:No any considerable Injuries
 Legal and Insurance Info: fine



Welcome Dushantest

- Profile
- All Vehicles
- Bookings
- viewRenters
- View Accident Details

Easy Rent

Accident Details

USER INFORMATION

NAME	EMAIL ADDRESS
Dushantest	testrenter@gmail.com
PHONE NUMBER	NIC
0775678765	200214354466

CUSTOMER ADDRESS

ADDRESS

Marawila

WHERE THE ACCIDENT TOOK PLACE

Search Vehicle Number	GT3487
CBL2340	AB82588
CHG6767	
CWD1900	

VEHICLE NUMBER

Enter Vehicle Number

Welcome Dushantest

EasyRent

Contact Us

Risk Details		
Dushan Chanuka Email: chanukaa1@gmail.com Phone Number: 0876356726 NIC: 23543465321345	Dushan Email: chanuka@gmail.com Phone Number: 0147895637 NIC: 415263968574	Chanukaa Email: chanukaa12@gmail.com Phone Number: 0876356726 NIC: 23543465321345
Accident Details Accident Happened : madampe Date: 2024-05-08 Time: 22:57 Legal and Insurance Info: 1111111111111111	Accident Details Accident Happened : madampe Date: 2024-05-30 Time: 14:51 Legal and Insurance Info: wqqqqqqqqqqqqqqqqqqqqqqqqqq	Accident Details Accident Happened : madampe Date: 2024-05-24 Time: 00:36 Legal and Insurance Info: wwwwwwwwwwwwwwwwwwwww
View Details Update Delete	View Details Update Delete	View Details Update Delete
Dushan Email: chanuka@gmail.com Phone Number: 0147895637 NIC: 415263968574	DushanTest Email: chanukarenter@gmail.com Phone Number: 0776183345 NIC: 200234543874	DushanTest Email: chanukarenter@gmail.com Phone Number: 0776183345 NIC: 200234543874
Accident Details Accident Happened : Marawila Town Date: 2024-05-06 Time: 14:56 Legal and Insurance Info: All fixed	Accident Details Accident Happened : Haththiniya Marawila Date: 2024-04-05 Time: 00:02 Legal and Insurance Info: Fixed	Accident Details Accident Happened : selfefer Date: 2024-04-30 Time: 04:12 Legal and Insurance Info: aaaaaaaaaaaaaa
View Details Update Delete	View Details Update Delete	View Details Update Delete
Dushantest	sudila	

Welcome Dushantest

EasyRent

Contact Us

NIC	Search by nic	
sudila sudila_r@gmail.com wolamulla 1231231233 123123123123	Vidu vidu@gmail.com makadura 098765433 29876542356	Vidumini vidu10@gmail.com makadura 0778654321 8765431
View Details Risk Note Delete	View Details Risk Note Delete	View Details Risk Note Delete
Vidu vidu@gmail.com makadura 078965432 123456	dhana dhana@gmail.com galle 0786543 23456	Dushantest dushan101@gmail.com Marawila 0774383693 20025843258745
View Details Risk Note Delete	View Details Risk Note Delete	View Details Risk Note Delete
DushanChanuka chanukadushan@gmail.com Haththiniya 0776183693 200218404433	raveeshar raveshagimhanmendis@gmail.com bandargama road,nugagoda,waskaduwa 0776501141 200301500967	DushanChanuka dushantest1@gmail.com Marawila 0778766787 232323323233
View Details Risk Note Delete	View Details Risk Note Delete	View Details Risk Note Delete
vidu vidu@gmail.com makadura	Dushantest testrenter@gmail.com Marawila	

Welcome Dushantest

EasyRent

Contact Us

	Username: Dushantest	Email: testrenter@gmail.com
	Phone number: 0775678765	Address: Marawila
	NIC: 200214354466	
Update Details		
Delete Account <div style="background-color: #f08080; padding: 10px; text-align: center;">  Are you sure? Do you really want to delete your account? This process cannot be undone. Delete </div>		

Welcome
Dushantest

EasyRent

Contact Us 

Risk Details

Name:	Dushantest	Email:	testrenter@gmail.com
NIC:	200214354466	Phone Number:	0775678765
Accident Address:	madampe	Accident Date:	09/05/2024 <input type="button" value="X"/>
Accident Time:	01:53 PM <input type="button" value="O"/>	Accident Description:	Happened near the madampe railway Station
Injuries:	No any considerable Injuries	Legal and Insurance Info:	fixed
Vehicle Number:	CBL2340		

Submit

Driver Management System



Welcome
RavinduSilva

Contact Us 

Profile

Display dates

All Concerns

All Drivers

Rejection upload

Public Profile
Driver Manager



Change picture

Delete picture

Username: RavinduSilva

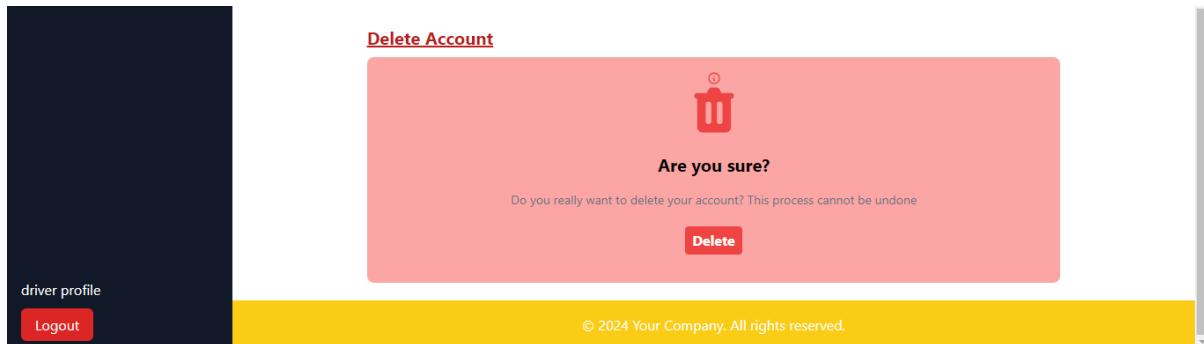
Phone number: 0777372445

NIC: 200305106233

Email: ravindu@gmail.com

Address: Weliwiriya, Gampaha

Update Details



driver profile

[Logout](#)

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Welcome RavinduSilva

Profile
Display dates
All Concerns
All Drivers
Rejection upload

localhost:5173/displaydate [Add Driver](#)

EasyRent

Contact Us

Search drivers. [Search](#)

Driver Name	Address	NIC	Phone Number	Actions
Sudila Jayasekara	Walasmulla, Matara	200122580433	0772629286	View Bookings
Dushan Chanuka	Naththandiya, Marawila	200222137128	0776183693	View Bookings
Vidumini Chandrasekara	Katukurunda, Horowpathana	200222286246	0762404667	View Bookings
Raveesha Gimhan	Benthota, Kaluthara	200222271150	0776501141	View Bookings
Nathasha Perera	Wabada, Udupila	200122230638	0703886818	View Bookings
KaushalSilva	Weliwierya, Gampaha	200301502633	0777372445	View Bookings
RavinduSilva	Weliwierya, Gampaha	200305106233	0777372445	View Bookings

Welcome RavinduSilva

Profile
Display dates
All Concerns
All Drivers
Rejection upload

localhost:5173/displaydate

EasyRent

Contact Us

Notice

Click reject button if you can't attend on the assigned date only .

LOCATION	DESCRIPTION	START DATE	END DATE	ACTIONS
Matara		5/8/2024	5/9/2024	Reject
Yapanaya		5/15/2024	5/16/2024	Reject
Elpitiya		5/29/2024	6/8/2024	Reject
Matara		5/9/2024	5/23/2024	Reject
Watthala		5/16/2024	5/29/2024	Reject
marawila	Urgent Need	5/16/2024	5/30/2024	Reject
Naththandiya	Needed for a Family Trip	5/13/2024	5/15/2024	Reject

Welcome
RavinduSilva

EasyRent

[Contact Us](#)

driver profile

[Logout](#)

EasyRent

ENTER YOUR DETAILS AND CONCERNS HERE.

Driver Name

NIC

Date

Location

Location

No of dates

Reasons

Submit

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EasyRent

[Contact Us](#)

Driver Reports

DRIVER NAME	NIC	DATE	LOCATION	NO OF DATES	REASON	
Kaushal Silva	200301502633	27/05/2024	Kurunagala	2	I have to attend to an arms giving.	Update Delete Generate PDF
Nathasha Perera	200122230638	21/05/2024	Jafna	3	Have to attend a party.	Update Delete Generate PDF
Raveesha Gimhan	200222271150	08/05/2024	Matara	3	I'm suffering from fever.	Update Delete Generate PDF
Sudila Jayasekara	200122580433	2024-06-07	Galle	2	I'm unable to be there with three days.	Update Delete Generate PDF

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Driver Report for Kaushal Silva

NIC: 200301502633

Location: Kurunagala

Date: 27/05/2024

No of Dates: 2

Reason: I have to attend to an arms giving.

Vehicle Management System

Welcome Manager2

Profile

Added Vehicles

Show Reviews

Show Replies

localhost:5173/vehicles

EasyRent

Contact Us

Easy Rent

Search by category

Vehicle Model	Rating	Availability	Rental Price
Glory DFSK	★4.7(109)	Available	Rs.7000 /per Week
Premio Toyota	★4.7(109)	Available	Rs.5500 /per Week
Mini Cooper BMW	★4.7(109)	Available	Rs.10000 /per Week

View

View

View

View

Welcome Manager2

Profile
Added Vehicles
Show Reviews
Show Replies

EasyRent

Contact Us

Reply Form

Complain Id
6638b964dc914db9521b229

Review for vehicle
test0

Review for Driver
asdfghjkl

Reply

Submit

Welcome Manager2

Profile
Added Vehicles
Show Reviews
Show Replies

EasyRent

Contact Us

localhost:5173 says

Reply submitted successfully!

OK

Reply Form

Complain Id
6638b964dc914db9521b229

Review for vehicle
test0

Review for Driver
asdfghjkl

Reply
thank you

Submit

Welcome Manager2

- [Profile](#)
- [Added Vehicles](#)
- [Show Reviews](#)
- [Show Replies](#)

vehiclemanager profile

[Logout](#)

EasyRent

[Contact Us](#)

Complain ID	Vehicle ID	Reviews for Vehicles	Reviews for Drivers	Reply
1	66368675bc3cea8961e2cf3d	test0	asdfghjkl	Reply
2	66368675bc3cea8961e2cf3d	test3	hey	Reply
3	66368a1fb3cea8961e2cf51	test	hellow	Reply

localhost:5173/ReviewsDetails

EasyRent

[Contact Us](#)

Vehicle Details

Vehicle Number

Offers

Brand

Model

Total Seats

Model Year

Engine Capacity

Mileage

[Update](#)

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Welcome Manager2

- [Profile](#)
- [Added Vehicles](#)
- [Show Reviews](#)
- [Show Replies](#)

vehiclemanager profile

localhost:5173/showreply

EasyRent

Reply List

Search
Generate PDF

Complain Id	Reviews for vehicles	Reviews for Drivers	Reply	Actions
6638bb17dc914db9521b232	test3	highly appreciate the driver and his friendliness	Reply done	Update Delete
6638b964dc914db9521b229	test	asdfghjkl	Thank you for your feedback,from the driver	Update Delete
6638b964dc914db9521b229	test0	asdfghjkl	good	Update Delete
6638b964dc914db9521b229	test0	asdfghjkl	Thank you	Update Delete
6638b964dc914db9521b229	test0	asdfghjkl	thank you	Update Delete

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EasyRent

Public Profile
Vehicle Manager



[Change picture](#)
[Delete picture](#)

First name

Last name

Phone number

User E-mail

[Update Details](#)

[Delete Account](#)



Are you sure?

Do you really want to delete your account?

[Delete](#)

HR Management System

Welcome

- Profile
- Dashboard
- ADD Employee
- Payroll
- Leave
- Employee Details
- Salary Details
- Leave Details
- Profile

EasyRent

Contact Us

Manage Employee

Search Employee

FIRST NAME	LAST NAME	NIC	ROLE	EMAIL
Kaushal	Silva	2000156345	cleaner	kaushal@gmail.com
Sudila	Jayasekara	199765432	car washer	sudi@gmail.com
Nathasha	Rishmi	200987654	cleaner	Natha@gmail.com
vidu	Chandrasekara	2000156345	cleaner	Vidu3@gmail.com
Vidu	chandrasekara	2009876578	car washer	Vidu123@gmail.com

Welcome

- Profile
- Dashboard
- ADD Employee
- Payroll
- Leave
- Employee Details
- Salary Details
- Leave Details
- Profile

EasyRent

Contact Us

Employee Registration

Gimhan Fernando

1998765432 Cleaner

05 / 07 / 1999 Male

0785648765 Gim@gmail.com

Register

Already have an account? [Login](#)

localhost:5173/EmpRegister

Welcome

- [Profile](#)
- [Dashboard](#)
- [ADD Employee](#)
- [Payroll](#)
- [Leave](#)
- [Employee Details](#)
- [Salary Details](#)
- [Leave Details](#)
- [Profile](#)

admin_profile

EasyRent

Contact Us

Attendance Form

Employee Name:

Select Date:

Sign In Time:

Sign Out Time:

Calculate Working Hours Working Hours: 11.33

Welcome

- [Profile](#)
- [Dashboard](#)
- [ADD Employee](#)
- [Payroll](#)
- [Leave](#)
- [Employee Details](#)
- [Salary Details](#)
- [Leave Details](#)
- [Profile](#)

EasyRent

Contact Us

Salary Calculator

Employee Name:

Hours Worked:

Hourly Rate (\$):

Total Salary:
\$1008.37

Calculate Salary **Submit**

Welcome

- [Profile](#)
- [Dashboard](#)
- [ADD Employee](#)
- [Payroll](#)
- [Leave](#)
- [Employee Details](#)
- [Salary Details](#)
- [Leave Details](#)
- [Profile](#)

localhost:5173/empLeave

EasyRent

Contact Us

Leave Request

Employee Name:

Leave Type:

Leave From:

Leave To:

Action Plan:

Welcome

- [Profile](#)
- [Dashboard](#)
- [ADD Employee](#)
- [Payroll](#)
- [Leave](#)
- [Employee Details](#)
- [Salary Details](#)
- [Leave Details](#)
- [Profile](#)

EasyRent

Contact Us

Employee Details

[Get PDF](#)

First Name	Last Name	NIC	Role	Date of Birth	Gender	Contact Number	Email	Actions
Kaushal	Silva	2000156345	cleaner	09/02/2023	male	0778654328	kaushal@gmail.com	Read Update Delete
Sudila	Jayasekara	199765432	car washer	22/05/2024	male	0756432678	sudi@gmail.com	Read Update Delete
Nathasha	Rishmi	200987654	cleaner	22/05/2024	female	0786532678	Natha@gmail.com	Read Update Delete
vidu	Chandrasekara	2000156345	cleaner	16/05/2024	female	0773207533	Vidu3@gmail.com	Read Update Delete
Vidu	chandrasekara	2009876578	car washer	28/05/2024	female	0776543245	Vidu123@gmail.com	Read Update Delete

localhost:5173/empDash

Welcome

- [Profile](#)
- [Dashboard](#)
- [ADD Employee](#)
- [Payroll](#)
- [Leave](#)
- [Employee Details](#)
- [Salary Details](#)
- [Leave Details](#)
- [Profile](#)

EasyRent

Contact Us

Edit Employee Details

admin profile

Welcome

- [Profile](#)
- [Dashboard](#)
- [ADD Employee](#)
- [Payroll](#)
- [Leave](#)
- [Employee Details](#)
- [Salary Details](#)
- [Leave Details](#)
- [Profile](#)

EasyRent

Contact Us

Salary Details

Employee Name	Hours Worked	Hourly Rate	Total	Actions
Kamal	4	20	80	Update Delete
Shan	17.00	20	340	Update Delete
Raweesha	14.00	60	840	Update Delete
vihaga	14.00	25	350	Update Delete
Raweesha	15.00	80	1200	Update Delete
Charitha	14.00	80	1120	Update Delete
Rishu	12.00	90	1080	Update Delete

localhost:5173/salaryDetails

Welcome

- [Profile](#)
- [Dashboard](#)
- [ADD Employee](#)
- [Payroll](#)
- [Leave](#)
- [Employee Details](#)
- [Salary Details](#)
- [Leave Details](#)
- [Profile](#)

EasyRent

[Contact Us](#)

Update Employee Salary

Employee Name:

Hours Worked:

Hourly Rate (\$):

Total Salary:

\$80.00

Welcome

- [Profile](#)
- [Dashboard](#)
- [ADD Employee](#)
- [Payroll](#)
- [Leave](#)
- [Employee Details](#)
- [Salary Details](#)
- [Leave Details](#)
- [Profile](#)

EasyRent

[Contact Us](#)

Leave Requests

Employee Name	Leave Type	Leave From	Leave To	Action Plan	Actions
Chami	Sick	03/05/2024	30/05/2024	Active	Delete Accept
Isuru	Sick	14/05/2024	20/05/2024	Active	Delete Accept
Saman	Sick	21/05/2024	25/05/2024	Active	Delete Accept
Harsha	medical	23/05/2024	26/05/2024	Active	Delete Accept
Sithum	casual leave	01/06/2024	03/06/2024	Active	Delete Accept

localhost:5173/leaveDetails

Reviews and Ratings Management System

Welcome Raveesha_renter

Profile

All Vehicles

Bookings

viewRenters

My Reviews

EasyRent

Easy Rent

Search by category

3(109) Available Add Reviews

5(109) Available Add Reviews

No Reviews (109) Available Add Reviews

Glory DFSK Rs.7000 /per Week

Premio Toyota Rs.5500 /per Week

Mini Cooper BMW Rs.10000 /per Week

auto 5 auto 4 auto 4

EasyRent

Contact Us

Search by rating

Complain ID	Vehicle ID	Rating(Stars)	Vehicle Description	Driver Description	Reply	Actions
1	66368675bc3cea8961e2cf3d	3	test0	asdfghjkl		  
2	66368675bc3cea8961e2cf3d	4	test3	hey		  
3	66368a1fb3cea8961e2cf51	5	test	hellow		  

EasyRent

localhost:5173 says
sucessfully updated...

Contact Us 

OK

Edit Rating & Reviews

★★★☆☆ You rated: 3 stars

Vehicle Id
66368675bc3cea8961e2cf3d

Review for Driver
asdfghjkl

Review for Vehicle
test0

Save

Delete Complain

Are You Sure You want to delete this book?

yes, delete it



Give your Ratings & Reviews.....

★★★☆☆ Average

Vehicle Id

66368675bc3cea8961e2cf3d

Review for Driver

cad

Special characters are not allowed

Review for Vehicle

afefefq

Special characters are not allowed

Save

close

View your complains

Maintenance Management System

Welcome Tharanga

Profile

All Vehicles

ViewRenter

Logout

vehiclemanager profile



Contact Us 

Vehicle Details

View Conditions

Update Conditions



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Welcome Tharanga

Profile

All Vehicles

ViewRenter

Logout

localhost:5173/homerenter



Contact Us 

Search...

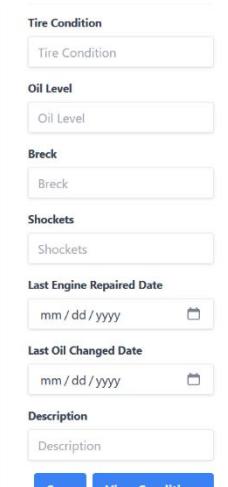
Brand: DFSK Model: Glory Model Year: 2020 Engine Capacity: 1498 Mileage: 25000 Total Seats: 5	Brand: Toyota Model: Premio Model Year: 1999 Engine Capacity: 1500 Mileage: 145000 Total Seats: 4	Brand: BMW Model: Mini Cooper Model Year: 2014 Engine Capacity: 1400 Mileage: 52000 Total Seats: 4
Brand: Aqua Model: Hybrid Model Year: 2019 Engine Capacity: 1234 Mileage: 200000	Brand: abc Model: abc Model Year: 12312 Engine Capacity: 12312 Mileage: 123	Brand: qqqqq Model: qqqqq Model Year: 2001 Engine Capacity: 123123 Mileage: 213123

View Conditions

View Conditions

View Conditions

vehiclemanager profile



Tire Condition

Oil Level

Breck

Shockets

Last Engine Repaired Date
 mm / dd / yyyy 

Last Oil Changed Date
 mm / dd / yyyy 

Description

Save **View Conditions**

Welcome Tharanga

Profile

All Vehicles

ViewRenters

vehiclemanager profile

Logout

EasyRent

Contact Us



Search...

Vehicle ID : 66390dde095f32a92a8d011f

Vehicle Model : Toyota Premio

Vehicle No : AAA-1398

Tire Condition : 80%

Oil Level : High

Breck : 70%

Shockets : 60%

Last Engine Repaired Date : 05/02/2024

Last Oil Changed Date : 06/02/2024

Description : Oil filters have changed.

Update

Delete

Vehicle ID : 663927518d1d4e887b2742a2

Vehicle Model : Bajaj Threewheel

Vehicle No : QH-1256

Tire Condition : 75%

Oil Level : Low

Breck : 80%

Shockets : 60%

Last Engine Repaired Date : 2023-08-16

Last Oil Changed Date : 2024-06-10

Description : --

Update

Delete

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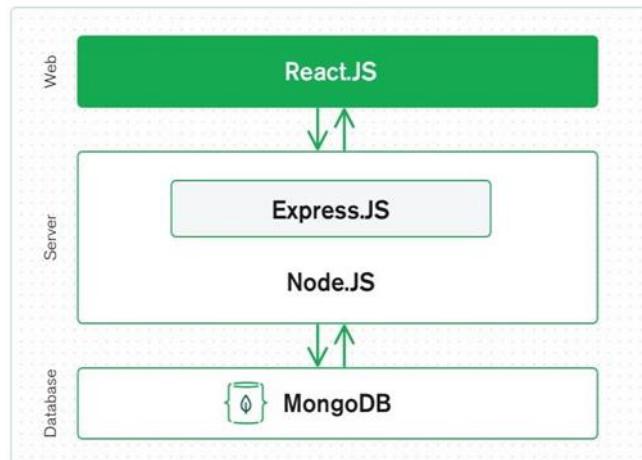
2.3 Implementation

The EasyRent application was built using the MERN stack on the VS Code platform. The team chose VS Code because of its user-friendly interface and advanced capabilities like syntax highlighting, bracket-matching, and auto-indentation.

MERN, an open-source and readily available framework, was chosen as the technology stack. The majority of the team members had previous experience with MERN, and its lower learning curve made it the ideal choice for the project.

The blend of backend technologies Node.js and Express.js with the frontend JavaScript framework React.js enables a smooth flow of JSON data from the frontend to the backend. This makes the system quick to develop and relatively easy to troubleshoot.

MongoDB, a NoSQL database that stores a collection of documents, was used in conjunction with Node.js. This combination simplifies the process of storing, manipulating, and representing JSON data.



2.3.1 Tools and Technology

In our online vehicle rental management system project, we adopted a comprehensive set of tools and technologies to ensure effective design, collaboration, and project management.

2.3.1.1 Project Management and Documentation:

- **Microsoft Project:** Used for project management tasks, scheduling, and resource allocation.
- **Microsoft PowerPoint and Word:** Utilized for crafting the project proposal presentation, creating the scrum presentation, and finalizing the work proposal document. Microsoft Office suite proved instrumental in facilitating collaborative efforts.

2.3.1.2 Modeling and Drawing Tools:

- **Mock flow, Draw.io:** Employed for creating models and drawings. Mock flow for interface design, StarUML for UML diagrams, and Draw.io for collaborative drawing with shape libraries.

2.3.1.3 Design and User Interface:

- **Figma:** Employed Figma design software to ensure the design is clear and efficient. Figma is a powerful vector application tailored for productive and creative interface building for websites or apps.

2.3.1.4 Programming Languages and Development Environments:

- **JavaScript and Node.js:** Leveraged as the primary programming language and runtime environment for executing JavaScript code outside of a web browser.
- **Microsoft Visual Studio Code and Eclipse:** Chosen as the main integrated development environments (IDEs) for coding, with Sublime Text as the backup editor.

2.3.1.5 Application Development:

- **Express (Back-end Framework) and React (Front-end Framework):**
 - **Express:** Utilized as the back-end framework, simplifying the development of multiplatform and online applications while incorporating necessary functionalities.
 - **React:** Acted as the front-end framework, enabling the creation of intricate user interfaces for building single-page web apps.

2.3.1.6 Full-Stack Development:

- **MERN Stack (MongoDB, Express, React, Node.js):** Adopted for full-stack development. MongoDB served as the data storage, Express as the back-end framework, React as the front-end framework, and Node.js as the runtime environment. This combination enables the development of high-performance web applications.

This arsenal of tools and technologies, ranging from project management to development frameworks, ensures the project's success and efficient collaboration among team members. The chosen stack aligns with modern web development practices, providing a robust foundation for building and managing an online vehicle rental management system.

2.4 Testing

Test Function: Search Booking history

Test Case Designed By: IT22580344

Test Priority: High

Pre-condition: Renter must be logged into the system.

Test Steps:

- Vehicle Renter navigates to the "Booking" section.
- Enters search criteria such as vehicle type, location, availability dates, etc.

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Vehicle brand, Vehicle model, location, dates	The system should only display the relevant bookings that matching to search criteria	System display only relevant bookings the matching to search criteria	pass	The renter successfully searches for bookings

Test Function: Generate Payment Report

Test Case Designed By: IT22580344

Test Priority: High

Pre-condition: Owner must be logged into the system.

Test Steps:

- Vehicle Owner navigates to the "Earning" section.
- Select a week, month or year for generate reports

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Select week, month or year for generate report	System should generate a report for all earning for entered period of time	System display generated report for owner earnings for selected time period	pass	The owner successfully generated report for earning

Test Function: Adding vehicles details to the system

Test Case Designed By: IT22101242

Test Priority: High

Pre-condition: User has necessary permissions to add vehicle details

Test Steps:

- Enter valid vehicle details into the respective fields
- Check for a confirmation message indicating successful addition of vehicle details

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Vehicle details: brand, model, model year, engine capacity, total seats, vehicle id, start date, transmission, price, mileage	The owner adds the vehicle details and confirms successful addition.	Vehicle details are added, and the system displays a success message.	pass	Verify that the owner can successfully add vehicle details

Test Function: Adding driver details to the system

Test Case Designed By: IT22101242

Test Priority: High

Pre-condition: The vehicle owner has necessary permissions to add driver details

Test Steps:

- Enter valid driver details in the form
- Check if the added driver details are visible in the system's database

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Form including driver's name, email, contact no, NIC and other details	Driver details are successfully added to the system	Driver details added successfully	pass	Verify that the system can add driver details with valid inputs

Test Function: Update Renter Profile

Test Case Designed By: IT22137128

Test Priority: Medium

Pre-condition: Renter must be logged into the system.

Test Steps:

- Renter navigates to the "Profile" section.
- Updates personal information such as name, contact details, or address.
- Saves the changes

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
UP-01	Updated name, contact details, address	System should save the updated profile information	System successfully saves the updated profile information.	pass	The renter successfully updates their profile information

Test Function: Add Vehicle to Favorites

Test Case Designed By: IT22137128

Test Priority: High

Pre-condition: Renter must be logged into the system

Test Steps:

- Renter navigates to the "Vehicle Listings" section
- Finds a vehicle of interest.
- Selects the option to add the vehicle to favorites

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
AVF-01	Vehicle selected for addition to favorites	System should add the vehicle to the renter's favorites list	System successfully adds the vehicle to the renter's favorites list	pass	The renter successfully adds a vehicle to their favorites list for future reference.

Test Function: Response for driver assigning for a hire.

Test Case Designed By: IT22124876

Test Priority: High

Pre-condition: Owner should assign a driver for the hire.

Test Steps:

- Driver navigates to the “View bookings”.
- Driver checks for the dates and the locations where the drivers have been assigned.
- Response whether he can participate in the hire or not.

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Dates that the renters have done a booking.	Owners checked the dates and assign a suitable driver for the hire.	Assigning is accurately displays at the relevant driver's profile.	pass	Renters can make a booking for a vehicle. So the vehicle owners can check the dates and assign a relevant driver to the booking. Drivers can watch the dates they have been assigned and response whether they can attend or not.

Test Function: Adding Approved Vehicles to the system

Test Case Designed By: IT22230638

Test Priority: High

Pre-condition: Vehicle Manager must be logged into the system.

Test Steps:

- Vehicle Manager navigates to the “Approved Vehicles” section in the system.
- Check the approved vehicle forms.

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Approved vehicles' forms	Approved vehicles successfully added to the system for rental.	Approved vehicles successfully added to the system for rental.	pass	The vehicle manager successfully add approved vehicle to the system

					after receiving approval from the maintenance manager.
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Test Function: Investigating Renter Complaints

Test Case Designed By: IT22230638

Test Priority: High

Pre-condition: Vehicle Manager must be logged into the system.

Test Steps:

- Vehicle Manager navigates to the “Reviews and Ratings” section in the system.
- Access the list of Reviews submitted by renters.
- Reviews and ratings for vehicles and the system are inspected thoroughly.

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Reviews and ratings provided by renters	Effectively investigate and respond appropriately to renter complaints by thoroughly analyzing reviews and ratings provided by renters.	Responding appropriately to address any identified issues or concerns.	pass	The vehicle manager effectively investigating renter complaints and responding appropriately to address any identified issues or concerns.

Test Function: Add new employees to the system.

Test Case Designed By: IT22286246

Test Priority: High

Pre-condition: HR manager must be logged into the system.

Test Steps:

- Enter employee details by filling form.
- Click the register button.

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	First name, Last name, NIC, Role, Date of birth, select	Create new employee in database.	Add new employee to database and display	pass	Add a new employee to the system.

	gender, Contact number, Email	Display registration successful message.	“Employee data send successfully” message.		
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Test Function: Leave request management.

Test Case Designed By: IT22286246

Test Priority: High

Pre-condition: Employee must be registered into system.

Test Steps:

- Employees navigate to “Leave Management” section in the system.
- Fill the leave request form.
- Click “Submit Request” button.

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Employee name, leave type, leave from, Leave to, Action plan	Apply leave request. Display request successful message.	Add new request in database.	pass	Add a new request in the database and HR manager can review those requests.

Test Function: Report Generation

Test Case Designed By: IT22271150

Test Priority: High

Pre-condition: Renter must be logged into the system.

Test Steps:

- Renter navigates to the "Reviews and rating page" section.
- Select the form to add reviews and ratings.

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Vehicle id. Rating through stars. Review for vehicle. Review for Driver.	A detailed report should be generated, including information such as Reviews for driver, vehicle	The report is generated successfully and displays relevant data	pass	The renter Can add reviews effectively and other renters can see all the reviews and rating in

		separately and rating through starts to trip.			booking page.
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Test Function: Adding vehicle conditions to the system.

Test Case Designed By: IT22281128

Test Priority: High

Pre-condition: Maintenance manager must be registered into the system.

Test Steps:

- Maintenance manager navigates to “Vehicle Conditions” section in the system.
- Fill in the vehicle conditions form.
- Click “Save” button.

Test ID	Test Inputs	Expected Output	Actual Output	Result	Description
	Oil level, Tire condition, Breck, Shockets, Last engine repaired date, Last oil changed date	Update vehicle conditions in database. Display request successful message.	Add new repair details to database and display “Vehicle conditions details update successfully” message.	pass	Add a new repair detail of vehicles to the system.

3 Conclusion

Easy Rent is a comprehensive vehicle renting and hiring management system designed to meet the diverse needs of vehicle rental businesses. By integrating modern technology and user-friendly interfaces, Easy Rent streamlines the entire rental process, from vehicle inventory management to customer reservations, payments, and reporting.

Our system provides significant benefits for both administrators and customers. Administrators can efficiently manage their vehicle fleets, track maintenance schedules, and monitor rental activities through a robust and intuitive dashboard. This enhances operational efficiency, reduces administrative overhead, and ensures optimal utilization of the vehicle inventory.

Customers benefit from a seamless and convenient rental experience. The user-friendly customer portal allows for easy browsing of available vehicles, straightforward booking processes, and secure online payments. Real-time availability tracking and clear reservation statuses improve transparency and customer satisfaction.

Easy Rent's scalability and flexibility make it suitable for a wide range of vehicle rental businesses, from small local companies to large enterprises with diverse fleets. The system's integration capabilities with third-party services and payment gateways further enhance its functionality and extend its value.

Moreover, the detailed analytics and reporting features of Easy Rent provide valuable insights into business performance, helping owners make informed decisions and drive growth. The focus on security and data protection ensures that both customer and business data remain safe and confidential.

Overall, Easy Rent represents a significant advancement in the vehicle rental industry, offering a powerful, efficient, and user-centric solution. By

automating key processes and enhancing the user experience, Easy Rent empowers vehicle rental businesses to achieve greater efficiency, customer satisfaction, and long-term success.