

A

MINI PROJECT REPORT

ON

“ JET JOURNEY”

SUBMITTED BY

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(SPPU Exam Seat No. 3384)

D.Y. PATIL INSTITUTE OF MCA AND MANAGEMENT

AKURDI, PUNE-411044

Under

Savitribai Phule Pune University
for

Academic Year 2023-2024



DR. D. Y. PATIL PRATISHTHAN'S
**D. Y. PATIL INSTITUTE OF MASTER OF COMPUTER
APPLICATIONS AND MANAGEMENT**

(Approved by A.I.C.T.E., New Delhi and Recognized by State Govt. of
Maharashtra and Affiliated to Savitribai Phule Pune University, Pune)

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CERTIFICATE

This is to certify that the project entitled

“JET JOURNEY”

Has been successfully completed

By

Mr.Dhananjay Manik Bhgat

Towards the partial fulfillment of

M.C.A. (Master of Computer Application)

Under

Savitribai Phule Pune University for

Academic Year 2023-2024

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Academic Year 2023-24 (Sem: Aug 23-Dec 23)

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CHAPTER 1 : INTRODUCTION

1. Introduction

- The Jet Journey is a Django-based web application designed to simplify and enhance the vehicle rental process. It provides an intuitive platform for both customers and administrators.
- The primary goal is to create an automated system that facilitates easy browsing, selection, and booking of vehicles for customers, while offering administrators tools for effective fleet and reservation management.
- The system includes user authentication, a dynamic vehicle catalog, reservation management, and an administrative dashboard. Integration with payment gateways and real-time availability updates ensures a seamless user experience.
- Leveraging the Django framework, along with HTML, CSS, and JavaScript for the frontend, the Jet Journey benefits from robust features and a responsive user interface.
- Beyond basic rental functionalities, the project includes user roles, detailed vehicle information, reservation history, and extensibility for future enhancements.
- The Jet Journey offers a strategic advantage for rental businesses by improving the customer experience and providing administrators with valuable insights through analytics and reporting functionalities.
- The report is structured to provide a comprehensive understanding of the Jet Journey, covering background, requirements, design, implementation, testing, challenges, and future recommendations. Each section contributes to a holistic view of the development process and outcomes.

1.1. Project Abstract

- **Objective:**Develop a modern Car Rental System using the Django framework to enhance and streamline the vehicle rental process.
- **User-Friendly Interface:**Prioritize an intuitive and responsive interface for both customers and administrators, ensuring a seamless user experience.
- **Security Measures:**Implement robust user authentication mechanisms to safeguard user data and control access securely.
- **Real-Time Updates:**Integrate real-time updates to provide accurate and instant information on vehicle availability, minimizing the risk of overbooking.
- **Online Transaction Capability:**Enable secure online transactions through a reliable payment gateway, simplifying and securing the reservation and payment process.
- **Administrator Dashboard:**Develop a comprehensive dashboard equipped with tools for efficient fleet management, reservation monitoring, and detailed analytics.
- **Scalable Architecture:**Design the system on a scalable architecture to accommodate increased user traffic and ensure adaptability for future enhancements.
- **Documentation and Training:**Provide extensive documentation and training materials to facilitate effective utilization of the system by users and administrators.

1.2 Existing System and Need of System

- **Manual Processes:** Relies on manual procedures for vehicle reservations, involving paperwork and in-person interactions.
- **Limited Accessibility:** Customers face challenges accessing real-time information about vehicle availability, pricing, and specifications.
- **Inefficient Fleet Management:** Fleet management is conducted manually, including tracking vehicle usage, maintenance schedules, and overall fleet performance.
- **Security Gaps:** Absence of a robust user authentication system raises security concerns, potentially compromising user data and access controls.
- **Automation for Efficiency:** Implement automation to streamline and optimize the vehicle rental process, reducing manual effort and enhancing overall efficiency.
- **Enhanced Customer Accessibility:** Develop a digital platform that allows customers easy access to real-time information about vehicle availability, pricing, and specifications.
- **Prevention of Overbooking:** Introduce a system with real-time updates to minimize the risk of overbooking, ensuring a more reliable and customer-friendly service.
- **Efficient Fleet Management:** Provide administrators with tools for efficiently managing the vehicle fleet, including monitoring usage, scheduling maintenance, and optimizing overall fleet performance.
- **Improved Customer Experience:** Enhance the overall customer experience by offering a user-friendly, convenient, and reliable platform for renting vehicles.

1.3 Scope of Work

- Build a user-friendly car rental web application using Django.
- Create an easy-to-use interface for customers and administrators.
- Ensure secure user authentication.
- Manage a dynamic catalog with detailed vehicle information.
- Develop a straightforward reservation system for customers.
- Integrate real-time updates for accurate vehicle availability.
- Enable secure online transactions with a payment gateway.
- Provide administrators with a dashboard for fleet management and analytics.
- Implement role-based access control for users and administrators.

1.4 Operating Environment – Hardware and Software

❖ Hardware Requirements :

- Processor: Intel i3 10th Generation & above.
- Hard Disk: 25 GB Minimum.
- RAM: 1 GB Minimum.

❖ Software Requirements :

- Operating System: Windows 7 and Higher Version.
- Front – End: HTML, CSS, Bootstrap, JavaScript
- Back - End: Python Django
- Database: MySQL
- Server : XAMPP
- Editor: PyCharm

1.5 Technology Used

- With the advent of latest technology if we do not update our system then our business result in losses gradually with time.
- Here, Python Django is used for logic and view purpose. For designing HTML/CSS/Bootstrap/JavaScript/jQuery is used.

1.6 Module Specification

➤ **ADMINISTRATION:**

- **Admin:** In this module the admin will manage all the system.
- **Customer:** In this module customer will perform the Booking operation.
- **Car Owner:** In this module car owner will add his car.

➤ **VEHICLE MANAGEMENT:**

In this module the vehicle will be managed by the admin. Vehicle can be added by admin & also be deleted.

➤ **BOOKING MANAGEMENT:**

In this module the booking of car will be done by the customer. Customer can select the car & book the car as per choice.

➤ **PAYMENT MANAGEMENT:**

In this module the payment of car will be done by the customer. Customer can do the payment.

➤ **REPORT GENERATION:**

In this module the report will be generated by the system of the details. The report of the car booking & payment will be generated.

➤ **ORDER MANAGEMENT:**

In this module the order page will be shown to the customer & order will be given by customer.

CHAPTER 2 : PROPOSED SYSTEM

2.1 Proposed System

- **Django-Powered Platform:** Develop a streamlined car rental system using the Django web framework, ensuring efficiency and scalability.
- **Intuitive User Interface:** Create a user-friendly interface for both customers and administrators, prioritizing ease of use and accessibility.
- **Secure User Authentication:** Implement a robust user authentication system to safeguard user data and control access securely.
- **Real-Time Updates and Notifications:** Integrate real-time updates for accurate vehicle availability, minimizing the risk of overbooking. Implement instant notifications for users.
- **Online Transaction Capability:** Enable secure online transactions with a reliable payment gateway, enhancing the convenience of reservations and payments.
- **Administrator Dashboard and Analytics:** Develop a comprehensive dashboard for administrators with tools for efficient fleet management, reservation monitoring, and analytics.
- **Scalable Architecture:** Design the system with scalability in mind, capable of accommodating increased user traffic and adaptable for future enhancements.

2.2 Objective of System

- **Automation and Efficiency:** Streamline the vehicle rental process by automating manual tasks, reducing errors, and enhancing overall operational efficiency.
- **User-Friendly Experience:** Create an intuitive and user-friendly interface for customers, simplifying vehicle selection, reservation, and payment processes.
- **Administrator Efficiency:** Provide administrators with a comprehensive dashboard and tools for efficient fleet management, reservation monitoring, and analytics.
- **Security and User Privacy:** Implement robust user authentication to ensure data security, protect user privacy, and manage access controls effectively.
- **Real-Time Updates:** Integrate real-time updates to offer customers accurate information on vehicle availability, minimizing the risk of overbooking.
- **Online Transaction Capability:** Enable secure online transactions through a reliable payment gateway, allowing customers to complete reservations and payments seamlessly.
- **Scalability and Adaptability:** Design the system to be scalable, accommodating potential increases in user traffic, and adaptable to future industry changes and additional features.

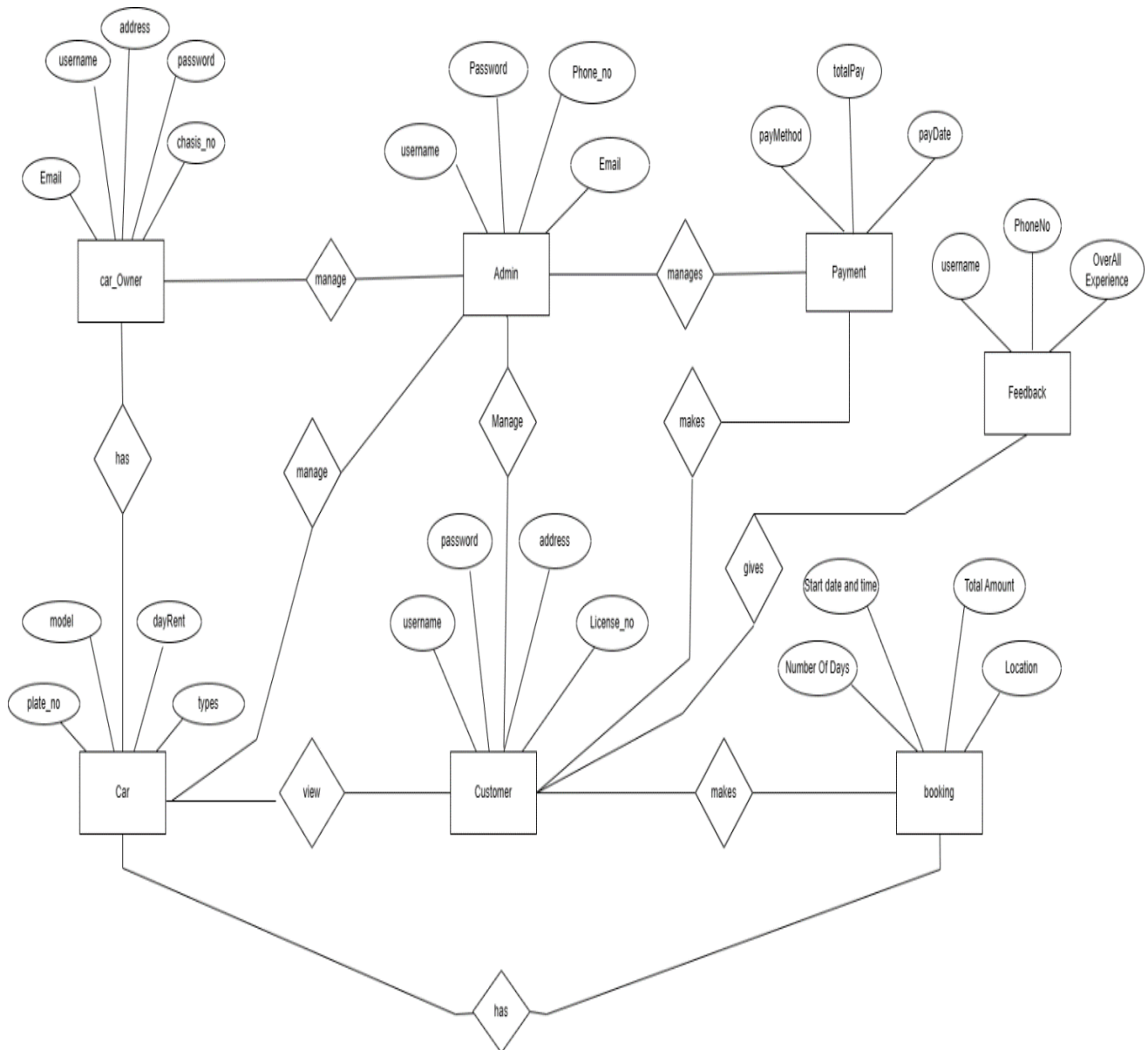
2.3 User Requirements

- 1. User Authentication:** Implement a secure authentication system that allows Admin, Car Owners, and Customers to have distinct login credentials.
- 2. Dashboard Functionality:** Provide Admin with a comprehensive dashboard for managing Car Owners, Customers, and rental bookings.
- 3. Car Owner Management:** Enable Car Owners to register, create profiles for their cars, and manage details like availability and pricing.
- 4. Booking System:** Allow Customers to browse available cars, view details, and make bookings for specified rental dates.
- 5. Reservation Mechanism:** Implement a reservation system to prevent double bookings and notify Customers of booking confirmations.
- 6. Payment Integration:** Integrate a secure payment gateway for online transactions, generating invoices and receipts for Customers.
- 7. Notifications:** Send timely notifications to Admin, Car Owners, and Customers regarding booking status, payments, and updates.

CHAPTER 3 : ANALYSIS AND DESIGN

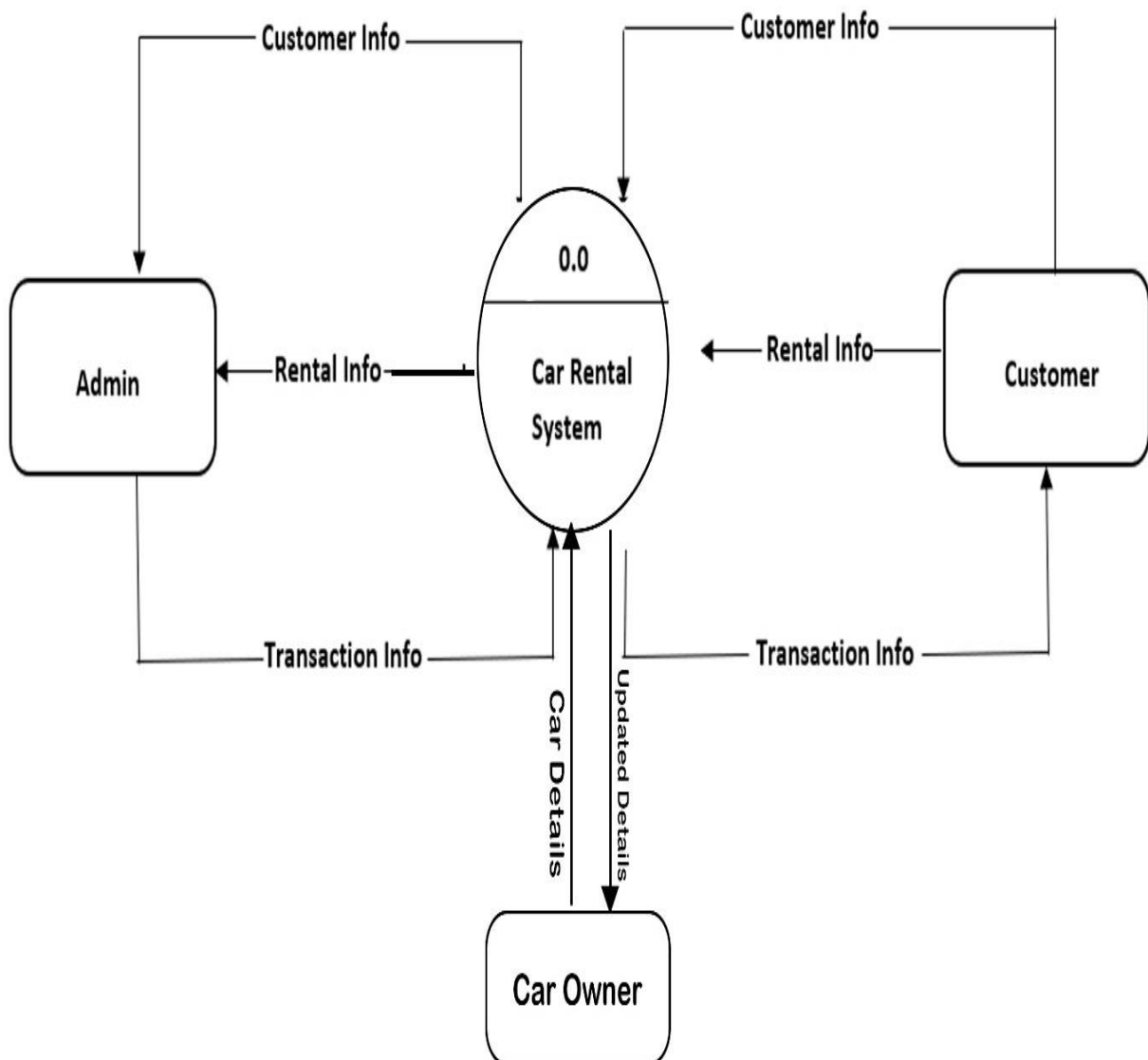
3. Analysis & Design

3.1 Entity Relationship Diagram

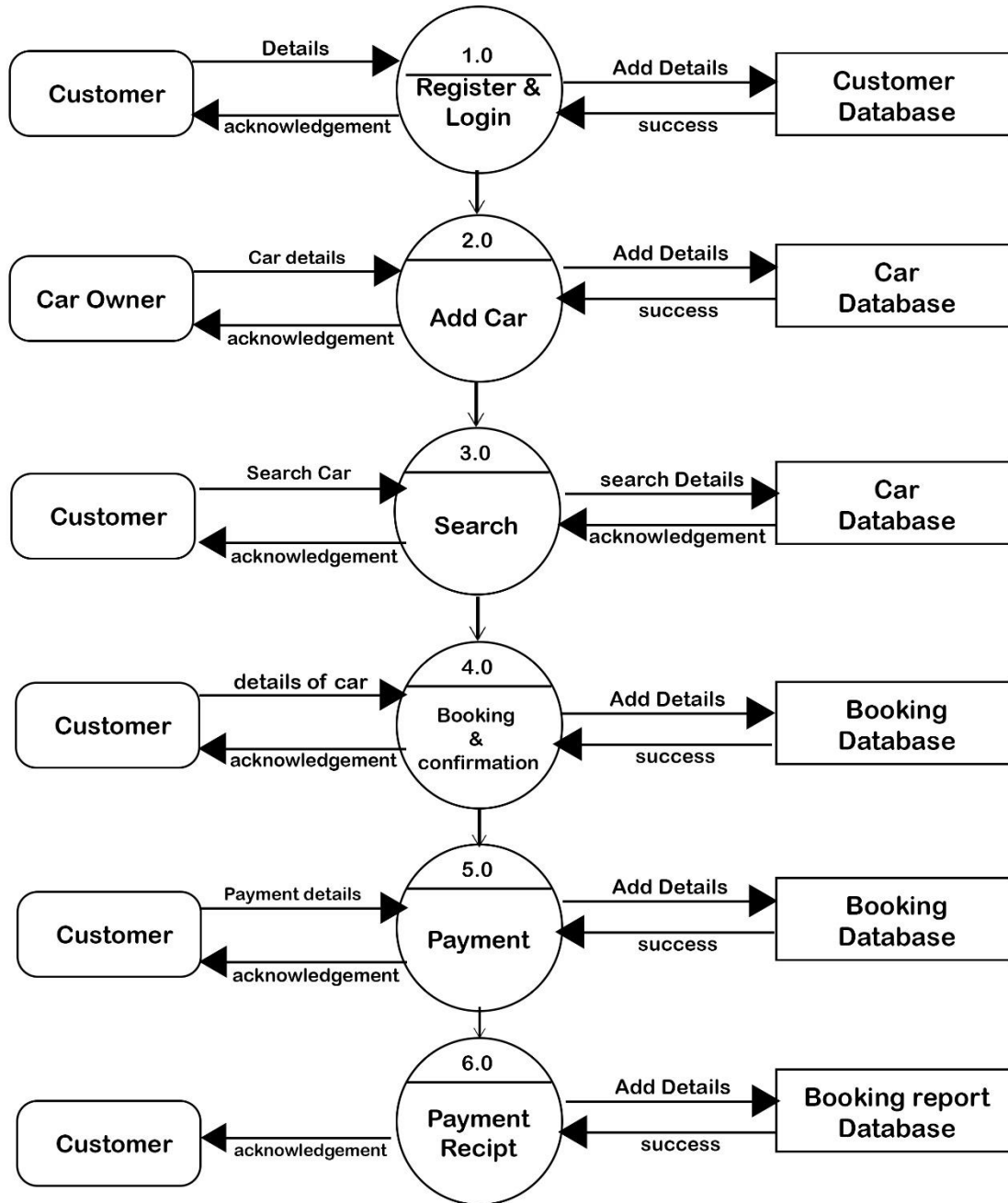


3.2 Data Flow Diagram

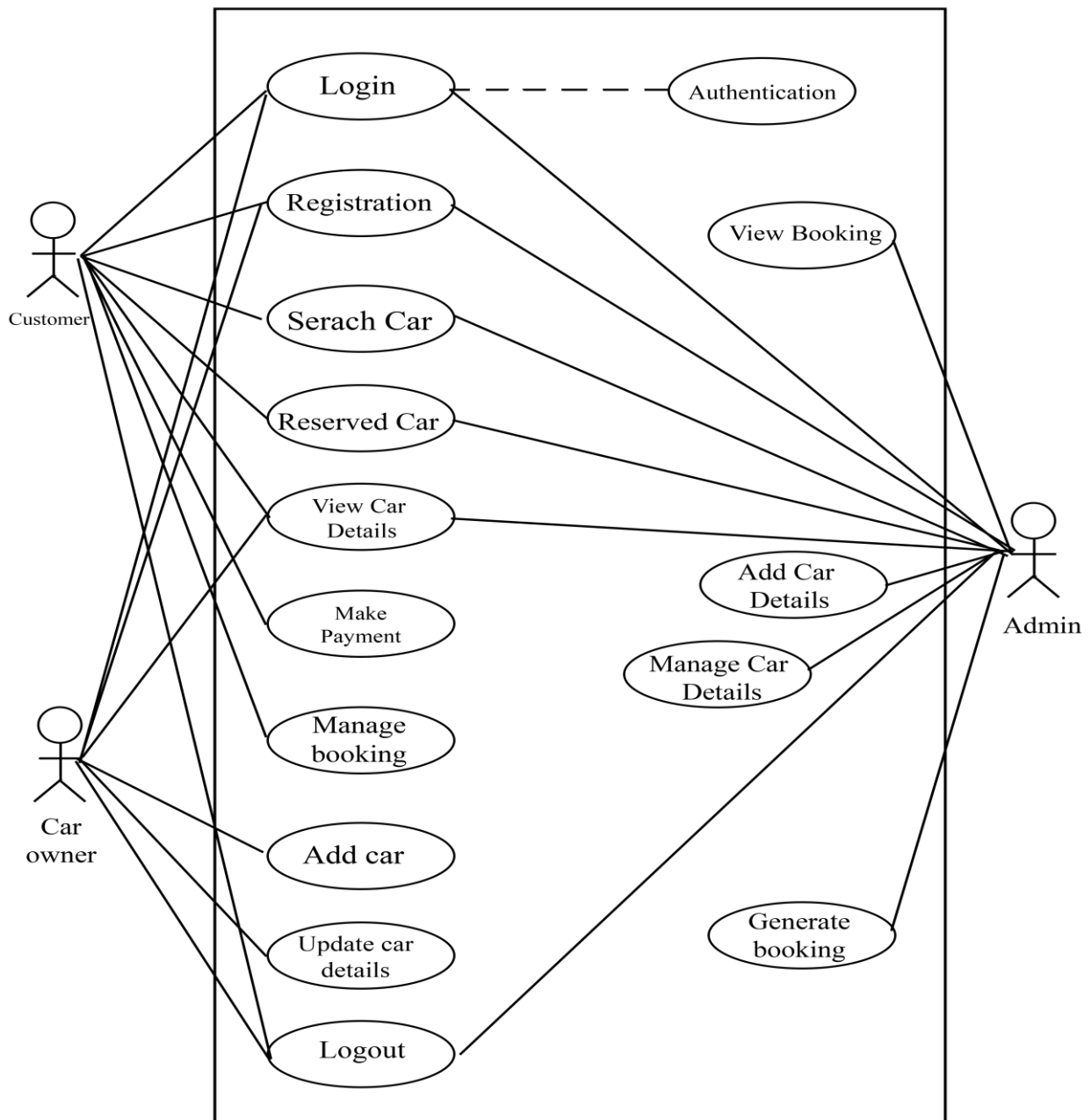
Level 0 :



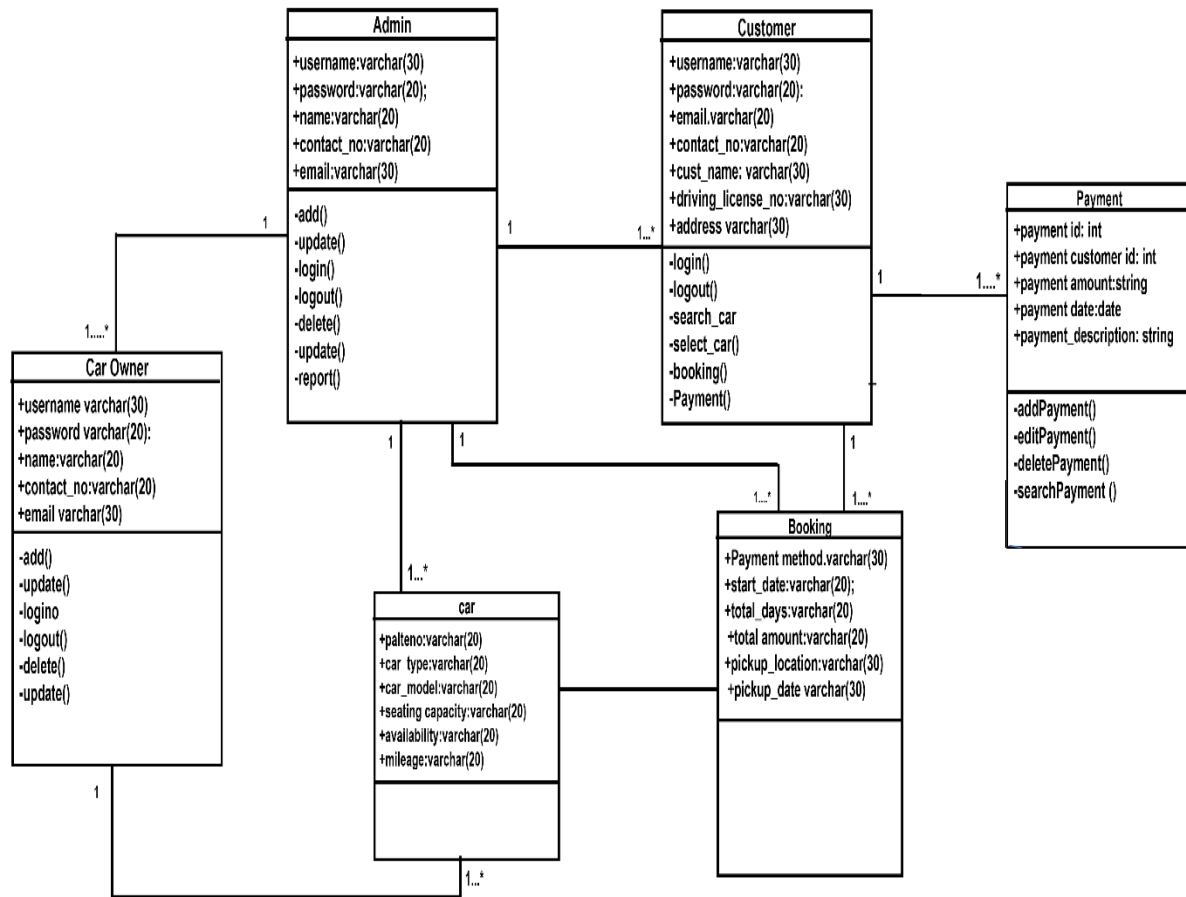
Level 1 :



3.3 Use Case Diagram

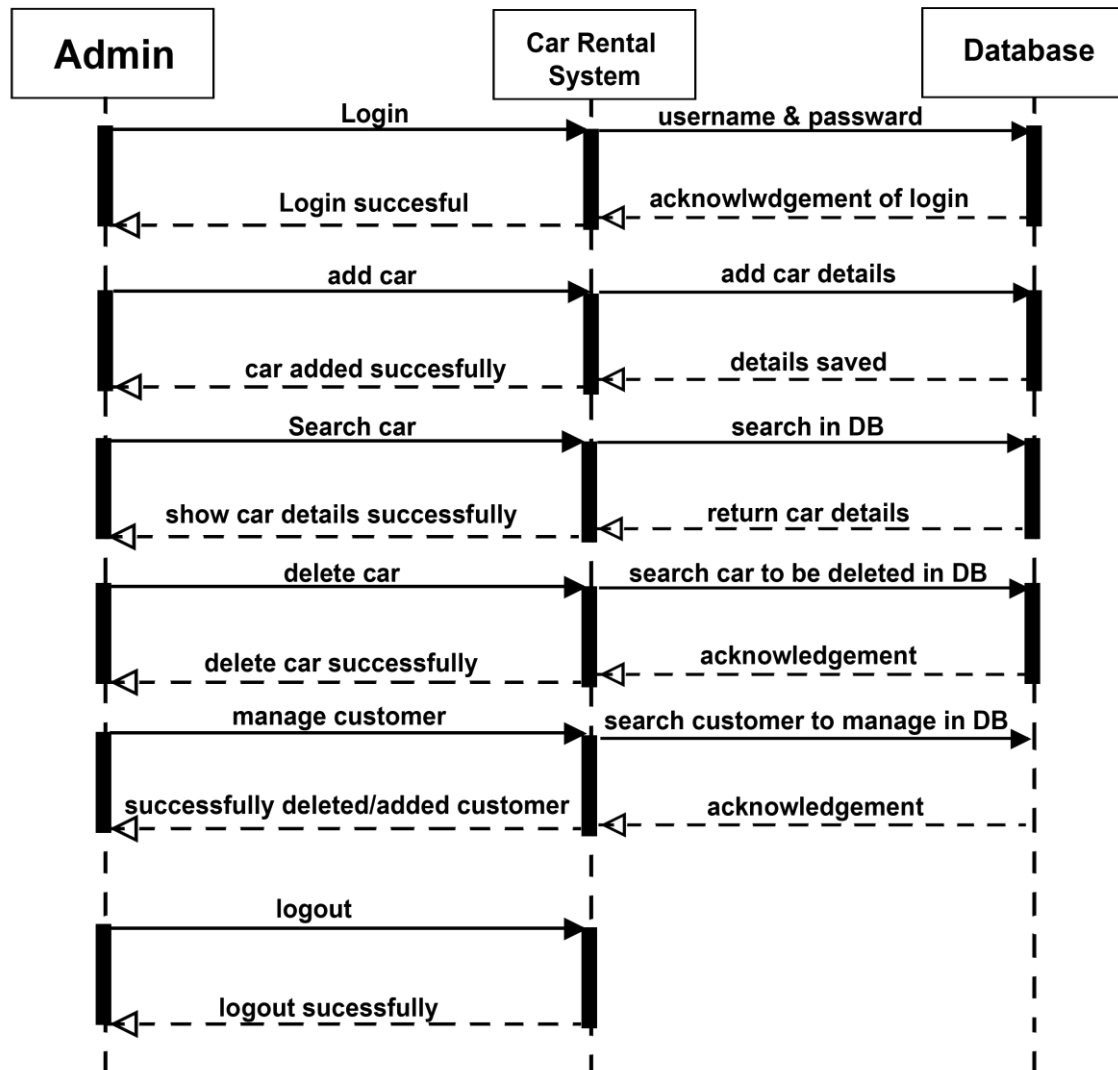


3.4 Class Diagram

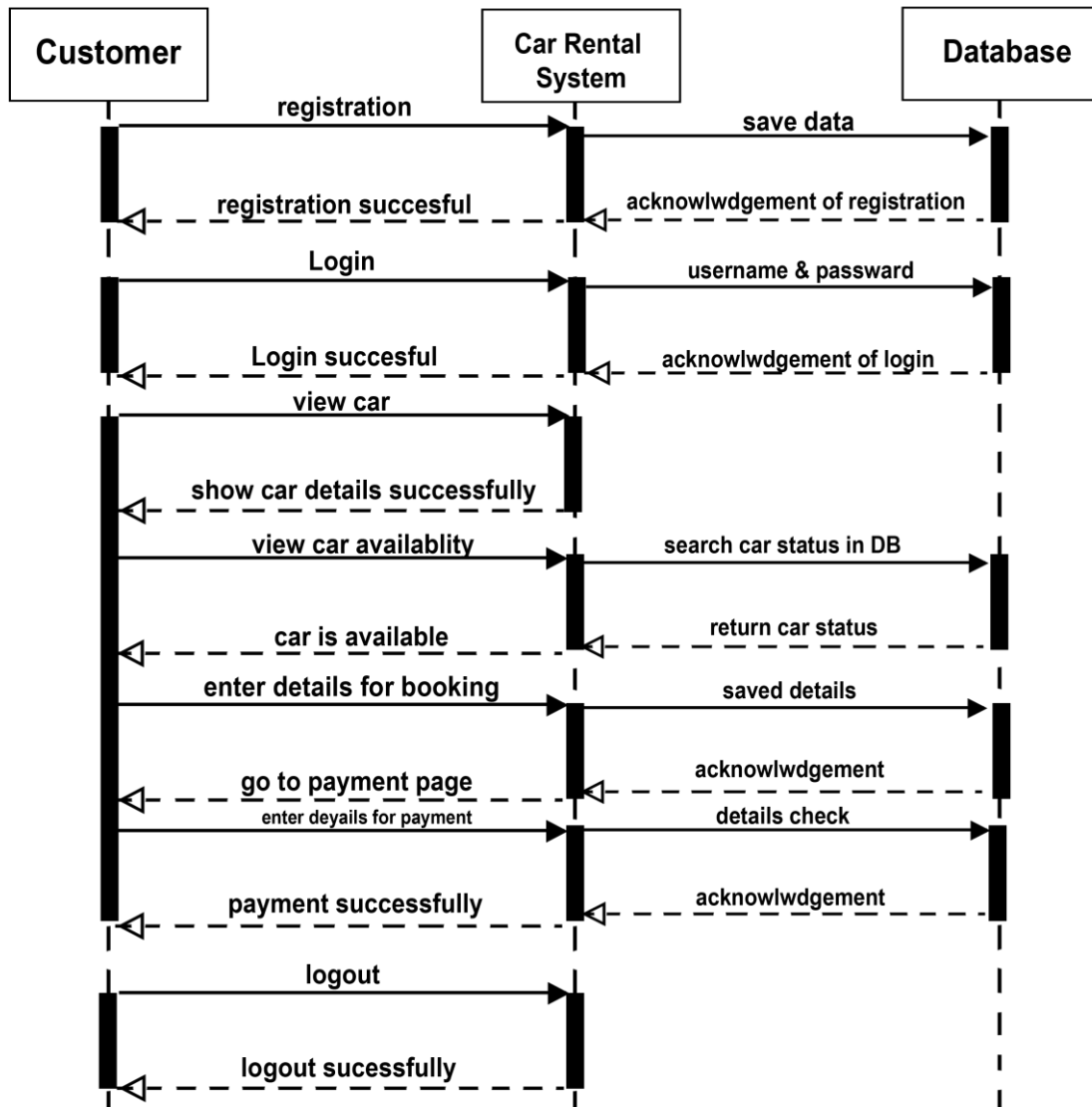


3.5 Sequence Diagram

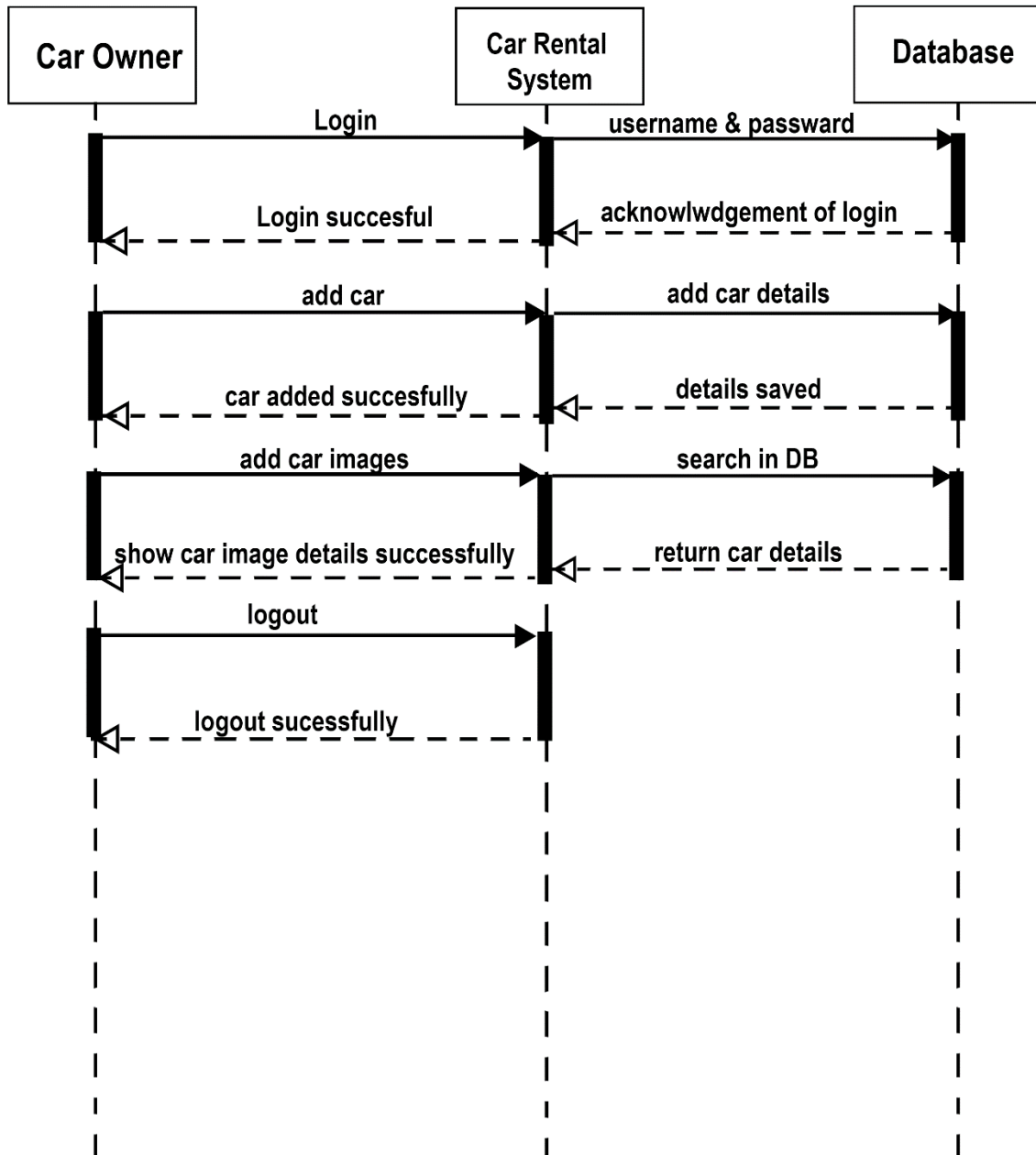
Sequence Diagram for Admin



Sequence Diagram for Customer

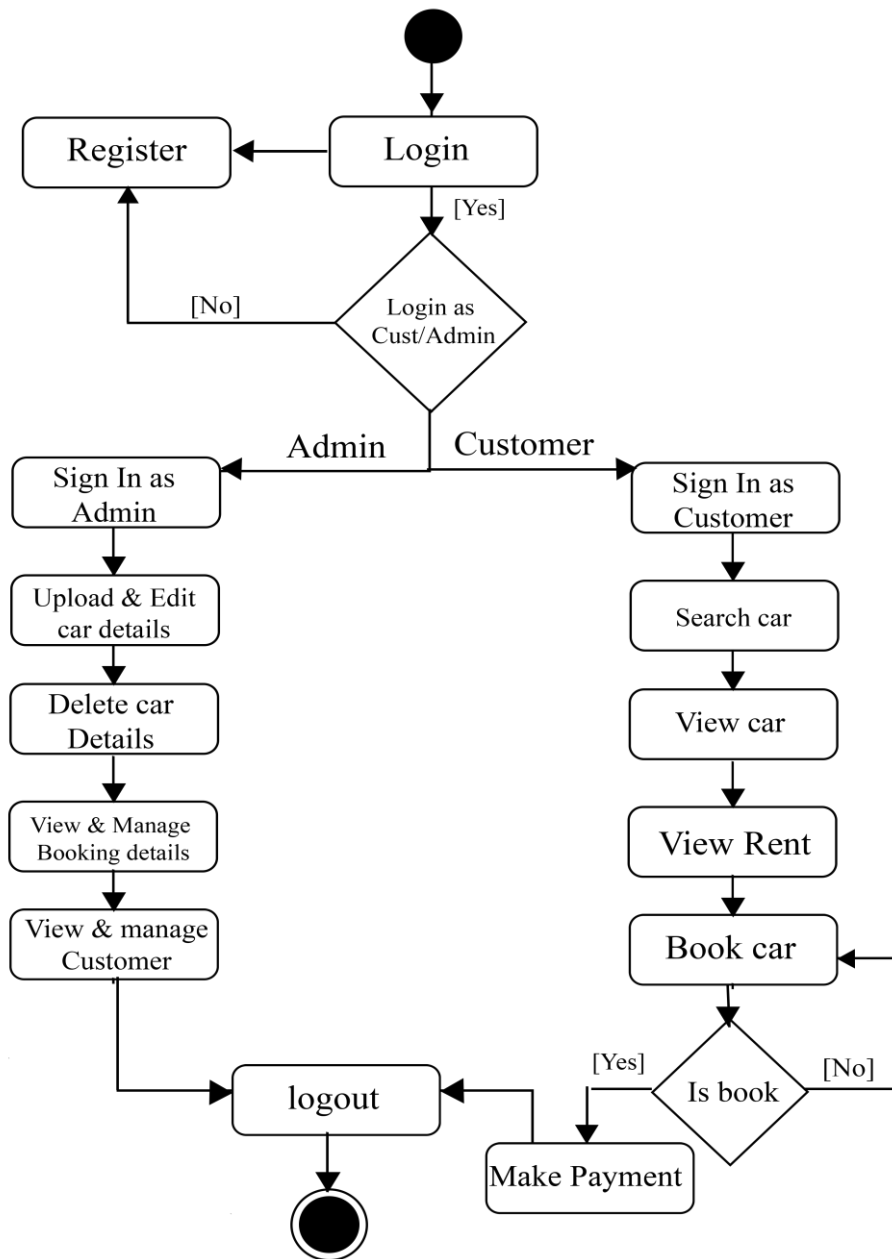


Sequence Diagram for owner

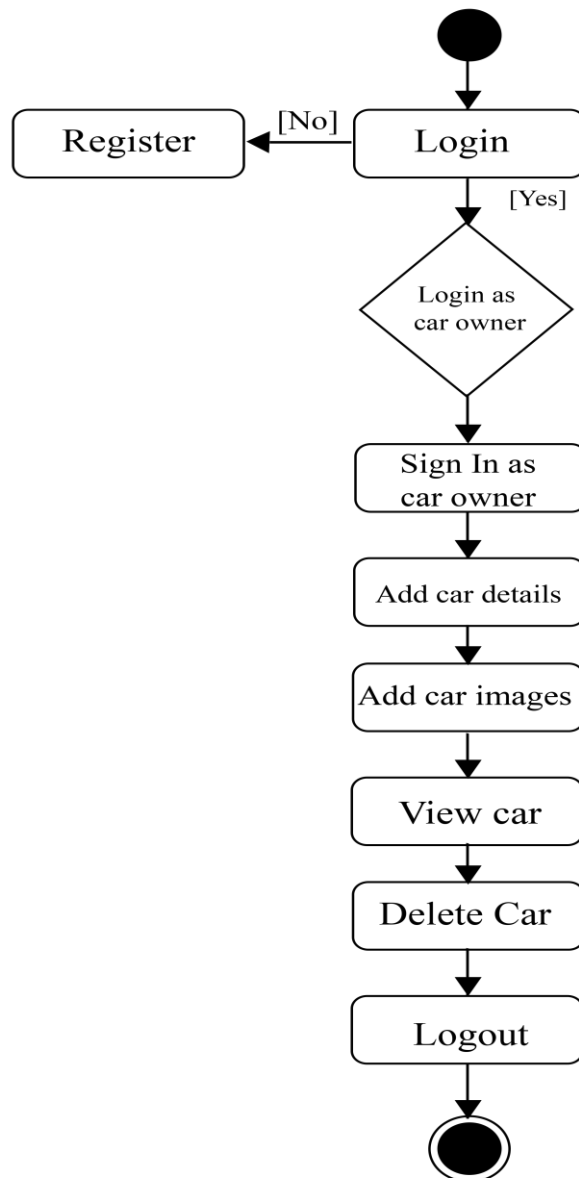


3.6 Activity Diagram

Activity Diagram for Admin and Customer



Activity Diagram for Car Owner



3.7 Table Structure

- Admin

Sr. No	Field Name	Data Type	Size	Constraints	Description
1	Username	Varchar	20	Primary key	Username
2	Password	Varchar	100	Not Null	Password
3	Admin Name	Varchar	20	Not Null	Admin Name
4	Phone No	Int	10	Not Null	Phone No
5	Email	Varchar	20	Not Null	Email
6	City	Varchar	20	Not Null	City
7	Pincode	Int	20	Not Null	Pincode

- Customer

Sr. No	Field Name	Data Type	Size	Constraints	Description
1	Username	Varchar	20	Primary key	Username
2	Password	Varchar	100	Not Null	Password
3	Customer Name	Varchar	20	Not Null	Customer Name
4	Custid	Int	10	Not Null	Custid
5	CustPhone No	Int	10	Not Null	CustPhone No
6	CustEmail	Varchar	20	Not Null	CustEmail
7	CustCity	Varchar	20	Not Null	CustCity
8	Pincode	Int	20	Not Null	Pincode
9	Admin Name	Varchar	20	Foreign Key	Admin Name
10	Payment id	int	20	Foreign Key	Payment id

- Car Dealer

Sr. No	Field Name	Data Type	Size	Constraints	Description
1	Username	Varchar	20	Primary key	Username
2	Password	Varchar	100	Not Null	Password
3	Dealer Name	Varchar	20	Not Null	Dealer Name
4	Dealer Phone No	Int	10	Not Null	Dealer Phone No
5	Dealer Email	Varchar	20	Not Null	Dealer Email
6	Dealer City	Varchar	20	Not Null	Dealer City
7	Pincode	Int	20	Not Null	Pincode
8	Admin Name	Varchar	20	Foreign Key	Admin Name

- Booking

Sr. No	Field Name	Data Type	Size	Constraints	Description
1	PlateNo	Varchar	20	Primary key	PlateNo
2	Username	Varchar	100	Not Null	Username
3	PayMethod	Varchar	20	Not Null	PayMethod
4	StartDate	Int	10	Not Null	StartDate
5	TotalDays	Varchar	20	Not Null	TotalDays
6	TotalAmt	Varchar	20	Not Null	TotalAmt
7	PickLocation	Int	20	Not Null	PickLocation
8	Admin Name	Varchar	20	Foreign Key	Admin Name
9	Custid	Int	10	Foreign Key	Custid
10	PlateNo	varchar	20	Foreign Key	PlateNo

- Car

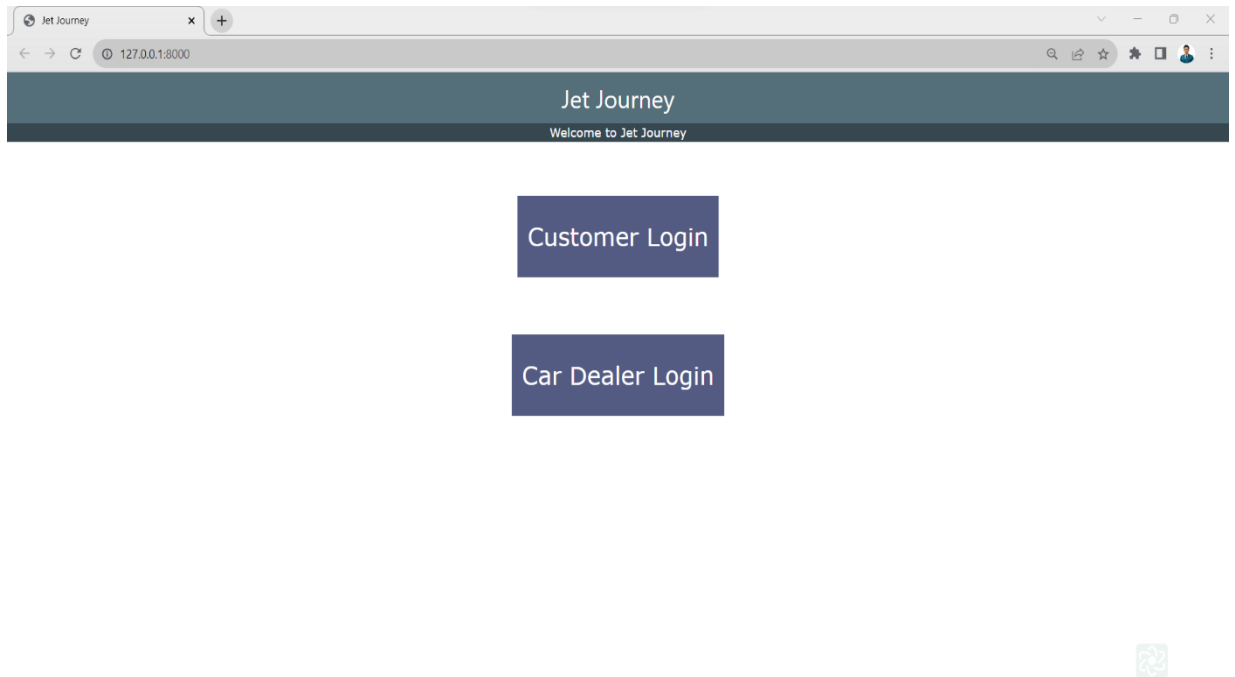
Sr. No	Field Name	Data Type	Size	Constraints	Description
1	PlateNo	varchar	20	Primary key	PlateNo
2	CarType	varchar	100	Not Null	CarType
3	Model	varchar	20	Not Null	Model
4	Colour	varchar	20	Not Null	Colour
5	TotalSeats	int	10	Not Null	TotalSeats
6	IsAvailable	varchar	50	Not Null	IsAvailable
7	Mileage	int	15	Not Null	Mileage
8	Dealer Name	Varchar	20	Foreign Key	Dealer Name
9	Admin Name	Varchar	20	Foreign Key	Admin Name

- Payment Report

Sr. No	Field Name	Data Type	Size	Constraints	Description
1	Payment id	int	20	Primary key	Payment id
2	PlateNo	varchar	20	Not Null	PlateNo
3	Username	varchar	100	Not Null	Username
4	Paymethod	varchar	20	Not Null	Paymethod
5	Startdate	varchar	20	Not Null	Startdate
6	Totaldays	int	10	Not Null	Totaldays
7	Totalamt	int	50	Not Null	Totalamt
8	Picklocation	varchar	15	Not Null	Picklocation
9	Custid	Int	10	Foreign Key	Custid

3.8 User Interface Screens

➤ Home Page:



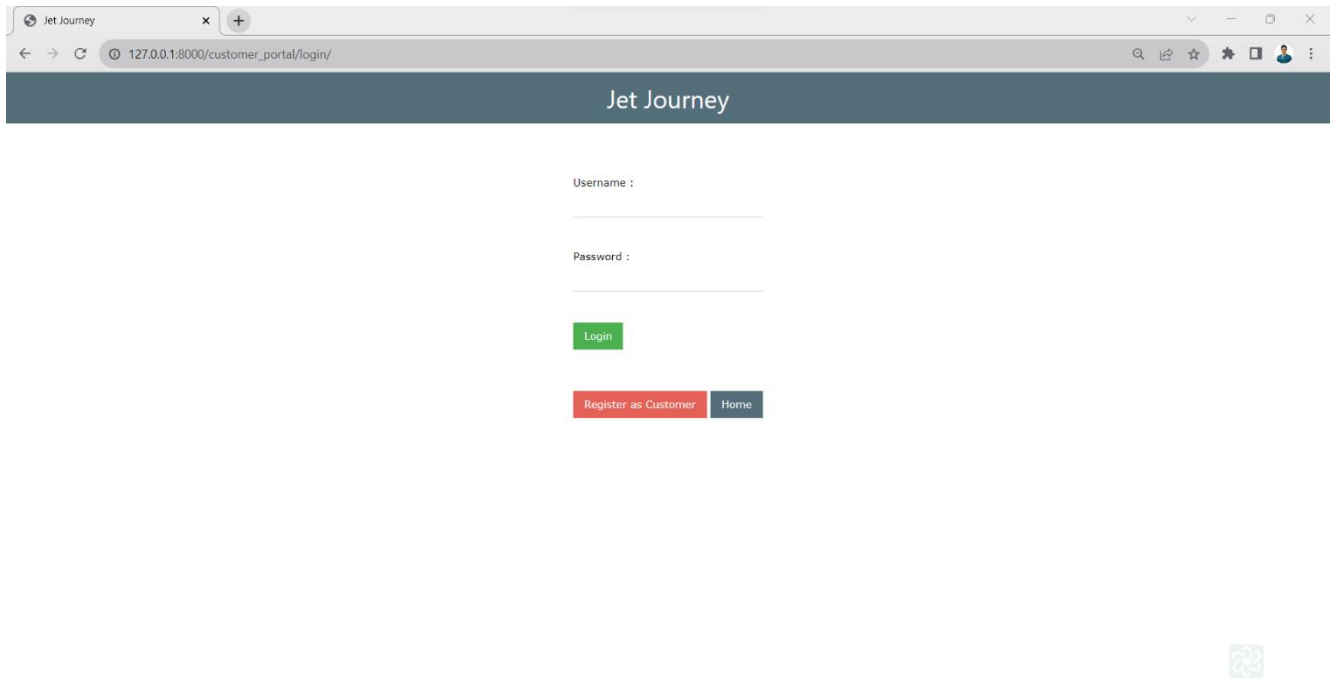
➤ Customer Registration

The screenshot shows a web browser window with the title 'Jet Journey'. The address bar displays '127.0.0.1:8000/customer_portal/register/'. The page has a dark blue header with the text 'Jet Journey' and 'Home Login'. Below the header, there is a 'Registration Form' with the following fields:

- Firstname : Nikhil
- Lastname : Momare
- Username : Nikhil
- Password : ****
- Email : nikhil@gmail.com
- Contact : 8888888888
- City : Akurdi
- Pincode : 411035

At the bottom of the form is a 'Submit' button.

➤ Customer login

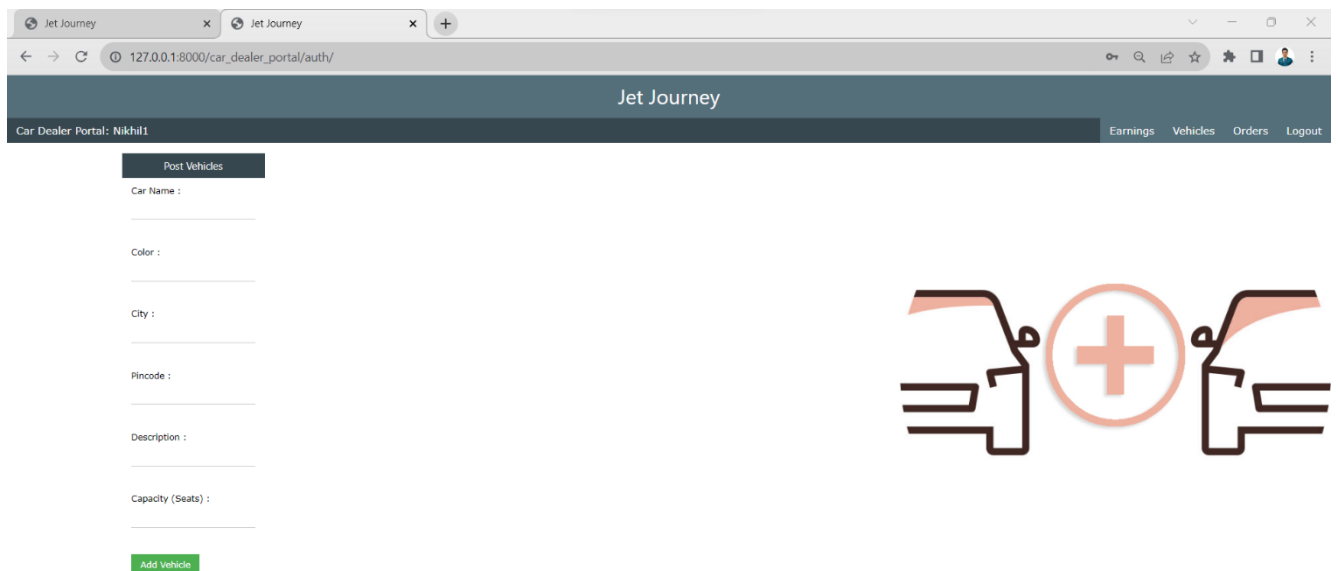


The screenshot shows a web browser window with the title 'Jet Journey'. The address bar displays '127.0.0.1:8000/customer_portal/login/'. The page has a dark blue header with the 'Jet Journey' logo. Below the header, there is a login form with the following elements:

- A label 'Username :' followed by a text input field.
- A label 'Password :' followed by a text input field.
- A green 'Login' button.
- A red 'Register as Customer' button and a blue 'Home' button.

At the bottom right of the page, there is a small, faint circular logo.

➤ Add vehicles



The screenshot shows a web browser window with the title 'Jet Journey'. The address bar displays '127.0.0.1:8000/car_dealer_portal/auth/'. The page has a dark blue header with the 'Jet Journey' logo. Below the header, there is a navigation bar with the text 'Car Dealer Portal: Nikhil1' and a menu with 'Earnings', 'Vehicles', 'Orders', and 'Logout'. The main content area has a dark blue button labeled 'Post Vehicles'. Below this button, there is a form with the following elements:

- A label 'Car Name :' followed by a text input field.
- A label 'Color :' followed by a text input field.
- A label 'City :' followed by a text input field.
- A label 'Pincode :' followed by a text input field.
- A label 'Description :' followed by a text input field.
- A label 'Capacity (Seats) :' followed by a text input field.
- A green 'Add Vehicle' button.

On the right side of the page, there is a large, stylized graphic of two hands holding a large orange plus sign, symbolizing adding or creating something.

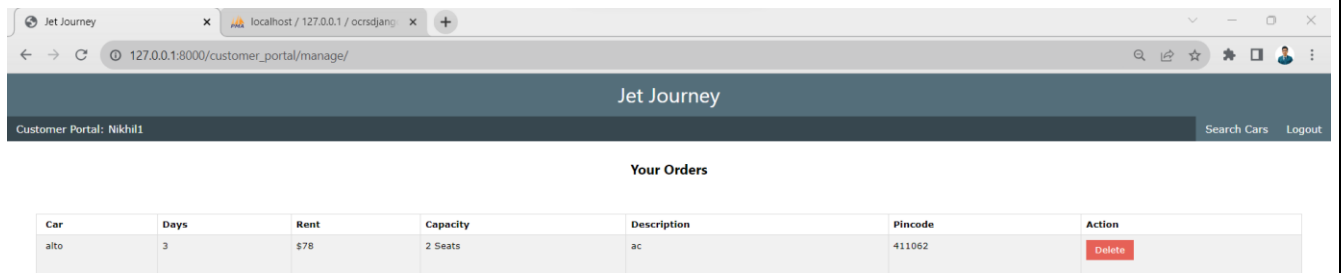
➤ Car Dealer Registration:

The screenshot shows a web browser window with two tabs labeled 'Jet Journey'. The address bar displays '127.0.0.1:8000/car_dealer_portal/register/'. The page has a dark blue header with the text 'Jet Journey' and a 'Home Login' link on the right. The main content area is titled 'Registration Form' and contains the following fields: First Name, Last Name, Username, Password, Email, Contact, City, and Pincode. Each field is represented by a horizontal input line. A dark blue 'Submit' button is located at the bottom of the form.

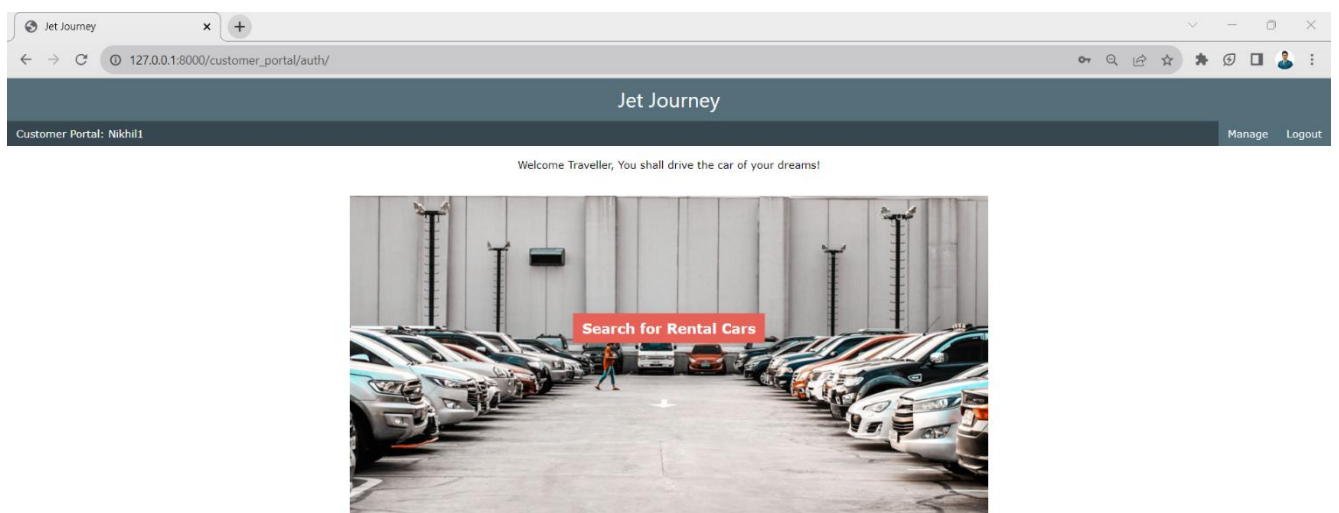
➤ Car Dealer Login:

The screenshot shows a web browser window with two tabs labeled 'Jet Journey'. The address bar displays '127.0.0.1:8000/car_dealer_portal/login/'. The page has a dark blue header with the text 'Jet Journey'. The main content area contains the following fields: Username and Password, each with a horizontal input line. Below these fields is a green 'Login' button. At the bottom of the form, there are two buttons: 'Register as Dealer' (in red) and 'Home' (in dark blue).

➤ Manage Order



➤ Customer Home Page



➤ Booking

The screenshot shows a web browser window with the URL `127.0.0.1:8000/customer_portal/rent/`. The page header includes the "Jet Journey" logo and a navigation bar with "Search Cars", "Manage", and "Logout" links. The user is logged in as "Nikhil1". The main content area displays a booking form for a car named "alto" with a price of "\$26 per day". A text input field for "How many days?" contains the value "2". A "Confirm My Order" button is located below the input field.

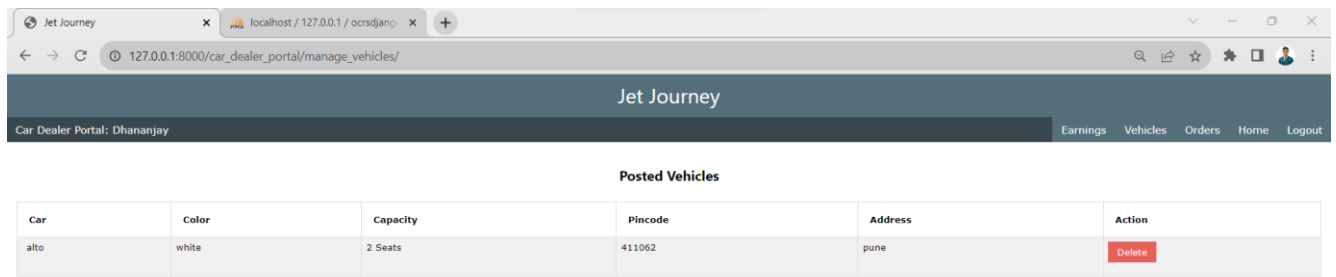
Car : alto
Price : \$26 per day
How many days?
Confirm My Order

➤ Total Earning

The screenshot shows a web browser window with the URL `127.0.0.1:8000/car_dealer_portal/history/`. The page header includes the "Jet Journey" logo and a navigation bar with "Earnings : \$78", "Vehicles", "Orders", "Home", and "Logout" links. The user is logged in as "Dhananjay". The main content area displays a table titled "History" with the following data:

Name	Rent	Days	Seat
alto	\$78	3	2

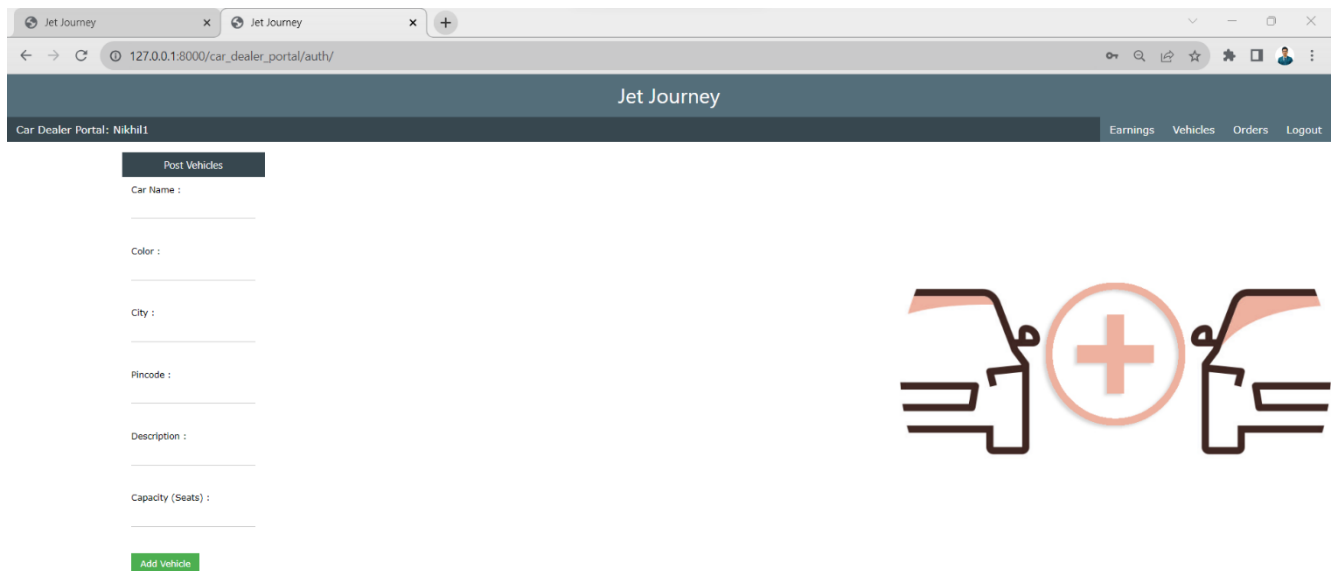
➤ Posted Vehicle



The screenshot shows a web browser with two tabs. The active tab is titled 'Jet Journey' and shows the URL '127.0.0.1:8000/car_dealer_portal/manage_vehicles/'. The page header includes the 'Jet Journey' logo and a navigation bar with links for 'Earnings', 'Vehicles', 'Orders', 'Home', and 'Logout'. The main content area is titled 'Posted Vehicles' and contains a table with the following data:

Car	Color	Capacity	Pincode	Address	Action
alto	white	2 Seats	411062	pune	Delete

➤ Add Vehicle



The screenshot shows a web browser with two tabs. The active tab is titled 'Jet Journey' and shows the URL '127.0.0.1:8000/car_dealer_portal/auth/'. The page header includes the 'Jet Journey' logo and a navigation bar with links for 'Earnings', 'Vehicles', 'Orders', and 'Logout'. The main content area is titled 'Post Vehicles' and contains a form with the following fields:

Car Name :

Color :


City :

Pincode :

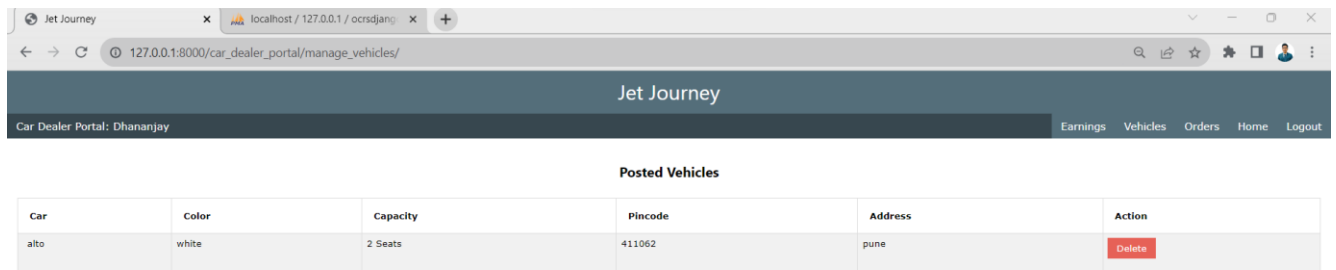
Description :

Capacity (Seats) :

[Add Vehicle](#)



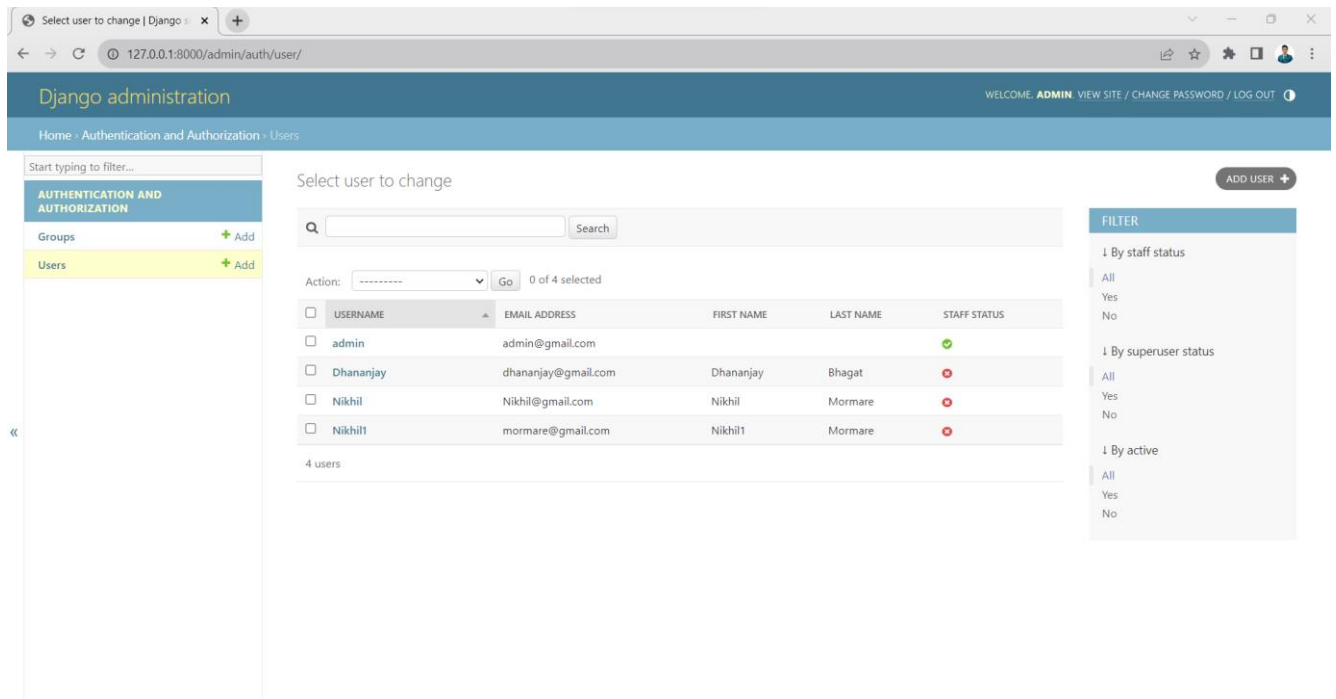
➤ Manage Vehicle



The screenshot shows a web browser window with the URL `127.0.0.1:8000/car_dealer_portal/manage_vehicles/`. The page title is "Jet Journey". Below the title is a navigation bar with links: "Car Dealer Portal: Dhananjay", "Earnings", "Vehicles", "Orders", "Home", and "Logout". The main content area is titled "Posted Vehicles" and contains a table with the following data:

Car	Color	Capacity	Pincode	Address	Action
alto	white	2 Seats	411062	pune	Delete

➤ Admin Manage User



The screenshot shows the Django administration interface for user management. The page title is "Django administration". The navigation bar includes "Home", "Authentication and Authorization", and "Users". The main content area is titled "Select user to change" and contains a table with the following data:

USERNAME	EMAIL ADDRESS	FIRST NAME	LAST NAME	STAFF STATUS
admin	admin@gmail.com			Yes
Dhananjay	dhananjay@gmail.com	Dhananjay	Bhagat	No
Nikhil	Nikhil@gmail.com	Nikhil	Mormare	No
Nikhil1	mormare@gmail.com	Nikhil1	Mormare	No

On the left side, there is a sidebar with a search bar and a list of users. On the right side, there is a "FILTER" section with options to filter by staff status, superuser status, and active status.

3.9 Test Cases

Test Case Id	Test Case Name	Test Case Description	Prerequisite	Test Steps	Test Data	Expected Result	Actual Result	Status
TC_Admin_Login_01	Admin Login Success	Verify that the Admin can log in with valid credentials.	Admin account exists	1. Navigate to the Admin login page. 2. Enter valid Admin username and password. 3. Click on the "Login" button.	Admin credentials	Admin successfully logs in, and the system displays the Admin dashboard.	Admin successfully logs in. The dashboard is displayed as expected.	Pass
TC_Admin_Login_02	Admin Login Failure	Verify that the Admin cannot log in with invalid credentials.	Admin account exists	1. Navigate to the Admin login page. 2. Enter invalid Admin username and/or password. 3. Click on the "Login" button.	Invalid Admin credentials	System displays an error message indicating login failure.	Invalid Admin credentials. Error message displayed as expected.	Pass
TC_Admin_Login_03	Admin Account Lockout	Verify that the Admin account is locked out after multiple consecutive failed login attempts.	Admin account exists	1. Attempt to log in with invalid credentials multiple times until the account is locked out. 2. Try to log in again with valid credentials.	Invalid and then valid Admin credentials	Account is locked after consecutive failed attempts, and an error message is displayed. Successful login is prevented during the lockout period.	Account is locked after consecutive failed attempts, and an error message is displayed. Successful login is prevented during the lockout period.	Pass
TC_CarOwner_Login_01	Car Owner Login Success	Verify that a Car Owner can log in with valid credentials.	Car Owner account exists	1. Navigate to the Car Owner login page. 2. Enter valid Car Owner username and password. 3. Click on the "Login" button.	Car Owner credentials	Car Owner successfully logs in, and the system redirects to the Car Owner dashboard.	Car Owner successfully logs in. Redirected to the Car Owner dashboard.	Pass

Test Case Id	Test Case Name	Test Case Description	Prerequisite	Test Steps	Test Data	Expected Result	Actual Result	Status
TC_Admin_Login_01	Admin Login Success	Verify that the Admin can log in with valid credentials.	Admin account exists	1. Navigate to the Admin login page. 2. Enter valid Admin username and password. 3. Click on the "Login" button.	Admin credentials	Admin successfully logs in, and the system displays the Admin dashboard.	Admin successfully logs in. The dashboard is displayed as expected.	Pass
TC_Admin_Login_02	Admin Login Failure	Verify that the Admin cannot log in with invalid credentials.	Admin account exists	1. Navigate to the Admin login page. 2. Enter invalid Admin username and/or password. 3. Click on the "Login" button.	Invalid Admin credentials	System displays an error message indicating login failure.	Invalid Admin credentials. Error message displayed as expected.	Pass
TC_Admin_Login_03	Admin Account Lockout	Verify that the Admin account is locked out after multiple consecutive failed login attempts.	Admin account exists	1. Attempt to log in with invalid credentials multiple times until the account is locked out. 2. Try to log in again with valid credentials.	Invalid and then valid Admin credentials	Account is locked after consecutive failed attempts, and an error message is displayed. Successful login is prevented during the lockout period.	Account is locked after consecutive failed attempts, and an error message is displayed. Successful login is prevented during the lockout period.	Pass
TC_CarOwner_Login_01	Car Owner Login Success	Verify that a Car Owner can log in with valid credentials.	Car Owner account exists	1. Navigate to the Car Owner login page. 2. Enter valid Car Owner username and password. 3. Click on the "Login" button.	Car Owner credentials	Car Owner successfully logs in, and the system redirects to the Car Owner dashboard.	Car Owner successfully logs in. Redirected to the Car Owner dashboard.	Pass

CHAPTER 4 : DRAWBACKS AND LIMITATIONS

4.Drawbacks And Limitations

- Dependency on Internet Connectivity: The system's reliance on internet connectivity may pose challenges for users in areas with limited or no access.
- Security Concerns: Despite user authentication, security vulnerabilities may still exist, necessitating constant monitoring and updates.
- Initial Development Costs: The high initial development costs may be a limitation for smaller rental businesses with budget constraints.
- Scalability Challenges: Adapting to sudden spikes in user traffic may pose scalability challenges, impacting system performance.

CHAPTER 5 : FUTURE ENHANCEMENT

5. Future Enhancement

- **Advanced Analytics for Informed Decision-Making:** Implement advanced analytics tools to analyze user behavior, predict demand patterns, and optimize fleet management for strategic decision-making.
- **AI-Driven Recommendation Engine:** Integrate artificial intelligence to develop a recommendation engine that suggests vehicles based on user preferences and popular choices.
- **Mobile App Development for On-the-Go Access:** Expand accessibility by developing a mobile application, providing users with on-the-go access to reservations, real-time updates, and account management.
- **Environmental Sustainability Features:** Introduce features promoting environmentally friendly choices, displaying vehicle emissions information and incentivizing the rental of eco-friendly vehicles.

6 . Conclusion

- Transformational Opportunity: The development of the Jet Journey using Django signifies a transformative opportunity for revolutionizing the vehicle rental process.
- Strategic Enhancements: Addressing existing limitations through proposed enhancements, the system strategically focuses on offline functionality, advanced security, cost-effectiveness, scalability, and simplified user onboarding.
- Resilience and Security Assurance: The envisioned improvements aim to fortify the system, ensuring resilience against challenges, enhanced security measures, and reliable performance.
- User-Centric Priorities: Prioritizing user satisfaction, broader accessibility, and sustainable growth, the proposed enhancements align with industry expectations and evolving user needs.
- Commitment to Ongoing Success: With a commitment to continuous improvement, user feedback, and adaptability, the Jet Journey is poised to become a competitive and indispensable tool in the dynamic landscape of the car rental industry.

7 . Bibliography

➤ Website Reference

- <https://www.w3schools.com>
- <https://docs.djangoproject.com/>
- <https://realpython.com/>
- <https://www.wikipedia.org/>
- www.geeksforgeeks.org

➤ Books Reference

- "Django for Beginners" by William S. Vincent
- "Two Scoops of Django 3.x" by Daniel Roy Greenfeld and Audrey Roy Greenfeld
- HTML Black Book

ANNEXURE 3 : SAMPLE PROGRAM CODE

1. Coding of Home Page :

```
{% load static % }
<html>
<head>
  <title>Jet Journey</title>
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="{% static 'css/w3.css' %}">
</head>
<body>
  <div class="w3-container w3-teal">
    <h1 class="w3-center">Jet Journey</h1>
  </div>
  <div class="w3-center w3-bar w3-black w3-large"> Welcome to Jet Journey</div><br><br>
  <div class="w3-display-container" style="height:400px;">
    <div class="w3-display-middle">

      <form class="w3-container w3-center" action="/customer_portal/login/"
method="POST">{% csrf_token %}
        <input class="w3-indigo w3-btn w3-xxlarge w3-padding-32" type="submit"
value="Customer Login">
      </form>
    <br><br><br>
    <form class="w3-container w3-center" action="/car_dealer_portal/login/"
method="POST">{% csrf_token %}
      <input class="w3-btn w3-indigo w3-xxlarge w3-padding-32" type="submit" value="Car
Dealer Login">
    </form>
  </div>
</div>
</body>
</html>
```

2. Car_Dealer Registration

```
{% extends 'car_dealer/base.html' %}
{% block content %}
<div class="w3-bar">
  <a class="w3-bar-item w3-right w3-btn w3-teal" href="/car_dealer_portal/login/">Login</a>
  <a class="w3-bar-item w3-right w3-btn w3-teal" href="/">Home</a>
</div>
<div class="w3-display-container" style="height:1000px;">
<div class="w3-display-middle">

  <b> <h2>Registration Form</h2></b>
```

```

<form class="w3-container" action="/car_dealer_portal/registration/" method="POST">{ %
csrf_token % }
  <label>First Name</label> <input class="w3-input" type="text"
name="firstname"><br><br>
  <label>Last Name</label> <input class="w3-input" type="text" name="lastname"><br><br>
  <label>Username</label> <input class="w3-input" type="text" name="username"><br><br>
  <label>Password</label> <input class="w3-input" type="password"
name="password"><br><br>
  <label>Email</label> <input class="w3-input" type="text" name="email"><br><br>
  <label>Contact</label> <input class="w3-input" type="text" name="mobile"><br><br>
  <label>City</label> <input class="w3-input" type="text" name="city"><br><br>
  <label>Pincode</label> <input class="w3-input" type="text" name="pincode"><br><br>
  <input class="w3-btn w3-teal" type="submit"><br><br>
</form>
</div>
</div>
{ % endblock % }

```

3. Search

```

{ % extends 'customer/base.html' % }
{ % block content % }
<div class="w3-bar w3-large w3-black">
  <div class="w3-bar-item w3-left w3-black">Customer Portal: { {user.username}} </div>
  <a class="w3-bar-item w3-btn w3-teal w3-right"
href="/customer_portal/logout/">Logout</a>
  <a class="w3-bar-item w3-btn w3-teal w3-right"
href="/customer_portal/manage/">Manage</a>
</div>
<div class="w3-display-container" style="height:300px;">
  <div class="w3-display-middle">
<form class="w3-container" action="/customer_portal/search_results/" method="post">
  { % csrf_token % }
  <br><br>
  <label>Enter City Name:</label> <input class="w3-input" type="text"
name="city"><br><br>
  <input class="w3-btn w3-green" type="submit" value="Search Car">
</form>
</div>
</div>

{ % endblock % }

```

4. Vehicle Added

```

{ % extends 'car_dealer/base.html' % }
{ % block content % }
{ % csrf_token % }

```

```

<div class="w3-bar w3-black w3-large">
  <div class="w3-bar-item w3-left w3-black">Car Dealer Portal: {{user.username}}</div>
  <a class="w3-bar-item w3-btn w3-teal w3-right"
href="/car_dealer_portal/logout/">Logout</a>
  <a class="w3-bar-item w3-btn w3-teal w3-right " href="/car_dealer_portal/auth/">Home</a>
  <a class="w3-bar-item w3-btn w3-teal w3-right"
href="/car_dealer_portal/order_list/">Orders</a>
  <a class="w3-bar-item w3-btn w3-teal w3-right"
href="/car_dealer_portal/manage_vehicles/">Vehicles</a>
  <a class="w3-bar-item w3-btn w3-teal w3-right"
href="/car_dealer_portal/history/">Earnings</a>
</div>
<div class="w3-display-container" style="height:300px;">
  <div class="w3-display-middle">
    Vehicle Details Added! <br><br>
    <a href="/car_dealer_portal/index/">Back To Home Page</a>
  </div>
</div>
{% endblock %}

```

5. Booking

```

{% extends 'customer/base.html' %}
{% block content %}

<div class="w3-bar w3-large w3-black">
  <div class="w3-bar-item w3-left w3-black">Customer Portal: {{user.username}}</div>
  <a class="w3-bar-item w3-btn w3-teal w3-right"
href="/customer_portal/logout/">Logout</a>
  <a class="w3-bar-item w3-btn w3-teal w3-right"
href="/customer_portal/manage/">Manage</a>
  <a class="w3-bar-item w3-btn w3-teal w3-right" href="/customer_portal/search/">Search
Cars</a></div>
<div class="w3-container w3-center" style="padding:100px ">
<b>Car : {{vehicle.car_name}}</b>
<form class="w3-container" action="/customer_portal/confirmed/" method="post">
  {% csrf_token %}
  <b>Price : ${{cost_per_day}} per day</b><br><br>
  <table>How many days?</table> <input type="text" placeholder="2"
name="days"><br><br>
  <input class="w3-btn w3-teal" type="submit" value="Confirm My Order"><br><br>
  <input type="hidden" value="{{vehicle.id}}" name="id">
  <br><br>
</form>
</div>
{% endblock %}

```