CAR RENTAL SERVICE'S

THIS PROJECT REPRESENT

BY

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T.Y.B.B.A – C.A

"Drive Anywhere, Anytime"

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INTRODUCTION

Online Car Rental Systems are used mostly in developed countries such as USA, England and Australia where electronic commerce has been fully accepted in the society. The online rental car system (OCRS) has made It possible for people to rent a car from specific areas/places. The benefits of these services are numerous, but the most important include convenience and being able to avoid the inconvenience and frustrations of renting a car.

Enterprise recently created a new system of car rentals that allows customers to rent cars without ever leaving their homes. This system is meant for those who live outside of major airports, and who would prefer a more affordable option. With the number of rental cars reaching an all-time high and the online rental car company market expanding, it's clear that the time is right for the next breakthrough in the car rental market.

PROJECT DESCRIPTION

Car Rental Pro is a comprehensive Car Rental Management System designed to streamline the rental process. It efficiently manages vehicle availability, customer bookings, billing, and rental history. The system features an intuitive interface for customers and staff, allowing easy access to vehicle details and real-time updates on reservations. Enhanced communication tools facilitate coordination between departments, reducing errors and improving service delivery. Car Rental Pro integrates payment processing, fleet management, and customer support to ensure a smooth workflow. The system also supports automated notifications and generates analytical reports for better decision-making.

Existing System :

The existing system for the car rental service relies heavily on manual processes, such as paper-based records for vehicle availability and customer bookings, which often leads to errors, data loss, and inefficiencies. Vehicle reservation management is also handled manually, resulting in long wait times and frequent miscommunications with customers. Billing processes are conducted on paper, making them prone to mistakes and delays. Accessing rental history and customer information is time-consuming, as it requires manual retrieval from various files and locations, hindering overall operational efficiency and customer satisfaction.

Proposed System:

The proposed system aims to address current challenges by implementing a digital Car Rental Management System. This system will introduce a centralized platform to securely store customer and vehicle information, reducing errors and improving data accuracy. An automated booking system will allow customers to reserve vehicles online, minimizing wait times and enhancing overall satisfaction.

SCOPE & OBJECTIVE

The scope of the Car Rental Management System includes:

1. User Accounts: Customers can create and manage their profiles with personal details and payment options.
2. Vehicle Management: Admins can add, update, and remove vehicles from the rental fleet with details like pricing and availability.
3. Online Booking: Customers can search for and book vehicles online in real time, with options for extras like GPS or insurance.
4. Improve Customer Experience: Make booking easy and enjoyable to keep customers happy and coming back.
5. Increase Efficiency: Automate tasks like booking and billing to reduce errors and save time.
6. Manage Data Better: Keep all customer and vehicle information organized and easy to access.

KEY OBJECTIVE INCLUDE

Enhance User Experience: Create an easy-to-use website that allows customers to quickly search, compare, and book vehicles.

Automate Booking Processes: Streamline the reservation system to reduce manual work, minimize errors, and speed up the booking process.

Secure Payment Processing: Implement safe and reliable payment options to ensure customer transactions are secure.

Improve Vehicle Management: Allow administrators to efficiently manage vehicle details, availability, and maintenance schedules.

Increase Customer Satisfaction: Provide excellent customer support through live chat and quick responses to inquiries.

Generate Useful Reports: Create reports to analyze rental trends, customer preferences, and financial performance for better decision-making.

PROJECT CATEGORY

Web Development: Building the website infrastructure, user interface, and backend systems for managing data and processes.

User Experience (UX) Design: Focusing on creating an intuitive and user-friendly experience for customers navigating the site.

Payment Integration: Implementing secure payment gateways and processing systems for online transactions.

Database Management: Setting up and maintaining databases to store customer information, vehicle details, and booking records.

Mobile Development: Ensuring the website is responsive and functional on mobile devices for easy access.

Customer Support Systems: Developing features like live chat, FAQs, and support ticket systems to assist customers.

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MODULES
01

🕐 **Secure Authentication**: Implements a robust protocol for staff and admin access to ensure that only authorized personnel can log in to the system.

🕐 **Access Control**: Assigns appropriate permissions to different roles (e.g., admin, rental agents), allowing users to access only the information relevant to their job functions.

🕐 **Confidentiality**: Establishes protocols to protect sensitive data related to customers and vehicles, ensuring that all operational information remains confidential.

🕐 **Login Functionality**:

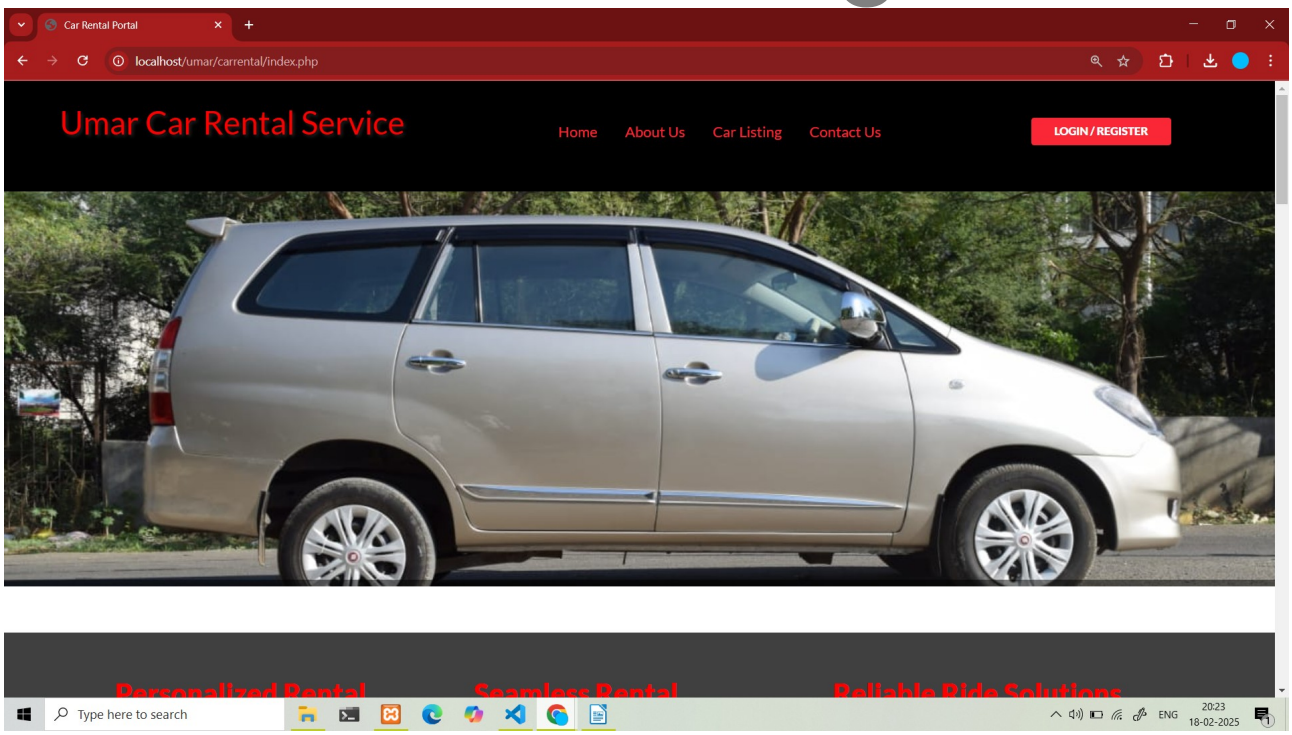
- Staff and admins can securely log in using their unique credentials (username and password).
- Supports session management to track logged-in users and their activities.

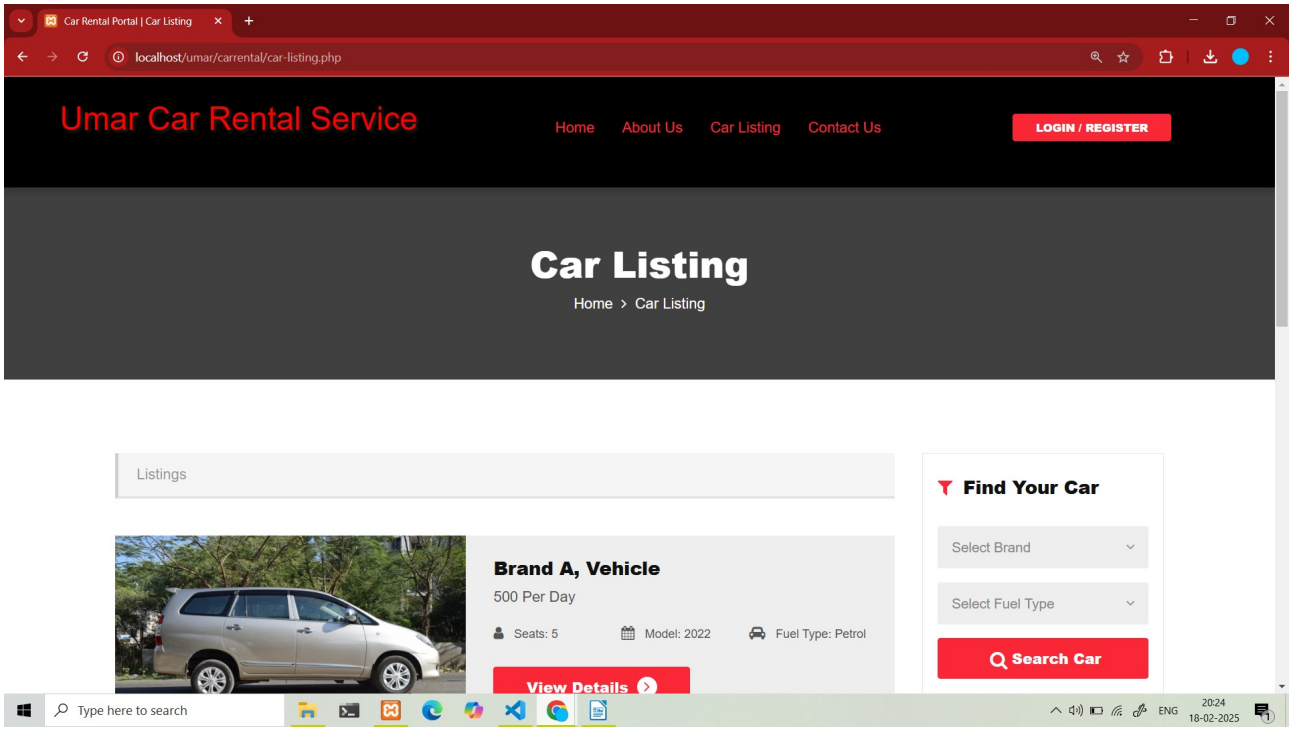
🕐 **Logout Functionality**:

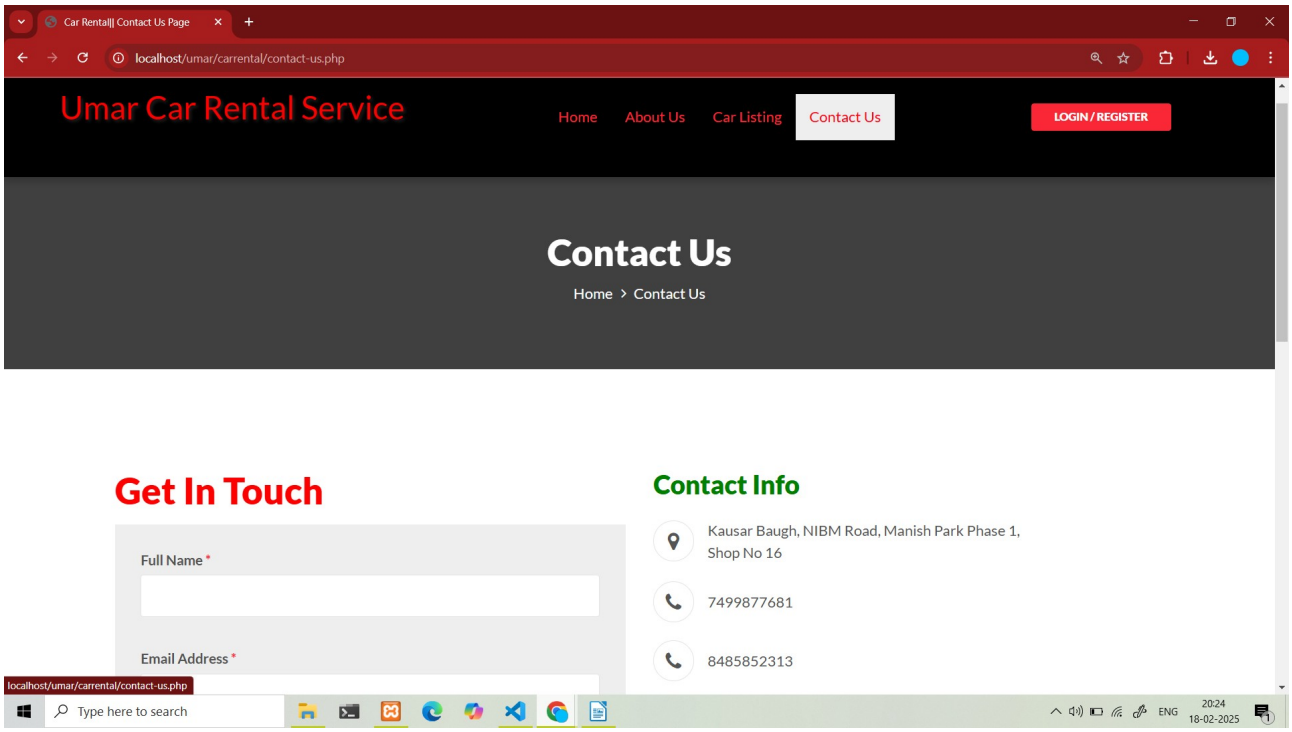
- Provides an option for staff and admins to log out securely, ensuring that sessions are closed properly.
- Automatic session timeout after a designated period of inactivity to enhance security.

🕐 **Enhances Efficiency**: Contributes to overall system reliability and efficiency, streamlining operations and facilitating quick access to necessary data for staff and admins.

Home Page


Car Rental Portal
localhost/umar/carrental/index.php
Umar Car Rental Service
Home
About Us
Car Listing
Contact Us
LOGIN / REGISTER
Personalized Rental
Seamless Rental
Reliable Ride Solutions
Type here to search
ENG
20:23
18-02-2025


Car Rental Portal | Car Listing
localhost/umar/carrental/car-listing.php
Umar Car Rental Service
Home
About Us
Car Listing
Contact Us
LOGIN / REGISTER
Car Listing
Home › Car Listing
Listings
Brand A, Vehicle
500 Per Day
Seats: 5
Model: 2022
Fuel Type: Petrol
View Details
Find Your Car
Select Brand
Select Fuel Type
Search Car
Type here to search
ENG
20:24
18-02-2025



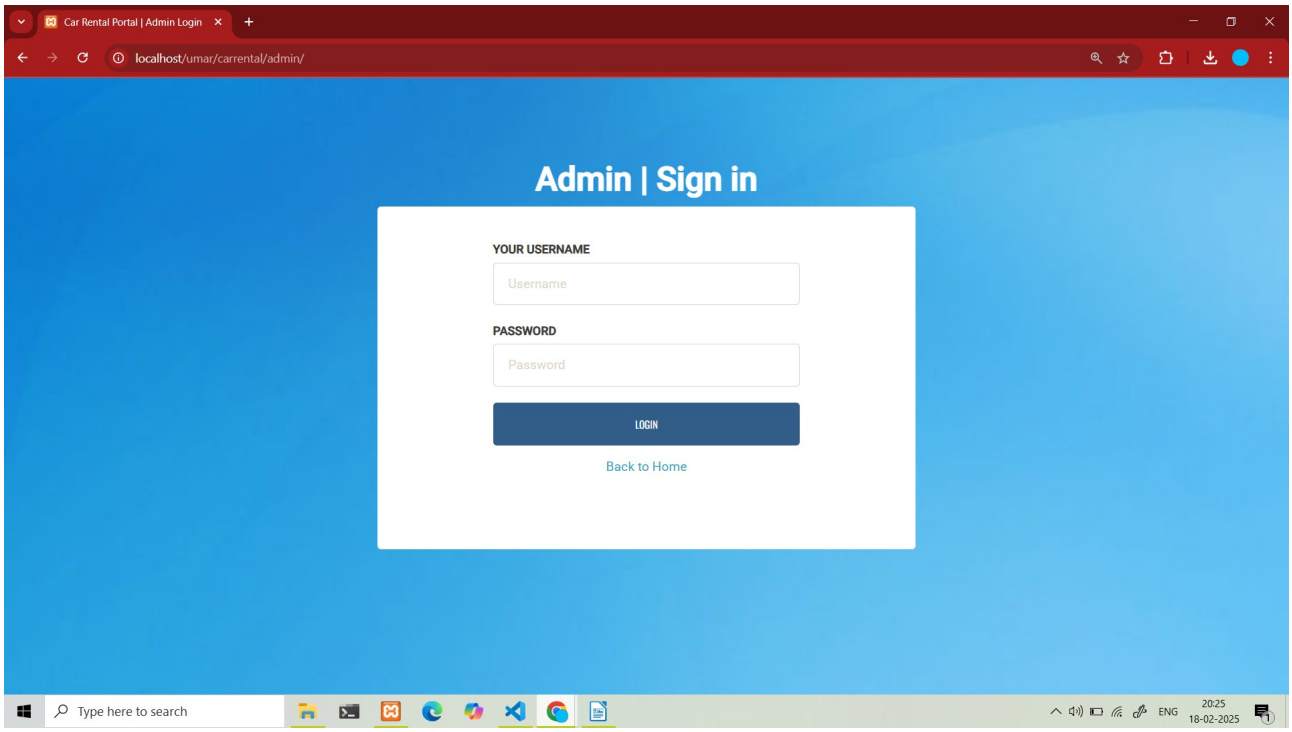
🕐 **Engaging Content**: Shows attractive images and descriptions of available cars, along with special deals and promotions to grab visitors' attention.

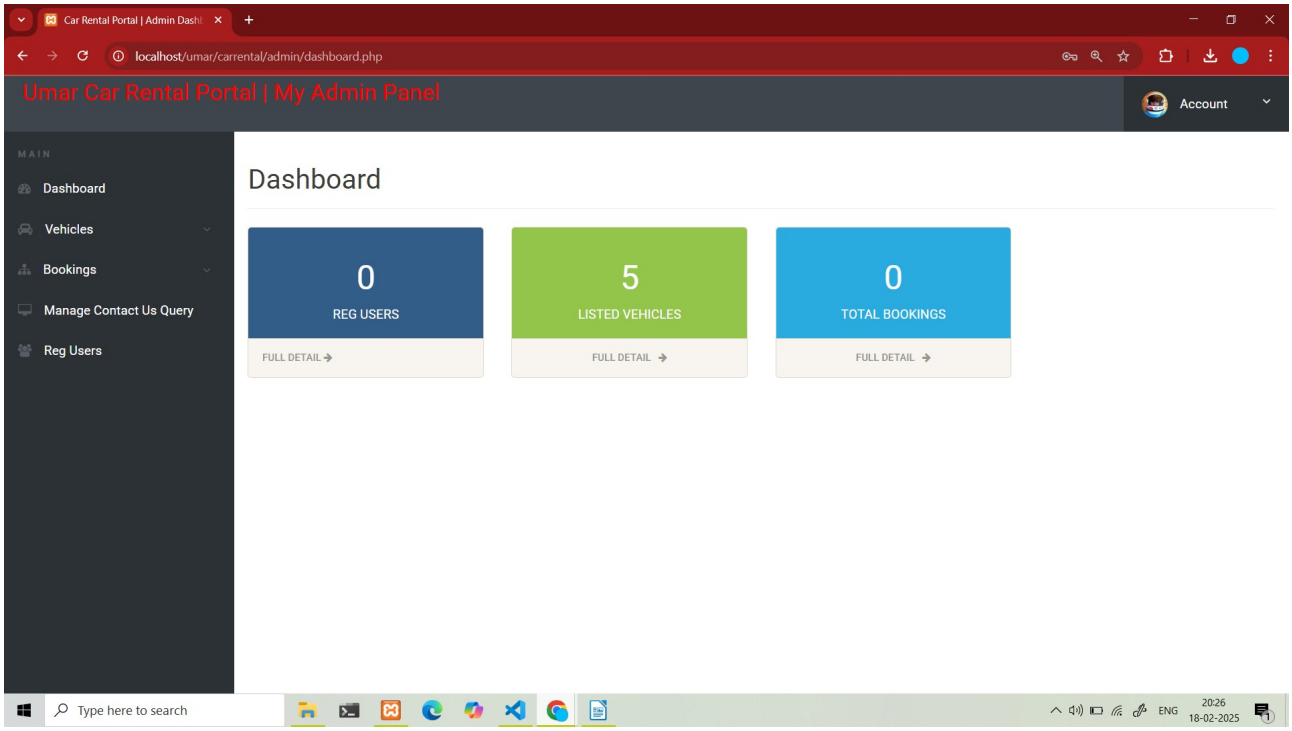
🕐 **Intuitive Navigation**: Offers a simple and user-friendly layout that makes it easy for customers to find and book cars without any hassle.

🕐 **Important Announcements**: Displays key updates, like new car arrivals, seasonal offers, and any important information, so customers always know what's going on.

🕐 **Enhanced User Experience**: Focuses on making the visit enjoyable, with easy access to customer support, FAQs, and clear rental terms.

Admin Page


Car Rental Portal | Admin Login
localhost/umar/carrental/admin/
Admin | Sign in
YOUR USERNAME
Username
PASSWORD
Password
LOGIN
Back to Home
Type here to search
ENG
20:25
18-02-2025


Car Rental Portal | Admin Dashb
localhost/umar/carrental/admin/dashboard.php
Umar Car Rental Portal | My Admin Panel
Account
MAIN
Dashboard
Vehicles
Bookings
Manage Contact Us Query
Reg Users
Dashboard
0
REG USERS
FULL DETAIL
5
LISTED VEHICLES
FULL DETAIL
0
TOTAL BOOKINGS
FULL DETAIL
Type here to search
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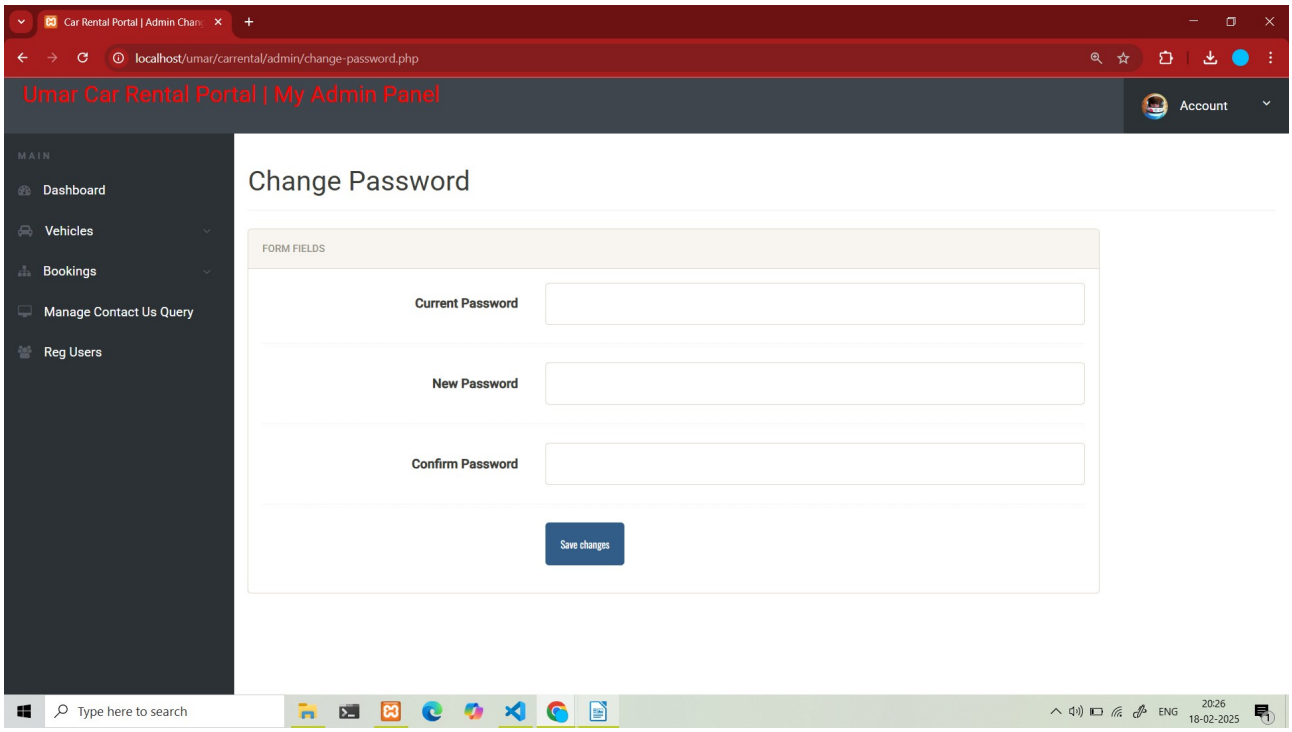
20:26
18-02-2025

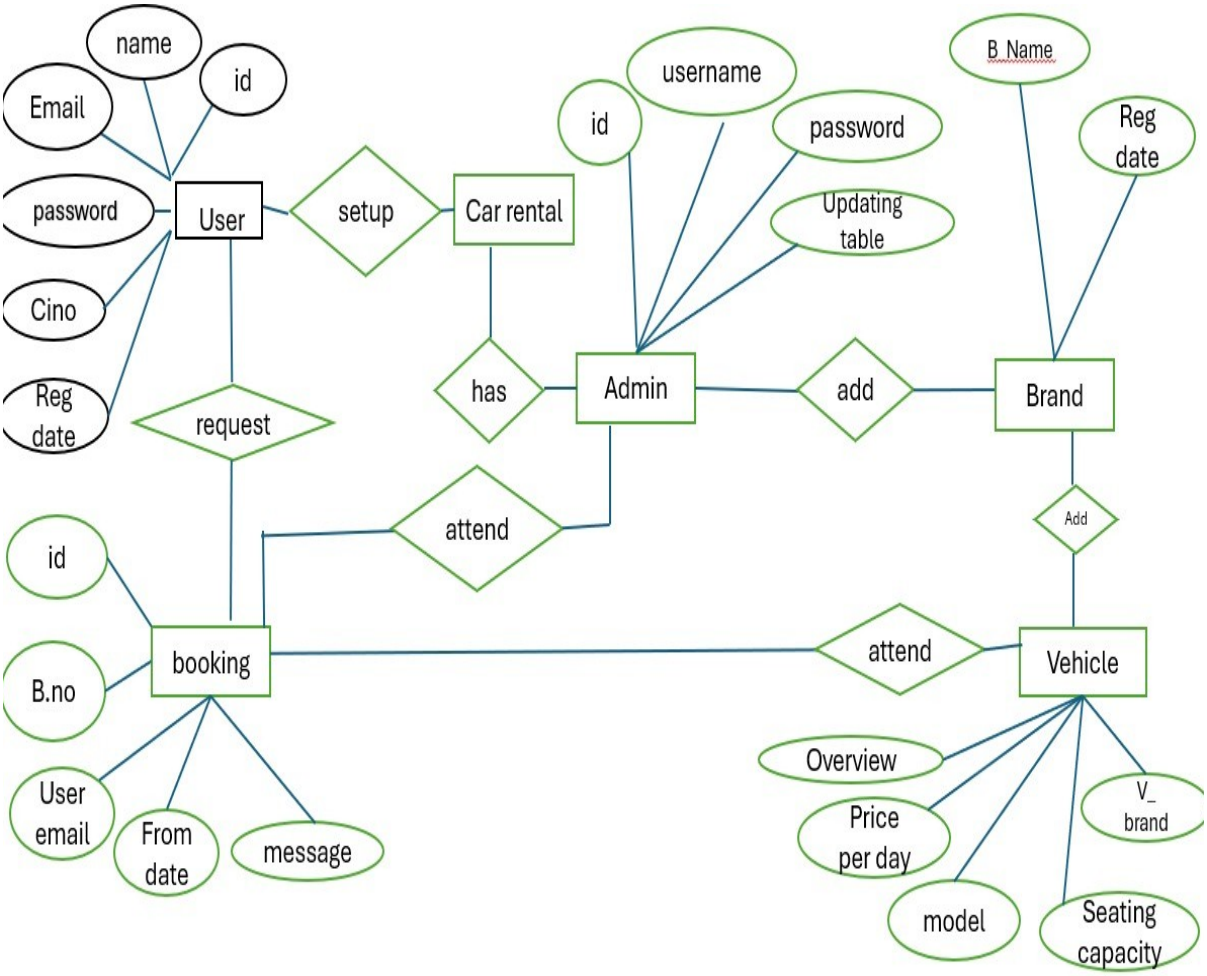


- **Admin Dashboard**: A centralized control panel that allows admins to manage all aspects of the car rental operations, including vehicle listings, bookings, and customer information.

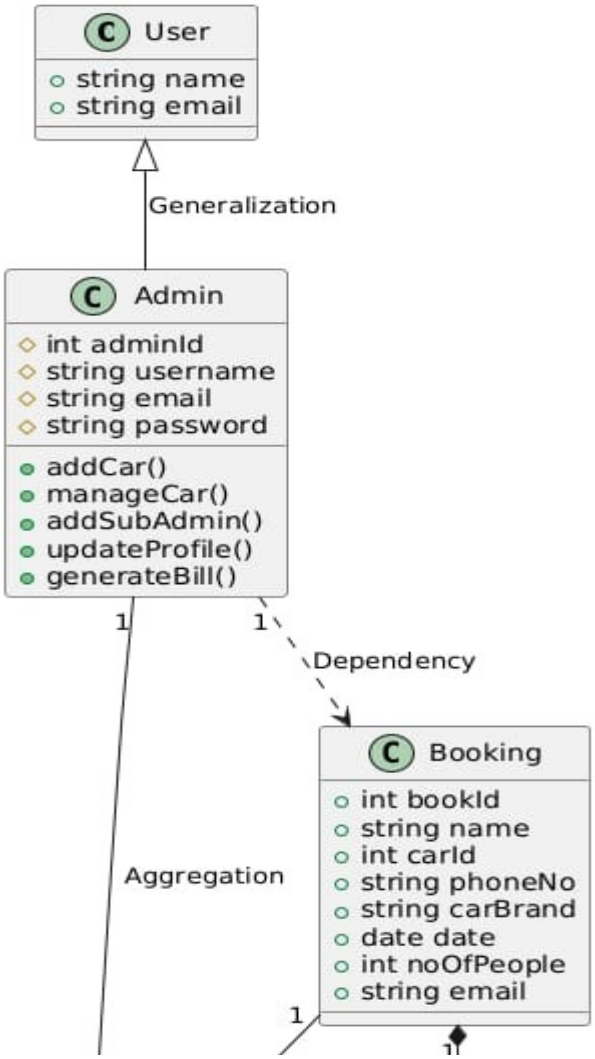
- **Invoice via Email**: Automatically sends rental invoices and appointment details to customers' email addresses, ensuring they receive all necessary information about their bookings.

ER
&
UML
DIAGRAM
02

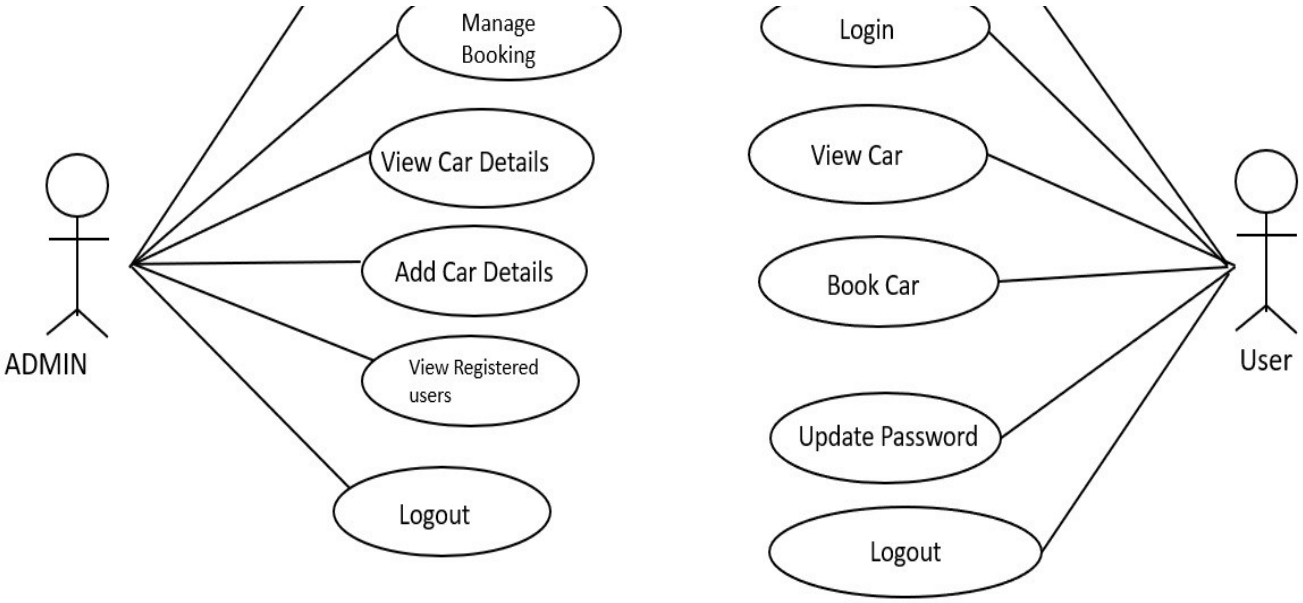
ER DIAGRAM


name
id
Email
password
User
Cino
Reg date
request
setup
Car rental
id
username
password
Updating table
has
Admin
add
B_Name
Reg date
Brand
Add
attend
id
B.no
booking
attend
Vehicle
User email
From date
message
Overview
Price per day
model
Seating capacity
V_ brand

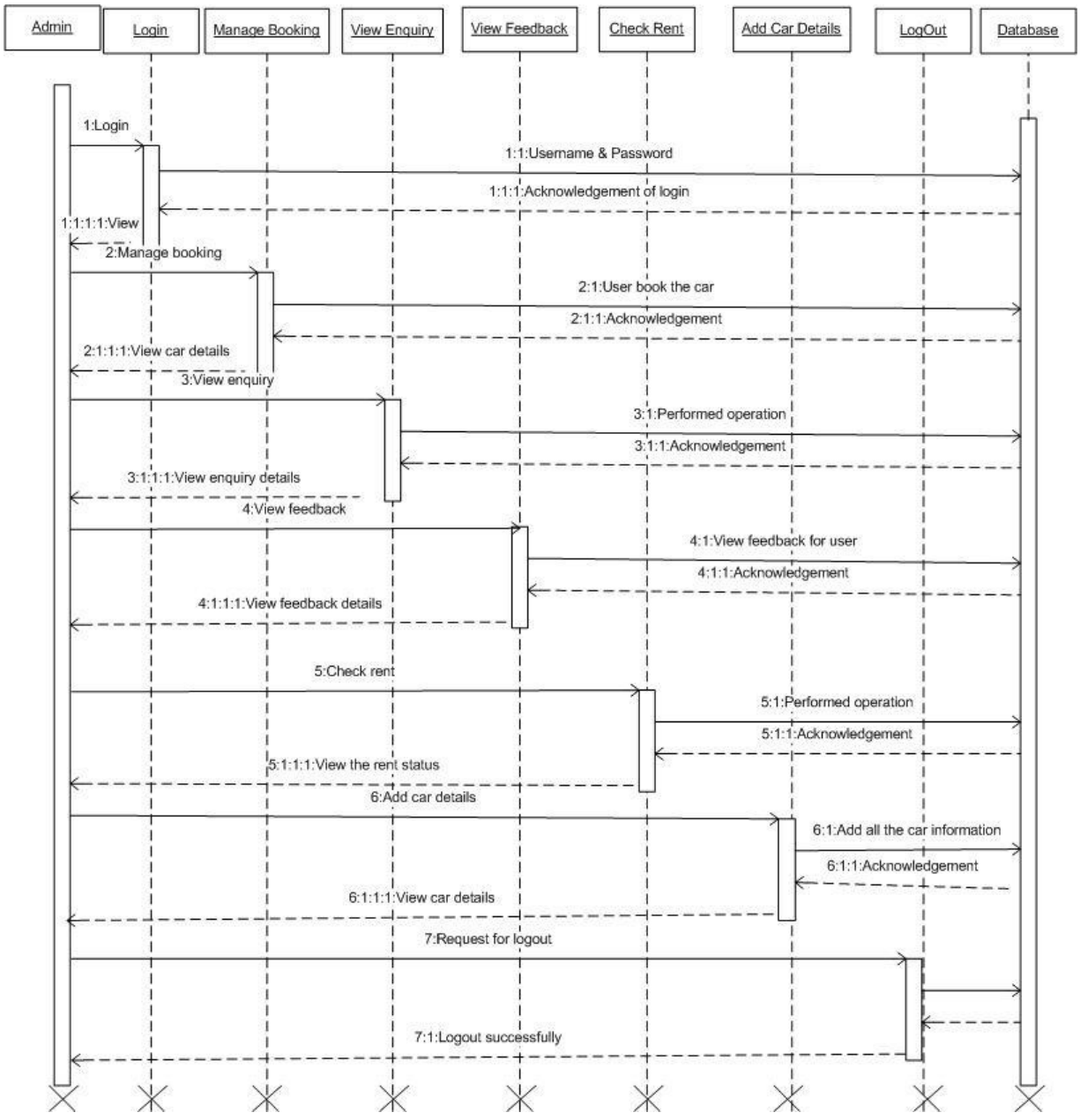
CLASS DIAGRAMS



USE CASE DIAGRAMS

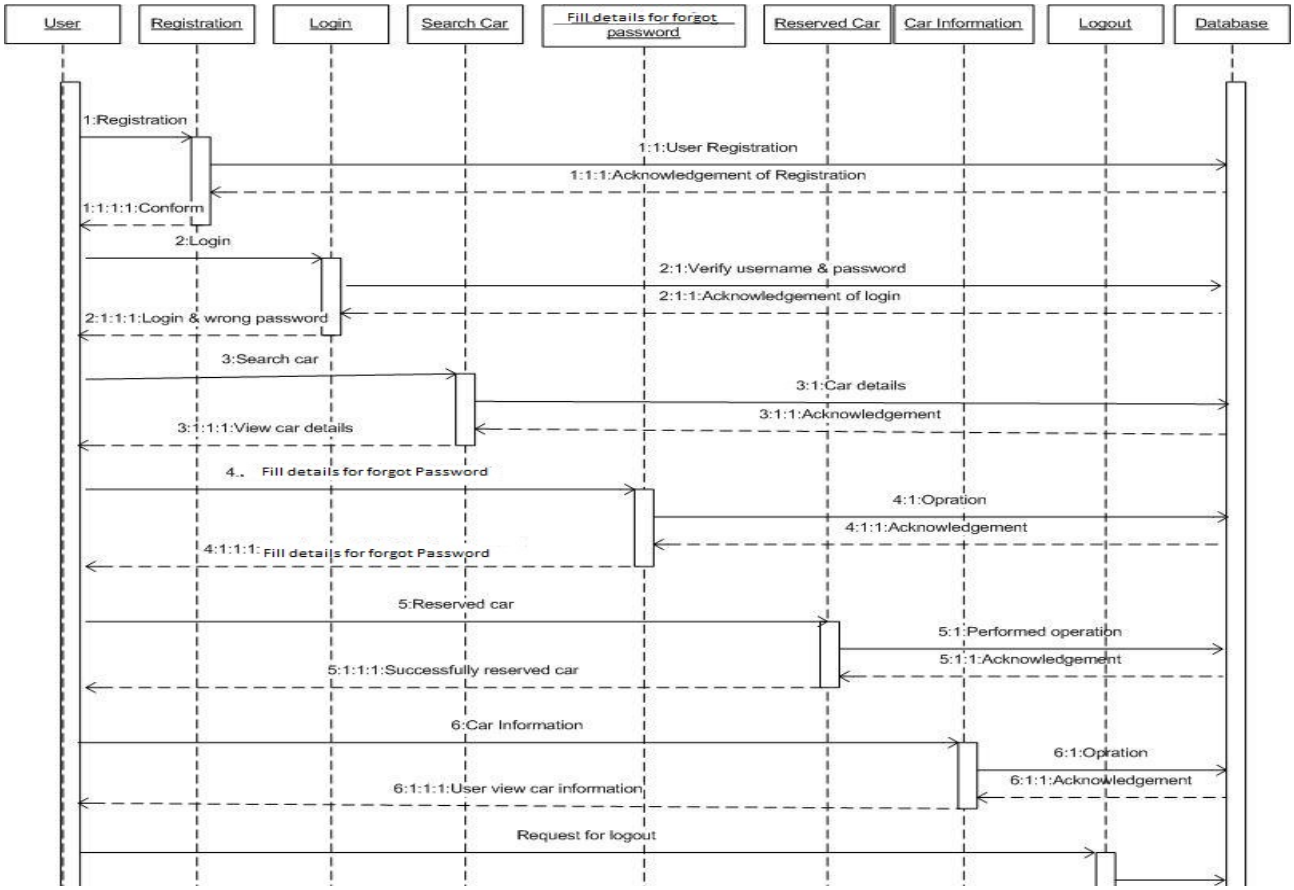


SEQUENCE DIAGRAMS
ADMIN



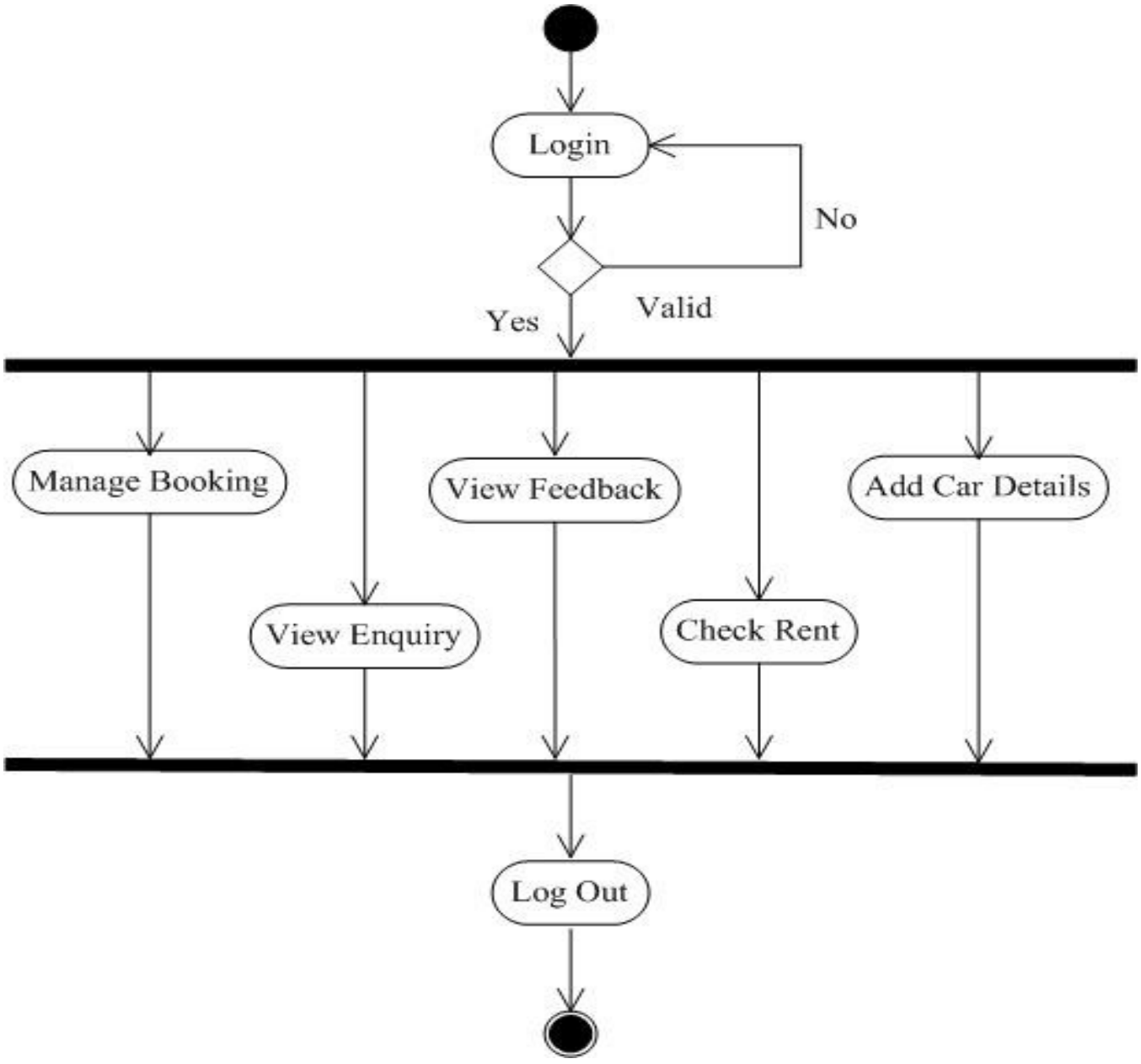
SEQUENCE DIAGRAMS

USER



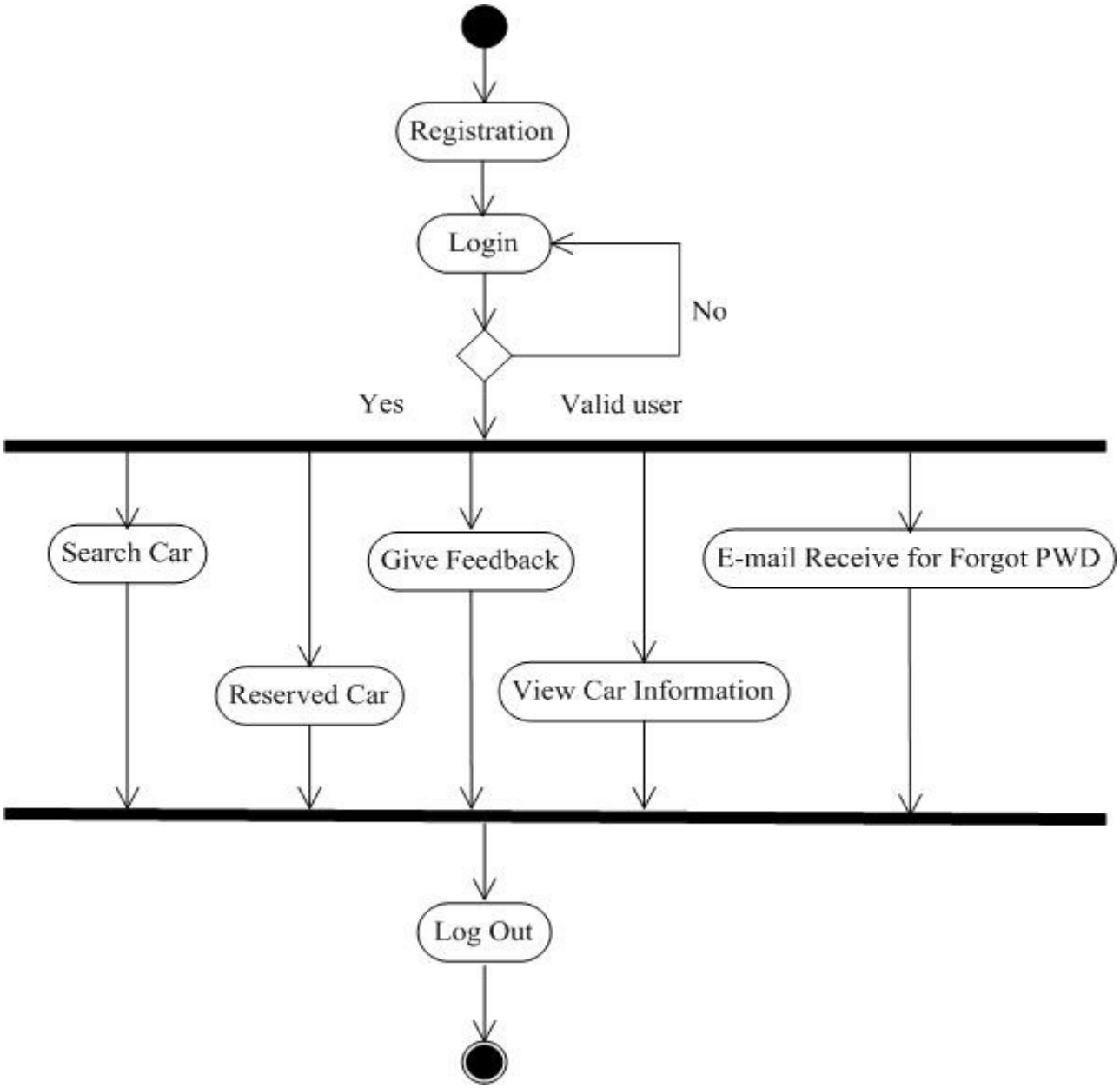
ACTIVITY DIAGRAMS

ADMIN

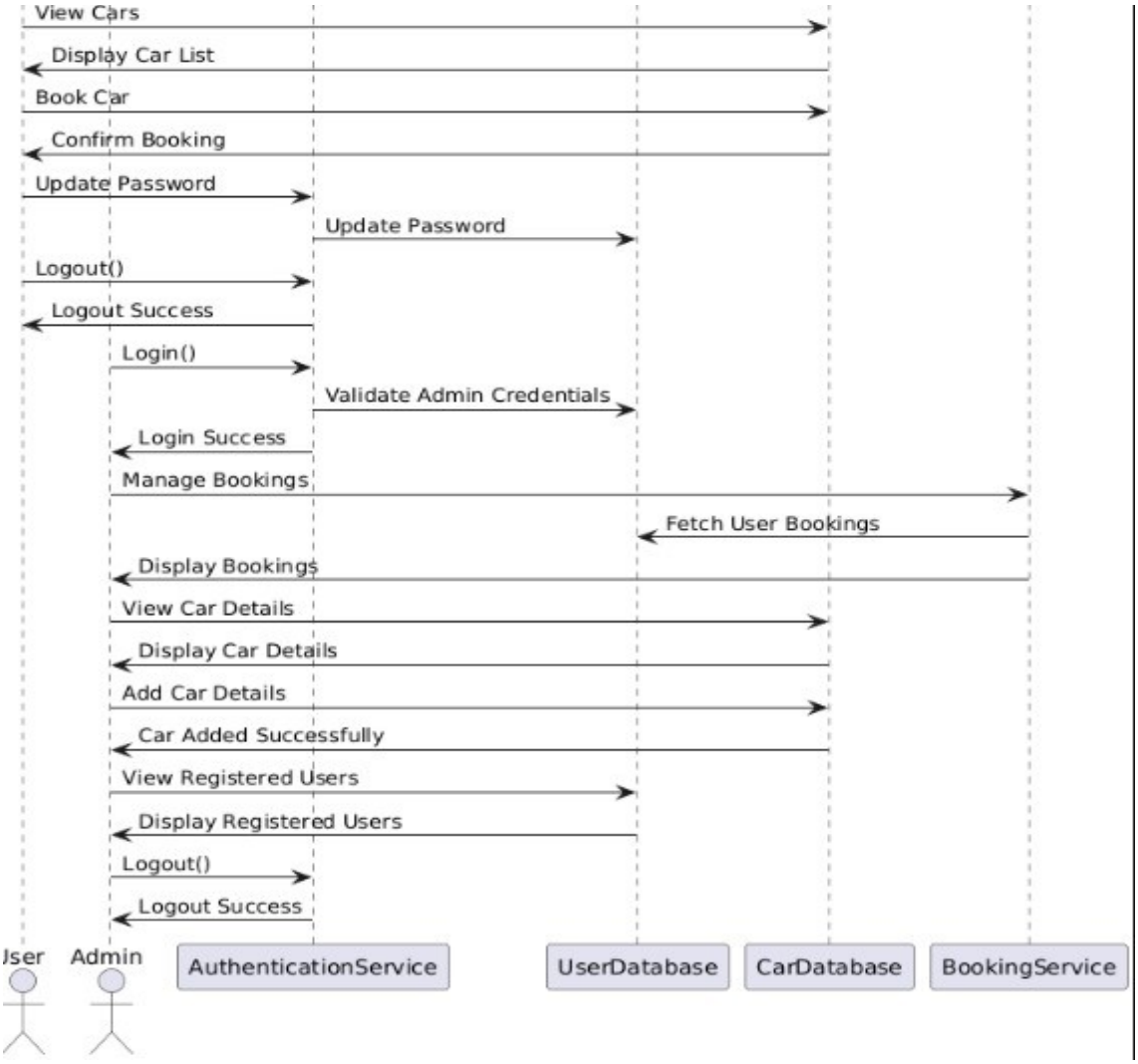


ACTIVITY DIAGRAMS

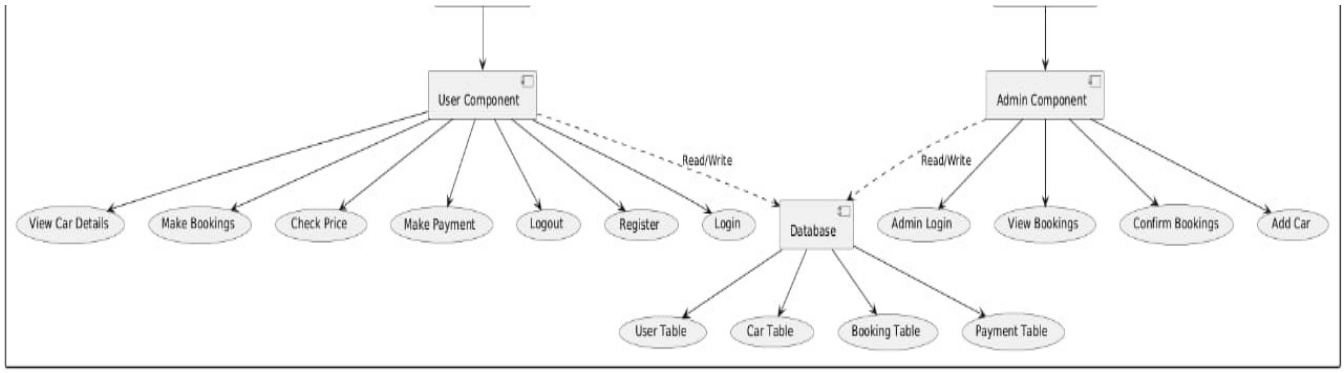
USER



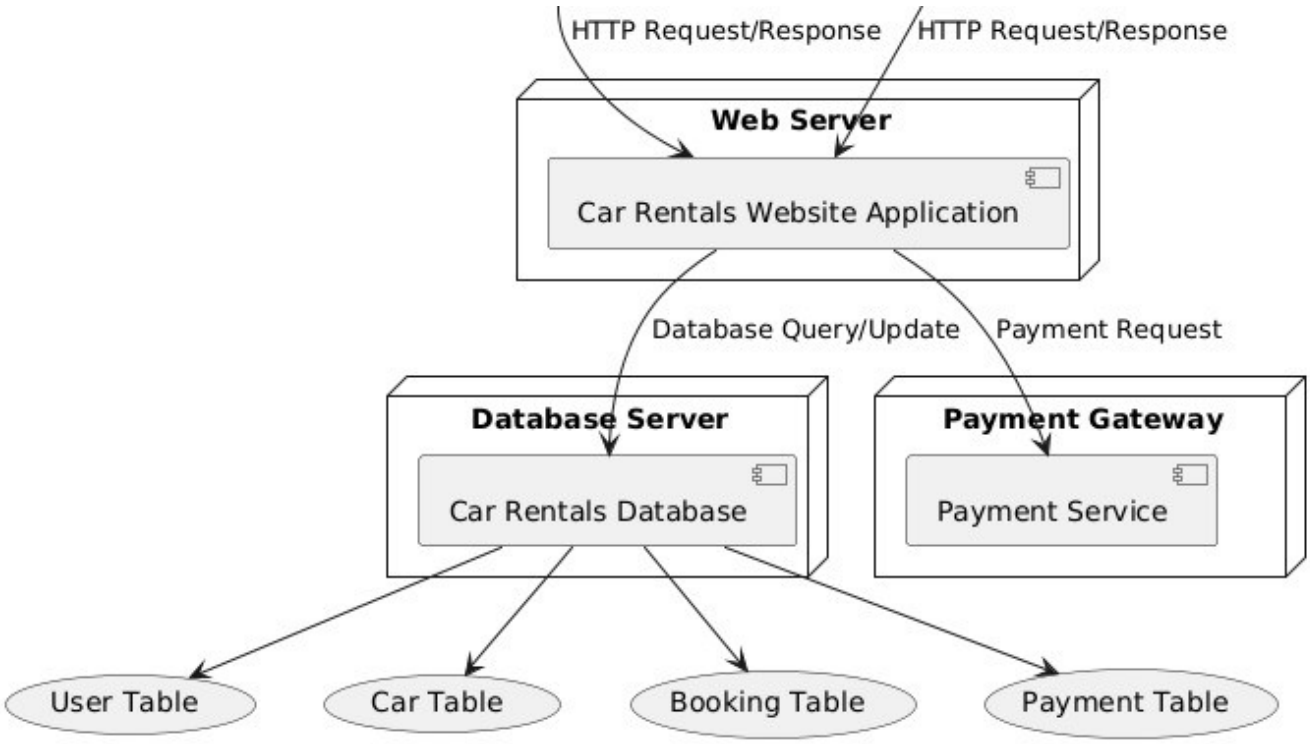
INTERACTION DIAGRAM



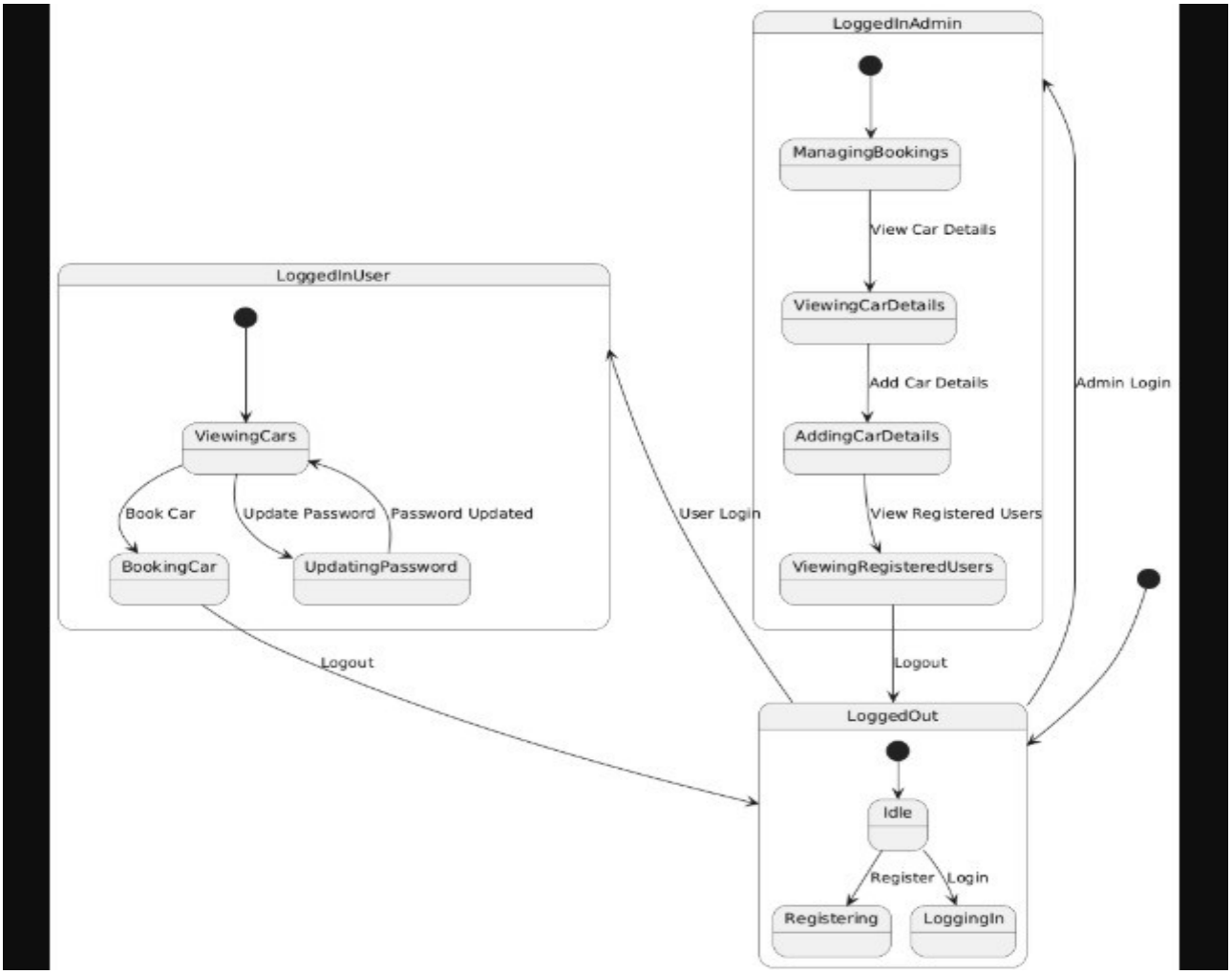
COMPONENT DIAGRAMS



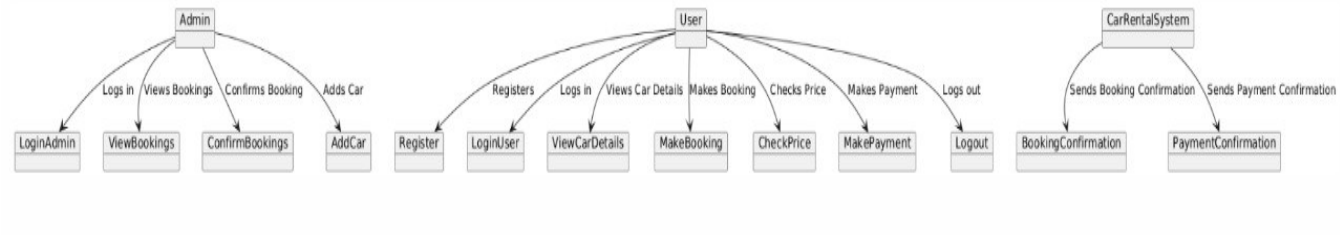
DEPLOYMENT DIAGRAMS



STATE CHART DIAGRAMS



COLLABRATION DIAGRAMS



Feasiblility Study 03

1. Feasibility Study Overview: This assessment evaluates the practicality and potential success of launching a standalone car rental website, focusing on various factors to determine its viability.

2. Economic Feasibility: Analyze the **initial investment** needed for website development, domain registration, and marketing, alongside **ongoing operating expenses** like hosting, customer support, and maintenance. Estimate **revenue projections** from rental pricing and additional services, and perform a **profitability analysis** to calculate the break-even point and expected return on investment (ROI).

3. Technical Feasibility: Assess the **technology requirements**, including the choice between custom development or using a CMS, and the integration of a real-time booking system with secure payment processing. Ensure a mobile-responsive user experience and plan for regular **maintenance and updates** along with effective technical support strategies.

4. Operational Feasibility: Identify **staffing requirements** and roles needed, estimating workload based on anticipated rental volume. Develop **training programs** focused on customer service and software usage, and establish **workflow processes** for managing reservations and vehicle maintenance. Analyze how the new platform will fit into existing operational frameworks.

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DATA DICTIONARY 04

Admin:

Table Name	Admin
Description	This table is store information about Admin
Primary Key	id
Foreign Key	-

Sr. No	**Field Name**	**Data type(Size)**	**Constraints**	**Description**
1	id *(Primary)*	int(11)	Primary Key	It is store Admin id
2	UserName	varchar(100)	Not Null	It is store admin user name
3	Password	varchar(100)	Not Null	It is store the password of Admin
4	updationDate	timestamp	NotNull	It is store the profile updating date

User Registration:

Table Name	tblusers
Description	This table is provide the information about User registration
Primary Key	Id
Foreign Key	-

Sr. No	Field Name	Data type(Size)	Constraints	Description
1	id *(Primary)*	int(11)	Primary Key	It is store User id
2	FullName	varchar(120)	Null	It is store User name
3	EmailId	varchar(100)	Null	It is store email address of User
4	Password	varchar(100)	Null	It is store Password
5	ContactNo	char(11)	Null	It is store Contact no
6	dob	varchar(100)	Null	It is store Birthdate
7	Address	varchar(255)	Null	It is store Address
8	City	varchar(100)	Null	It is store city
9	RegDate	timestamp	CURRRENT_TIMESTAMP	It is store CURRRENT_TIMESTAMP
10	UpdationDate	timestamp	Null	It store updation date

Brands Table:

Table Name	tblbrands
Description	This table is provide the information about Car brands
Primary Key	Id
Foreign Key	-

Sr. No	Field Name	Data type(Size)	Constraints	Description
1	id *(Primary)*	int(11)	Primary Key	It is store brand id
2	BrandName	varchar(120)	Not Null	It is store Brand name
3	CreationDate	timestamp	CURRRENT_TIMESTAMP	It is store brand creation date
4	UpdationDate	timestamp	NotNull	It is store brand updation date

Contact us details Table:

Table Name	tblcontactusinfo
Description	This table is provide the contact information at website
Primary Key	id
Foreign Key	-

Sr. No	Field Name	Data type(Size)	Constraints	Description
1	Id	Int	Primary Key	It is id of the record
2	Address	tinytext	Null	It is store name of the company
3	EmailId	varchar(255)	Null	It is store of the company email
4	ContactNo	char(11)	Null	It is store of the company contact no

Enquiry Table:

Table Name	tblcontactusquery
Description	This table will store the information of car enquiry of user
Primary Key	Id
Foreign Key	-

Sr. No	**Field Name**	**Data type(Size)**	**Constraints**	**Description**
1	id *(Primary)*	int(11)	Primary Key	It is store enquiry id
2	name	varchar(100)	Null	It is store user
3	EmailId	varchar(120)	Null	It is store email id
4	ContactNumber	char(11)	Null	It is store contact no for user
5	Message	longtext	Null	It is store user message for enquiry
6	PostingDate	timestamp	CURRENT_TIMESTAMP	It store enquiry date
7	status	int(11)	NotNull	It is store status 0 for read and 1 for read

Feedback Table:

Table Name	tbltestimonial
Description	This table store information about feedback
Primary Key	F_Id
Foreign Key	-

Sr. No	Field Name	Data type(Size)	Constraints	Description
1	id *(Primary)*	int(11)	Primary Key	It is store feedback id
2	UserEmail	varchar(100)	Not Null	It is store user email
3	Testimonial	mediumtext	Not Null	It is store feedback
4	PostingDate	timestamp	NotNull	It is store posting date of feedback
5	status	int(11)	NotNull	It is store staus(0 for inactive and 1 active)

Pages Content Table:

Table Name	tblpages
Description	This table store information about website pages
Primary Key	Id
Foreign Key	-

Sr. No	Field Name	Data type(Size)	Constraints	Description
1	id *(Primary)*	int(11)	Primary Key	It is store page id
2	PageName	varchar(255	Null	It is store page name
3	type	varchar(255)	Not Null	It is store page type
4	detail	longtext	Not Null	It is store pages info

Subscriber Table:

Table Name	tblsubscriber
Description	This table store email address of subscriber
Primary Key	Id
Foreign Key	-

Sr. No	Field Name	Data type(Size)	Constraints	Description
1	id *(Primary)*	int(11)	Primary Key	It is store subscriber id
2	SubscriberEmail	varchar(120)	Null	It is store subscriber email is
3	PostingDate	timestamp	Null	It is store subscription date

Vehicles Info Table:

Table Name	tblvehicles
Description	This table is provide the information about cars
Primary Key	Id
Foreign Key	-

Sr. No	Field Name	Data type(Size)	Constraints	Description
1	id *(Primary)*	int(11)	Primary Key	It is store User id
2	VehiclesTitle	varchar(150)	Null	It is store vehicle titl
3	VehiclesBrand	int(11)	Null	It is store vehicle brand id
4	VehiclesOverview	longtext	Null	It is store vehicle overview
5	PricePerDay	int(11)	Null	It is store vehicle ren perday
6	FuelType	varchar(100)	Null	It is store fuel type o

				vehicle
7	ModelYear	int(6)	Null	It is store model year of vehicle
8	SeatingCapacity	int(11)	Null	It is store seating capacity of vehicles
9	Vimage1	varchar(120)	Null	It is store vehicle image 1
10	Vimage2	varchar(120)	Null	It is store vehicle image 2

11	Vimage3	varchar(120)	Null	It is store vehicle image 3
12	Vimage4	varchar(120)	Null	It is store vehicle image 4
13	Vimage5	varchar(120)	Null	It is store vehicle image 5
14	AirConditioner	int(11)	Null	It is store availability of air conditioner in vehicle
15	PowerDoorLocks	int(11)	Null	It is store availability of power door locaks in vehicle
16	AntiLockBrakingSystem	int(11)	Null	It is store availability of Anti locak Braking System in vehicle
17	BrakeAssist	int(11)	Null	It is store availability of Brake Assist in vehicle
18	PowerSteering	int(11)	Null	It is store availability of Power steering in vehicle
19	DriverAirbag	int(11)	Null	It is store availability

				of Driver Airbag in vehicle
20	PassengerAirbag	int(11)	Null	It is store availability of Passenger airbag i vehicle
21	PowerWindows	int(11)	Null	It is store availability of Power windows in vehicle
22	CDPlayer	int(11)	Null	It is store availability of CD Player in vehicle
23	CentralLocking	int(11)	Null	It is store availability of Central locking in vehicle
24	CrashSensor	int(11)	Null	It is store availability of crash sensor in vehicle
25	LeatherSeats	int(11)	Null	It is store availability of leathers seats in vehicle
26	RegDate	timestamp	Null	It is store vehicle creation date
27	UpdationDate	timestamp	Null	It is store vehicle updation date

Booking table:

Table Name	tblbooking
Description	This table is provide the information about booking
Primary Key	Id
Foreign Key	-

Sr. No.	Field Name	Data type(Size)	Constraints	Description
1	id *(Primary)*	int(11)	Primary Key	It is store booking id
2	BookingNumber	bigint(12)	Null	It is store Booking Number
3	userEmail	varchar(100)	Null	It is store User email
4	VehicleId	int(11)	Null	It is store vehicle id
5	FromDate	varchar(20)	Null	It is store booking from date
6	ToDate	varchar(20)	Null	It is store booking To date
7	message	varchar(255)	Null	It is store message
8	Status	int(11)	Null	It is store confirmation and cancellation status
9	PostingDate	timestamp	Null	It is store Booking date

Bibliography
06

WEBSITES

Google Fonts:
Check out the Google Fonts website at fonts.google.com.
Find the documentation for usage and integration on the Google Fonts site.

wikipedia :
I gathered general information from .
wikipedia.org

ChatGPT : technology enables natural language understanding and generation.
For details on using and integrating ChatGPT, refer to the official documentation provided by OpenAI, if applicable.

FUTURE ENHANCEMENT:07

1. **AI Integration**: Smarter booking and recommendation systems using artificial intelligence.
2. **Self-Driving Cars**: Autonomous vehicle rentals for safer and more efficient rides.
3. **Blockchain**: Enhanced security for transactions and user data.
4. **Contactless Rentals**: Fully digital and app-based rental processes without physical interaction.
5. **Electric Vehicles (EVs)**: Expanding electric car fleets for eco-friendly rentals.
6. **Subscription Models**: Flexible car subscription services instead of traditional rentals.
7. **Improved GPS & Telematics**: Real-time tracking and better navigation for users.

HARDWARE REQUIREMENTS:08

- ✓ Processor: Intel Core i3 or Higher/ AMD Processors
- ✓ Ram: 4GB or Higher (Recommended)
- ✓ Hard Disk: 50GB or Higher (Recommended)

SOFTWARE REQUIREMENTS:09

Software Requirement:

- User Interface Design: HTML 5, CSS 3,Boostrap
- Software: XAMPP server
- Language Used : PHP
- Database : MY SQL
- Web Browser : Google Chrome

CONCLUSIONS:10

Car rental systems offer convenience by providing vehicles without ownership, making transportation flexible and accessible. These systems are cost-effective for users who need vehicles occasionally, saving money on maintenance and purchase. They also allow access to various car models suited for different needs. Integration of technology, such as mobile apps and GPS, enhances user experience and efficiency. Car rentals promote sustainability by reducing the need for private vehicle ownership, encouraging shared usage. Additionally, they boost business opportunities, especially in tourism and urban mobility services, contributing to economic growth.