

A Project Report on  
**Car Rental Portal**



**SAURASHTRA UNIVERSITY**



Submitted In Partial Fulfilment of The Requirement  
Academic Year 2024-2025

**BACHELOR OF COMPUTER APPLICATION**  
**[Semester – 5<sup>th</sup>]**

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## Declaration

**Krish Sangani** and **Dhruv Kunjadiya** hereby declare that the project report titled "**Car Rental Portal**" submitted in partial fulfillment of the requirements for the **B.C.A.** at **Grace College** is my original work and has not been submitted previously for any other degree.

I affirm that the work presented in this report is entirely my own, except where otherwise stated and acknowledged. Any references, diagrams, or data that have been used from other sources have been appropriately cited and acknowledged.

I take full responsibility for the content of this report and for any inadvertent errors or omissions that may have occurred during its preparation.

**Krish Sangani**

**Dhruv Kunjadiya**

## Acknowledgement

My Website, which you are using, is the result of many people's dedication. It is the cumulative efforts of many minds working together day and night that gave us the contentment of developing the software.

Special thanks to **Prof. Sanjay Tilavat** for his great support. We express our gratitude to for guidance and who kept the things on track and also to all other faculty members who helped us directly or indirectly.

Last but not least our Acknowledgement goes to all the well wishers of my project for their excellent support in all aspects.

## Preface

This report presents the design, development, and implementation of a **Car Rental Portal**, a web-based application aimed at streamlining the process of renting vehicles. The project is intended to automate various tasks in a car rental business, such as managing car inventory, booking vehicles, and handling customer data. The goal is to create a user-friendly system that provides an efficient solution for both customers and the business.

In the rapidly evolving landscape of transportation services, the need for a well-structured, automated car rental platform is more relevant than ever. This project aims to bridge the gap between service providers and customers by offering a seamless interface for renting vehicles and managing the rental process.

Throughout this report, the reader will find a detailed analysis of the system's requirements, a breakdown of its design through diagrams such as Data Flow Diagrams (DFD) and Entity-Relationship Diagrams (ERD), and an overview of the implementation process. Key features, challenges, and testing methodologies are discussed to provide a comprehensive understanding of the system.

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## Abstract

The **Car Rental Portal** is a web-based platform that simplifies vehicle rentals for customers and businesses. It offers a user-friendly interface for browsing and booking cars.

Administrators can efficiently manage car inventory, bookings, and customer data. Built with PHP, MySQL, HTML, CSS, and JavaScript, the system ensures responsiveness.

Key features include real-time availability tracking, user registration, and secure login.

This system enhances efficiency and improves customer satisfaction.

## Project Introduction

- THE **CAR RENTAL PORTAL** INTRODUCES A MODERN, STREAMLINED EXPERIENCE FOR VEHICLE RENTALS WITH A FUTURISTIC VIEW OF AVAILABLE CARS.
- THE PORTAL OFFERS A WIDE VARIETY OF CAR BRANDS, MODELS, AND CATEGORIES TO SUIT EVERY CUSTOMER'S PREFERENCE.
- WITH A FRESH APPROACH TO DESIGN, FUNCTIONALITY, AND SERVICE, THE CAR RENTAL PORTAL IS THE BEST DESTINATION TO MEET YOUR TRANSPORTATION NEEDS.
- IT PROVIDES REAL-TIME UPDATES ON AVAILABLE VEHICLES, ALONG WITH EASY CATEGORY-WISE BROWSING.
- THE PLATFORM ENSURES THE BEST OFFERS ARE MAINTAINED ACROSS ALL RENTALS AND HELPS CLEAR UNSOLD INVENTORY EFFICIENTLY.
- WE HAVE AUTOMATED BOOKING SYSTEMS, IT REDUCES MANUAL INTERVENTION AND SIMPLIFIES THE RENTAL PROCESS.

## Project Profile

<b>Project Title</b>	<b>Car Rental Portal</b>
<b>Project Duration</b>	4 Months
<b>Platform</b>	Application will be embedded with any system.
<b>Tool Used</b>	1. Editor Use: Visual Studio 2. Web Server: Apache 3. Browser: Mozilla Firefox, Chrome
<b>Front End</b>	HTML, CSS, Bootstrap, JS, PHP
<b>Back End</b>	MySQL
<b>Project Guide</b>	Prof. Sanjay Tilavat
<b>Team Member</b>	2
<b>Name Of Team Member</b>	Krish Sangani Dhruv Kunjadiya
<b>Submitted to University</b>	Saurashtra University-Rajkot

## Requirement Gathering

- "Requirement gathering is the most important and fundamental stage of SDLC."
- "The system analysis, working closely with employees and managers, studies the detailed working of the business process."
- Here we have four options for requirement gathering:

<b>A</b>	Interview
<b>B</b>	Questionnaires
<b>C</b>	Record Reviews
<b>D</b>	Observation

# Requirement Analysis

REQUIREMENT ANALYSIS IS ONE OF THE MOST IMPORTANT PHASES IN THE LIFECYCLE OF THE SOFTWARE DEVELOPMENT. IN REQUIREMENT ANALYSIS THE DEVELOPER SHOULD KNOW THE REQUIREMENTS OF THE USER AND ALL THE FACILITIES THEY NEEDED.

## ❖ ADMIN REQUIREMENTS:

- **LOGIN:** ADMIN LOGS INTO THE PORTAL.
- **MANAGE INVENTORY:** ADD, EDIT, OR DELETE CARS.
- **MANAGE CATEGORIES:** CREATE AND MANAGE CAR CATEGORIES (E.G., SUV, SEDAN).
- **MANAGE BOOKINGS:** VIEW AND UPDATE CUSTOMER BOOKINGS.
- **VIEW FEEDBACK:** ACCESS AND DELETE CUSTOMER FEEDBACK.
- **MANAGE USER ACCOUNTS:** OVERSEE CUSTOMER REGISTRATIONS.
- **VIEW REPORTS:** GENERATE BUSINESS PERFORMANCE REPORTS.
- **LOGOUT:** SECURELY EXIT THE SYSTEM.

## ❖ **CUSTOMER (CLIENT) REQUIREMENTS:**

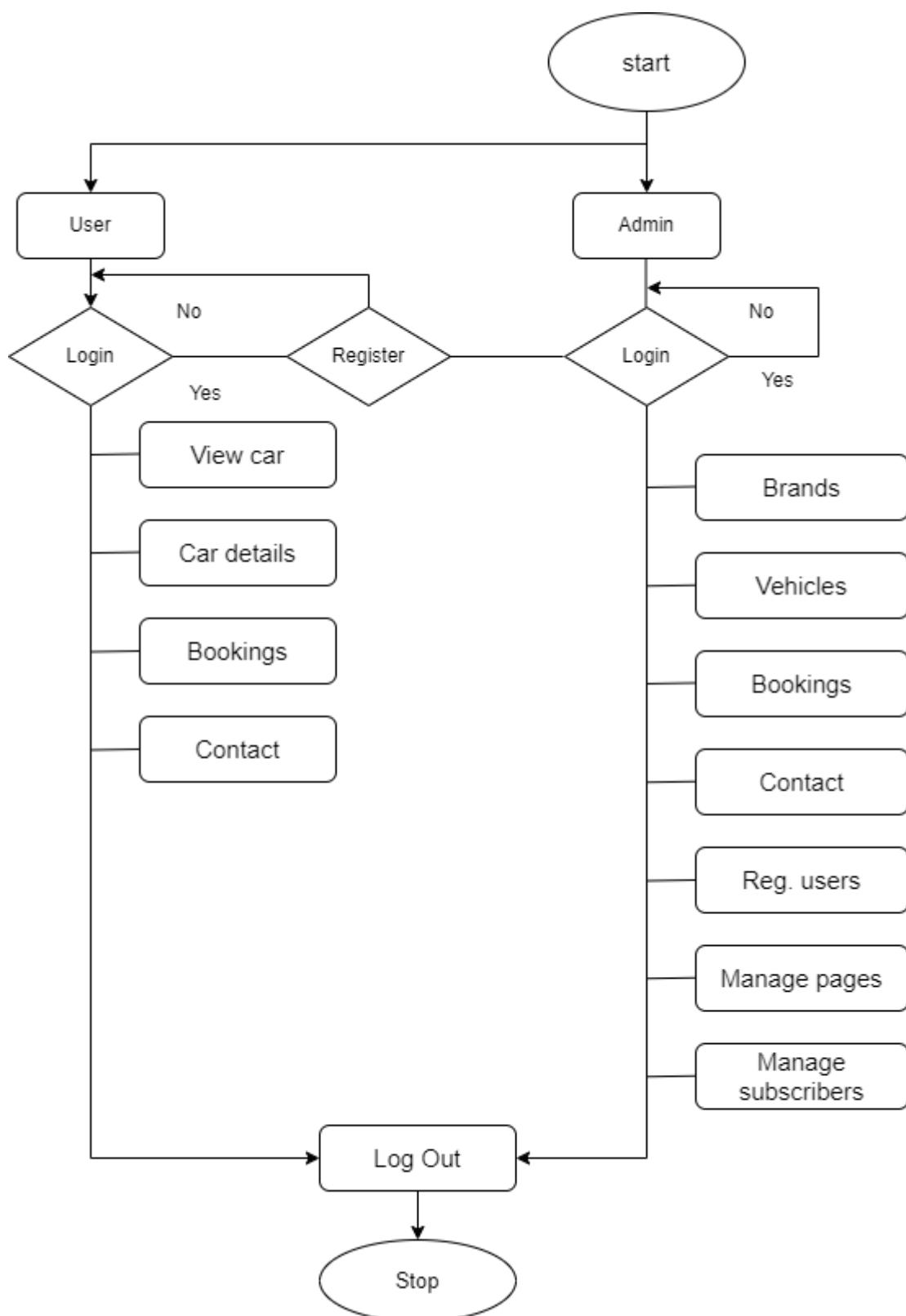
- **REGISTRATION & LOGIN:** CUSTOMERS REGISTER AND LOG INTO THE PORTAL.
- **SEARCH CARS:** BROWSE CARS BY CATEGORY.
- **VIEW CAR DETAILS:** CHECK INFORMATION ON SPECIFIC VEHICLES.
- **BOOK A CAR:** MAKE RESERVATIONS WITH RENTAL DETAILS.
- **VIEW BOOKING HISTORY:** ACCESS PAST BOOKINGS.
- **VIEW INFORMATION:** ACCESS "ABOUT US" AND "CONTACT US" SECTIONS.
- **LOGOUT:** EXIT THE SYSTEM AFTER ACTIVITIES.

THIS ANALYSIS ENSURES THAT THE CAR RENTAL PORTAL MEETS THE NEEDS OF BOTH ADMINS AND CUSTOMERS EFFECTIVELY.

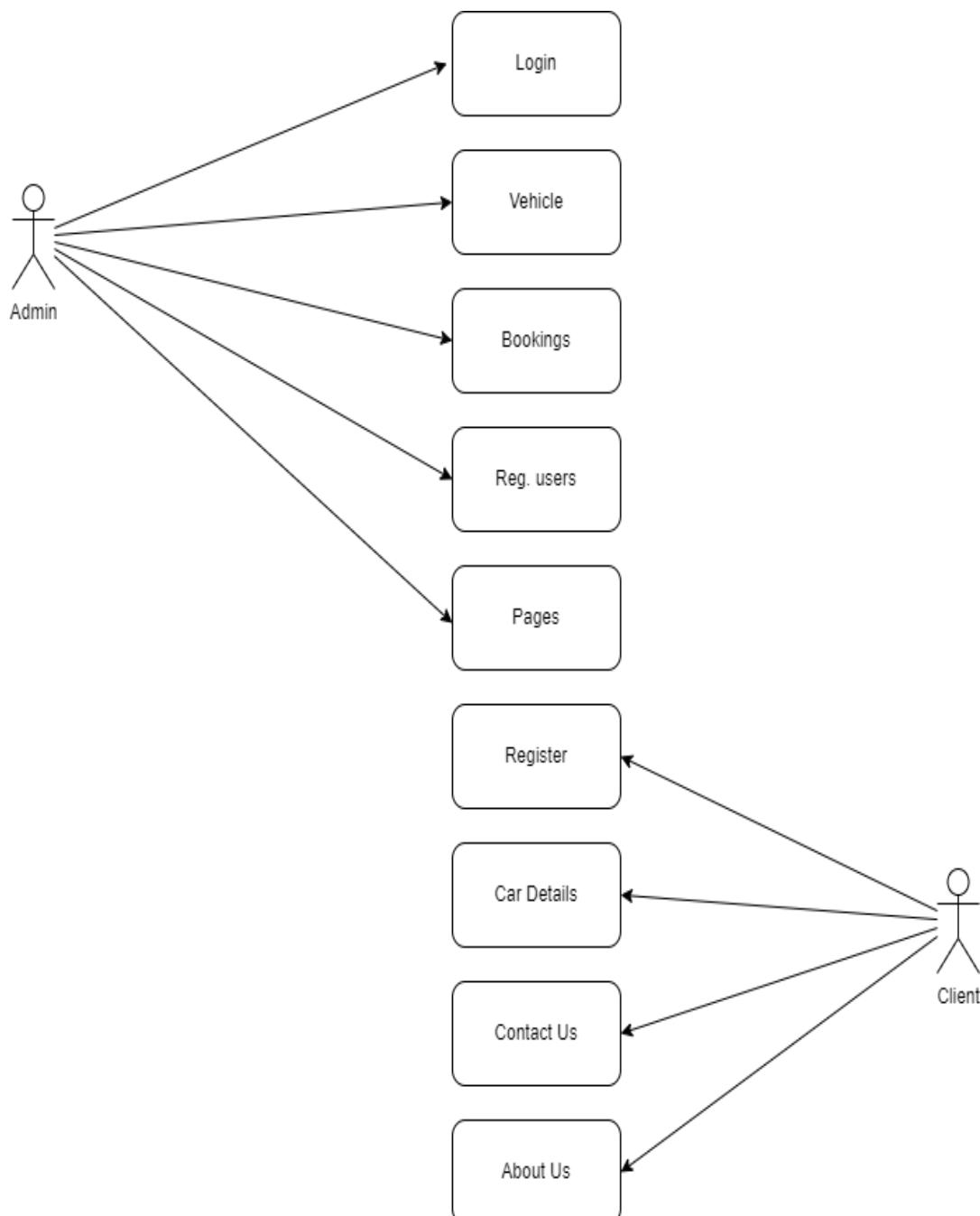
## Timeline Chart

Task	Description	Duration
Project Initiation	Define project scope, objectives, and requirements.	Week 1 (Start Date)
Requirement Gathering	Collect functional and non-functional requirements from stakeholders.	Week 2
Requirement Analysis	Analyze and document requirements, create diagrams (Use Case, DFD, etc.).	Week 3
System Design	Design the architecture, database schema, and user interfaces.	Week 4
Development Phase	Implement user registration, login, and car search functionalities.	Week 5
Testing Phase	Conduct integration testing for the entire system.	Week 6
Documentation	Finalize user manuals, system documentation, and project report.	Week 7

## Flow Chart

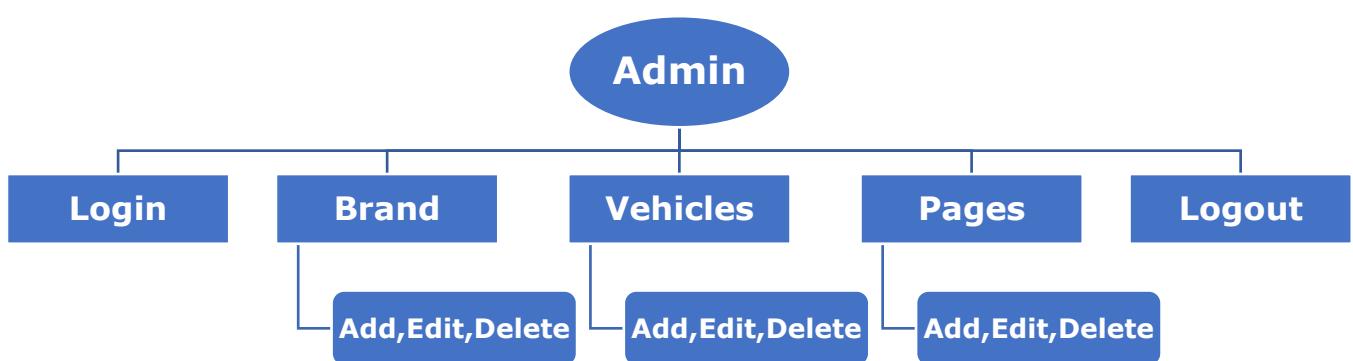


# Use Case Diagram

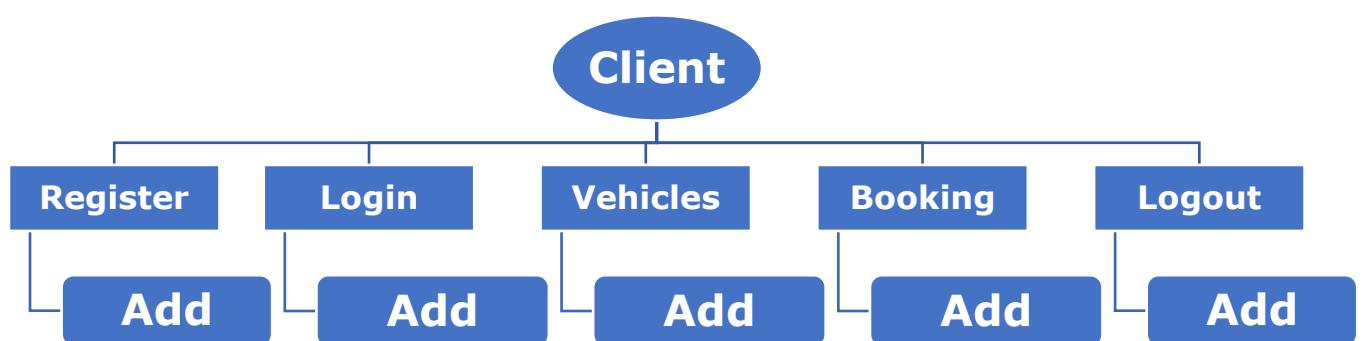


# Data Flow Diagram

## Admin



# Client

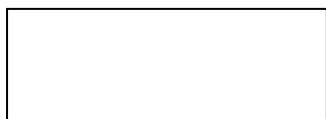


## E-R Diagram

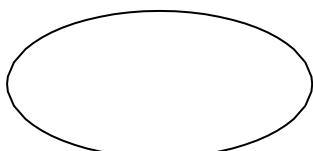
An entity relationship diagram is a model that shows the logical relationships and interaction among system entities. It is widely used in database design to represent a conceptual schema. The Conceptual schema description of the data requirement of different kinds of users in a organization.

The E-R diagram employs three basic notations:

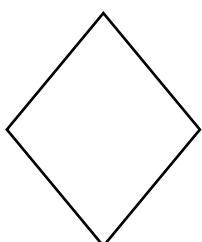
1. Entities
2. Attributes
3. Relationship



This symbol represents entity set



This symbol represents Attributes

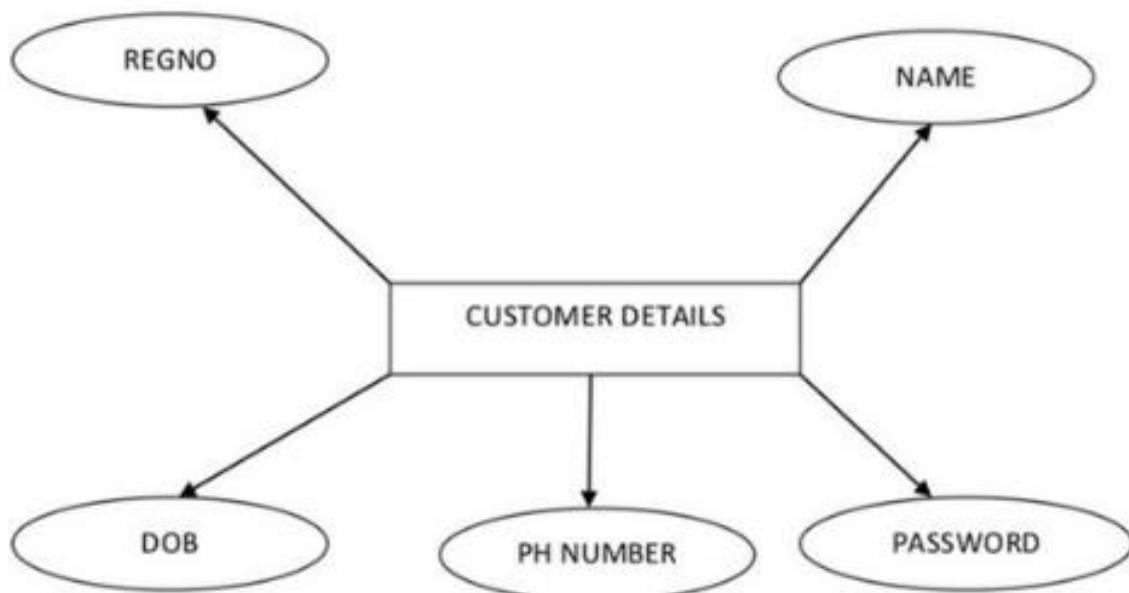


This symbol represents relationship

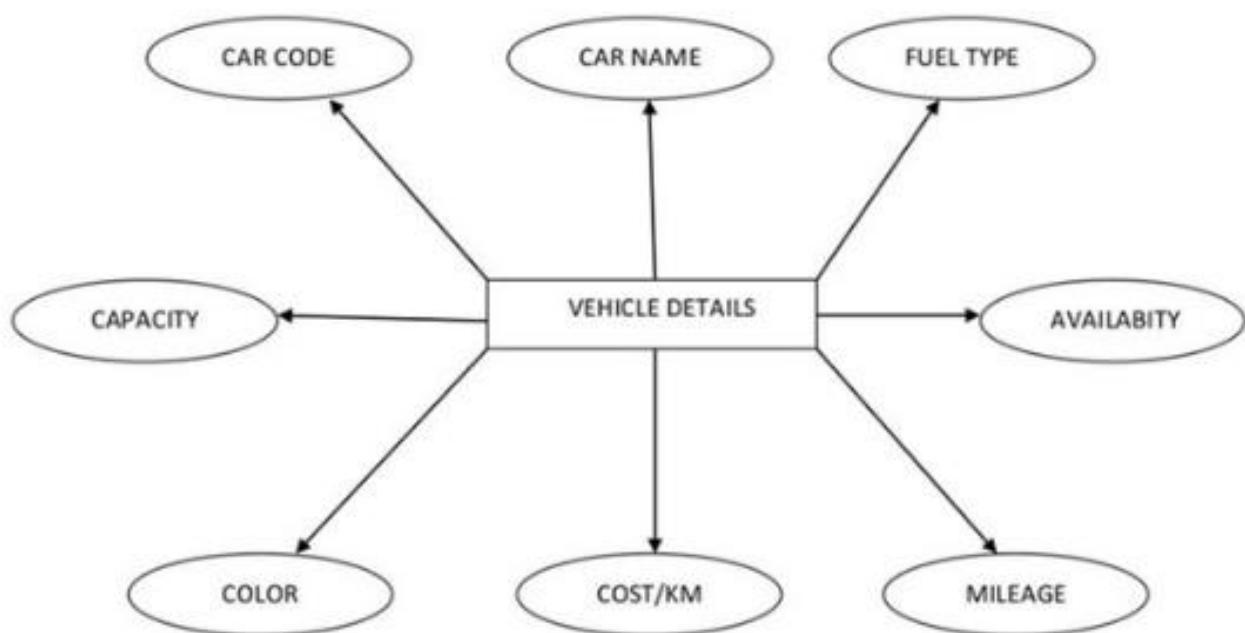
---

Attributes to Entities and Entity Sets with  
Other Relationship Types

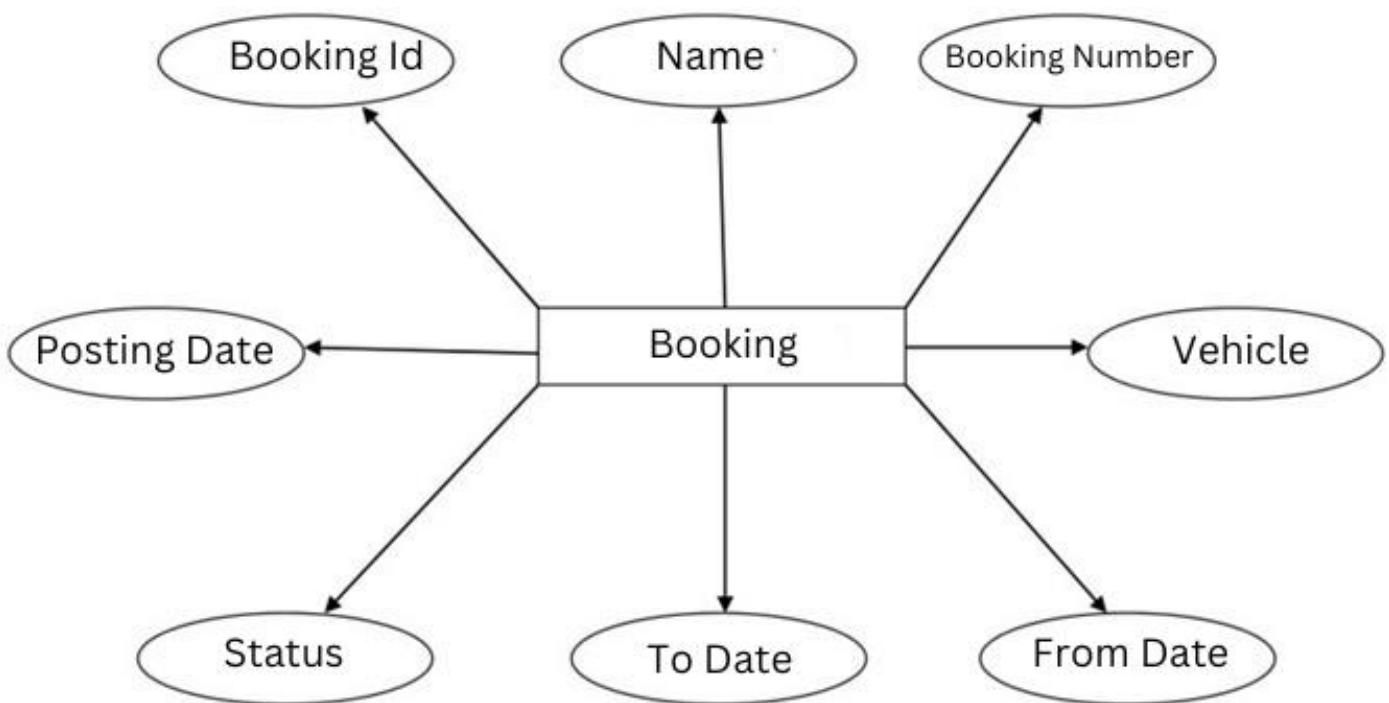
# Customer Details



# Vehicle Details



# Booking Details



## Database Tables

### List of Tables

No	Table Name
1	admin
2	tblbooking
3	tblbrands
4	tblcontactusquery
5	tblpages
6	tblsubscribers
7	tblusers
8	tblvehicles

# admin

<b>Table Name</b>		<b>admin</b>		
<b>Description</b>		This table is used to maintain store.		
<b>Key</b>		<b>Field Name</b>	<b>Type</b>	<b>Size</b>
*		Id	Int	11
		Username	Varchar	100
		Password	varchar	100
		updationdate	Timestamp	--
				ON UPDATE CURRENT_TIMESTAMP()

# tblbooking

<b>Table Name</b>		<b>tblbooking</b>		
Description		This table is used to maintain booking of vehicle		
<b>Key</b>	<b>Field Name</b>	<b>Type</b>	<b>Size</b>	<b>Constraints</b>
*	Id	Int	11	AUTO_INCREMENT
	BookingNumber	bigint	12	
	userEmail	Varchar	100	
	VehicleId	int	11	
	FromDate	Varchar	20	
	ToDate	Varchar	20	
	Message	Varchar	255	
	Status	Int	11	
	PostingDate	timestamp	--	
	LastUpdationDate	timestamp	--	ON UPDATE CURRENT_TIMESTAMP()

## tblbrands

<b>Table Name</b>		<b>tblbrands</b>		
Description		This table is used to store information about vehicle brands.		
<b>Key</b>	<b>Field Name</b>	<b>Type</b>	<b>Size</b>	<b>Constraints</b>
*	Id	Int	11	AUTO_INCREMENT
	Brandname	Varchar	120	
	CreationDate	timestamp	--	
	UpdationDate	timestamp	--	ON UPDATE CURRENT_TIMESTAMP()

## tblcontactusquery

<b>Table Name</b>		<b>tblcontactquery</b>		
Description		This table is used to store information about customers queries.		
<b>Key</b>	<b>Field Name</b>	<b>Type</b>	<b>Size</b>	<b>Constraints</b>
*	Id	Int	11	AUTO_INCREMENT
	name	Varchar	100	
	EmailId	Varchar	120	
	ContactNumber	Char	11	
	Message	Lingtesxt		
	PostingDate	Timestamp		
	status	int	11	

## tblpages

<b>Table Name</b>		<b>tblpages</b>		
Description		This table is used to maintain pages of the store.		
<b>Key</b>	<b>Field Name</b>	<b>Type</b>	<b>Size</b>	<b>Constraints</b>
*	Id	Int	11	AUTO_INCREMENT
	PageName	Varchar	255	
	type	varchar	255	
	detail	Longtext	--	

## **tblsubscribers**

<b>Table Name</b>		<b>tblsubscribers</b>		
Description		This table is used to maintain subscribers detail.		
<b>Key</b>	<b>Field Name</b>	<b>Type</b>	<b>Size</b>	<b>Constraints</b>
*	Id	Int	11	AUTO_INCREMENT
	SubscribersEmail	Varchar	120	
	PostingDate	timestamp	--	

# tblusers

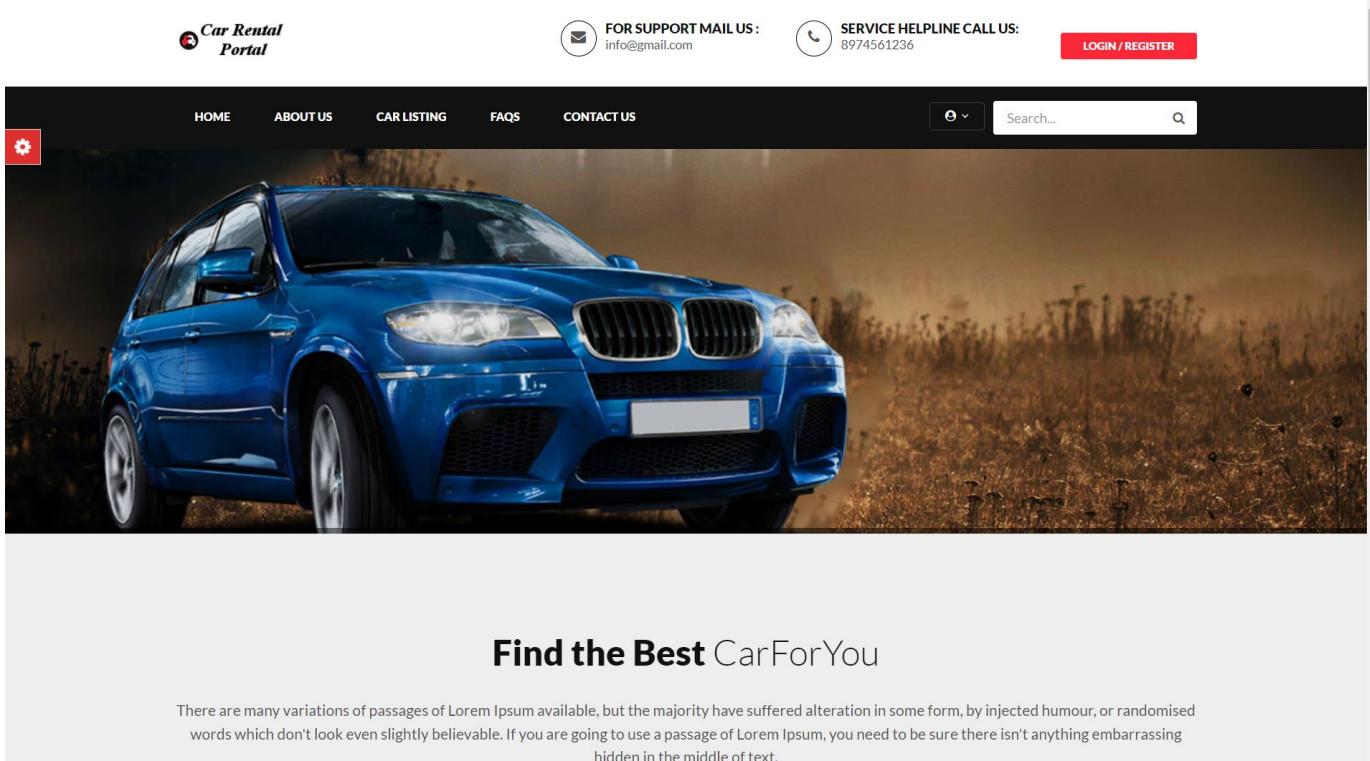
<b>Table Name</b>		<b>Tblusers</b>		
Description		This table is used to maintain users information.		
<b>Key</b>	<b>Field Name</b>	<b>Type</b>	<b>Size</b>	<b>Constraints</b>
*	Id	Int	11	AUTO_INCREMENT
	FullName	Varchar	120	
	EmailId	Varchar	100	
	Password	Varchar	100	
	ContactNo	Char	11	
	Dob	Varchar	100	
	Address	Varchar	255	
	City	Varchar	100	
	Country	Varchar	100	
	RegDate	timestamp	--	
	UpdationDate	timestamp	--	ON UPDATE CURRENT_TIMESTAMP()

# tblvehicles

<b>Table Name</b>		<b>tblvehicles</b>		
Description		This table is used to maintain information about vehicle.		
<b>Key</b>	<b>Field Name</b>	<b>Type</b>	<b>Size</b>	<b>Constraints</b>
*	Id	Int	11	AUTO_INCREMENT
	VehicleTitle	Varchar	150	
	VehiclesBrand	Int	11	
	VehiclesOverview	Longtext	100	
	PricePerDay	Int	11	
	FuelType	Varchar	100	
	ModelYear	int	255	
	SeatingCapacity	int	11	
	Vimage1	Varchar	120	
	Vimage2	Varchar	120	
	Vimage3	Varchar	120	
	AirConditioner	int	11	
	PowerDoorLocks	Int	11	
	AntiLockBreakingSystem	Int	11	
	BrakeAssist	int	11	
	PowerSteering	Int	11	
	DriverAirbag	Int	11	
	PassagerAirbag	Int	11	
	PowerWindows	int	11	
	CDPlayer	Int	11	
	CentralLocking	Int	11	
	CrashSensor	Int	11	
	LeatherSeats	int	11	
	RegDate	timestamp	--	
	UpdationDate	timestamp	--	ON UPDATE CURRENT_TIMESTAMP()

## Screenshots

# Home Page



The screenshot shows the homepage of a car rental portal. At the top left is the logo 'Car Rental Portal'. To the right are links for support mail ('FOR SUPPORT MAIL US: info@gmail.com') and service helpline ('SERVICE HELPLINE CALL US: 8974561236'), along with a 'LOGIN / REGISTER' button. A navigation bar at the top includes links for HOME, ABOUT US, CAR LISTING, FAQS, and CONTACT US. A search bar is also present. The main visual is a large image of a blue BMW X5 driving through a field.

**Find the Best CarForYou**

There are many variations of passages of Lorem Ipsum available, but the majority have suffered alteration in some form, by injected humour, or randomised words which don't look even slightly believable. If you are going to use a passage of Lorem Ipsum, you need to be sure there isn't anything embarrassing hidden in the middle of text.

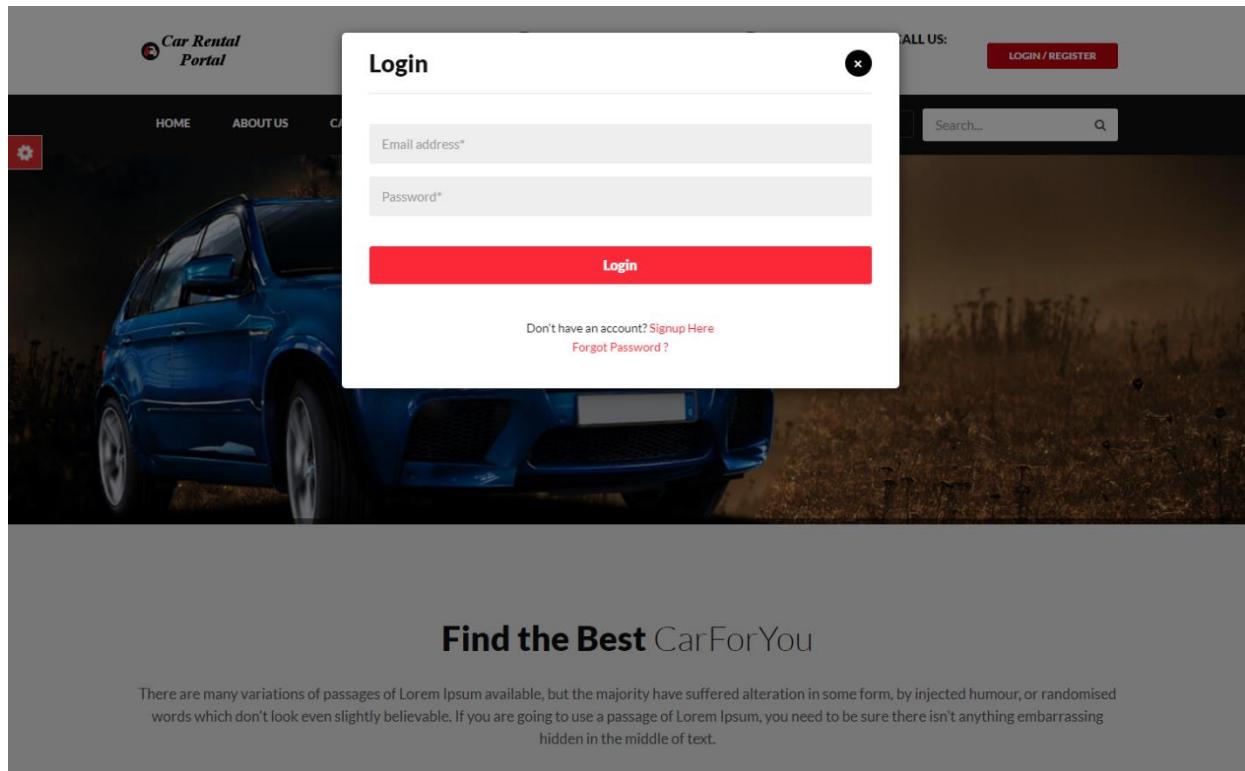
# Signup Page

The screenshot shows the 'Sign Up' page of a car rental website. The page has a white background with a dark header bar at the top. The header bar includes the 'Car Rental Portal' logo, a search bar with placeholder text 'Search...', and a red 'LOGIN / REGISTER' button. Below the header, there is a large image of a blue car parked in a field. The main form area is titled 'Sign Up' and contains four input fields: 'Full Name', 'Mobile Number', 'Email Address', and 'Password'. Below these fields is a checkbox labeled 'I Agree with Terms and Conditions'. A red 'Sign Up' button is centered at the bottom of the form. At the very bottom of the page, there is a small note: 'Already got an account? [Login Here](#)'.

**Find the Best CarForYou**

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# Login Page



**Find the Best** CarForYou

There are many variations of passages of Lorem Ipsum available, but the majority have suffered alteration in some form, by injected humour, or randomised words which don't look even slightly believable. If you are going to use a passage of Lorem Ipsum, you need to be sure there isn't anything embarrassing hidden in the middle of text.

# Cars List



⚙️

 Petrol  2019 Model  5 seats

**Maruti Suzuki Wagon R** ₹500 /Day

Maruti Wagon R Latest Updates Maruti Suzuki has launched the BS6 Wa



 Petrol  2018 Model  5 seats

**BMW 5 Series** ₹1000 /Day

BMW 5 Series price starts at ₹ 55.4 Lakh and goes upto ₹ 68.39 Lakh. T



 Petrol  2017 Model  5 seats

**Audi Q8** ₹3000 /Day

As per ARAI, the mileage of Q8 is 0 kmpl. Real mileage of the vehicle



 Petrol  2020 Model  5 seats

**Nissan Kicks** ₹800 /Day

Latest Update: Nissan has launched the Kicks 2020 with a new turbochar



 Petrol  2019 Model  5 seats

**Nissan GT-R** ₹2000 /Day

The GT-R packs a 3.8-litre V6 twin-turbocharged petrol, which puts ou



 CNG  2018 Model  5 seats

**Nissan Sunny 2020** ₹400 /Day

Value for money product and it was so good It is more spacious than ot

# Booking Page

Nissan , Nissan GT-R

\$2000

Per Day



2019

RegYear



Petrol

Fuel Type



5

Seats

Share: [f](#) [t](#) [in](#) [G+](#)

Book Now

From Date:

mm/dd/yyyy



To Date:

mm/dd/yyyy



Message

**LOGIN FOR BOOK**

# Booking Details

The screenshot shows a user profile section at the top with a placeholder image for 'Autospot' and the name 'krish' from 'rajkot, rajkot india'. Below this, the 'MY BOOKINGS' section displays a booking for 'Booking No #546135009'. The booking details are: Car Model 'Audi , Audi Q8', Rent Period 'From 2024-10-10 To 2024-10-17', and a message 'Message: hello'. A 'Not Confirm yet' button is visible next to the booking. On the left, a sidebar menu includes 'Profile Settings', 'Update Password', 'My Booking', 'Post a Testimonial', 'My Testimonials', and 'Sign Out'. At the bottom, an 'Invoice' table provides a breakdown of the rental costs.

Car Name	From Date	To Date	Total Days	Rent / Day
Audi Q8, Audi	2024-10-10	2024-10-17	7	3000
Grand Total				21000

# Admin Dashboard

The screenshot shows the Admin Dashboard of the Car Rental Portal. The top navigation bar includes the title "Car Rental Portal | Admin Panel" and a user account icon. The left sidebar contains a navigation menu with the following items:

- MAIN
  - Dashboard
  - Brands
  - Vehicles
  - Bookings
  - Contact
  - Reg Users
  - Manage Pages
  - Manage Subscribers

The main dashboard area displays six cards with summary data:

Category	Value	Color
REG USERS	2	Dark Blue
LISTED VEHICLES	8	Light Green
TOTAL BOOKINGS	1	Light Blue
LISTED BRANDS	6	Orange
SUBSCRIBERS	2	Dark Blue
CONTACT	1	Light Green

Each card includes a "FULL DETAIL" button with a right-pointing arrow.

# Testing

<b>Test Case</b>	<b>Description</b>	<b>Result</b>	<b>Status</b>
TC-001	User registration with valid details	User successfully registered	pass
TC-002	User registration with existing email	Error message displayed	Pass
TC-003	User login with valid credentials	User successfully logged in	Pass
TC-004	User login with invalid credentials	Error message displayed	pass
TC-005	Search available cars	List of available cars displayed	Pass
TC-006	Book a car	Booking confirmation displayed	Pass
TC-007	Admin access to dashboard	Admin dashboard loaded correctly	Pass
TC-008	View booking history	Booking history displayed	Pass
TC-009	Logout functionality	User successfully logged out	pass

## Conclusion

- Making this application admin & user can work easily & efficiently.
- The Car Rental Portal management is a project build with an attempt to save Time and energy of the administrator. This is a totally computerized Project that makes the work of the administrator very easy and accurate and hence saves time and human efforts.
- Using this application admin can store Booking details, car details, client details.
- This application save the time & cost.
- Also be retrieve information of client that is registered in system.
- The project is quite user friendly and so on special academic or technical Experience and/or background are requiring for end-user. Any person with little knowledge of computer can easily operate it.
- Provide the best feature also in this application to make it this we used the some resources that will get from the web resources also.

# Bibliography

## ❖ Online Resources

- **MDN Web Docs:** Mozilla Developer Network for comprehensive documentation on HTML, CSS, JavaScript, and Node.js.
- **Stack Overflow:** Various threads and discussions related to specific programming challenges encountered during development.
- **GitHub:** Accessed open-source repositories for examples of car rental applications and related functionalities.

## ❖ Design Resources

- **Bootstrap Documentation:** Bootstrap for implementing responsive design and components in the user interface.



THANK  
YOU