A PROJECT REPORT

on

"Ride Dekho"

Submitted to KIIT Deemed to be University

In Partial Fulfillment of the Requirement for the Award of

BACHELOR'S DEGREE IN COMPUTER SCIENCE AND ENGINEERING

BY

ROSHAN BARIK	2005186
SOMALI KUNDU	2005203
SAMEER SHEKHAR	2005960
SRISHTY SINGH	2006972

UNDER THE GUIDANCE OF Dr. PARTHA SARATHI PAUL



SCHOOL OF COMPUTER ENGINEERING KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY BHUBANESWAR, ODISHA-751024 May-2024

KIIT Deemed to be University

School of Computer Engineering Bhubaneswar, Odisha-751024



CERTIFICATE

This is to certify that the project entitled

"Ride Dekho"

Submitted by

ROSHAN BARIK	2005186
SOMALI KUNDU	2005203
SAMEER SHEKHAR	2005960
SRISHTY SINGH	2006972

is a record of bonafide work carried out by them, in the partial fulfillment of the requirement for the award of Degree of Bachelor of Engineering (Computer Science & Engineering) at KIIT Deemed to be university, Bhubaneswar. This work is done during year 2022-2023, under our guidance.

Date: 05/05/2023

(Guide Name) Project Guide

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> ROSHAN BARIK SOMALI KUNDU SAMEER SHEKHAR SRISHTY SINGH

ABSTRACT

The Car and Bike Rental System is being developed for customers so that they can book their cars and bikes from any part of the world. This application takes information from the customers through filling in their details.

A customer being registered on the website has the facility to book a car or a bike which he requires. The proposed system is completely integrated with online systems. It automates manual procedures in an effective and efficient way. This automated system facilitates customers and allows them to fill up the details according to their requirements. It includes the type of car or bike they are trying to hire and location. The purpose of this system is to develop a web site for people who can book their car and bike along with requirements from any part of the world. The car and bike rental system provides a car or bike to users at their location in a short time.

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CHAPTER-1 INTRODUCTION

1.1 Introduction to online car and bike rental system

This project is designed so as to be used by a Car and Bike Rental company specializing in renting cars to customers. It is an online system through which customers can view available cars and bikes, register, view profile and book cars and bikes. Here, users have to Login to book a car or a bike. The user can search for cars and bikes easily and book. For bookings, the user has to provide information such as booking dates and text messages. All car and bike details are provided and it also includes the car's and bike's features and overview. The user can also post their testimonials and the user can update their profile as well as passwords anytime they want from the site. Admins can Add/Manage car and bike brands, manage cars and bikes, bookings, testimonials, pages and many more. It's easy to operate and be understood by users. This site makes customers easy for car and bike rental. The design is pretty simple and the user won't find it difficult to understand, use and navigate.

1.2 Reason for the Project

- ➤ Enhance Business Processes: To be able to use internet technology to project the rental company to the global world instead of limiting their services to their local domain alone, thus increasing their return on investment (ROI).
- ➤ Online Car and Bike Reservation: A tool through which customers can book available cars and bikes online prior to their expected pick-up date or time.

- ➤ Customer's registration: A registration portal to hold customer's details, monitor their transactions and use same to offer better and improved services to them.
- ➤ Group Booking/Event Management: Allows the customer to book space for a group in the case of weddings or corporate meetings

1.3 Problem Statement

A car and bike rental is a car or bike that can be used temporarily for a fee during a specified period. Getting a rental car or bike helps people get around despite the fact they do not have access to their own personal car or bike or don't own a car or bike at all. The individual who needs a car or bike, must contact a rental company and contract out for a car or a bike. This system increases customer retention and simplifies car or bike and staff management.

1.4 Aims & Objective

- To produce a web-based system that allows customers to register and book a car or a bike online and for the company to effectively manage their car and bike rental business.
- To ease the customer's task whenever they need to rent a car or a bike.

1.5 Scope

This project traverses a lot of areas, ranging from business concepts to the computing field, and requires us to perform much research to be able to achieve the project objectives.

The area covered includes:

- ➤ Car and Bike rental industry: This includes a study on how the car and bike rental business is being done, process involved and opportunities that exist for improvement.
- > PHP Technology is used for the development of the application.
- ➤ General customers as well as the company's staff will be able to use the system effectively.
- ➤ Web-platform means that the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

1.6 Summary

The main objective of this Car and Bike Rental System project will enable users to rent a car or a bike. The user shall login to the system and check for availability of cars and bikes. The user specifies the type of car and bike and the journey date and time. The Car and Bike Rental System will check for the availability of the car and bike and rent the car or the bike to the customer. All the data regarding the rental cars and bikes is stored in a MySQL database. The user has to enter his name, address, phone details and check for the cars and bikes available for rent. The UI is very simple and the connectivity to back end is robust. The main advantage is that the user will be able to choose a car or bike depending on his budget.

CHAPTER-2

ONLINE CAR AND BIKE RENTAL SYSTEM

2.1 How Car and Bike Rental Services Work

A car and bike rental is a car and bike that can be used temporarily for a period of time for a fee. Renting a car or bike assists people with getting around even when they do not have access to their own personal vehicle or don't own a car or bike at all. An individual who wants to rent a car or a bike must first contact the car and bike rental company for the desired car or bike. This can be done online. At this point, this person has to supply some information such as dates of rental, and type of car or bike, fuel type, etc. After these details are worked out, the individual renting the car must present a valid Identification Card(Aadhar Card, Passport) during handling the car or the bike. Most companies throughout the industry make a profit based on the type of cars or bikes that are rented. Rental cars and bikes are provided of every type. And customers are free to choose any car or bike of their choice based on their purpose and availability of such a car or bike at the time of reservation.

2.2 Benefits of Online Car and Bike Rental Services

- This online car and bike rental solution is fully functional and flexible.
- ➤ It is very easy to use.
- ➤ It saves a lot of time, money and labour.
- ➤ Eco-friendly: The monitoring of the car activity and the overall business becomes easy and includes the least of paper work.
- \triangleright The software acts as an office that is open 24/7.
- ➤ It increases the efficiency of the management in offering quality services to the customer.

CHAPTER-3

REQUIREMENT ANALYSIS

3.1 Introduction

Here we will be discussing the requirements of making this application possible and respond as we wanted it to . This is only done through the thinking of the developer as well as the vision provided by our guide, Mr. Partha Sarathi Paul.

In this we will also understand the platform on which our application is running and on which it is being developed.

3.2 Feasibility Study

The preliminary investigation examines project feasibility, the likelihood of the system will be useful to the organization. The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new modules and debugging old running systems. All systems is feasible if they are unlimited resources and infinite time. There are aspects in the feasibility study portion of the preliminary investigation:

- ➤ Technical Feasibility
- ➤ Operation Feasibility
- ➤ Economical Feasibility

3.2.1 Technical Feasibility

- The technical issue is usually raised during the feasibility stage of the investigation includes the following:
- ➤ Does the proposed equipment have the technical capacity to hold the data required to use the new system?

- ➤ Will the proposed system provide adequate response to inquiries, regardless of the number or location of users?
- ➤ Are there technical guarantees of accuracy, reliability, ease of access and data security?

3.2.2 Operational Feasibility

Proposed projects are beneficial only if they can be turned into information system. That will meet the organization's operating requirements. Operational feasibility aspects of the project are to be taken as an important part of the project implementation. Some of the important issues raised are testing the operational feasibility of a project that includes the following: -

- ➤ Is there sufficient support for the management from the users?
- ➤ Will the system be used and work properly if it is being developed and implemented?
- ➤ Will there be any resistance from the user that will undermine the possible application benefits?

3.2.3 Economical Feasibility

A system can be developed technically and that will be used if installed must still be a good investment for the organization. In the economical feasibility, the development cost in creating the system is evaluated against the ultimate benefit derived from the new systems. Financial benefits must equal or exceed the costs.

3.2.4 Legal Feasibility

In the legal feasibility, it is necessary to check that the software we are going to develop is legally correct, which means that the ideas which we have taken for the proposed system will be legally implemented or not, so it is also an important step in the feasibility study.

3.3 System Implementation

During the implementation stage, the stage is physically created.

Necessary programs are coded, debugged and documented. A new hardware is selected, ordered and installed.

3.4 Functional Requirements

Requirement analysis is a software engineering technique that is composed of the various tasks that determine the needs or conditions that are to be met for a new or altered product, taking into consideration the possible conflicting requirements of the various users.

Functional requirements are those requirements that are used to illustrate the internal working nature of the system, the description of the system, and explanation of each subsystem. It consists of what task the system should perform, the processes involved, which data should the system holds and the interfaces with the user. The functional requirements identified are:

- ➤ Customer's registration: The system should allow new users to register online and generate a membership card
- ➤ Online reservation of cars: Customers should be able to use the system to make booking and online reservations.
- ➤ Automatic update to database once reservation is made or new customer registered: Whenever there's a new reservation or new registration, the system should be able to update the database without any additional efforts from the admin.

3.5 Non-Functional Requirements

It describes aspects of the system that are concerned with how the system provides the functional requirements.

They are:

> Security: The subsystem should provide a high level of security and

integrity of the data held by the system, only authorized personnel of the

company can gain access to the company's secured page on the system

and only users with a valid password and username can login to view

user's page.

➤ Availability: This system should always be available for access at 24

hours, 7 days a week. Also, in the occurrence of any major system

malfunctioning, the system should be available in 1 to 2 working days, so

that the business process is not severely affected.

Ease of use: Considering the level of knowledge possessed by the

users of this system, a simple but quality user interface should be

developed to make it easy to understand and require less training.

3.6 Hardware and Software Requirement

Hardware Requirements:

Processor: Intel Pentium Dual Core

RAM: 512 MB

Hard Disk: 160 GB Space

Software Requirements:

Operating System: Windows /iOS/Unix17

Web Browser: IE/Google Chrome/Firefox

Technology: PHP

Tools: XAMPP

Web Design: HTML, CSS, JAVASCRIPT

Back End: MYSQL

Scripting Language: PHP

CHAPTER-4

EXISTING SYSTEM

4.1 Introduction

Although many online portals have come into the picture for providing online car and bike booking services. But most of the car renting companies are using the traditional way to deal with the customer. Which are time-and labour-consuming?

An existing system can provide manually paper work or excel sheet to track the booking and registered cars and bikes details.

The user has to go to the office where the user can get the car or bike on rent and book their car or the bike. Most of the time user does not get a sight of the car or bike in which he is planning to travel. Which results in compromising the travel comfort.

In the existing system, you cannot provide feedback from the user to the admin directly. The user gets fluctuations every time he/she travels.

Maintaining an excel sheet or paper book record of reservations is very laborious work. Chances of error are more. No automation is involved, which means the process is very slow.

4.2 Problem Statement

The Manual car and bike rental system provides services only during office hours. So customers have limited time to make any transactions or reservations of cars and bikes.

The existence of the online car and bike rental systems nowadays has overcome the

limitation of the business operation hours. There are some customers who face a problem of choosing a car or a bike to be rented which is suitable for some of the important requirements.

- i. To rent a car or a bike a prospective renter must first go to the nearest office to register as a client.
- ii. Cars and bikes that cause difficulties renting out are normally advertised in local or national newspapers. It involves a lot of paper work and consumes time
- iii. Details are stored in papers
- iv. Maintenance is a huge problem
- v. Upgradation, changes in details is a tedious task
- vi. Performance is not achieved up to the requirements.

CHAPTER-5 PROPOSED SYSTEM

5.1 INTRODUCTION

The proposed system facilitates the customers to fill up their details, and to give a brief description of a car or bike they want to book. This new system is very helpful for customers who want to hire their cars or bikes through this site. This Ride Dekho System project will enable the user to rent a car or a bike. The user will login to the system and check for availability of car or bike. The user specifies a type of car or bike and the journey date and time. The Ride Dekho System will check for the availability of the car or bike and rent the car or bike to the customer. All the data regarding the rental cars or bikes are stored in MySQL database. The user has to enter his name, address, phone details and check for the cars available for rent. The UI is very simple and the connectivity to back end is robust. The main advantage is that the user will be able to choose a car or bike depending on his budget

5.2 Advantages:

- First, the customer has to make a reservation and later on in the process, has to do registration.
- ➤ Second, if the customer has already registered himself, then he can continue booking from his own account by giving his customer id or mail id.
- ➤ Third, the customer can amend details or update his details.
- ➤ Maintenance is easy and performance is good

- ➤ It is easy to use and understand.
- ➤ It reduces the time complexity

5.3 SPECIFICATION OF PROPOSED SYSTEM

Modules

- i. Registered Users
- ii. Admin
- iii. Guest

Guest Users

Guest user can view the website and checkout the information about rental cars or bikes.

Guest users can also inquiry through the contact us page.

Register Users

Anyone can register through the registration page. After a successful registration user can log in with valid email and password.

User can recover own password by providing some registered info.

After successful login user can do the following things

- ➤ Car or bikes Booking
- ➤ View Car or bike booking history
- ➤ Update His/Her profile
- ➤ Update his/her password
- > View details of cars or bikes
- ➤ Logout

Admin

The Admin is the super user of the website who can manage everything on the website.

Admin Features-

- ➤ Admins can create car or bike brands
- ➤ Manage car or bike Brands(Edit, Delete)
- > Post car or bikes
- ➤ Manage cars or bikes(Edit,Delete)
- ➤ Manage Booking(Admin can confirm and Cancel Booking)
- ➤ Manage 'Contact us' Query
- ➤ Admins can see the details of registered users
- ➤ Admins can also update the page content
- ➤ Admins can update the contact us details
- ➤ Manage Subscribers
- ➤ Admin Dashboard(Admin can view the count of reg users, total booking, total subscribers, total queries etc)
- ➤ Change Password(admin can change own password)
- ➤ Logout

CHAPTER-6 SYSTEM ARCHITECTURE AND DESIGN

6.1 Data Flow Diagram (DFD)

A Data Flow Diagram (DFD) is a graphical representation that depicts the information flow and the transforms that are applied as data moves from input to output.

Zero Level Data Flow Diagram

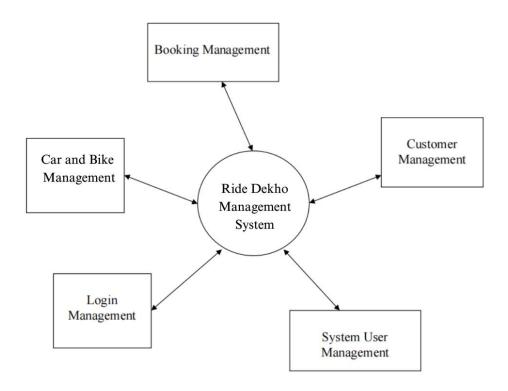


Figure 1: Zero level DFD

Zero Level DFD of online car and bike rental system, it elaborates high level process of

online car and bike rental system. It is an overview of the whole online car and bike rental system there are some high-level entities for the process of car and bike rental system.

First Level Data Flow Diagram

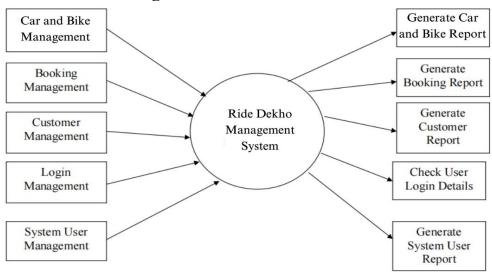


Figure 2: 1st level DFD

The 1st Level DFD of the online RideDekho system shows how the system is divided into sub systems, each of which deals with one or more of the data that flows to or from an external agent, which together provides all the functionality of an online car and bike rental system as a whole, above are some given entities and the output of 1st level.

Second Level Data Flow Diagram

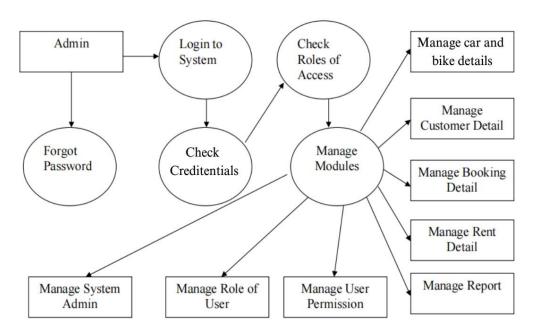


Figure 3: 2nd level DFD

6.2 ER-DIAGRAM

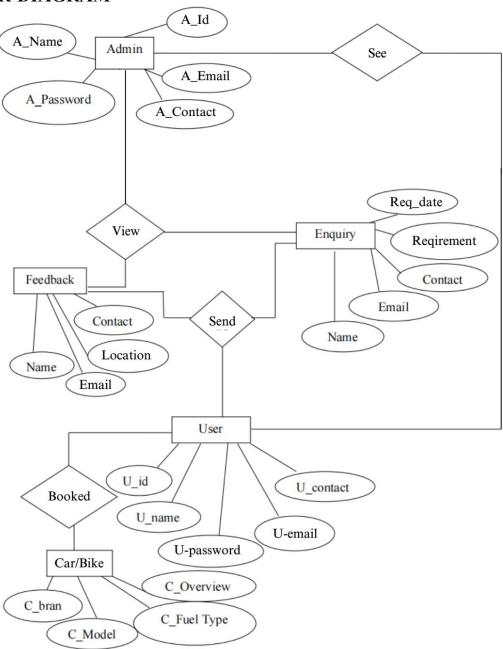


Figure 4: ER Diagram

CHAPTER-7 USE CASE DIAGRAM

7.1 Use Case Description

Actor and use case description shows the detailed description of the interaction between the actors and their use cases. The description enables us to have a proper understanding of how the actor interacts with the system through their use cases.

Actor	Use-case	Use-case Description
Register as		This use case describes the activities of the
member		customer to register online and become a member. Customer's details are required as
		part of the registration. Login details is automatically sent to the customer after successful registration.
Customer	Booking Reservation	This use case enables customers to search and make reservations. Non-registered customers will be directed to register before their reservation can be confirmed. A notification is automatically sent to the customer after the task is completed.
	Return car or bike	This use case describes the event of a customer returning the car or the bike borrowed. The use case extends to "process rental" use case from the staff actor.
	Give feedback	This use case is used by the customer to provide feedback/comment to the company; a confirmation notification will be sent to the customer once a feedback has been submitted.
Admin	Add a new car	This use case is used by the staff to add new cars or bikes to the company's fleet database. Staff will need to login to activate this use case.
Update car or bike details		This use case is used by the staff to edit and modify car details whenever there is new renewal (insurance, road tax). It allows the company to keep an up-to-date record of their fleet.
	Reply to customer's feedback	This use case describes the event by which staff updates the system when customers pick up or when they return their car or bike.

Table 1: Actors and Use Case Description

7.2 Use-case Login

Use-case Number	UC-01			
Use-case Name	Login			
Actor	Customer			
Description	This use case describes how the us	This use case describes how the users login into this online Ride Dekho		
	system			
Precondition	None			
Post condition	If the use case was successful, the actor is now logged into the			
	application.			
Basic course of	User Action	System Response		
Action	1. The user is on the home page to	2. The system promotes the user to		
	login to the system.	enter Username and Password.		
	3. The user enters username and	4.The system verifies that all the		
	Password then click	information.		
	on login button.	5.The system successfully logged in		
		6.Use case exit		

Table no-2: Use case -Login

7.3 Use-case Booking Vehicle

Use-case Number	UC-02		
Use-case Name	Booking car or bike		
Description	This use case permits customers to	book and make a schedule for	
	renting a car or a bike, based on th	e availability.	
Precondition	A customer wants to book a car or	a bike and reservation details about	
	customer has to be entered.		
Post condition	Customers booking successfully		
Basic course of	User Action	System Response	
Action	1. The customer wants to book a	3. The system prompts the	
	car or a bike.	customer to fill out a reservation	
	2. The customer clicks on the	form.	
	booking page.	6. The system checks all required	
	4. The customer enters the	information had been filled in and	
	following information	the date entered dates are valid	
	(customer's full name, email	7. The system presents information	
	address, password, pickup date	to accept or decline the rental	
	& return date)	Agreement.	
	5. The customer clicks on	9. The system shows the	
	booking button to book.	customer that the reservation has	
	8. The customer accepts the	been completed, and presents the	
	reservation and click Accept.	customer a reservation confirmation	
		number.	
		10. Use case ends.	

Table No. 3: Use Case Booking Car or Bike

7.4 Use Case View My booking

Use-case Number	UC-03		
Use-case Name	My Booking		
Actor	User		
Description	These use case allow staff to view or display customer reservations.		
Precondition	UC-1		
Post condition	Display All Bookings		
Basic course of	User Action	System Response	
Action	1. The staff wants to view	3. The system responds the	
	reservation.	requested page.	
	2. The staff requests the	5. The system puts on view or	
	reservation page.	displays all reservation information	
	4. Then on the reservation page	to the employee.	
	the employee clicks view	6. Use case ends.	
	Button.		

Table No.4: Use Case View My booking

7.5 Use Case Diagram

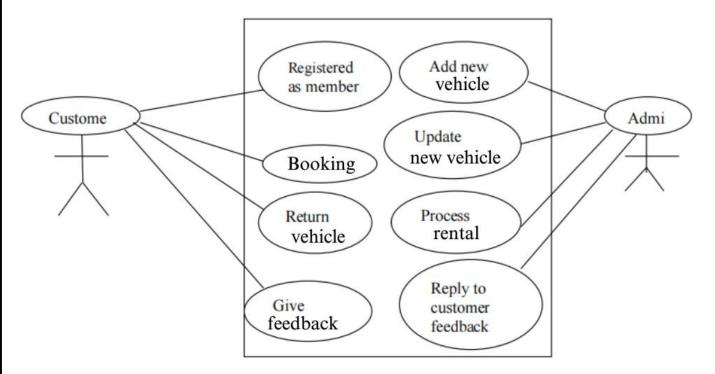
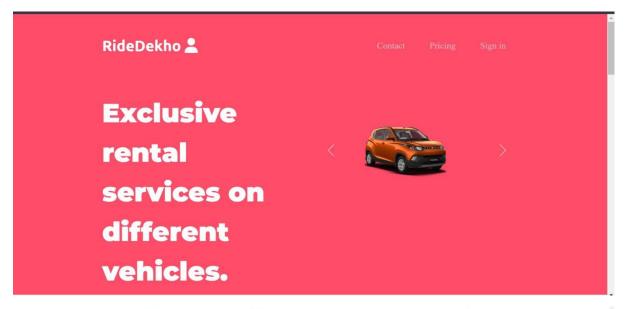


Figure 5 : Online Car and Bike Rental System [use case]

CHAPTER-8 OUTPUT/SCREENSHOT

8.1 Screenshot





Easy to use.

It aims at providing convenience of zero insurance cost, zero service and maintenance and 24x7 roadside assistance.



Elite Clientele

We have a set of happy and satisfied customers who love our service.



Guaranteed to work.

Rather than going door-to-door we make it easy for the user, as they can book the vehicle online and can have a hassle free experience.



Save money.

People who don't use their vehicles more often can list it on the website and get financial benefits from it.

Our vehicle rental system provides an easy-to-use platform for renting cars, trucks, and other vehicles for any occasion.



Pebbles , Mumba

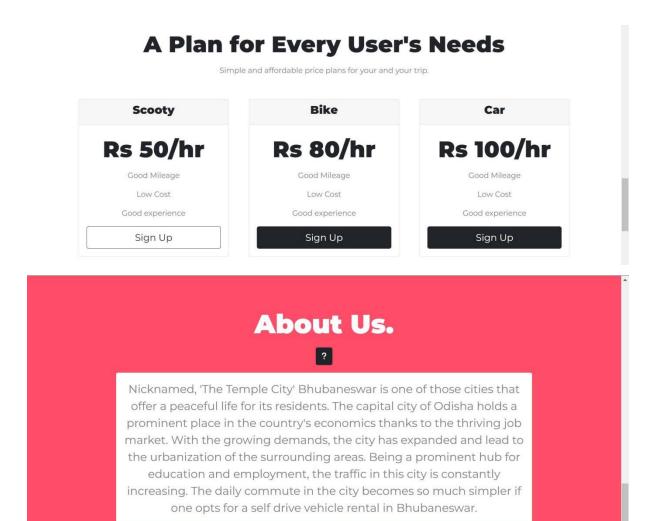


Figure 6: Home Page

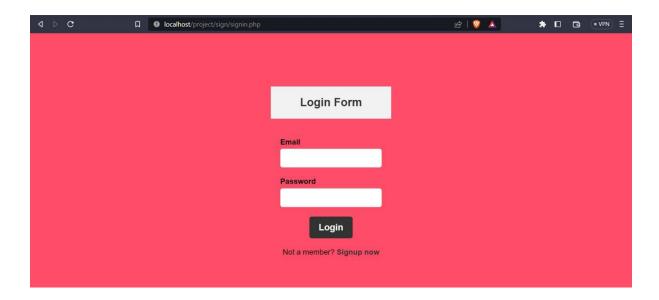


Figure 7: Login Page

SignUp Form	
Signop Form	
Full Name*	
Email *	
Email	
User ID*	
Password*	

Vehicle Type	
None	
Vehicle Type	
None	
Address *	
6	
Phone No.*	
Status *	
Lessee	
Login	
Already a member->Sign-in	

Figure 8: Sign-up Page

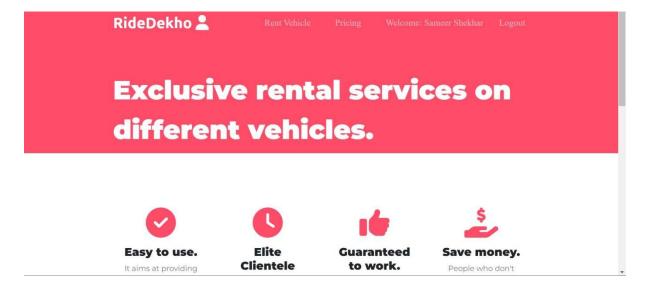


Figure 9: Dashboard

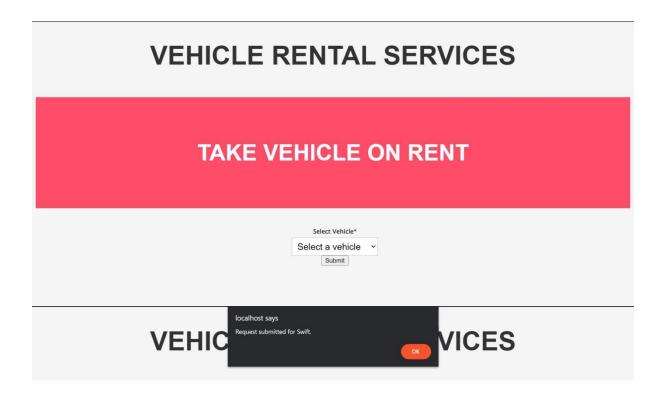


Figure 10: Booking Page

8.2 Summary

The user interface has been designed keeping in mind the guidelines for good and easy-to-learn interfaces. The interface provides proper guidance for operation, including success and error messages to keep the user aware of the results and operations. Tabular navigation panels have been used to provide links to commonly accessible tasks, and proper menus and sub-menus have been implemented wherever required for effective navigation.

CHAPTER-9

CONCLUSION AND SCOPE OF FUTURE WORK

9.1 Conclusion

The car and bike rental business has emerged with a new goodies compared to the past experience where every activity concerning car and bike rental business is limited to a physical location only. Even though the physical location has not been totally eradicated; the nature of functions and how these functions are achieved has been reshaped by the power of the internet. Nowadays, customers can book cars and bikes online, rent them online, and have the vehicle brought to their door once the customer is a registered member or goes to the office to pick up the car. The web based car and bike rental system has offered an advantage to both customers as well as the rental company, to efficiently and effectively manage the business and satisfy customers' needs at the click of a button.

9.2 Future Enhancement

In near future, we are planning to hire cars daily bases. So that clients can give their car to the customer on daily bases. We are planning to add new feature i.e. pay after the trip. We are working to increase automation in the system to increase user experience great.

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Plagiarism Check Report

