

OWNCAR – SELF DRIVE CAR IN DHAKA

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Computer Science and Engineering

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DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

JANUARY 2021

APPROVAL

This project titled “Own Car - Self Drive Car in Dhaka”, submitted by Md. Rafiul Huda ID:171-15-9258, Mahmudul Hasan Maruf ID:171-15-9115 and Md. Jakiul Rashid Khan ID:171-15-8554 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 27 January 2021.

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We hereby declare that, this project has been done by us under the supervision of **Md. Sadekur Rahman, Assistant Professor, Department of CSE**, Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree.

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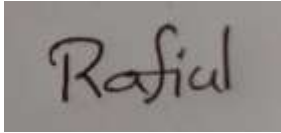
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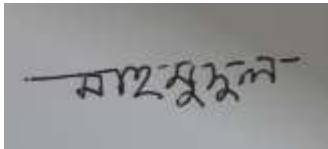


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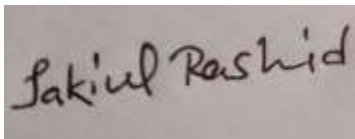


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ACKNOWLEDGEMENT

First, we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes me possible to complete the final year project successfully.

We really grateful and wish our profound our indebtedness to **Md. Sadekur Rahman, Assistant Professor, Department of CSE** Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of web development influenced us to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Dr. Touhid Bhuiyan, Head, Department of CSE**, Daffodil International University, Dhaka, and for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support of our parents.

ABSTRACT

In this day's people need to go many places in same day. Many working professionals, students, businessman, entrepreneurs need to go to different locations in Dhaka in a day for their tasks. Usually, they use ride sharing apps or hire a taxi cap and have to pay extra for waiting in a place. This is an expensive option to commute. It is more reliable and safer for a **self-drive car in Dhaka**. You do not need to worry about waiting charges and you use the car as much as you need. You can explore Dhaka after work at your leisure. People may need to go outside the city or various places in the route. But there is no option to do that without own car. We would like to drive different to different locations with different people. We want different types of environment while traveling. When we are with friends, we want to do some fun, with family we want privacy, spacious and safety. The ride sharing company's driver are busy to finish the trip driving unsafely and breaking the driving rules. When we want a small refreshment with our school friends and our relatives but the seat capacity is lower because driver himself wasting a seat. We also have social pressure of buying a car. To solve this kind of problem we have developed a project which name is **OwnCar**. **Owncar** is solving the problem by making online **self-drive car** booking system in Dhaka affordable.

OwnCar is an online platform where people can hire a car and drive themselves. You can book a self drive car at your fingertips using OwnCar. **Owncar** have given freedom and privacy to the customers. Customers don't need t worry about drivers' salary, garage fee, maintenance cost. **Owncar** has made the car driving very affordable and convenience.

TABLE OF CONTENTS

CONTENT	PAGE NO
Board of examiners	i
Declaration	iii
Acknowledgements	v
Abstract	vi

CHAPTER	PAGE NO
CHAPTER 01: INTRODUCTION	1-3
1.1 Introduction	01
1.2 Motivation	01
1.3 Objectives	02
1.4 Expected Outcome	02
1.5 Report Layout	03
CHAPTER 02: BACKGROUND	4-6
2.1 Introduction	04
2.2 Related Works	04
2.3 Comparative Studies	04
2.4 Scope of the Problem	06
2.5 Challenges	06
CHAPTER 03: REQUIREMENT SPECIFICATION	7-18
3.1 Business Process Modeling	07
3.2 Requirement Collection and Analysis	07
3.3 Use Case Modeling and Description	08
3.4 Logical Data Model	14

3.5 Design Requirements	14
3.6 Gantt Chart	16
3.7 Sequence Diagram	17
3.8 Data Flow Diagram	18
CHAPTER 04: DESIGN SPECIFICATION	19-22
4.1 Front-end Design	19
4.2 Back-end Design	20
4.3 Interaction Design and UX	21
4.4 Implementation Requirements	22
CHAPTER 05: IMPLEMENTATION AND TESTING	23-37
5.1 Implementation of Database	23
5.2 Implementation of Front-end Design	25
5.3 Implementation of Interactions	36
5.4 Testing Implementation	36
5.5 Test Results and Reports	37
CHAPTER 6: CONCLUSION AND FUTURE SCOPE	38-40
6.1 Discussion and Conclusion	38
6.2 Scope for Further Developments	38
6.3 Limitations	39
REFERENCES	40
APPENDIX	41

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.1: BPM of how a User Post a Booking in this System.	07
Figure 3.2: Use Case Diagram of System	10
Figure 3.3: Class Diagram	14
Figure 3.4: Flow chart of the system.	15
Figure 3.5: Gantt Chart	16
Figure 3.6: Sequence Diagram	17
Figure 3.7: Data Flow Diagram	18
Figure 4.1: Request lifecycle	20
Figure 4.2: System DBMS tables	21
Figure 4.3: The 7 Factors that Influence User Experience	21
Figure 5.1: Implementation of users table	23
Figure 5.2: Implementation of booking table	23
Figure 5.3: Implementation of cars table	23
Figure 5.4: Implementation of brand table	24
Figure 5.5: Implementation of pages table	24
Figure 5.6: Implementation of feedback table	24
Figure 5.7: Implementation of subscriber table	24
Figure 5.8: Home page	25
Figure 5.9: User Registration Page	26

Figure 5.10: User Login Page	27
Figure 5.11: User Dashboard	27
Figure 5.12: Admin Dashboard	28
Figure 5.13: Manage Booking Page	29
Figure 5.14: User Post a booking request Page	29
Figure 5.15: Users Previous Booking	30
Figure 5.16: Testimonial Page	30
Figure 5.17: Contact and Query Page	31
Figure 5.18: Car List Page	31
Figure 5.19: All User Page	32
Figure 5.20: Add Vehicle Page	32
Figure 5.21: All Case List Page	33
Figure 5.22: Page Details Manager Page	33
Figure 5.23: Contact Details Update Page	34
Figure 5.24: Admin Car Brand Manage page.	34
Figure 5.25: Admin Subscriber Manage page.	35
Figure 5.26: Admin Manage Queries page.	35

CHAPTER 01

Introduction

1.1 Introduction

The capital of Bangladesh, Dhaka is a city which never sleeps. People are busy doing their tasks in a day. It has many entertainment and shopping options.

The biggest problem in Dhaka is people cannot commute easily. Traffic jam is a major problem in this city and it kills time every single day. If you have a self-drive car then you can use the most of our time. If you need a car but do not plan to buy then OwnCar is the best solution to rent and drive a car yourself. OwnCar allows you to book a self-drive car easily online.

1.2 Motivation

Behind building this system there are many things that motivated us. We love road trip and we just don't like reaching the destination rather enjoy the journey and especially road trip outside the Dhaka city. We want that, anywhere anytime for any reason we can stop and live that moment. But we can't do that in any ride sharing app and we don't have our own car. We wanted to feel the pleasure of driving a whole new wide range of cars for our different moods. No company provides the chance to drive our own.

People may need to go outside the city or various places in the route. But there is no option to do that without own car.

We want different types of environment while traveling. When we are with friends, we want to do some fun, with family we want privacy, spacious and safety. The ride sharing company's driver are busy to finish the trip driving unsafely and breaking the driving rules. When we want a small refreshment with our school friends and our relatives but the seat capacity is lower because driver himself wasting a seat.

According to the information of BTRC that the total number of internet users has reached 80.829 million [1] so we thought if we make an online platform from where a user can easily find a self-

drive car. Finally, we had been an enthusiast of making something for the mobile platform. From our love, endeavor, desperation, enthusiasm towards web app development using most advanced php framework Laravel considered a good reason we concentrated on this project.

1.3 Objectives

The objectives of our project are point out below.

- To solve Bangladesh's urban commuting problem.
- To solve traffic jam problem by increasing 20% more usage of car's capacity.
- To remove the social pressure of buying a car.
- To ensure a stress-free car booking experience.
- To save transportation cost.
- To provide dependable and readily available transportation service.
- To save time.

1.4 Expected Outcome

OwnCar is an online platform that not only saves time but also gives fast outcomes. The transportation expense will be lower. It will decrease the traffic jam. People won't feel the pressure of buying new car. It can solve the urban commuting problem in our country basically in Dhaka. It can be a profitable business. The company can be listed in fortune 500 company.

By using this platform, a client can easily choose a car and drive himself.

This system has following features:

- Client can easily choose a car.
- Client can get his/her desired car within a short time.
- Client can hire a car through online based on cars expertise.
- At first no Need to communicate physically.
- They can give feedback each other after a complete ride.

1.5 Report Layout

The report is divided into five chapters. Each chapter deals with the different aspects of "OwnCar- self-drive car in Dhaka". Each chapter has various parts explaining in detail.

- **Chapter 1: Introduction**

This chapter discusses the important theoretical concepts behind our project. Here also discusses our project motivation, objectives and expected outcomes.

- **Chapter 2: Background**

This chapter discusses our project related works, comparative studies and scope of the problem.

- **Chapter 3: Requirement Specification**

This chapter discusses our project Business Process Modeling, requirement collection and analysis, use case modeling and description, logical data model and design requirements.

- **Chapter 4: Design Specification**

This chapter discusses our project front-end design, back-end design, interaction design and UX and implementation requirements.

- **Chapter 5: Implementation and Testing**

This chapter discusses about the Implementation of database, front-end design, interactions, testing. Also discuss about test results and reports.

- **Chapter 6: Conclusion and Future Scope**

This chapter discusses about the conclusion and future scope of our project.

CHAPTER 02

Background

2.1 Introduction

OwnCar is an online-based web Application. In this chapter we have compared the existing web application and services with our web application. Future scope of the application is explained here. Our target and the challenges we faced to build this system are described here.

2.2 Related Works

Some web applications are to book a car to rent by using website but none of them are giving car to drive by user. The other web applications based on specific car rent company. Our web application fully focuses on user's problem to hire their desired car for driving. Any services provide to hire a car online they just show the car details and we have make this process online. We are giving the opportunity to drive car themselves.

2.3 Comparative Studies

OwnCar is a web application based on car rent management for drive themselves system. There are several web applications on this type of management. Using those web applications anyone can rent car from home. OwnCar particularly shaped to make users hassle free. The other available web applications are not work for Bangladeshi people.

2.3.1 Comparison with related applications

A comparative analysis of some related applications is shown in table 2.1.

Table 2.1: Comparative analysis Table

	sheba.xyz/ car-rental	garivara. com.bd	Uber	OwnCar
1. User Registration	Yes	Yes	Yes	Yes
2. Edit Profile	Yes	Yes	Yes	Yes
3. Book Car	Yes	Yes	Yes	Yes
4. User can choice car	No	No	No	Yes
5. Drive by user	No	No	No	Yes
6. Need mobile verification	No	No	Yes	Yes
7. Need email verification	Yes	Yes	Yes	Yes
8. User can add driving license	No	No	No	Yes
9. Previous booking history	Yes	Yes	Yes	Yes
10. After finishing ride user can give feedback	Yes	Yes	Yes	Yes
11. Admin can add users	Maybe	Maybe	Maybe	Yes
12. Admin add cars	Maybe	Maybe	Maybe	Yes
13. Admin verify user	Yes	Yes	Yes	Yes
14. Admin see full statistics	Maybe	Maybe	Maybe	Yes

2.4 Scope of the Problem

We have collected requirements to build the system. We have followed software development process and completed each part one after another. We have planned for a long month. Planning and time management to build OwnCar is given below.

2.4.1 Time Scheduling

The time scheduling of our project is shown in table 2.2.

Table 2.2: Time Scheduling

Planning	1 Month
Design and Analysis	1 Weeks
Coding	5 Month and 2 Weeks
Testing and Implementation	1 Month
Total	8 Month and 2 Weeks

The Scope is Application Module. OwnCar has 2 Modules. User and Admin.

2.4.2 Target of our Project

To solve such problems to make smoother scheme user to rent a car and drive safely.

2.5 Challenges

The most challenging part was building order system in both user and admin parts. Data synchronization was also taking time to plan. To design the database for the whole system was challenging task.

CHAPTER 03

Requirement Specification

3.1 Business Process Modeling

Business process modeling in business process management and systems engineering is the activity of representing processes of an enterprise, so that the current process may be analyzed, improved, and automated [2]. BPM of OwnCar shown in figure 3.1.

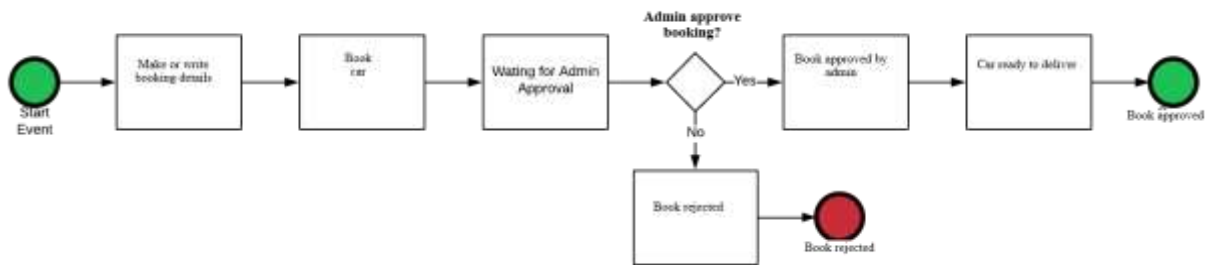


Figure 3.1: Business Process Model of how a User Post a booking in this System.

3.2 Requirement Collection and Analysis

3.2.1 Software Requirements

To develop this application, we used following Software Requirements:

- Operating System: Windows 8.1, Windows 10.
- System Design: Visio, draw.io, Lucidchart.
- Language: HTML5, CSS3, JavaScript, JQuery, Ajax, PHP, Laravel.
- Database: Mysql.
- Tools: PhpStorm, Sublime Text 3.
- Debugger: The Laravel Debugger by Barry vd Heuvel.
- Internet Browsers: Microsoft Edge, Firefox, Chrome.

Software Requirements, for running the application:

- Operating System: Any Operating System because it is a Web Application.

- Network: Wi-Fi or Cellular Network
- Compatible Browsers: Microsoft Edge, IE10, IE11, Firefox, Safari, Opera, Chrome.

3.2.2 Hardware Requirements

To develop this application, we need the following Hardware Requirements:

- Processor: Intel Core I3
- RAM: 4GB
- Space on disk: minimum 10GB

3.2.3 Functional Requirements

- Graphical User interface which the application user.
- Give ease of understanding to the application through Wi-Fi or cellular network MySQL that stores the data or information to be displayed to the user.

3.3 Use Case Modeling and Description

3.3.1 System Model

- User Module
- Admin Module

User Module

Users can do these tasks in this web application.

i. Registration

Users registers them in the system by email verification.

ii. Login

After registration users can login into the system.

iii. Mobile Number Verification

After login to the system users need to verify his/her mobile number.

iv. Edit Profile

Users can edit his/her profile.

v. Booking Car

Users can post his/her booking into the system.

vi. Comment

User can also comment on booking.

vii. Feedback

After complete work user can give feedback and rating.

Admin Module

Admin can perform the below operation in this web application.

i. Login

Admin can login into the system.

ii. System Statistics

Admin sees the system statics. Open for total cars, total users, total bookings, recent bookings and recent comments

iii. Add Cars

Admin can add cars.

iv. Add Announcements

Admin can add announcements users.

v. Manage Users

Admin can see all users of this system also can approve, disapprove users.

vi. Add User

Admin can add any types of user.

vii. Manage Bookings

Admin can see all bookings list also can verify booking, unverified booking, edit booking and delete booking.

3.3.2 Use Case Diagram and Description

A use case diagram is a graphic depiction of the interactions among the elements of a system [3]. Figure 3.2 shown OwnCar system use case diagram.

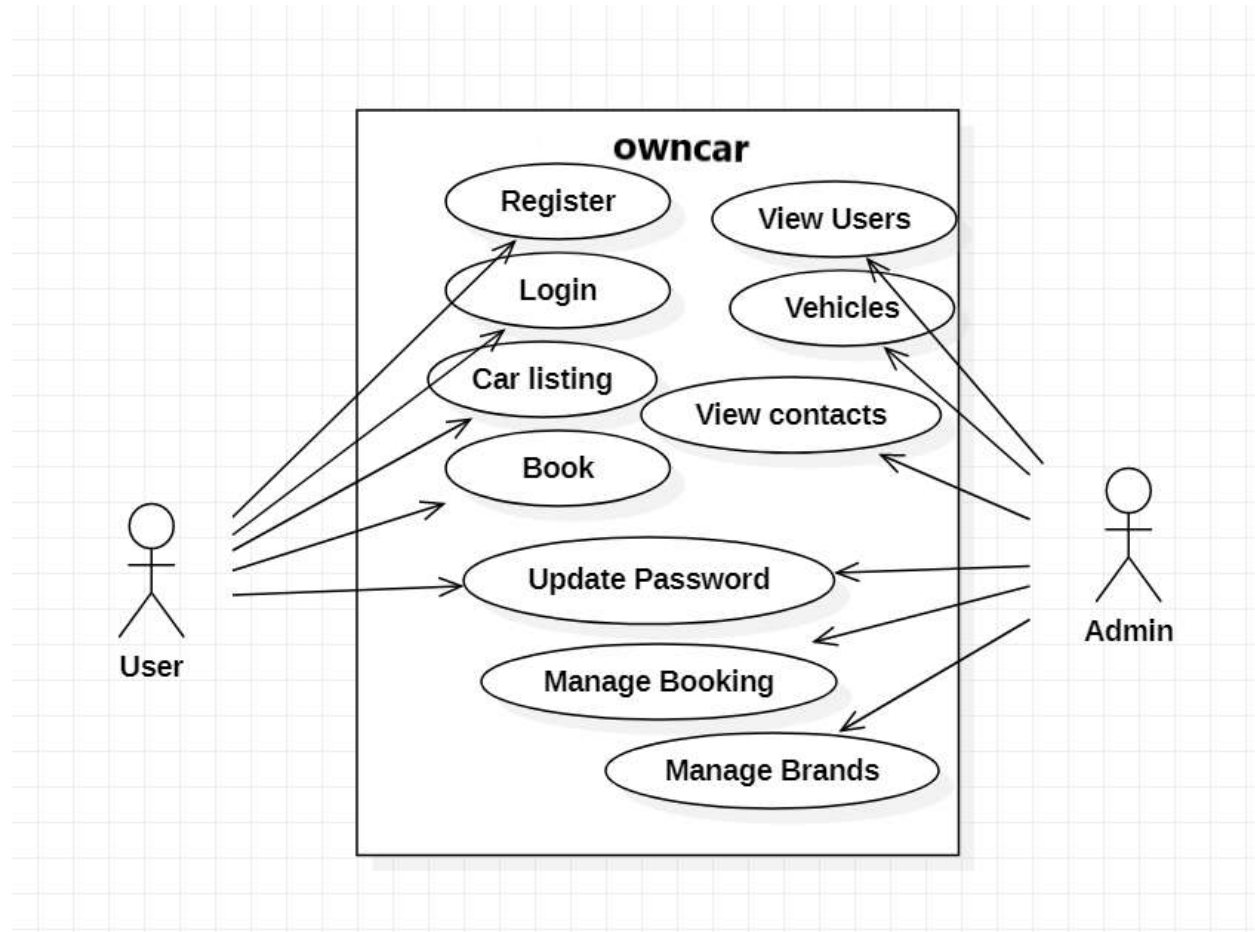


Figure 3.2: Use Case Diagram of the system.

Actor User

Flow of steps

- a) This Use case starts when a user enters the system.
- b) User can edit his/her profile, booking car, give feedback and rating.

i. Register

Brief Description: User can register the system

Actor: User

Flow of steps

- a) This use case starts when a user registered the system.

ii. Update Profile

Brief Description: User can update his/her profile information.

Actor: User

Flow of steps

- a) This use case starts when a user login to the system.
- b) User sees profile information and update profile information.

iii. Booking

Brief Description: User can rent car.

Actor: User

Flow of steps

- a) This use case starts when a user login to the system.
- b) User can post booking but to publish booking need to admin approval.

iv. Car Listing

Brief Description: User can see car list.

Actor: User

Flow of steps

- a) This use case starts when a user login to the system.
- b) User can see car list. User can book car from there.

v. Give Feedback

Brief Description: User can give feedback.

Actor: User

Flow of steps

- a) This use case starts when a user login to the system.
- b) User can give feedback after successfully complete his drive.

Actor Admin

Login with given id and password

Flow of steps

- a) Admin can control the system by login to the system.
- b) Admin can manage users, car order and see the full system statistic.

i. Add User

Brief Description: Admin can add user.

Actor: Admin

Flow of steps

- a) This use case starts when an admin login to the system.
- b) Admin can add any type of user to the system.

ii. Edit User

Brief Description: Admin can Edit user.

Actor: Admin

Flow of steps

- a) This use case starts when an admin login to the system.
- b) Admin can update existing user information.

v. Add Vehicles

Brief Description: Admin can add vehicles.

Actor: Admin

Flow of steps

- a) This use case starts when an admin login to the system.

- b) Admin can add new vehicles and can see details of vehicle.

vi. Manage Booking

Brief Description: Admin can see booking.

Actor: Admin

Flow of steps

- a) This use case starts when an admin login to the system.
- b) Admin can see and update existing booking.

vii. Approve booking

Brief Description: Admin can approve booking.

Actor: Admin

Flow of steps

- a) This use case starts when an admin login to the system.
- b) Admin can approve booking when client post a booking.
- c) Admin also can disapprove booking.

viii. Manage Brands

Brief Description: Admin can add or delete a brand.

Actor: Admin

Flow of steps

- a) This use case starts when an admin login to the system.
- b) Admin can edit car brands.

3.4 Class Diagram

The Class Diagram of OwnCar is shown in figure 3.3.

Class Diagram

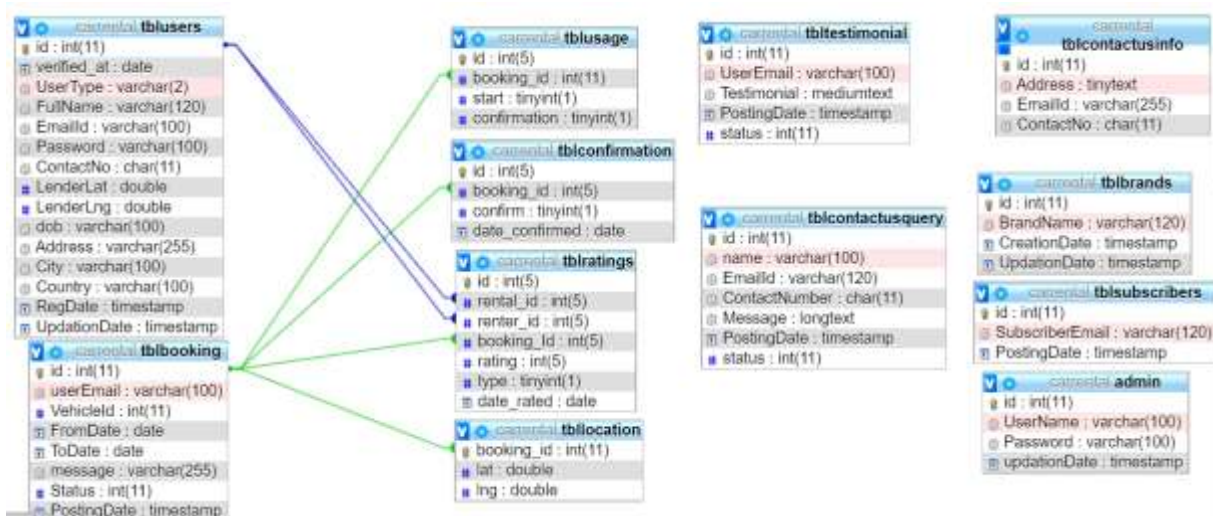


Figure 3.3: Class Diagram

3.5 Design Requirements

While designing the system of our web application. We have considered the goals that our system is going to be achieved. We make the system very simple and flexible to the users. We have focused to build a good system so that we need to maintenance less. The following figure 3.4 is the flow chart of how we have designed this system.

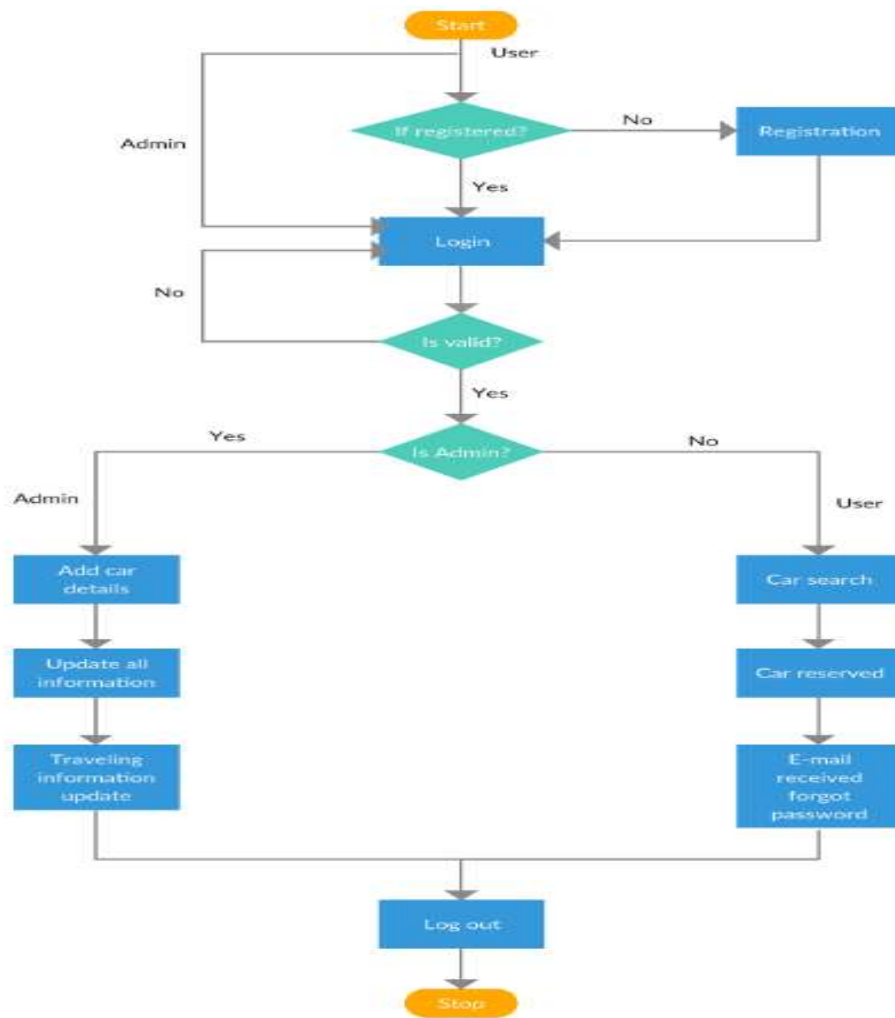


Figure 3.4: Flow chart of the system.

3.6 Gantt Chart

The following figure 3.5 is the flow chart of gantt chart we have designed this system.

Weeks Tasks	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
Coding	█	█							
System Design			█	█					
Requirement Analysis				█	█	█			
Testing & Debugging						█	█		
Installation								█	
User Training								█	█
Application Development	█	█	█	█	█	█	█	█	█

Figure 3.5: Gantt Chart

3.7 Sequence Diagram

The following figure 3.6 is the flow chart of sequence diagram of this system.

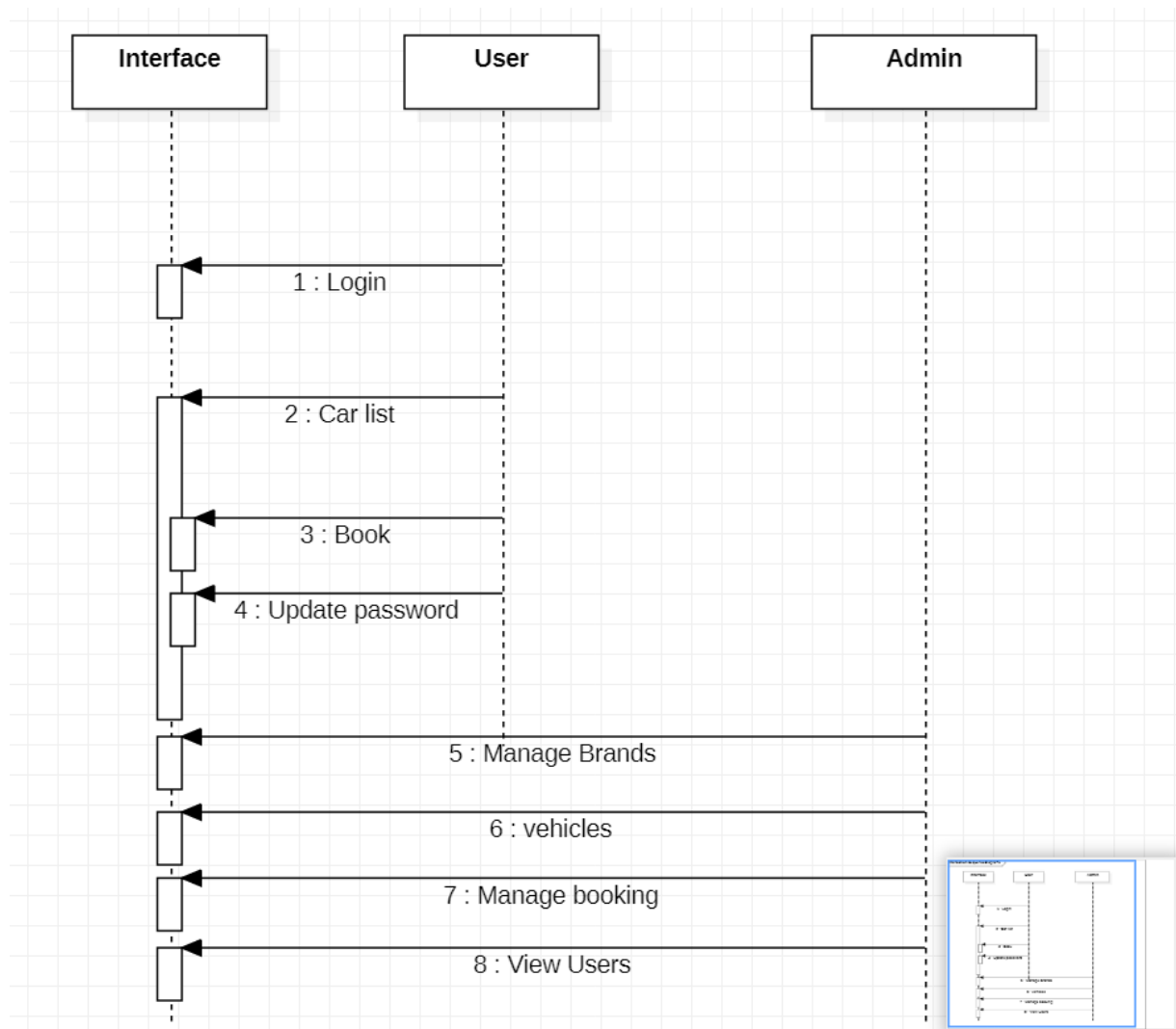


Figure 3.6: Sequence Diagram

3.8 Data Flow Diagram

The following figure 3.7 is the flow chart of data flow diagram

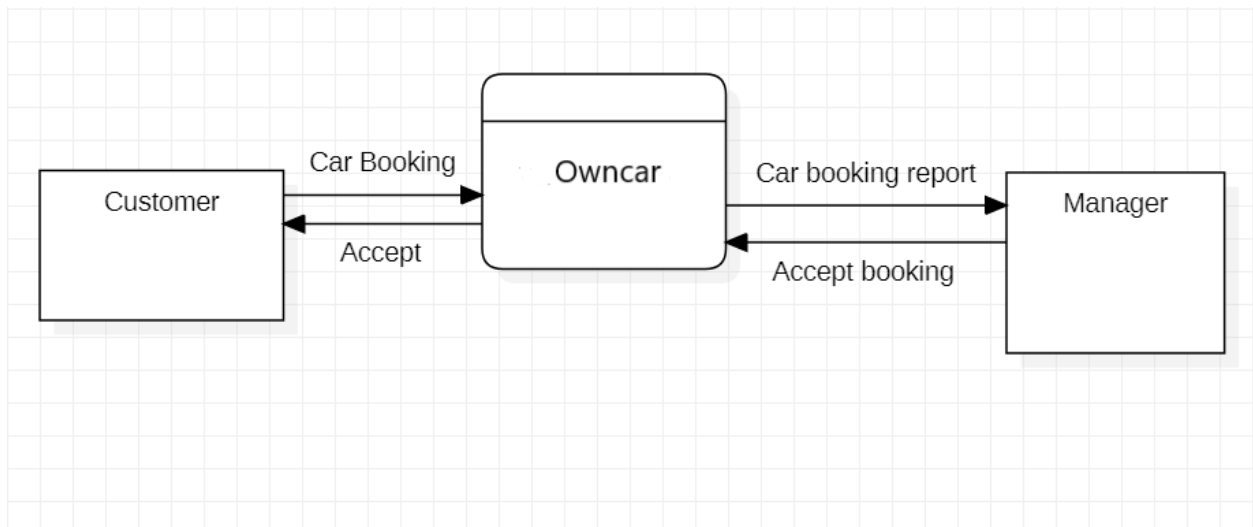


Figure 1.7: Data Flow Diagram

CHAPTER 04

Design Specification

4.1 Front-end Design

Front-end Design is the main attraction of an application. It also should be user-friendly. Our application we designed a beautiful front-end Design. We also try to design user-friendly. In front-end design, our Application has following screen shown in Table 4.1.

Table 4.1: Activity list of the system

1. User Registration Screen
2. User Login Screen
3. User Dashboard Screen
4. User My Booking Screen
5. User Feedback Screen
6. User About Us Screen
7. User Car Listing Screen
8. User FAQS Screen
9. User Contact Us Screen
10. User Privacy Screen
11. User Review Screen
12. User Terms of Use Screen
13. Admin Login Screen
14. Admin Dashboard Screen
15. Admin Create Brand Screen
16. Admin Manage Brand Screen
17. Admin Post Vehicle Screen

18. Admin Manage Vehicle Screen
19. Admin Manage Booking Screen
20. Admin Manage Testimonials Screen
21. Admin Manage Query Screen
22. Admin Reg Users Screen
23. Admin Manage Pages Screen
24. Admin Update Contact Info Screen
25. Admin Manage Subscribers Screen

4.2 Back-end Design

Our Web Application is Dynamic this function works by using the internet. In back-end, design used database. The internet is a most important role in our application. The user has none access to Back-End Design.

The following figure 4.1 [4] shows how user get output form back-end database.

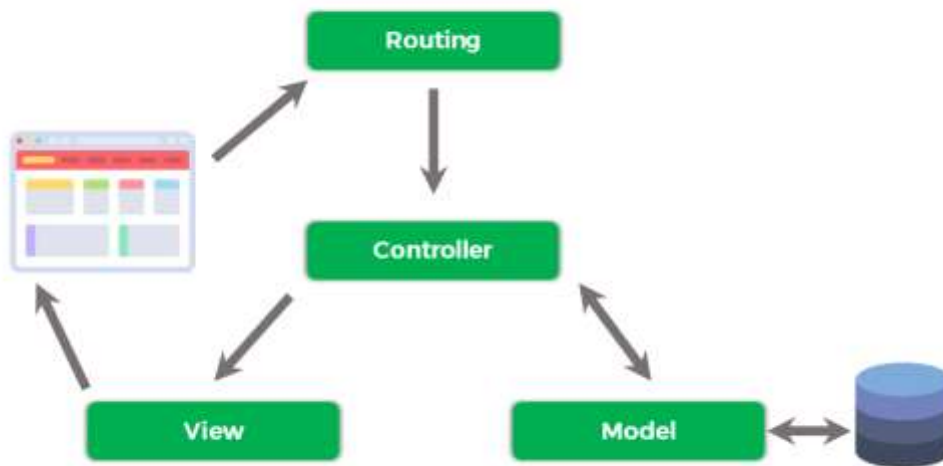


Figure 4.1: Request lifecycle [4].

DBMS tables: The following figure 4.2 shown OwnCar DBMS table.

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> admin	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> tblbooking	★ Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> tblbrands	★ Browse Structure Search Insert Empty Drop	6	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> tblcontactusinfo	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> tblcontactusquery	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> tblpages	★ Browse Structure Search Insert Empty Drop	4	MyISAM	latin1_swedish_ci	8.7 KiB	-
<input type="checkbox"/> tblsubscribers	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> tbltestimonial	★ Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> tblusers	★ Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> tblvehicles	★ Browse Structure Search Insert Empty Drop	5	InnoDB	latin1_swedish_ci	16 KiB	-
10 tables	Sum	28	InnoDB	latin1_swedish_ci	152.7 KiB	0 B

Figure 4.2: System DBMS tables

4.3 Interaction Design and UX

User Experience (UX) is critical to the success or failure of a product in the market. Interaction Design is most important part of User Experience (UX) design. An application fruition depends on User satisfaction. How an application is more attractive to the user is depends on interaction and Design part. In our web application, we used the useful model of Interactive design.

The following figure 4.2 [5] shows There are 7 factors that describe user experience, according to Peter Morville.

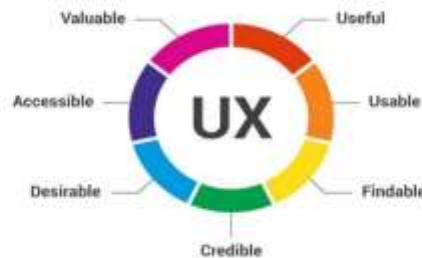


Figure 4.3: The 7 Factors that Influence User Experience [5].

Home Screen Interaction Design and UX:

We have designed our Home Screen which is linked with login page and registration page. When the application is open to the user, they show home page. User are two types in our system user and admin. If the user has login id and password, he/she can easily login into the system by click

on the Login button. If user don't have id or password, they must registration in the system as a user.

Dashboard Screen Interaction Design and UX:

We design Dashboard screen for every user. In user dashboard, they can see their profile, edit profile, my booking, car listing, contact, reviews.

In admin dashboard, admin can see the full system statistics, total booking, total reg users, running booking, add brands, add vehicle, vehicle list, all booking list, subscribers list.

Book Now Interaction Design and UX:

In User dashboard, user see a button which name is Book Now. By clicking the button user need to add all specific information about his booking and finally submit the request by clicking on the book now button.

4.4 Implementation Requirements

Implementation Requirement is given below:

1. PhpStorm
2. Sublime Text 3
3. HTML5
4. CSS3
5. JQuery
6. JavaScript
7. Ajax
8. PHP OOP Programming
9. Laravel
10. MySQL

CHAPTER 05

Implementation and Testing

5.1 Implementation of Database

To build this system one DBMS (MySQL) were used. MySQL for storing data to the server. Some screenshots of the system database are shown in figure 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7:

id	FullName	Email	Password	ContactNo	drch	Address	City	Country	RegDate	UpdateDate
1	Md. Rafiq Huda	rafid15-3258@diu.edu.bd	B25916a2754e5e1375d658e5733251	01748731732	NULL	NULL	NULL	NULL	2020-02-01 01:59:27	2020-02-01 03:02:58
2	masif	masif@gmail.com	B25916a2754e5e1375d658e5733251	0205703354	NULL	NULL	NULL	NULL	2020-06-18 02:09:45	2020-06-27 03:03:09
3	sezar	sezar@gmail.com	039e7988d52e12bba650902bd71621	9999857888	03021900	PKL	PKL	PKL	2020-06-18 02:01:43	2020-06-18 03:07:41
4	protty	test@gmail.com	5e2f5d03754293866715e3e131d13b8	9998057888	PKL	XYZ	XYZ	XYZ	2020-06-18 03:03:38	2020-06-27 01:18:14

Figure 5.1: Implementation of users table

id	userEmail	VehicleId	FromDate	ToDate	message	attachment	Status	PostingDate
1	test@gmail.com	2	22/06/2020	25/06/2020	new car	NULL	1	2020-03-01 02:15:43
2	test@gmail.com	3	30/06/2020	02/07/2020	Lorem ipsum dolor sit amet, consectetur adipiscing...	NULL	2	2020-03-03 02:15:43
3	test@gmail.com	4	02/07/2020	07/07/2020	Lorem ipsum Lorem ipsum Lorem ipsum Lorem...	NULL	0	2020-06-11 03:18:06
4	test@gmail.com	2	3/2/2021	3/2/2021	I need a car.	uploads/star.png	0	2021-01-06 21:27:39

Figure 5.2: Implementation of booking table

id	VehicleId	VehicleOverview	PricePerDay	FuelType	ModelYear	SeatingCapacity	Wregget1	Wregget2	Wregget3	Wregget4	Wregget5	AirCondition
1	ytb100	viewed	800	Petrol	2015	7	knowledge_base.jpg	2017021_14903.jpg	ppocosts-1.jpg	social-icons.png	NULL	NULL
2	Red Ferrari	viewed	800	CNG	2015	4	car_750x430.png	looking-wed-car.png	Seamless.jpg	about_services_640x320	NULL	NULL
3	Lotus sports	viewed	800	CNG	2012	6	Autobid-1.jpg	Autobid-2.jpg	img_200x100.jpg	beding.jpg	NULL	NULL
4	Lotus sports	viewed	800	CNG	2012	6	Autobid-1.jpg	Autobid-2.jpg	Autobid-3.jpg	Autobid-4.jpg	NULL	NULL
5	ytb100	viewed	800	Petrol	2015	7	car_750x430.png	NULL	NULL	NULL	NULL	NULL

Figure 5.3: Implementation of cars table

+ Options

			id	BrandName	CreationDate	UpdateDate
<input type="checkbox"/>				1	Maruti	2020-01-01 22:24:34 2021-01-06 23:28:15
<input type="checkbox"/>				2	BMW	2020-01-01 22:24:50 2021-01-06 23:28:32
<input type="checkbox"/>				3	Audi	2020-01-01 22:25:03 2021-01-06 23:28:49
<input type="checkbox"/>				4	Nissan	2020-01-01 22:25:13 2021-01-06 23:29:11
<input type="checkbox"/>				5	Toyota	2020-01-01 22:25:24 2021-01-06 23:29:25
<input type="checkbox"/>				7	Maruti	2020-01-01 12:22:13 2021-01-06 23:29:40

Figure 5.4: Implementation of brand table

+ Options

				id	PageName	type	detail
<input type="checkbox"/>				1	Terms and Conditions	terms	<P align=justify><FONT color=...
<input type="checkbox"/>				2	Privacy Policy	privacy	<span style="color: rgb(0, 0, 0); font-family: &qu...
<input type="checkbox"/>				3	About Us	aboutus	<span style="color: rgb(0, 0, 0); font-family: &qu...
<input type="checkbox"/>				11	FAQs	faqs	<span style="color: ...

Figure 5.5: Implementation of pages table

+ Options

				id	UserEmail	Testimonial	PostingDate	status
<input type="checkbox"/>				1	test@gmail.com	Test Test	2017-06-18 13:44:31	1
<input type="checkbox"/>				2	test@gmail.com	Lorem ipsum dolor sit amet, consectetur adipiscing...	2017-06-18 13:46:05	1

Figure 5.6: Implementation of feedback table

+ Options

				id	SubscriberEmail	PostingDate
<input type="checkbox"/>				1	anuj.lpu1@gmail.com	2020-06-04 22:35:32
<input type="checkbox"/>				2	rafiulhuda@gmail.com	2021-01-07 18:50:46
<input type="checkbox"/>				3	rafiul15-9258@diu.edu.bd	2021-01-07 18:50:59

Check all With selected: Edit Copy Delete Export

Figure 5.7: Implementation of subscriber table

5.2 Implementation of Front-end Design

For implementing front-end design of the system used HTML5, CSS3, JQuery, JavaScript, Bootstrap and Ajax. The challenge was more when we just implement the screen and there the perfection was the matters for us. There are some front-end screen given below.

5.2.1 Home Page

Home page, shown in figure 5.8, contains all the links to visit in the system and to perform tasks. Login and Registration pages are connected to this page actually other pages links will be shown after login into this system.



Figure 5.8: Home page

5.2.2 Registration Page

Registration is needed to login the main system. From this page user can register as user just fill-up full name, mobile number, email address. Admin registration handle the site owner only. This feature shown in figure 5.9.

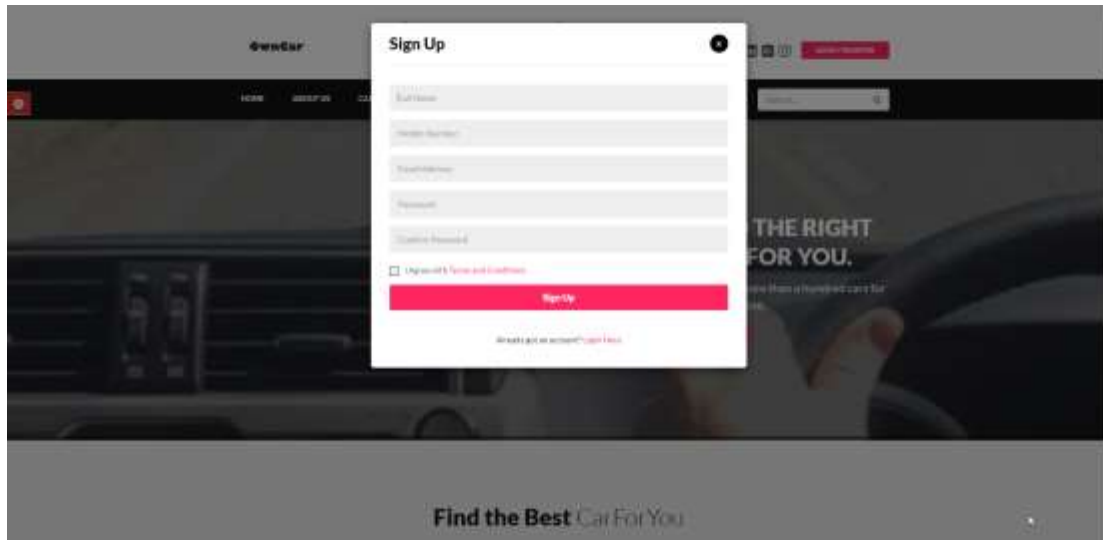


Figure 5.9: User Registration page

5.2.3 Login Page

Login is needed to access the main system. User, Admin and both has the access to enter the main system. No one can access main system without login. If one forgot password then he has to click **forgot password** or if one can registration newly then he has to click **create an account**. After login everyone can see their profile for example: A user can see his profile if he login by his user account details, shown in figure 5.10

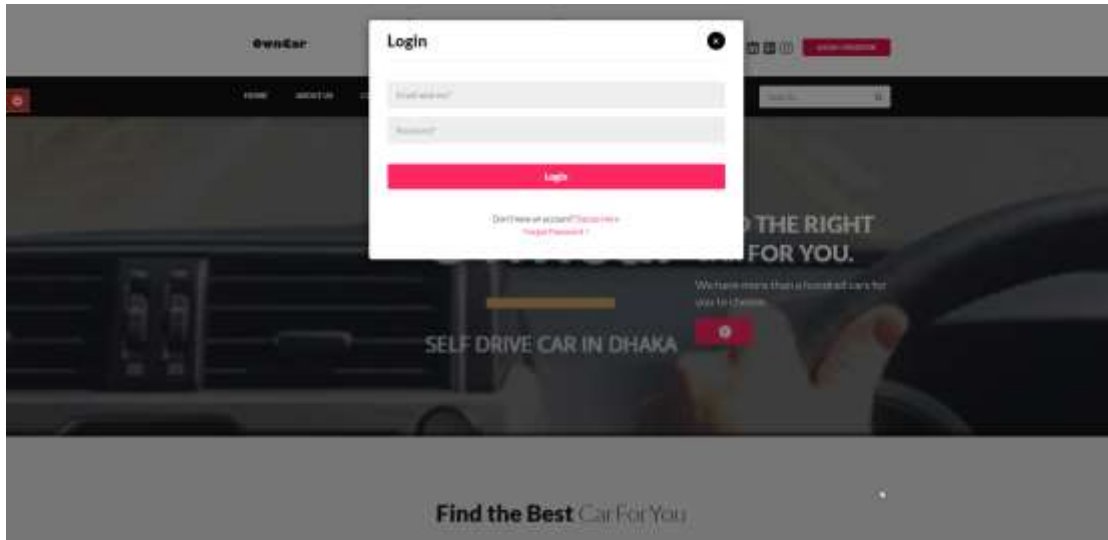


Figure 5.10: User Login Page

5.2.4 User Dashboard Page

After login as client, client can see this page. Dashboard pages is linked with all other internal pages which one is needed for client. In this page on **My Booking** section will show number of open rides, completed ride, number of completed ride and number of pending rides. And the profile percentage section will show the profile is fully completed or not, shown in figure 5.11.



Figure 5.11: User Dashboard

5.2.5 Admin Dashboard Page

After login as admin, admin can see this page. Dashboard pages is linked with all other internal pages which one is needed for admin. In this page admin can see number of total cars, total users, total bookings and total subscriber. Admin can also see recent bookings and recent feedback, shown in figure 5.13.

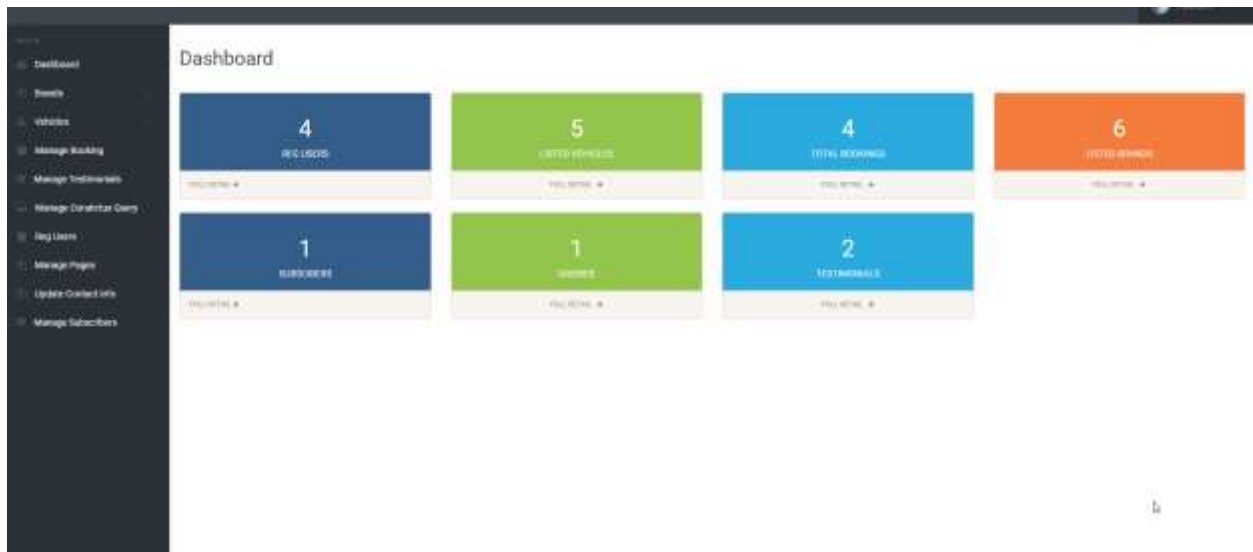
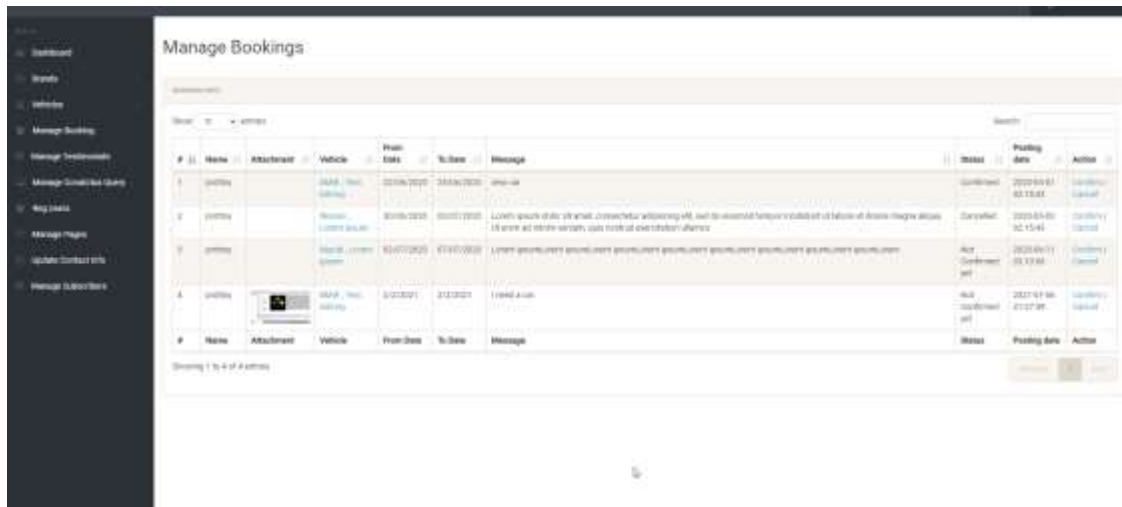


Figure 5.12: Admin Dashboard

5.2.7 Manage Booking Page

After admin login into the system, he/she see booking request in this page, shown in figure 5.14.



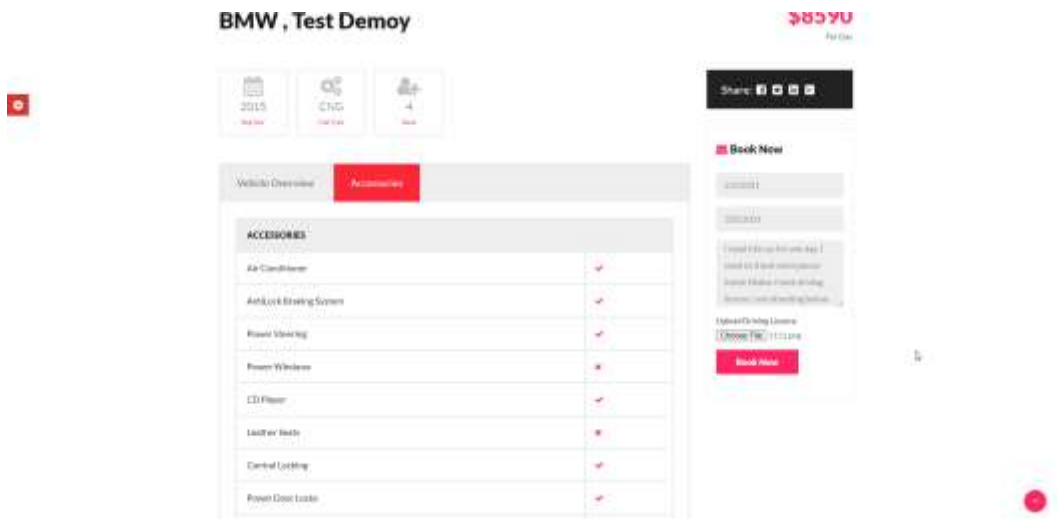
The screenshot shows the 'Manage Bookings' page with a table of booking requests. The table has columns for #, Name, Attachment, Vehicle, From Date, To Date, Message, Status, Booking date, and Action. There are four rows of data.

#	Name	Attachment	Vehicle	From Date	To Date	Message	Status	Booking date	Action
1	jamila		BMW, Test, Delivery	2020-07-20	2020-07-20	BMW	Confirmed	2020-07-20 10:13:00	Confirm / Cancel
2	jamila		BMW, Test, Delivery	2020-07-20	2020-07-20	BMW	Confirmed	2020-07-20 10:13:00	Confirm / Cancel
3	jamila		BMW, Test, Delivery	2020-07-20	2020-07-20	BMW	Confirmed	2020-07-20 10:13:00	Confirm / Cancel
4	jamila		BMW, Test, Delivery	2020-07-20	2020-07-20	BMW	Confirmed	2020-07-20 10:13:00	Confirm / Cancel

Figure 5.13: Manage Booking Page

5.2.8 Post a Booking Page

This page for user. User can post his/her case by fill-up this form from this page, shown in figure 5.15.



The screenshot shows the 'BMW, Test Demo' booking page. It features a 'Book Now' button and a form for selecting accessories. The form has a table with columns for the accessory name and a selection checkbox.

ACCESSORIES	
Air Conditioner	<input checked="" type="checkbox"/>
Anti-Lock Braking System	<input checked="" type="checkbox"/>
Power Steering	<input checked="" type="checkbox"/>
Power Windows	<input checked="" type="checkbox"/>
CD Player	<input checked="" type="checkbox"/>
Leather Seats	<input checked="" type="checkbox"/>
Central Locking	<input checked="" type="checkbox"/>
Power Door Locks	<input checked="" type="checkbox"/>

Figure 5.14: User Post a booking request Page

5.2.9 My Booking Page

This page for User. User can his/her existing booking. Posted booking with booking status complete/pending/ongoing from this page, shown in figure 5.15.

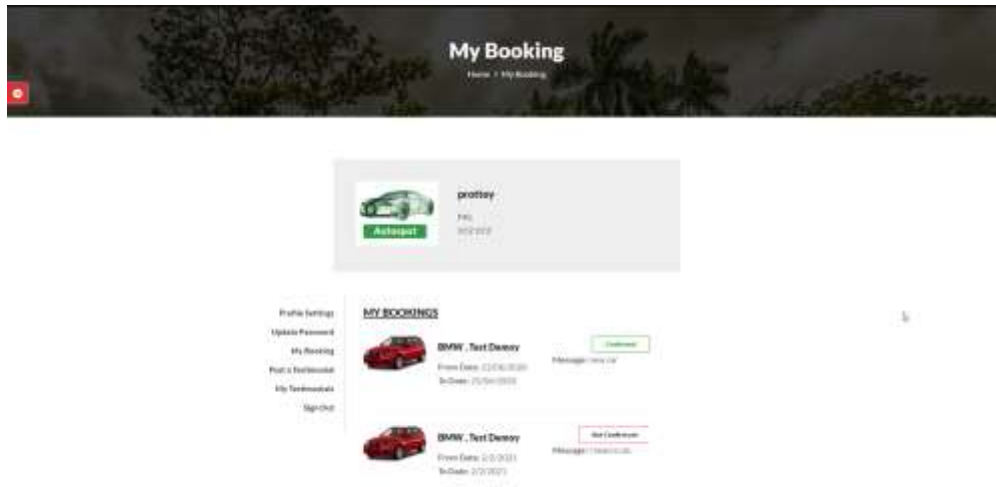


Figure 5.15: Users Previous Booking

5.2.16 Testimonial Page

After completed ride User can submit review which is helpful for future work, shown in figure 5.16.

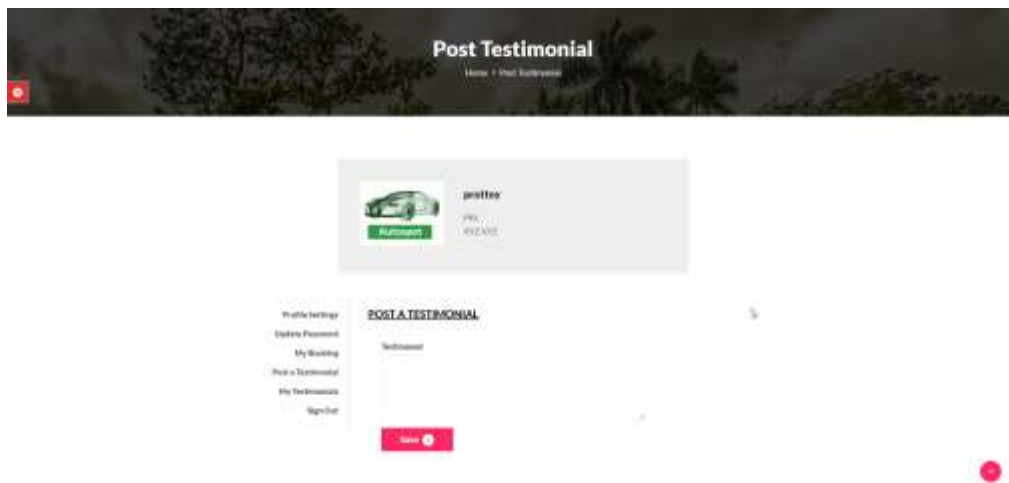


Figure 5.16: Testimonial Page

5.2.16 Contact and Query Page

User can get any query in this page, shown in figure 5.17.

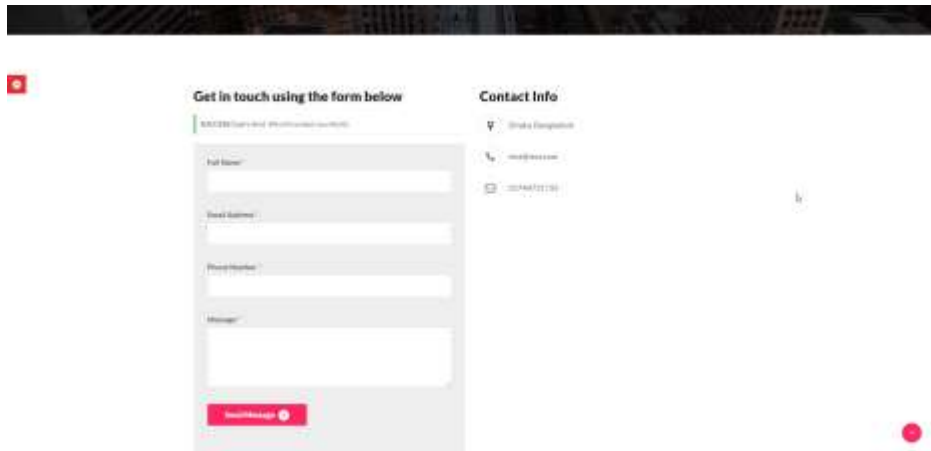


Figure 5.17: Contact and Query Page

5.2.16 Car List Page

From this page user can see all cars here, shown in figure 5.18.

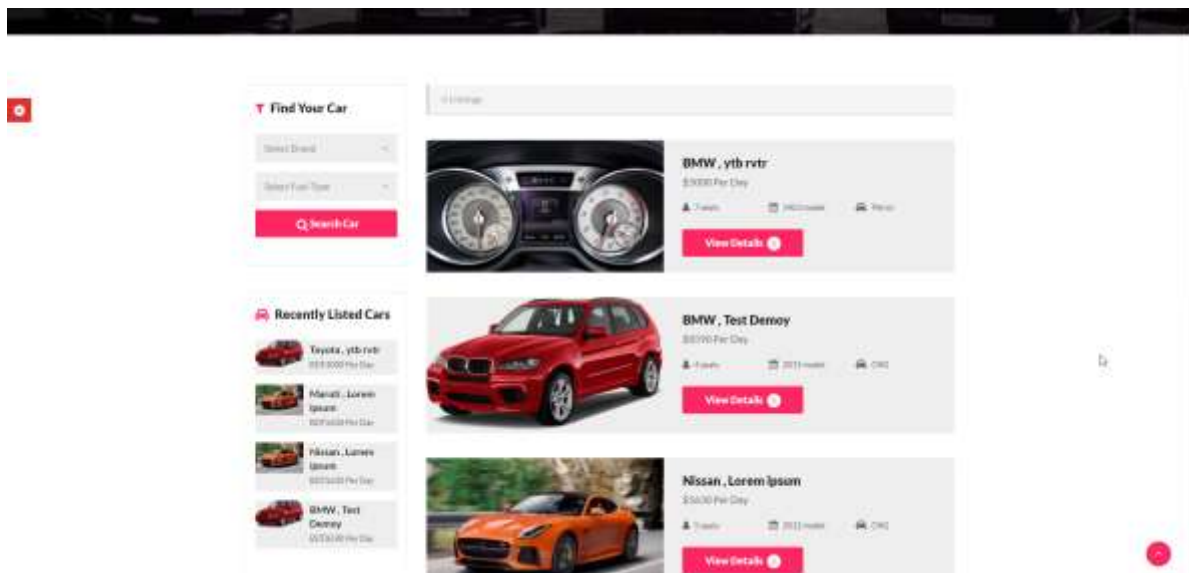
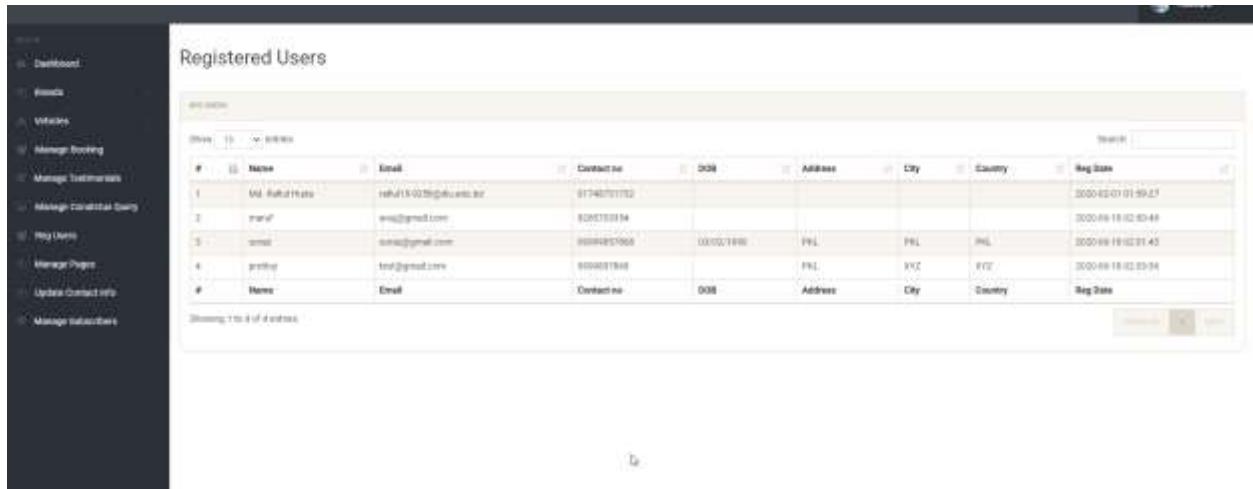


Figure 5.18: Car List Page

5.2.18 Admin All User Page

From this page admin can see all users here, shown in figure 5.19.



The screenshot shows the 'Registered Users' page in an admin dashboard. It features a table with columns for #, Name, Email, Contact no, DOB, Address, City, Country, and Reg Date. The table contains four rows of user data. A sidebar on the left lists various admin functions like Dashboard, Events, Vehicles, etc.

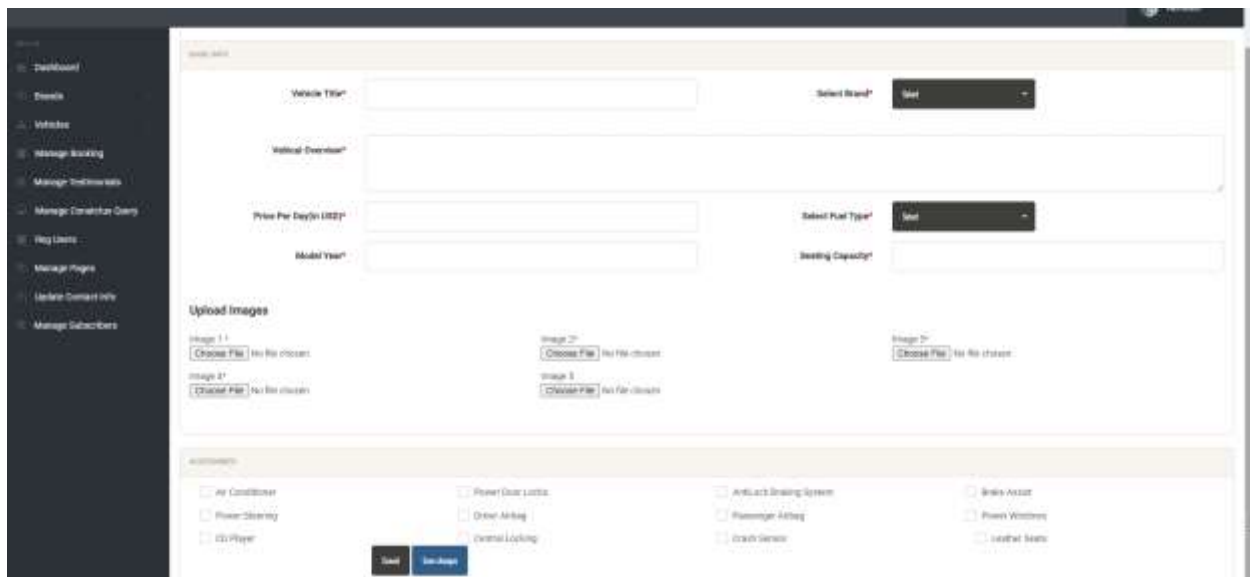
#	Name	Email	Contact no	DOB	Address	City	Country	Reg Date
1	Md. Rashed Hossain	rashed11003@gmail.com	81748711752					2020-02-07 01:59:27
2	manaf	manaf@gmail.com	806733334					2020-08-18 02:03:49
3	amal	amal@gmail.com	8064857968	00/00/1990	PHL	PHL	PHL	2020-08-18 02:31:43
4	prithvi	prith@gmail.com	8060818348		PHL	XYZ	XYZ	2020-08-18 02:03:34

S

Figure 5.19: All User Page

5.2.19 Admin Add Vehicle Page

From this page admin can add cars and details, shown in figure 5.28



The screenshot shows the 'Add Vehicle' page in an admin dashboard. It features a form with fields for Vehicle Title, Select Brand, Vehicle Overview, Price Per Day (in USD), Model Year, Select Fuel Type, and Seating Capacity. There are also sections for uploading images (Image 1, 2, 3) and a list of optional features like Air Conditioner, Power Door Locks, Anti-Lock Braking System, etc.

. Figure 5.20: Add Vehicle Page

5.2.20 Admin Booking List Page

From this page admin can see all case lists and can manage form here, shown in figure 5.29

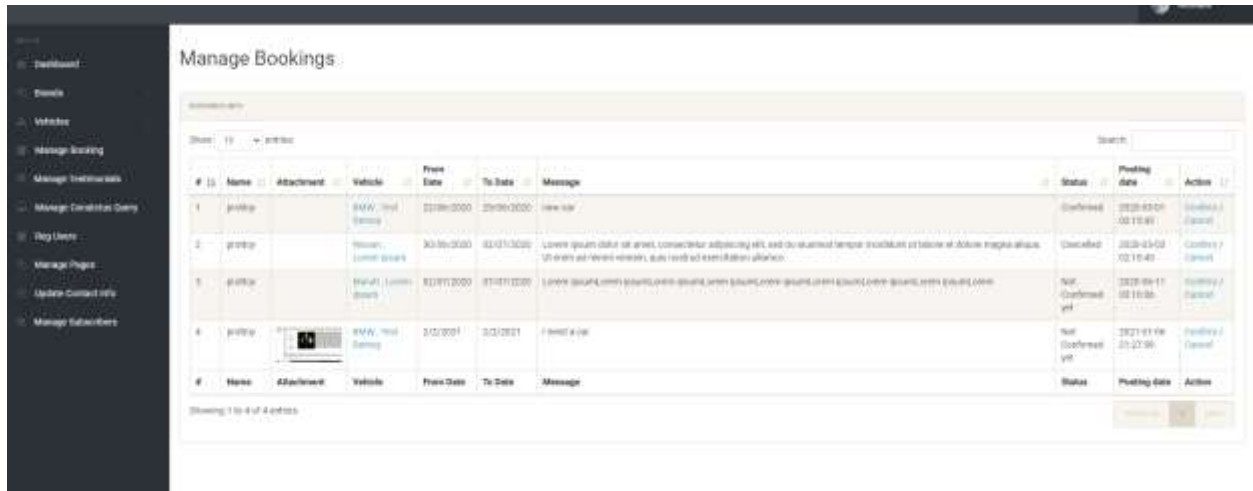


Figure 5.21: All Case List Page

5.2.21 Admin Page Manager

From this page admin can update terms and condition, FAQ, about us and Contact details, shown in figure 5.30

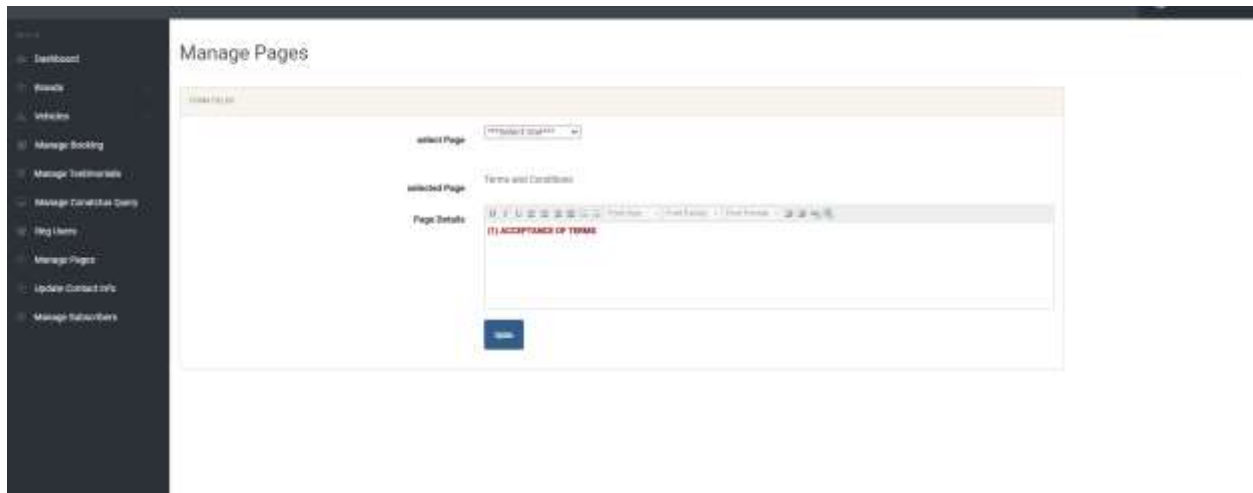


Figure 5.22: Page Details Manager Page

5.2.21 Admin Contact Details Update Page

Admin can update contact details in this page.

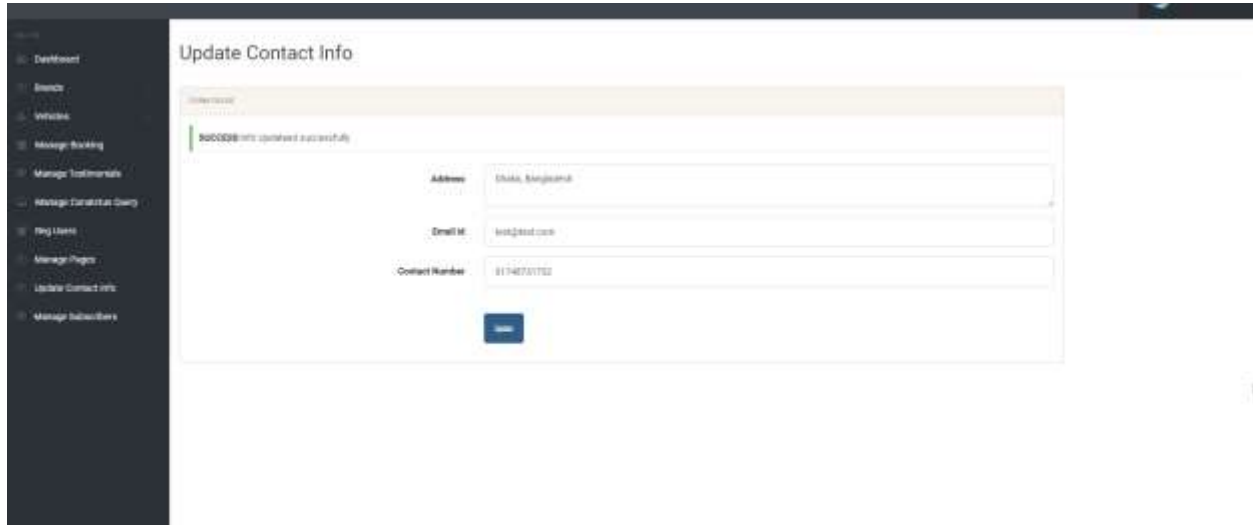


Figure 5.23: Contact Details Update Page

5.2.21 Admin Manage Car Brand Page

Admin can manage car brands here.

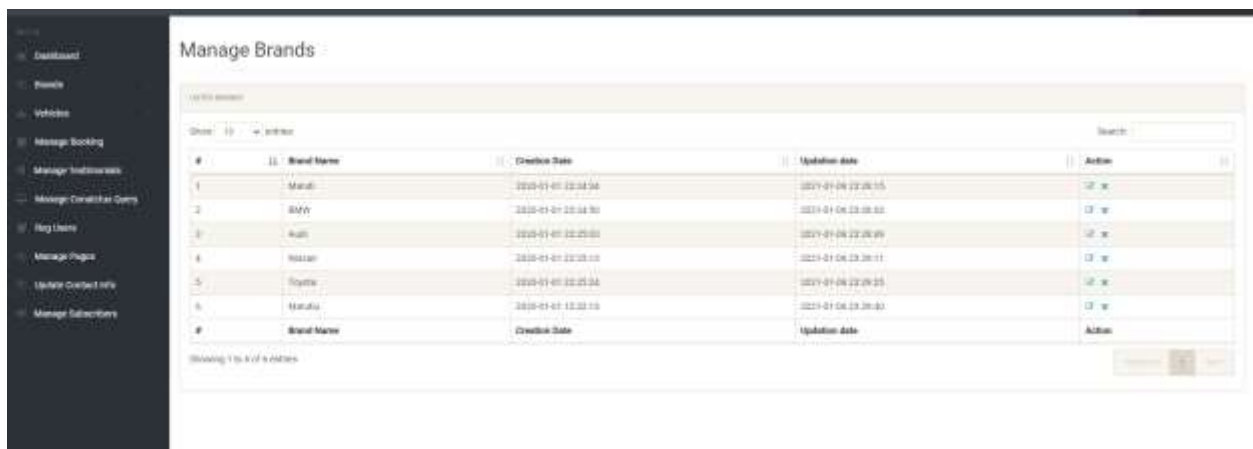


Figure 5.24: Admin Car Brand Manage page.

5.2.21 Admin Subscriber Page

Admin can see all the subscribers list and email addresses.

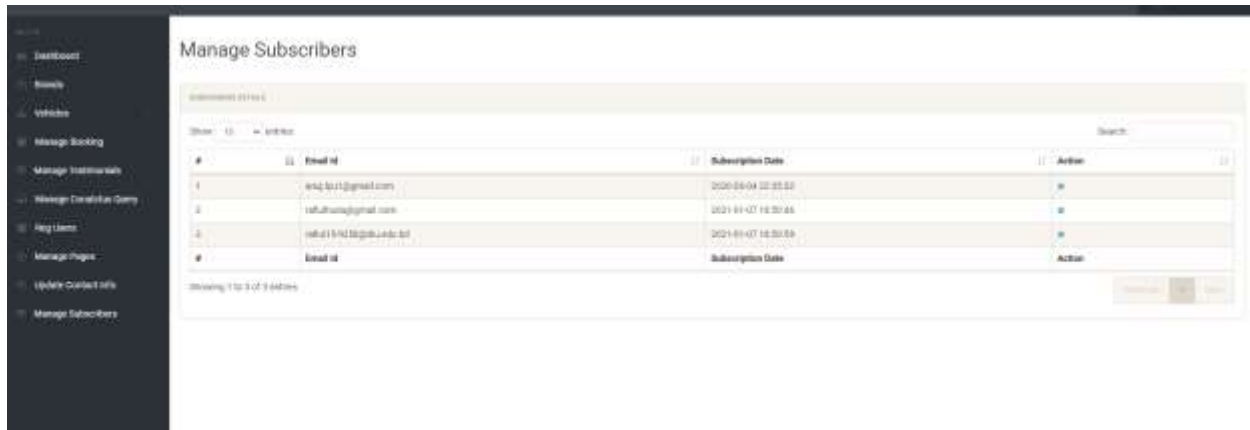


Figure 5.25: Admin Subscriber Manage page.

5.2.21 Admin Manage Contact Queries Page

Admin can manage customers queries here.

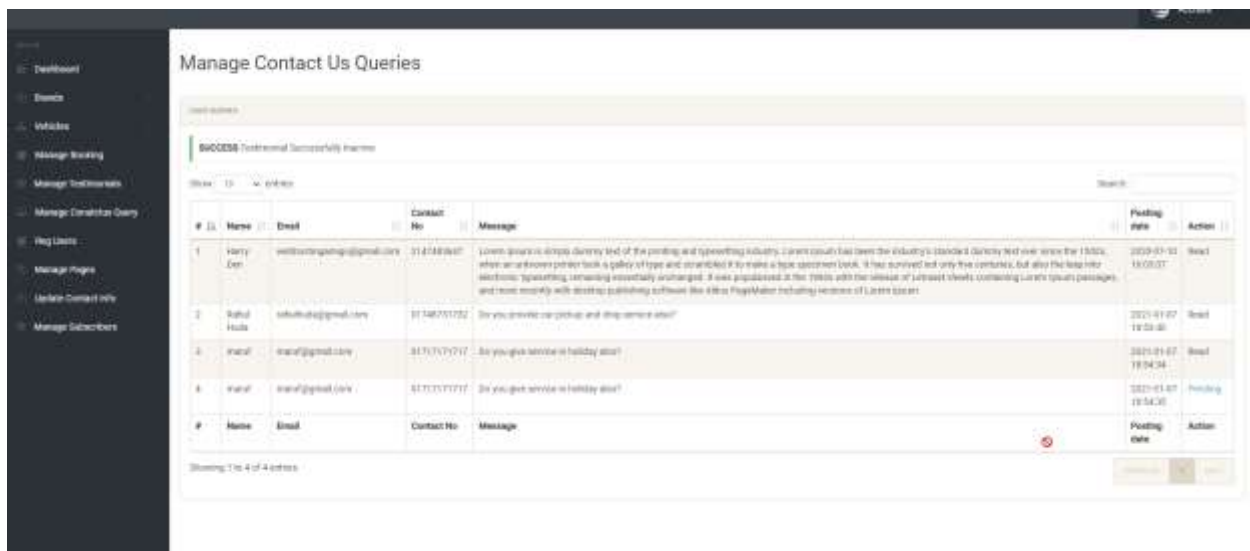


Figure 5.26: Admin Manage Queries page.

5.3 Implementation of Interactions

We design every user part very politely that user what he wants is indeed here. We design very carefully that the design attractive to users. An application Successions where the user can use the application easily and understand the functions of the system. The Satisfaction level of our system is high.

5.4 Testing Implementation

When a system is implemented and test some specific function is called test implementation [6]. We have tested our system several times. Login, Post booking, Browse Cars, user Registration, give testimonials, admin page manager. Test by us at various time. We have tested the following factors:

1. Login System.
2. User Registration System.
3. Admin Registration.
4. User post booking.
5. Add vehicle.
6. Give Feedback.
7. We test the whole system by maintains SDLC method.

5.5 Test Results and Reports

System Testing Table is given below:

Table 5.1: System Testing Table

Test Case Id	Date Tested	Tester	Pass/Fail	Severity of Defect	Summary Of Defect	Closed Prior to Release?	Comment
1	01.01.2021	Rafiul	Pass	Bug in 1 Places	Bug	<Yes>	

5.5.1 User Acceptance Testing

User Acceptance Testing Table is given below:

Table 5.2: User Acceptance Testing

Test Case Id	Date Tested	Tester	Pass or Fail	Severity of Defect	Summary Of Defect	Closed Prior to Release ?	Comment
1	02.01.2021	Rafiul	Pass	No Defect	No Defect	<Yes>	
2	02.01.2021	Mahmudul	Pass	No Defect	No Defect	<Yes>	

CHAPTER 06

Conclusion and Future Scope

6.1 Discussion and Conclusion

For the grace of **Almighty ALLAH**, we have successfully completed our project and documentation. After the long-term of thinking, Discussion, implementation we are in the last session and happy of completion. OwnCar is capable to rent a car online within short time. Our system reduces the hassle of time.

Until now Usually people hire a taxi cab and had to pay huge amount of money. Well, now this problem has changed. Using Owncar people can easily book car and rent the car to drive and go different places. **Self-drive car** booking in Dhaka is now affordable. The Owncar web platform have solved the problem to rent a car very easily online.

OwnCar – An Online Platform for those who need a car for day long and want some driving experience.

OwnCar is very useful for all the people who need to go different parts of Dhaka city in the same day. Their most valuable time saved by using this platform. We try to reduce some things by our web application.

6.2 Scope for Further Developments

Here is some future plans for the application. Some of the plans are:

1. Develop the payment system.
2. Most advanced tracking system.
3. Neural network driving license detect system.
4. Advance search for car selection option.
5. AI base recommendation for you (Best car for you)

6.3 Limitations

Here is some limitations of the application. In order to perform the rent a car capability;

- 1.Users must login to their own profiles.
- 2.Guests must create their own accounts.
- 3.Unless the driving license card is uploaded, the system will not allow to perform the booking and renting capabilities.
- 4.The system does not allow rent the same car for the same date. If such a consequence happened, the system will give fatal error.The total number of Internet Subscribers in Bangladesh,

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APPENDIX

Appendix A: Project Reflection

As what I have learnt during the work on OwnCar, a high-performance team would be one with high performance and high relationship.

In the beginning we were confident to finish this task. But we think we are very good as a team. We have different best character and that help us to complete the task.

We are hard working as a team. We are lucky to have good combination on a team. We have worked as a team and finished the task in time.

We have worked very hard and worked together. We have put a lot of efforts to make this project best. We have discussed about the idea of a part and developed together.

After doing this OwnCar project together, we have realized that if the bonding and understanding is good then the performance of the team members are increased. The team can bring best effort.

Lastly, we faced many problems when we developed this project but we solved this problem together. There are some parts of our project was difficult for us to develop but this was possible to complete because of the spirit of our team.

OwnCar

ORIGINALITY REPORT

18%

SIMILARITY INDEX

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