

# **“CAR RENTAL SYSTEM”**

**A**

## **Project Report**

**Submission for fulfillment of practical session of  
Data Base and Management System Lab**



**Bachelor of Technology  
Computer Science & Engineering  
V Semester**

**Submitted To:**

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2017- 2018**

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## **ACKNOWLEDGEMENT**

A study or a project can never be the outcome of a single person, so I express my profound sense of gratitude to those who extended their whole hearted help and support to me in completing my project because successful completion of any work requires guidance and help from a good people.

Firstly, it gives me immense pleasure to acknowledge my institute, **National Institute of Technology Sikkim**, for providing me an opportunity in developing a project on “**Car Rental System**”.

In addition, I wish to express my deep sense of gratitude to **Dr. Sangram Ray**, H.O.D. & Assistant professor CSED, for permitting me to carry out with this project work and for his guidance and support. I also very much esteemed for giving sincere thanks to **Ms. Dipanwita Sadhukhan**, Research Scholar CSED, **Mr. Vivek Kumar**, Research Scholar CSED, **Mr. Debarpan Triwedi**, M.Tech 2nd year CSED and **Mr. Anil Kumar**, M.Tech 2nd year CSED for their special concern and providing sufficient information related to the topic, which helped me in completing the project work in time and their timely guidance had been a source of inspiration in the conduct of my project work. Last but not the least, I extend my whole-hearted gratitude for the invaluable contribution of my parents for their blessings and earnest affection and all those persons ‘behind the veil’ for their necessary support, which enabled me to complete this project.

*-Khandapu Snehith*

## **Objective**

To develop software for car rental system with various functional and non-functional parts of design namely:

1. PROBLEM ANALYSIS AND REQUIREMENT ANALYSIS.
2. VEHICLE VIEWING
3. VEHICLE BOOKING
4. VEHICLE UPDATING
5. TESTINOMIAL CONTROL
6. PAGES CONTROL

The ultimate goal of this project is to develop a database that integrates the process of the renting of a car.

## **Abstract**

A car rental or car hire agency is a company that rents automobiles for short period of time for a fee whether in a few hours or a few days or week. It is an elaborate form of a rental shop, often organized with numerous local branches (which allow a user to return a vehicle to a different location), and primarily 'located near airports or busy city areas and often complemented by a website allowing online reservations.

Car rental agencies primarily serve people who have a car that is temporarily out of reach or out of service, for example travelers who are out of town or owners of damaged or destroyed vehicles who are awaiting repair or insurance compensation. Because of the variety of sizes of their vehicles, car rental agencies may also serve the self-moving industry needs, by renting vans or trucks, and in certain markets other types of vehicles such as motorcycles or scooters may also be offered.

## **Introduction**

Nowadays, there are online car reservations which give much benefit to user. A rental service, is a service in which customers arrive to request the hire of a rental unit. It is more convenient than carrying the cost of owning and maintaining the unit. A web application is an application that is accessed over a network such as the Internet or an intranet.

Therefore with this new method, the process will be more efficient and the safety of hiring car is secure. It's also the best way to increase the quality of management and can reduce the time constraints. The system being developed is a system to handle the business needs of renting out vehicles to customers, maintaining records and data on vehicle fleet, operating the customer portal website, and reporting the state of the system to the company. It is a system design especially for small car rental business.

The car rental system provides complete functionality of listing and booking car. The system will be able to rent out vehicles. The system will keep track of the rental fleet. The system will generate reports for the employees.

## **SCOPE**

This project aims to maintain vehicle availability information. Other scopes of this project are as follows:

- Provide car catalog for users to select car by their own.
- To take testimonials and feedback from users.
- To view and manage the bookings by admin.
- To give UI to edit pages for admin.
- Improved and optimized service.

## **Feasibility Study**

An initial investigation in a proposal that determines whether an alternative system is feasible. A proposal summarizing the thinking of the analyst is presented to the user for review. When approved, the proposal initiates feasibility study that describes and evaluates candidate systems and provides for the selection of best system that meets system performance requirements. To do a feasibility study, we need to consider the economic, technical factors in system development. First a project team is formed. The team develops system flowcharts that identify the characteristics of candidate systems, evaluate the performance of each system, weigh system performance and cost data and select the best candidate system for the job.



## How to Run the Code

### **A. Installation Steps**

1. Unzip file on your local system.
2. Put this file inside root directory.
3. Database Configuration.

### **B. Database Configuration**

- Open PHPmyAdmin <http://localhost/phpmyadmin/>
- Create Database carrental
- Import database carrental.sql (available inside zip package)
- Open Your browser put inside browser <http://localhost/carrental/>
- **Login Details** To Login as admin put inside browser <http://localhost/carrental/admin>  
**Login Details for admin:** admin/Test@12345
- To Login as User put inside browser <http://localhost/carrental/>  
**Login Details for user:** b150080cs@nitsikkim.ac.in / snehith1

## **Requirements**

### **Hardware:**

- CPU – Intel Core 2 Duo E7300(min)
- RAM – 512MB (min)
- Hard Disk – 80GB(min)

### **Software:**

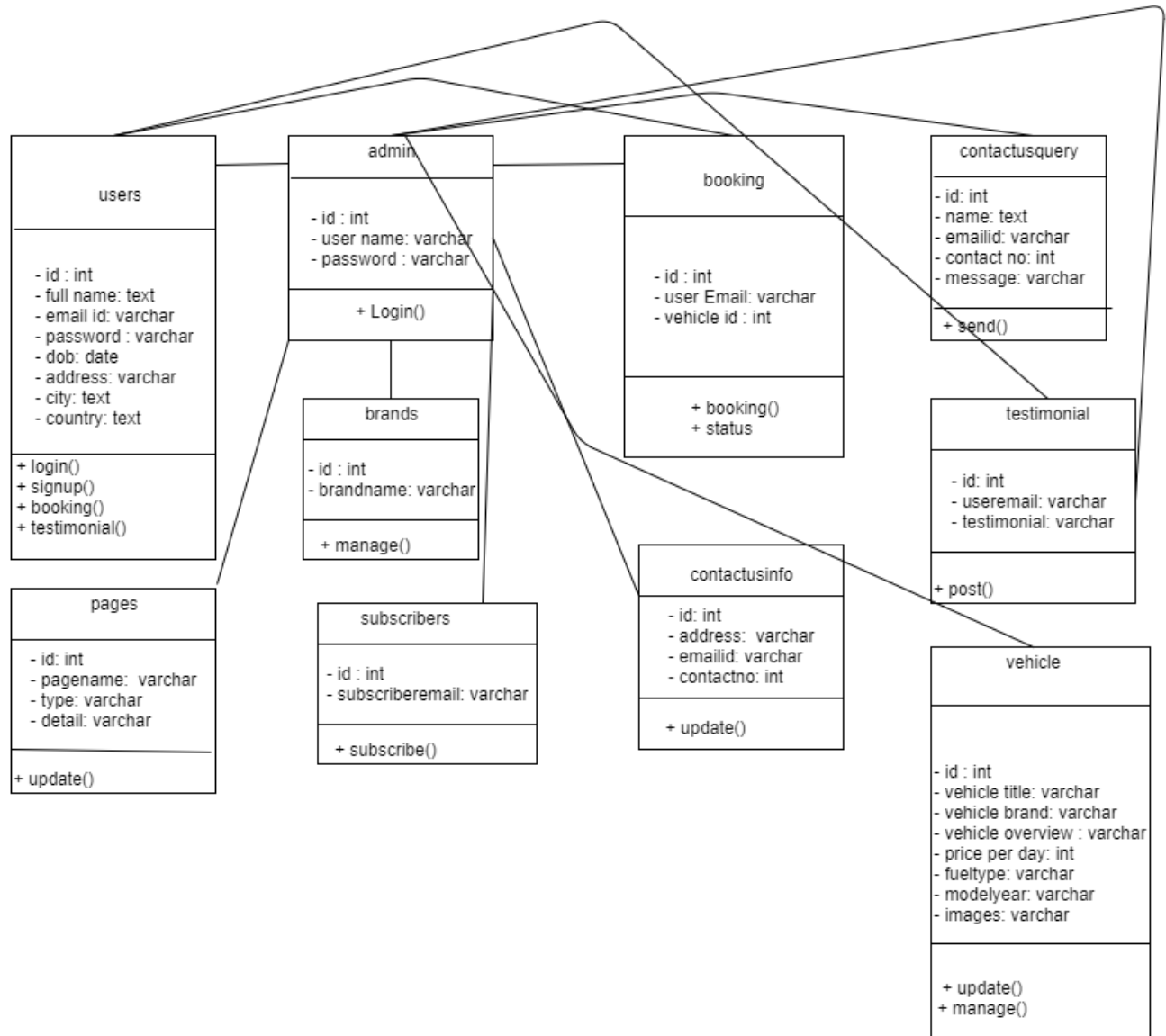
- ✓ Localhost (XAMPP control Panel)
- ✓ IDE(ATOM) for developing code
- ✓ MySQL as the DBSM for database

## Design Phase

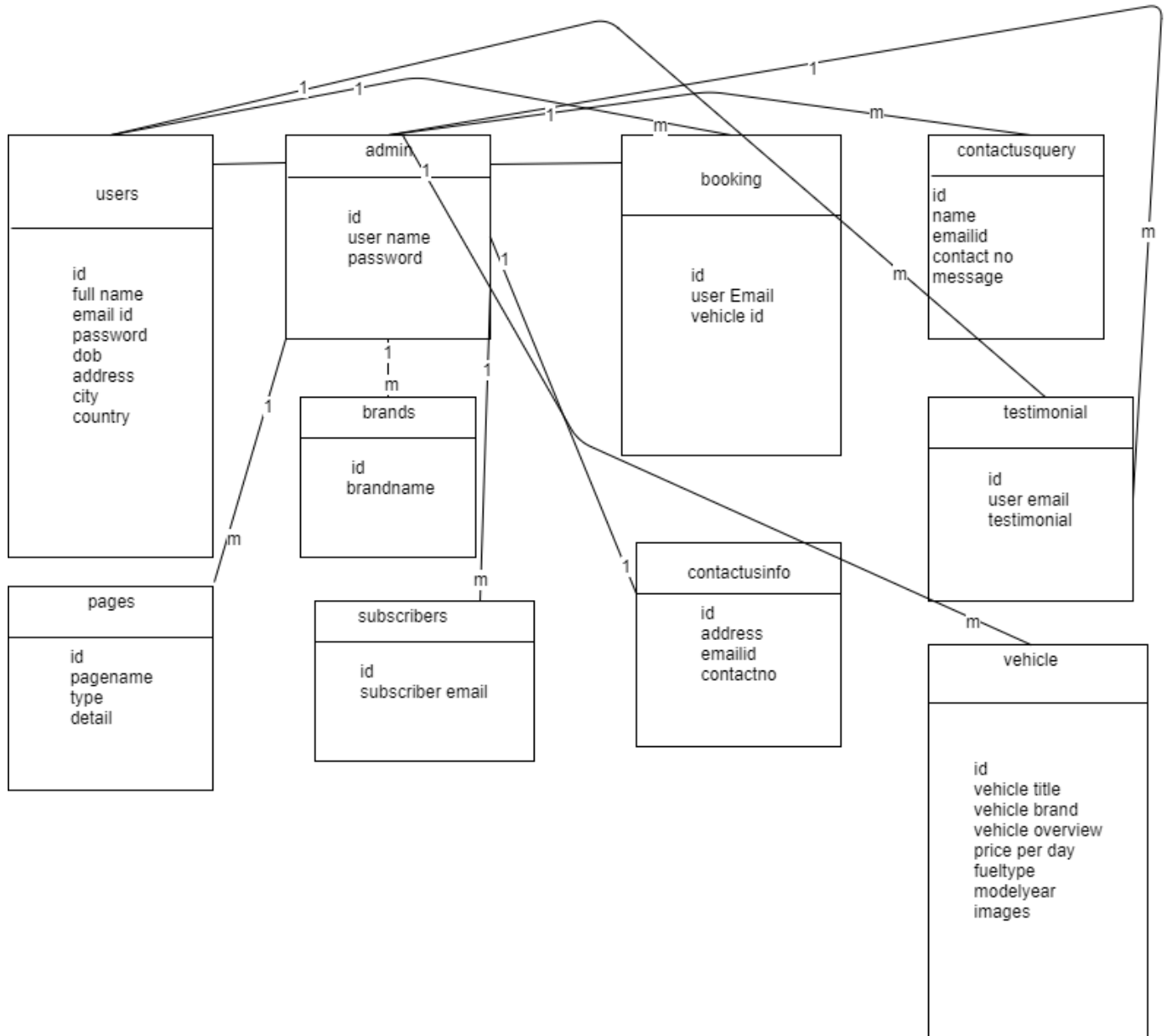
(i) Use-case:



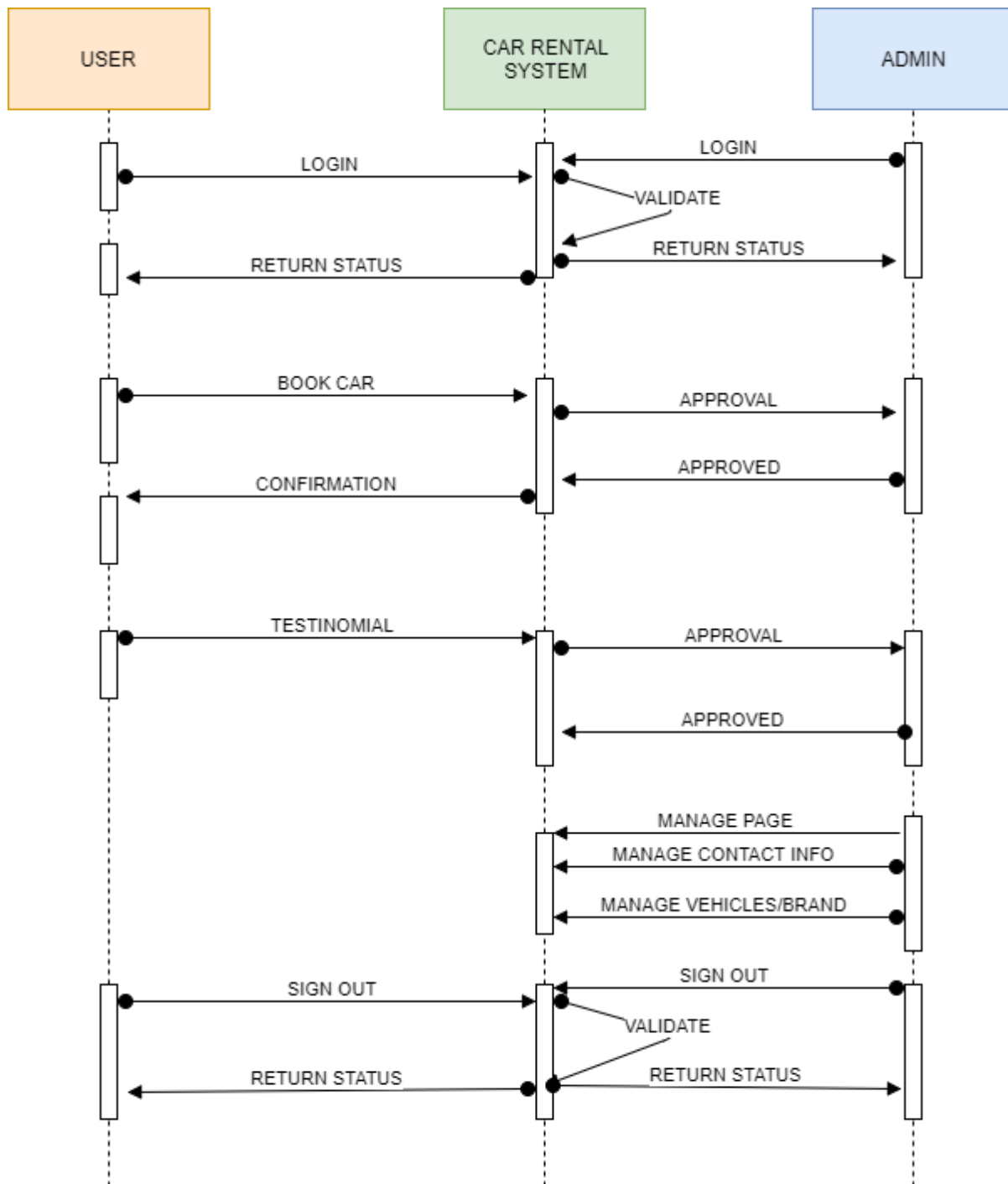
## (ii) Class Diagram:



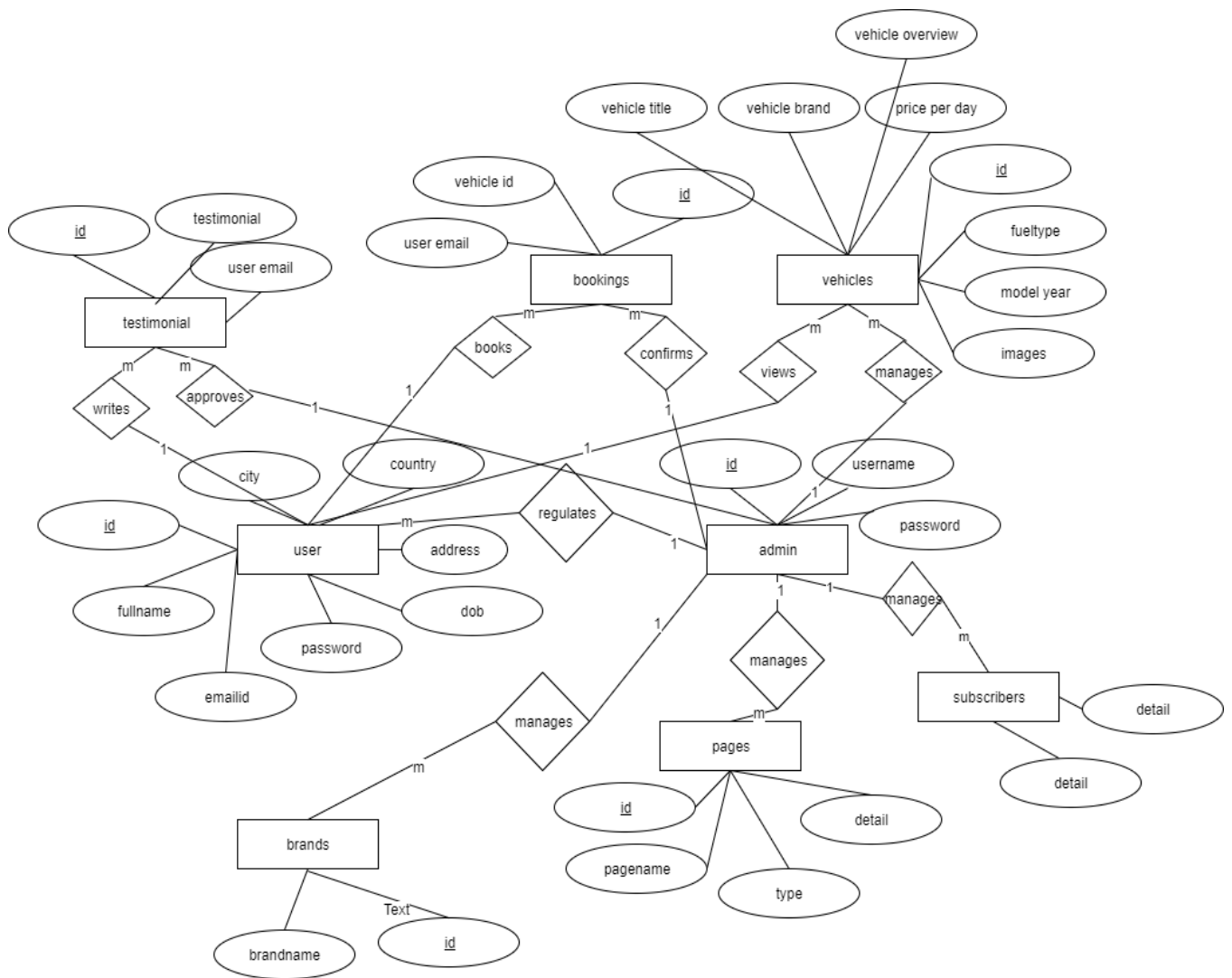
### (iii) Schema Diagram:



(iv) Sequence Diagram:

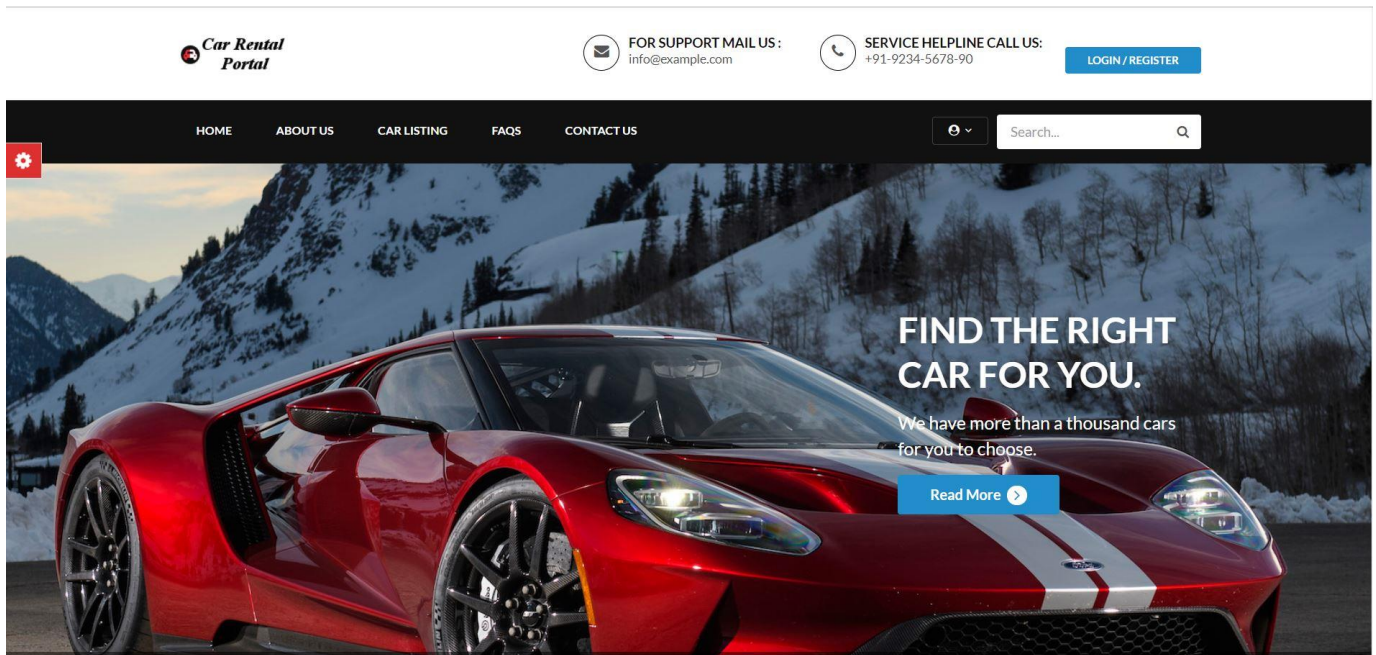


## (V) Entity-Relationship Diagram:

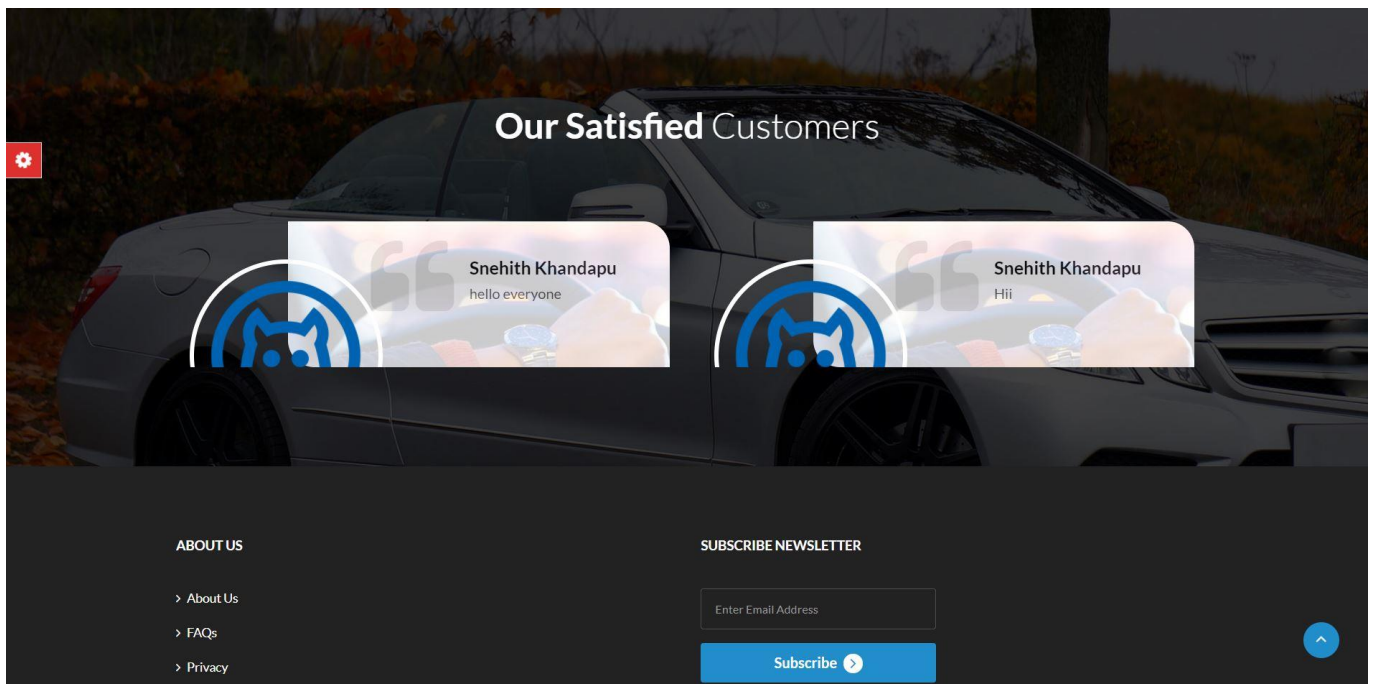


# Snapshots of the Project

## 1. Homepage

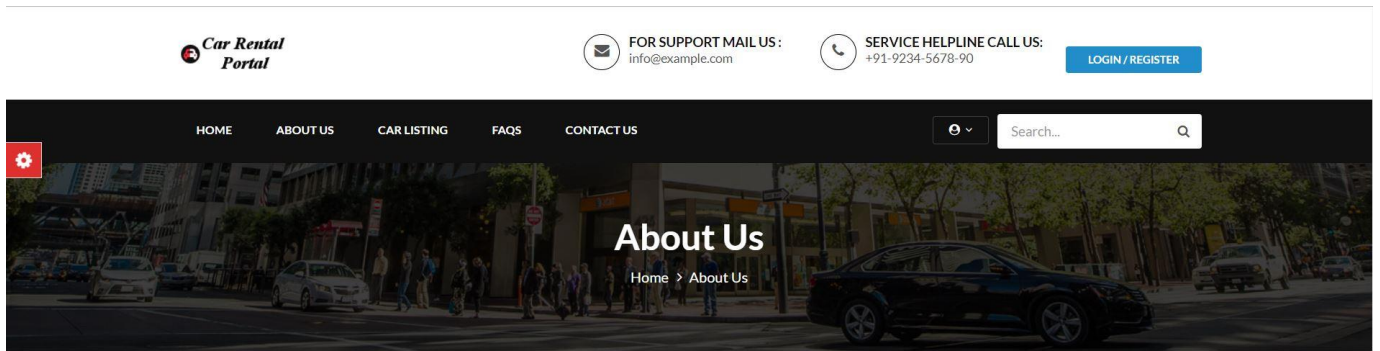


## 2. Testimonials & Subscribe section





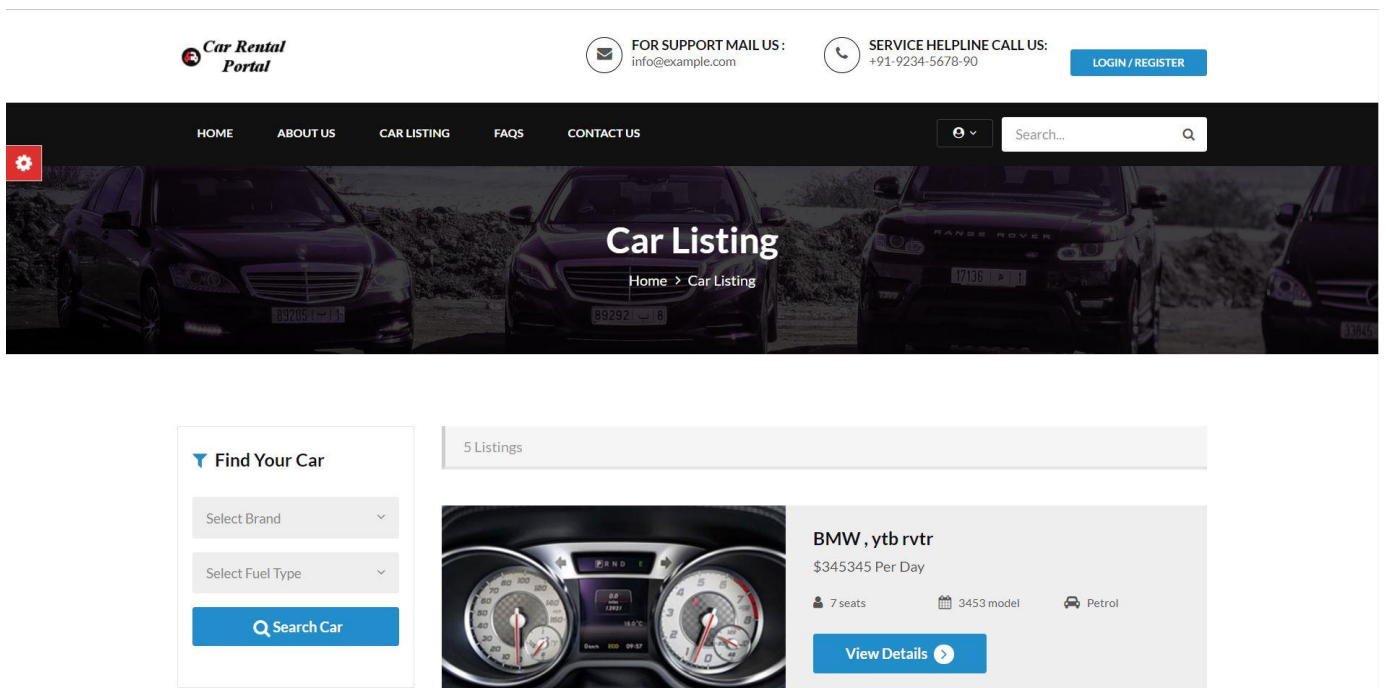
### 3. About us page



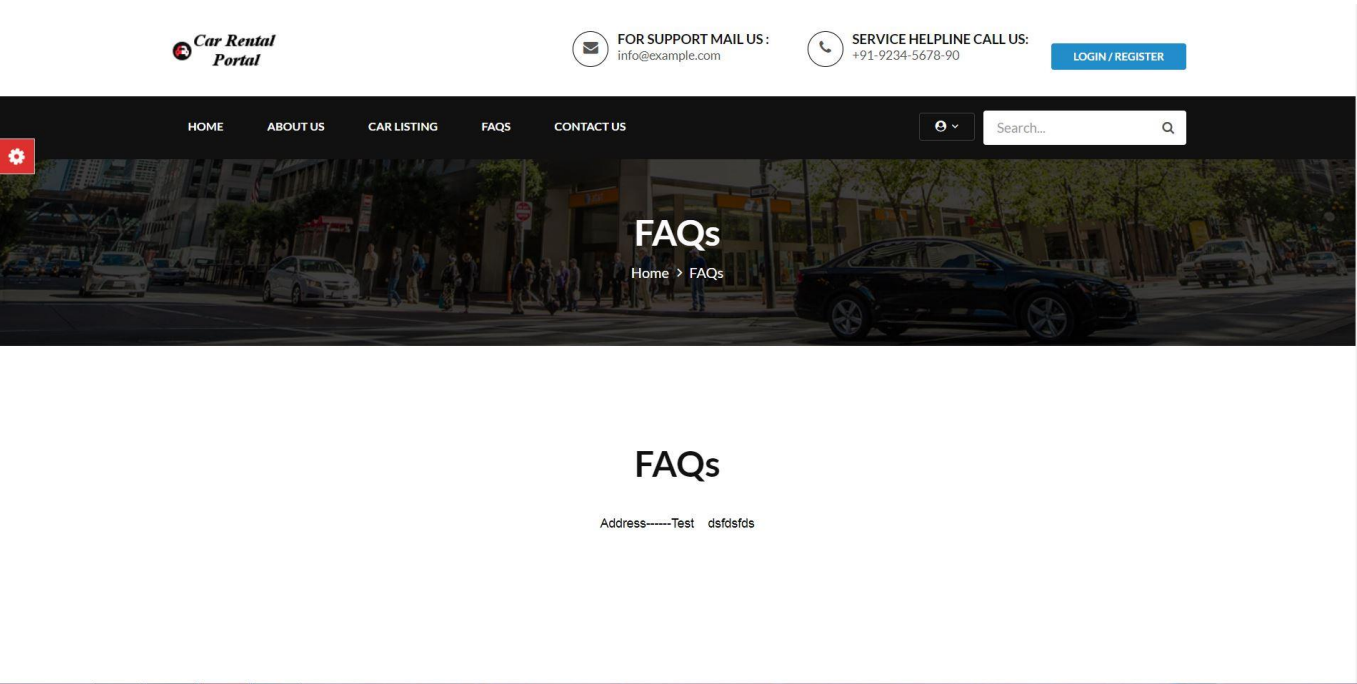
## About Us

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat

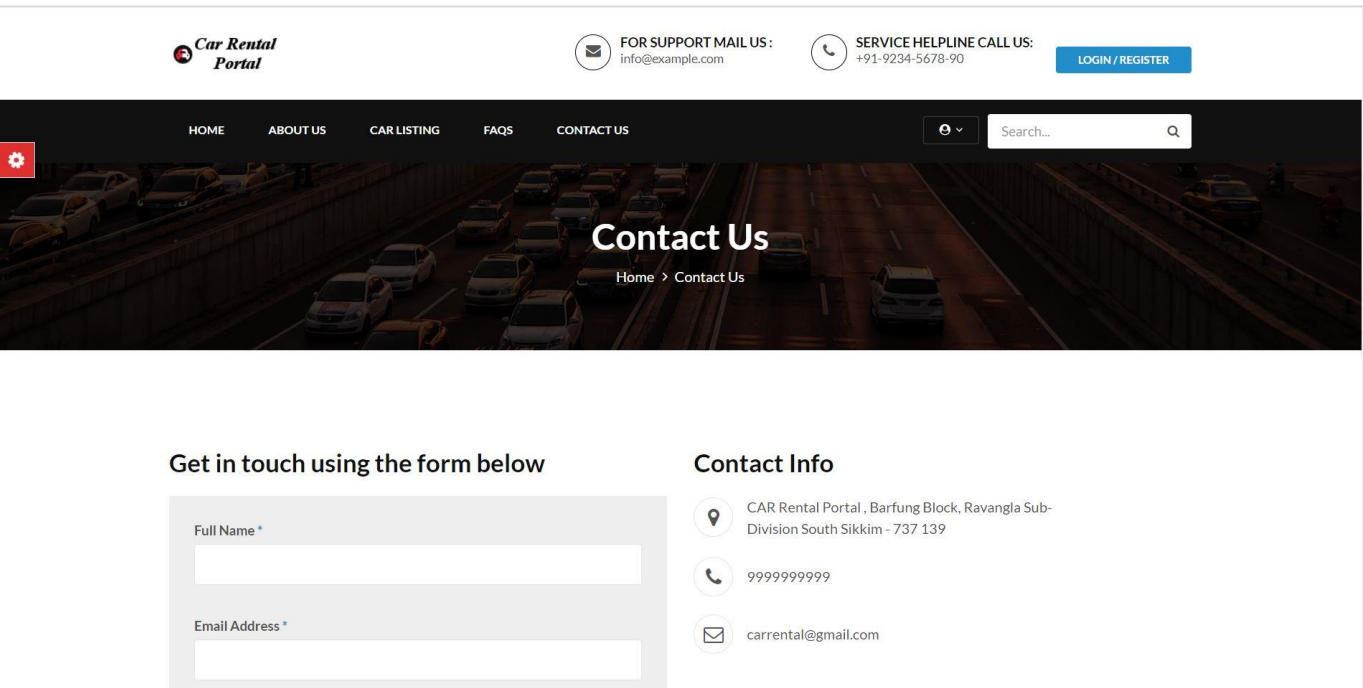
### 4. Car listing page



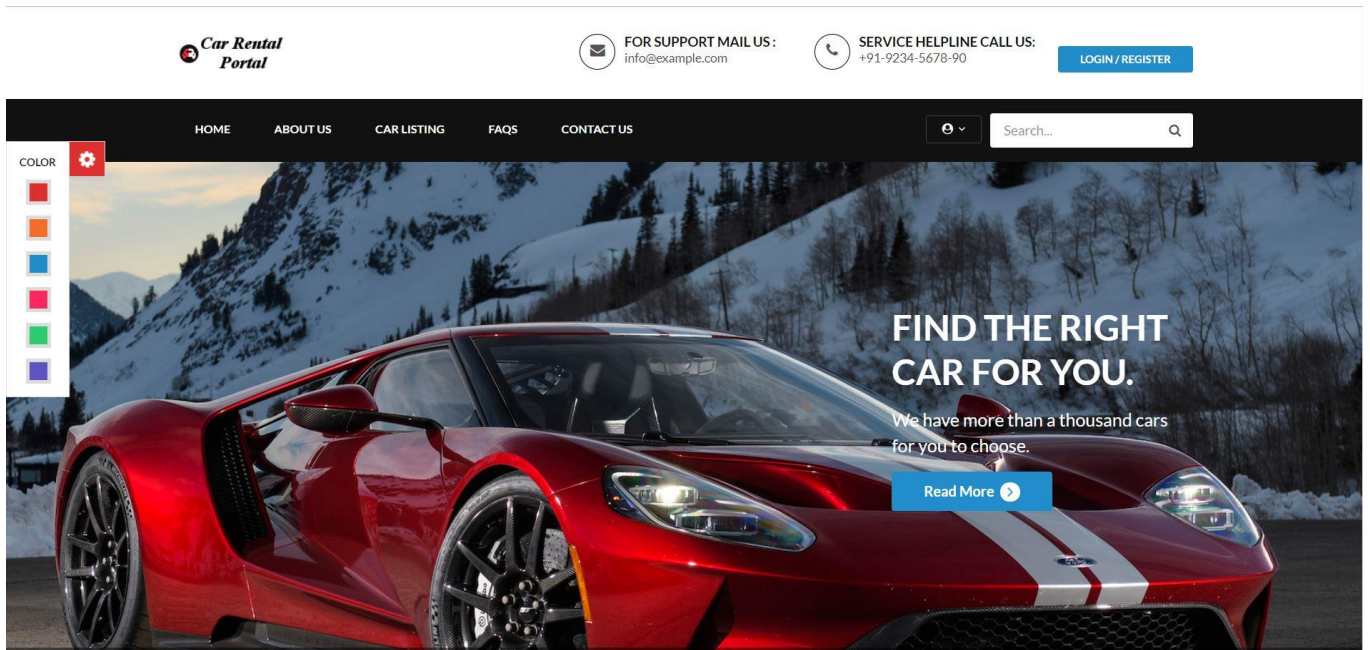
## 5. FAQs page



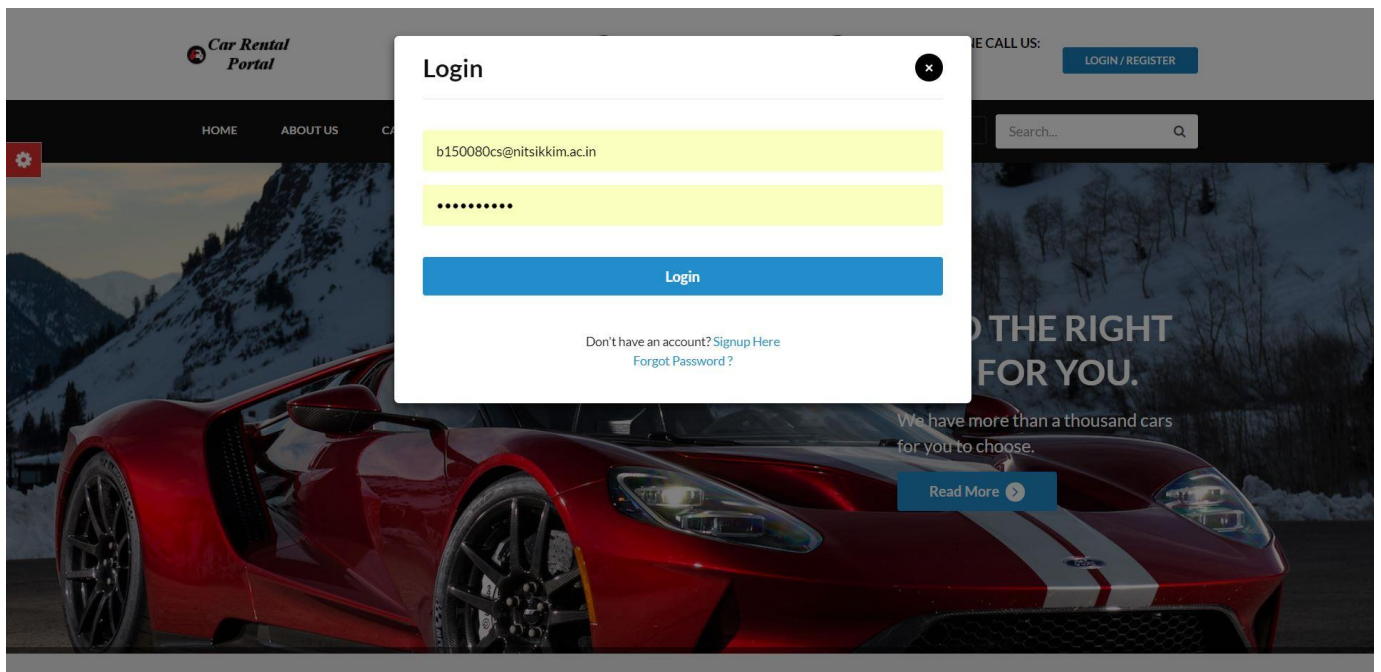
## 6. Contact Us page



## 7. Change color of buttons here

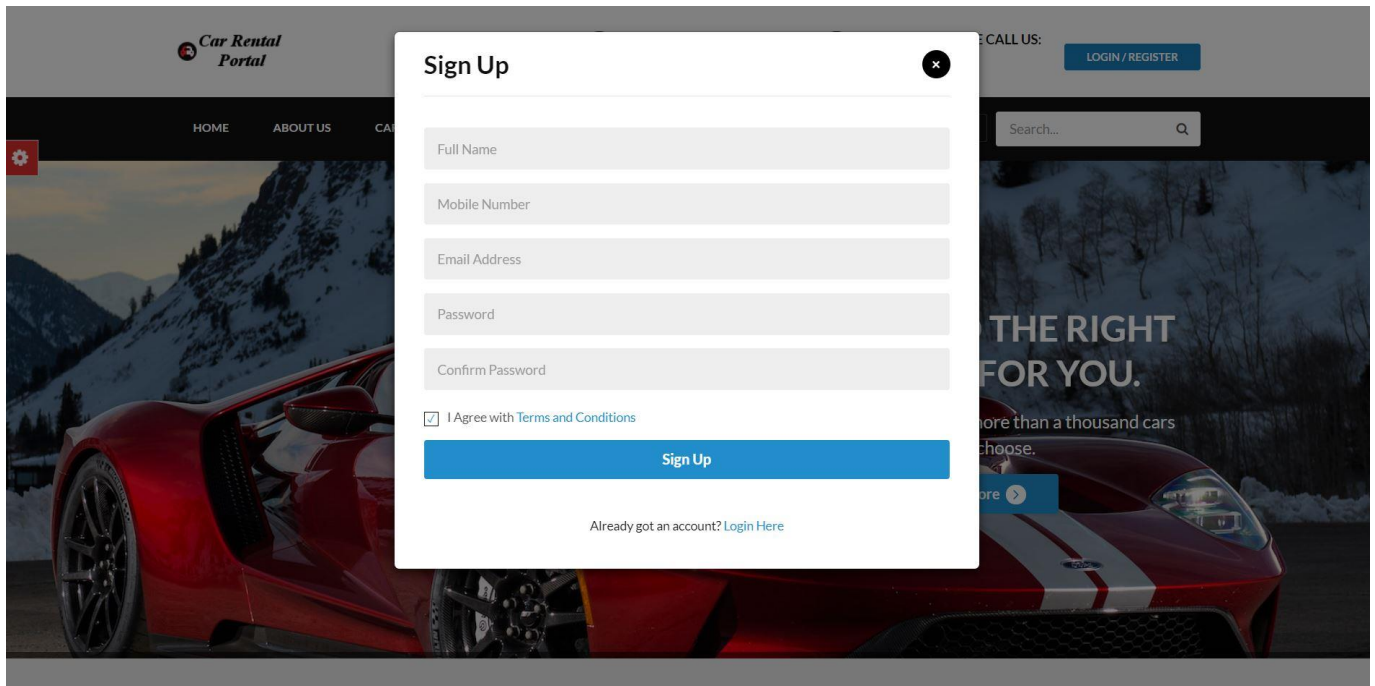


## 8. User Login page





## 9. User Signup form

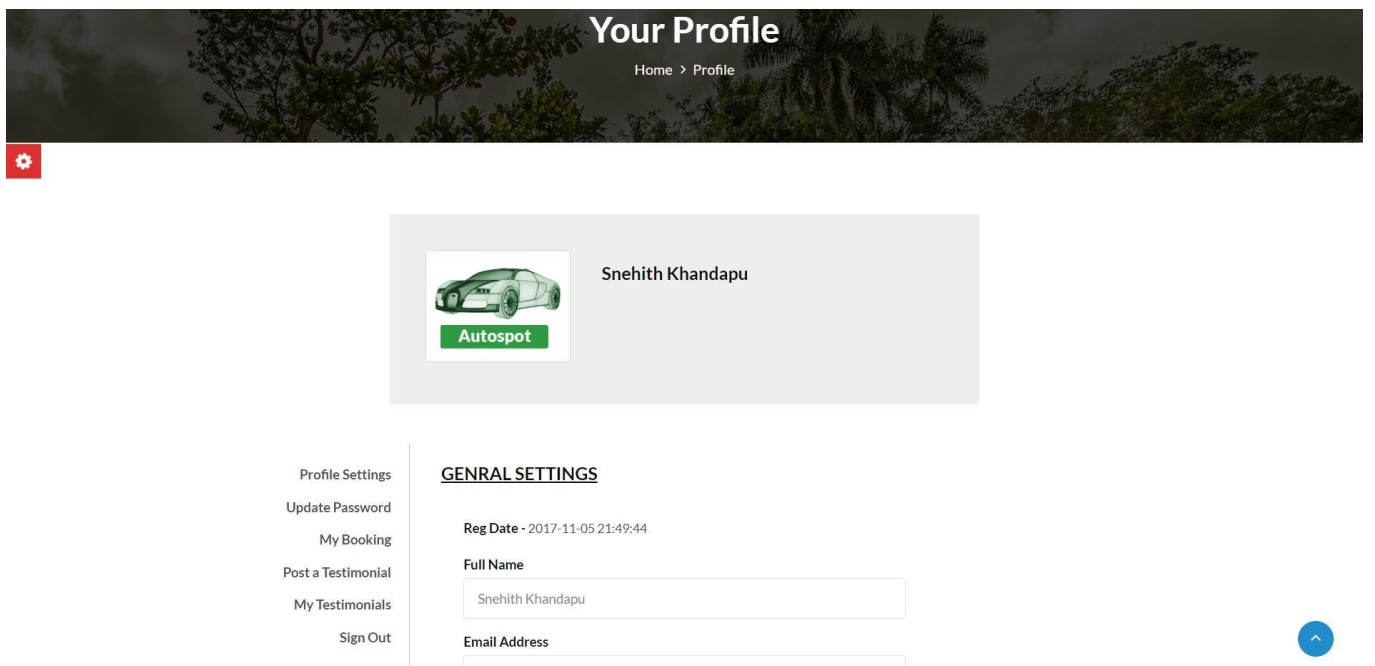


The image shows a web application for a car rental portal. A modal window titled "Sign Up" is displayed over a background image of a red sports car. The modal contains the following elements:

- Header:** "Sign Up" with a close button (X).
- Form Fields:** Five input fields for "Full Name", "Mobile Number", "Email Address", "Password", and "Confirm Password".
- Agreement:** A checkbox labeled "I Agree with [Terms and Conditions](#)".
- Buttons:** A blue "Sign Up" button and a link "Already got an account? [Login Here](#)".

The background website header includes the logo "Car Rental Portal", navigation links "HOME", "ABOUT US", and "CALL US:", a search bar, and a "LOGIN / REGISTER" button.

## 10. After logging in



The image shows a user profile page titled "Your Profile" with a breadcrumb "Home > Profile". The page features a user profile card and a settings sidebar.

**User Profile Card:**

- Avatar:** A placeholder image of a green car with the text "Autospot" below it.
- Name:** "Snehith Khandapu".

**Settings Sidebar:**

- Profile Settings
- Update Password
- My Booking
- Post a Testimonial
- My Testimonials
- Sign Out

**General Settings Section:**

- Reg Date:** 2017-11-05 21:49:44
- Full Name:**
- Email Address:**

A blue circular button with an upward arrow is located at the bottom right of the page.

# 11. Update Password

Home > Update Password

Autospot

Snehith Khandapu

Profile Settings

Update Password

My Booking

Post a Testimonial

My Testimonials

Sign Out

Update password

Current Password

^

# 12. My booking

HOMEABOUT USCAR LISTINGFAQSCONTACT US

SNEHITH KHANDAPU

Search...

Home > My Booking

Autospot

Snehith Khandapu

Profile Settings

Update Password

My Booking

Post a Testimonial

MY BOOIKNGS


Maruti , Lorem ipsum

Confirmed

From Date: 06/11/17

Message: plzz

## 13. Post testimonial




Snehith Khandapu


[Profile Settings](#)  
[Update Password](#)  
[My Booking](#)  
[Post a Testimonial](#)  
[My Testimonials](#)  
[Sign Out](#)

### POST A TESTIMONIAL

Testimonail



## 14. My testimonials page



Snehith Khandapu

[Profile Settings](#)  
[Update Password](#)  
[My Booking](#)  
[Post a Testimonial](#)  
[My Testimonials](#)  
[Sign Out](#)


### MY TESTIMONIALS

hello everyone

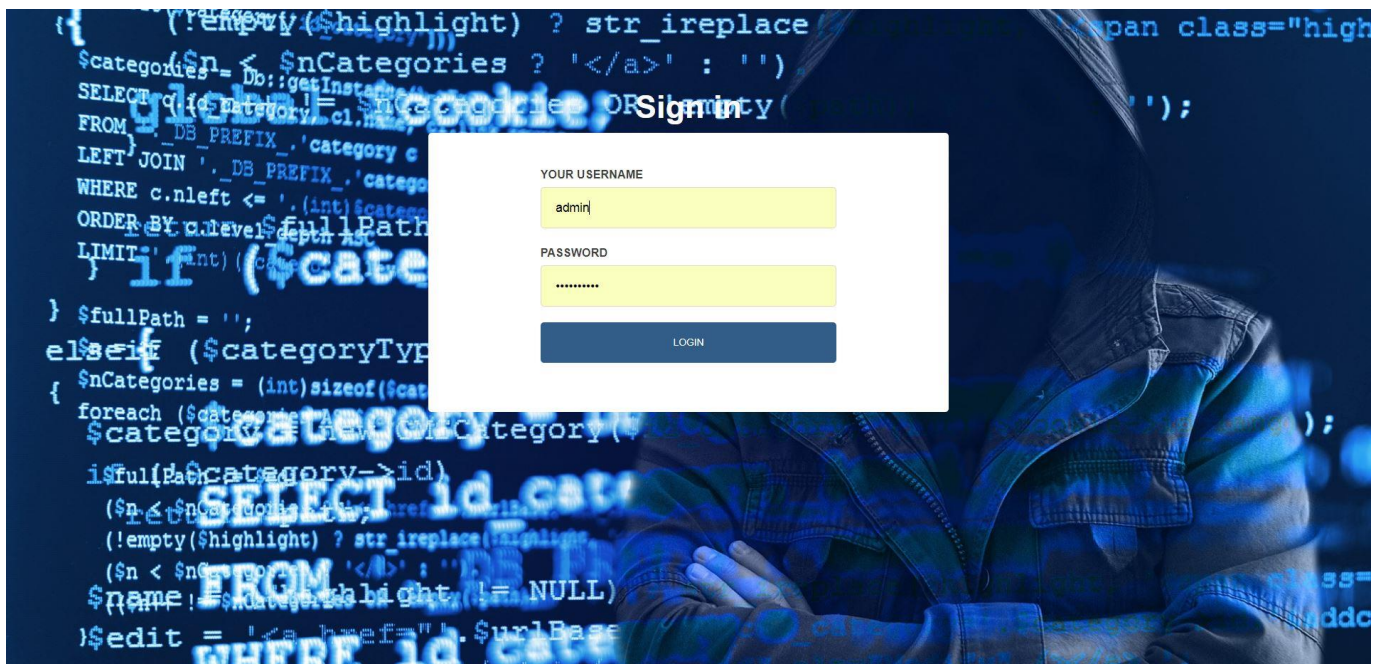
Posting Date:2017-11-05 21:54:29

Active

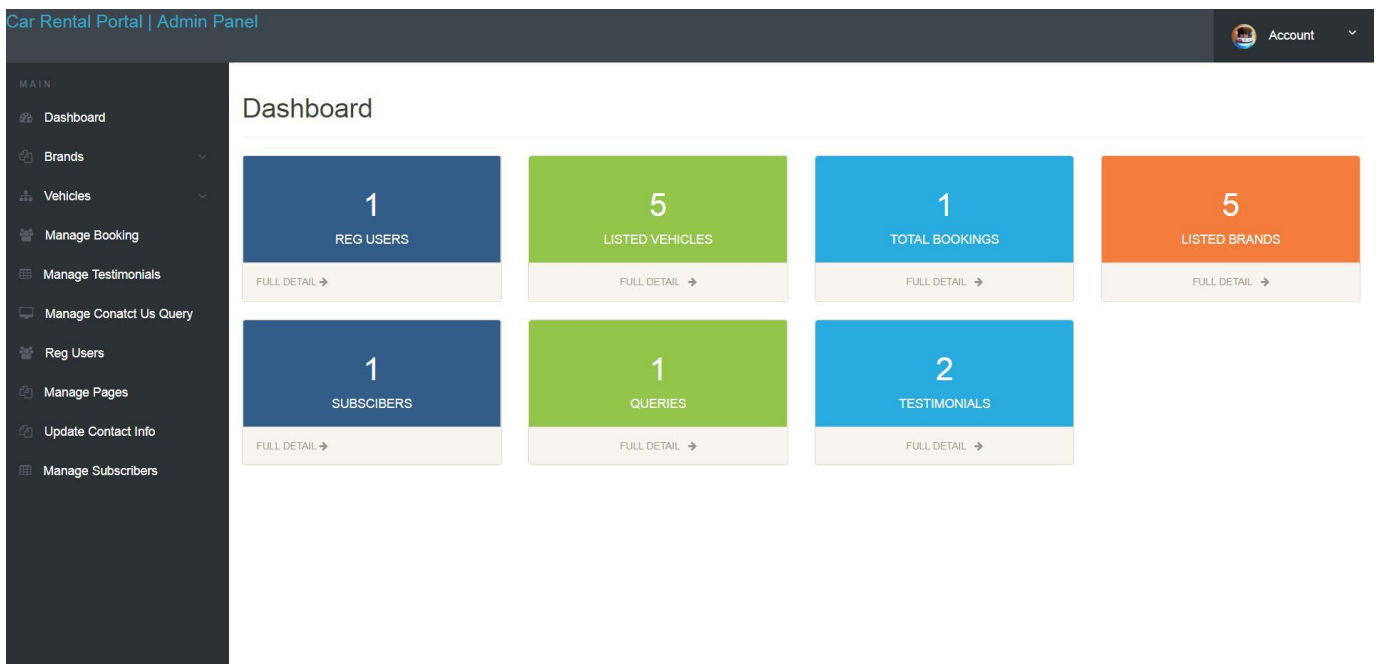
Hii



## 15. Admin Login



## 16. Admin Dashboard



## 17. Create Brand Form

Car Rental Portal | Admin Panel

Account

MAIN

Dashboard

Brands

Vehicles

Manage Booking

Manage Testimonials

Manage Contact Us Query

Reg Users

Manage Pages

Update Contact Info

Manage Subscribers

### Create Brand

FORM FIELDS

Brand Name

Submit

## 18. Manage Brands page

Car Rental Portal | Admin Panel

Account

MAIN

Dashboard

Brands

Vehicles

Manage Booking

Manage Testimonials

Manage Contact Us Query

Reg Users

Manage Pages

Update Contact Info

Manage Subscribers

### Manage Brands

LISTED BRANDS

Show 10 entries

Search:

#	Brand Name	Creation Date	Updation date	Action
1	Maruti	2017-06-18 21:54:34	2017-06-19 12:12:23	<a href="#">Edit</a> <a href="#">Delete</a>
2	BMW	2017-06-18 21:54:50		<a href="#">Edit</a> <a href="#">Delete</a>
3	Audi	2017-06-18 21:55:03		<a href="#">Edit</a> <a href="#">Delete</a>
4	Nissan	2017-06-18 21:55:13		<a href="#">Edit</a> <a href="#">Delete</a>
5	Toyota	2017-06-18 21:55:24		<a href="#">Edit</a> <a href="#">Delete</a>
#	Brand Name	Creation Date	Updation date	Action

Showing 1 to 5 of 5 entries

PREVIOUS1NEXT



## 19. Manage Vehicles form

Car Rental Portal | Admin Panel

Account

MAIN

- Dashboard
- Brands
- Vehicles
- Manage Booking
- Manage Testimonials
- Manage Contact Us Query
- Reg Users
- Manage Pages
- Update Contact Info
- Manage Subscribers

### Manage Vehicles

VEHICLE DETAILS

Show 10 entries

Search:

#	Vehicle Title	Brand	Price Per day	Fuel Type	Model Year	Action
1	ytb rvtr	BMW	345345	Petrol	3453	<a href="#">✎</a> <a href="#">✕</a>
2	Test Demoy	BMW	859	CNG	2015	<a href="#">✎</a> <a href="#">✕</a>
3	Lorem ipsum	Nissan	563	CNG	2012	<a href="#">✎</a> <a href="#">✕</a>
4	Lorem ipsum	Maruti	5636	CNG	2012	<a href="#">✎</a> <a href="#">✕</a>
5	ytb rvtr	Toyota	345345	Petrol	3453	<a href="#">✎</a> <a href="#">✕</a>
#	Vehicle Title	Brand	Price Per day	Fuel Type	Model Year	Action

Showing 1 to 5 of 5 entries

PREVIOUS1NEXT

## 20. Manage Bookings page

Car Rental Portal | Admin Panel

Account

MAIN

- Dashboard
- Brands
- Vehicles
- Manage Booking
- Manage Testimonials
- Manage Contact Us Query
- Reg Users
- Manage Pages
- Update Contact Info
- Manage Subscribers

### Manage Bookings

BOOKINGS INFO

Show 10 entries

Search:

#	Name	Vehicle	From Date	To Date	Message	Status	Posting date	Action
1	Snehith Khandapu	<a href="#">Maruti</a> , <a href="#">Lorem ipsum</a>	06/11/17	07/11/17	plzz	Confirmed	2017-11-05 22:25:22	<a href="#">Confirm</a> / <a href="#">Cancel</a>
#	Name	Vehicle	From Date	To Date	Message	Status	Posting date	Action

Showing 1 to 1 of 1 entries

PREVIOUS1NEXT

## 21. Manage Testimonials Page

Car Rental Portal | Admin Panel

Account

MAIN

Dashboard

Brands

Vehicles

Manage Booking

Manage Testimonials

Manage Contact Us Query

Reg Users

Manage Pages

Update Contact Info

Manage Subscribers

Manage Testimonials

USER TESTIMONIALS

Show 10 entries

Search:

#	Name	Email	Testimonials	Posting date	Action
1	Snehith Khandapu	b150080cs@nitsikkim.ac.in	hello everyone	2017-11-05 21:54:29	Active
2	Snehith Khandapu	b150080cs@nitsikkim.ac.in	Hll	2017-11-05 22:05:19	Active
#	Name	Email	Testimonials	Posting date	Action

Showing 1 to 2 of 2 entries

PREVIOUS1NEXT

## 22. Manage Feedbacks page

Car Rental Portal | Admin Panel

Account

MAIN

Dashboard

Brands

Vehicles

Manage Booking

Manage Testimonials

Manage Contact Us Query

Reg Users

Manage Pages

Update Contact Info

Manage Subscribers

Manage Contact Us Queries

USER QUERIES

Show 10 entries

Search:

#	Name	Email	Contact No	Message	Posting date	Action
1	Anuj Kumar	webhostingamigo@gmail.com	2147483647	Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum	2017-06-18 15:33:07	Read
#	Name	Email	Contact No	Message	Posting date	Action

Showing 1 to 1 of 1 entries

PREVIOUS1NEXT

## 23. View Registered Users

Car Rental Portal | Admin Panel

Account

MAIN

- Dashboard
- Brands
- Vehicles
- Manage Booking
- Manage Testimonials
- Manage Contact Us Query
- Reg Users
- Manage Pages
- Update Contact Info
- Manage Subscribers

### Registered Users

REG USERS

Show 10 entries

Search:

#	Name	Email	Contact no	DOB	Address	City	Country	Reg Date
1	Snehith Khandapu	b150080cs@nitsikkim.ac.in	8942966911					2017-11-05 21:49:44

Showing 1 to 1 of 1 entries

PREVIOUS1NEXT

## 24. Manage Pages

Car Rental Portal | Admin Panel

Account

MAIN

- Dashboard
- Brands
- Vehicles
- Manage Booking
- Manage Testimonials
- Manage Contact Us Query
- Reg Users
- Manage Pages
- Update Contact Info
- Manage Subscribers

### Manage Pages

FORM FIELDS

select Page

\*\*\*Select One\*\*\*

selected Page

Page Details

B I U Font Size... Font Family... Font Format...

Update

## 25. Update Contact page

Car Rental Portal | Admin Panel

Account

MAIN

- Dashboard
- Brands
- Vehicles
- Manage Booking
- Manage Testimonials
- Manage Contact Us Query
- Reg Users
- Manage Pages
- Update Contact Info
- Manage Subscribers

### Update Contact Info

FORM FIELDS

Address

CAR Rental Portal ,  
Barfung Block, Ravangla Sub-Division  
South Sikkim - 737 139

Email Id

carrental@gmail.com

Contact Number

9999999999

Update

## 26. View Subscribers here in this page

Car Rental Portal | Admin Panel

Account

MAIN

- Dashboard
- Brands
- Vehicles
- Manage Booking
- Manage Testimonials
- Manage Contact Us Query
- Reg Users
- Manage Pages
- Update Contact Info
- Manage Subscribers

### Manage Subscribers

SUBSCRIBERS DETAILS

Show 10 entries

Search:



#	Email Id	Subscription Date	Action
1	anuj.lpu1@gmail.com	2017-06-22 22:05:32	<a href="#">✕</a>
#	Email Id	Subscription Date	Action

Showing 1 to 1 of 1 entries


PREVIOUS1NEXT



## 27. Admin can Change Password here



Car Rental Portal | Admin Panel


 Account 


MAIN


 Dashboard


 Brands 


 Vehicles 


 Manage Booking


 Manage Testimonials

 Manage Contact Us Query

 Reg Users

 Manage Pages

 Update Contact Info

 Manage Subscribers

Change Password

FORM FIELDS

Current Password

New Password

Confirm Password

Save changes

## **Limitations**

My project meets the following limitations:

- (1)The software not allows to login if the user / admin forget the password.
- (2)The software not allows to take print of any list.
- (3)The software not allows payment through embedded online payment gateway.

## **Future Scope**

- Authentication using gmail, facebook accounts.
- Printing of lists.
- Payment through online payment gateway.
- SMS alerts to the user.

## **Conclusion**

Practical Training is a very important part of the curriculum as it strengthens the concept and enhances knowledge about the practical implementation of all the theory concepts, I have learnt so far in this subject due to practical session.

Although the project work has been done in a complete and detailed manner, I could not include some more features I wanted to. I left these features as a part of the future development.

So the present system is very efficient and robust for the small car rental ecommerce companies. Adding the above mentioned features can make it eligible to use by the medium and big car rental companies.



## **References**

### **Book used:**

1. Henry F Korth, Abraham Silberschatz, "Database system concepts", McGraw-Hill International editions, Computer Science Series (1991). Second Ed.
2. Software Engineering , McGraw-Hill International editions.

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[www.scribd.com](http://www.scribd.com)

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[www.uber.com/en-IN/](http://www.uber.com/en-IN/)

[www.olacabs.com](http://www.olacabs.com)

[www.wikipedia.org](http://www.wikipedia.org)