



NITTE
EDUCATION TRUST

**NMAM INSTITUTE
OF TECHNOLOGY**

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Department of Computer Science and Engineering

B.E. Program Accredited by NBA, New Delhi

Project Report on
APARTMENT PARKING MANAGEMENT SYSTEM

18CS502
Database Management System

5th Semester | Section D

Project Guide

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ABSTRACT

The purpose of Apartment Parking System is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

Apartment Parking System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus, it will help apartment in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach information. Basically the project describes how to manage for good performance and better services for the clients.

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CERTIFICATE

Certified that the project work carried out by Suman M Shettigar (4NM18CS194), Sumanth Goud N G(4NM18CS193) Sujay Suryavanshi(4NM18CS192) and Suhail Ahmed(4NM18CS191) bonafide students of NMAM Institute of Technology, Nitte in fulfilment for the Relational database Management System lab in Computer Science and Engineering during the academic year 2020-2021.

Signature of the Examiners:

Signature of the Guide:

- 1.
- 2.

ACKNOWLEDGEMENT

The satisfactions that accompany the successful completion of any task would be incomplete without the mention of the people who made it possible. So, we acknowledge all those whose guidance and encouragement served as a beacon of light and crowned our efforts with success.

We are thankful to our project guide, Mr. Pradeep Kanchan, Dept. of CSE for his valuable guidance and advice. His willingness to motivate us contributed tremendously to our project.

We would like to place on record our deep sense of gratitude to Dr. K. R. Udaya Kumar Reddy, HOD-Dept. of Computer Science and Engineering, NMAMIT, Nitte for his generous guidance, help and useful suggestions. We also acknowledge and express our sincere thanks to our beloved Dr. Niranjana N. Chiplunkar, Principal, NMAMIT, Nitte who is a source of inspiration to us.

We thank all the Teaching and Non-Teaching staff members of the department of CSE for providing resources for the completion of the project. A special thanks goes to our parents, friends and relatives for supporting and encouraging us in all ways thus making our project successful. Finally, we thank all those who have contributed directly or indirectly in making this project a grand success.

CHAPTER 1

INTRODUCTION

INTRODUCTION

The “Apartment Parking System” has been developed to override the problems prevailing in the practicing manual system. This application is supported to eliminate and, in some cases, reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the Apartment to carry out operations in a smooth and effective manner.

WHAT IS APARTMENT PARKING MANAGEMENT SYSTEM?

Apartment Parking System help people find parking spots quickly, thereby reducing frustration and enhancing the visitor’s experience. Apartment Parking Management System indicates the free spaces available at every level at a car park at real time.

WHAT DO YOU MANAGE IN APARTMENT PARKING MANAGEMENT?

An Apartment Parking System automates a car parking system. It optimizes parking space and make processes efficient. It gives real-time car parking information such as vehicle & slot counts, available slots display, reserved parking, reports, and a host of other features. It manages parking space, car details and available slots for parking for the user.

FEATURES

- Login page for Admin
- Login page for User
- Menu page for performing different operations
- Forms for adding vehicle
- Forms for showing user history
- Form for displaying the information of car parked, user details.
- Admin page for performing update and delete operations.
- Form for Complaints.
- Update parking slots.
- Remove vehicle.

PROJECT OBJECTIVES

- Monitoring of parking space and updated indication of vacant parking slots.
- Cloud computing.
- Information technology.
- Parking record.
- Personal Parking record.
- Admin Record.
- User Record.

CHAPTER 2

PROBLEM STATEMENT

PROBLEM STATEMENT

To manage the information of all parking of a particular apartment. The details of the existing parking's are retrieved by the system. New users update their details in the system. Along with parking details , car number,model, record details are also maintained. Admin may insert, update and cancel the record at any time.

SIGNIFICANCE OF PARKING DATABASE

Optimized parking – Users find the best spot available, saving time, resources and effort. The parking lot fills up efficiently and space can be utilized properly by Apartment.

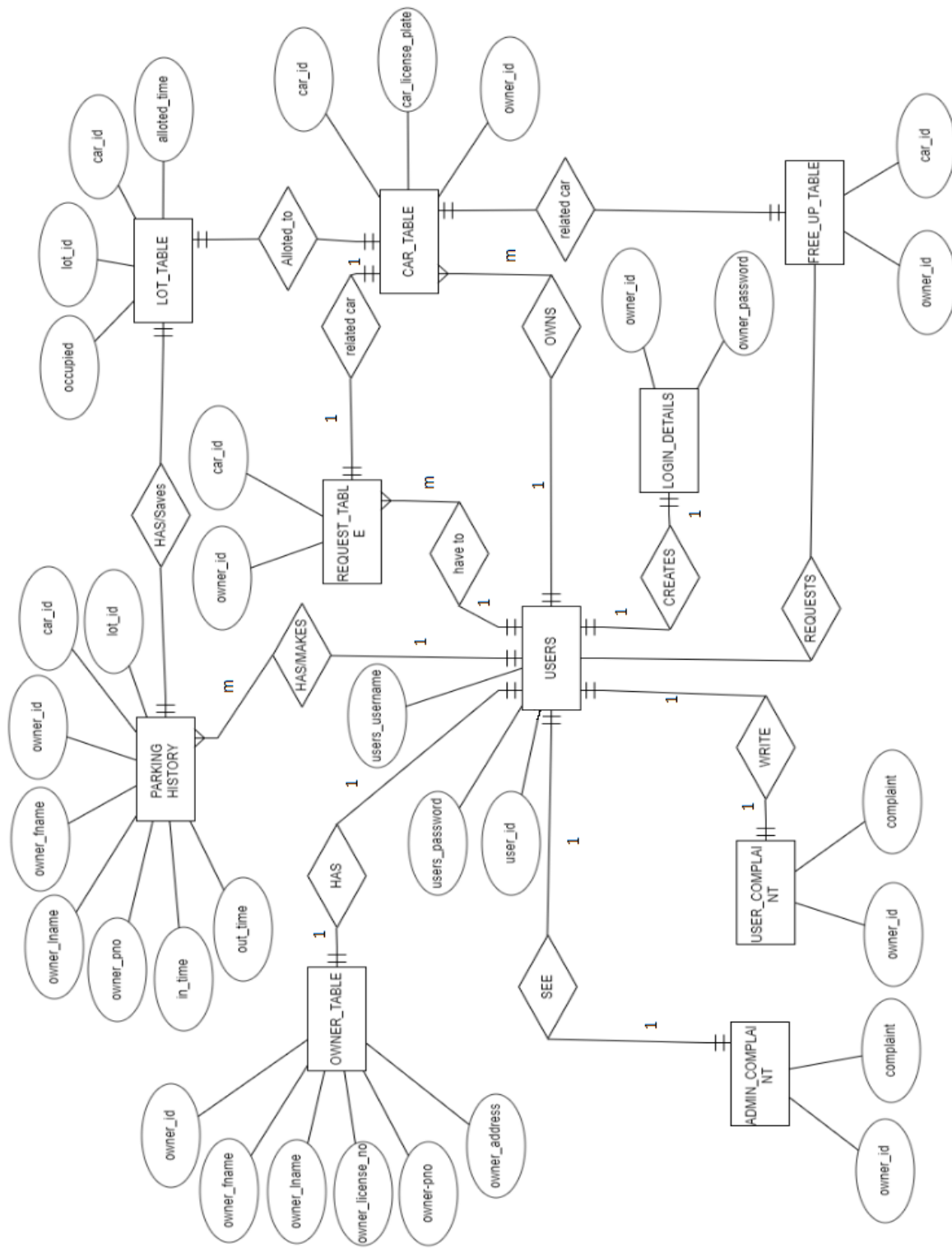
Reduced traffic – Traffic flow increases as fewer cars are required to drive around in search of an open parking space.

Reduced pollution – Searching for parking burns around one million barrels of oil a day. An optimal parking solution will significantly decrease driving time, thus lowering the amount of daily vehicle emissions and ultimately reducing the global environmental footprint.

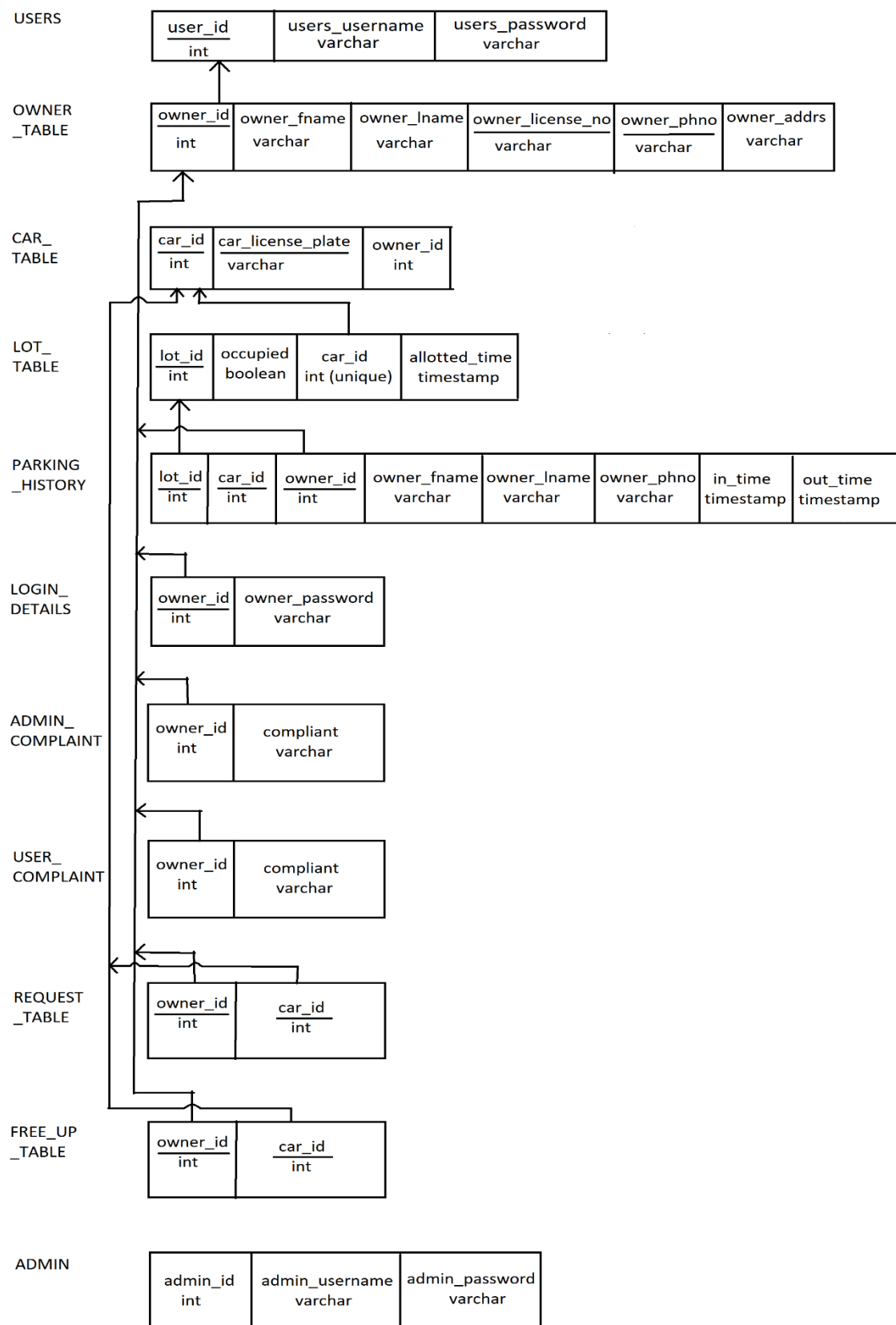
Enhanced User Experience – A smart parking solution will integrate the entire user experience into a unified action. Spot identification, location search and time notifications all seamlessly become part of the destination arrival process.

CHAPTER 3

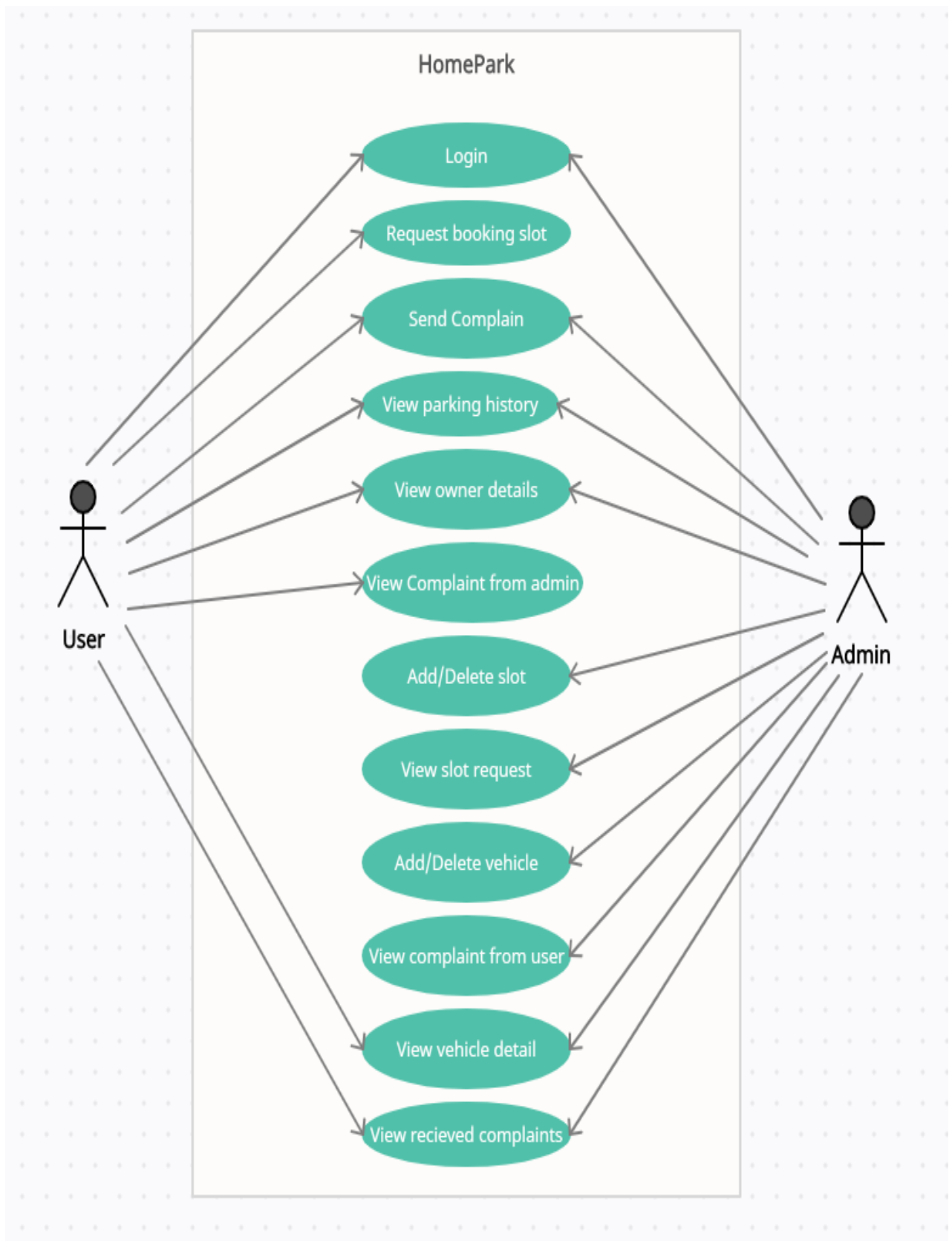
ER-Diagram:



RELATIONAL SCHEMA:



USE CASE:



CHAPTER 4

FRONTEND TECHNOLOGY

List of technologies for frontend

HTML|CSS

Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS).HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

BOOTSTRAP

Bootstrap is a powerful toolkit - a collection of HTML, CSS, and JavaScript tools for creating and building web pages and web applications.

It is a potent front-end framework used to create modern websites and web apps. It's open-source and free to use, yet features numerous HTML and CSS templates for UI interface elements such as buttons and forms.

CHAPTER 5

BACKEND TECHNOLOGY

List of technologies for Backend

Database:

Microsoft SQL Server is a relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications which may run either on the same computer or another computer across a network.

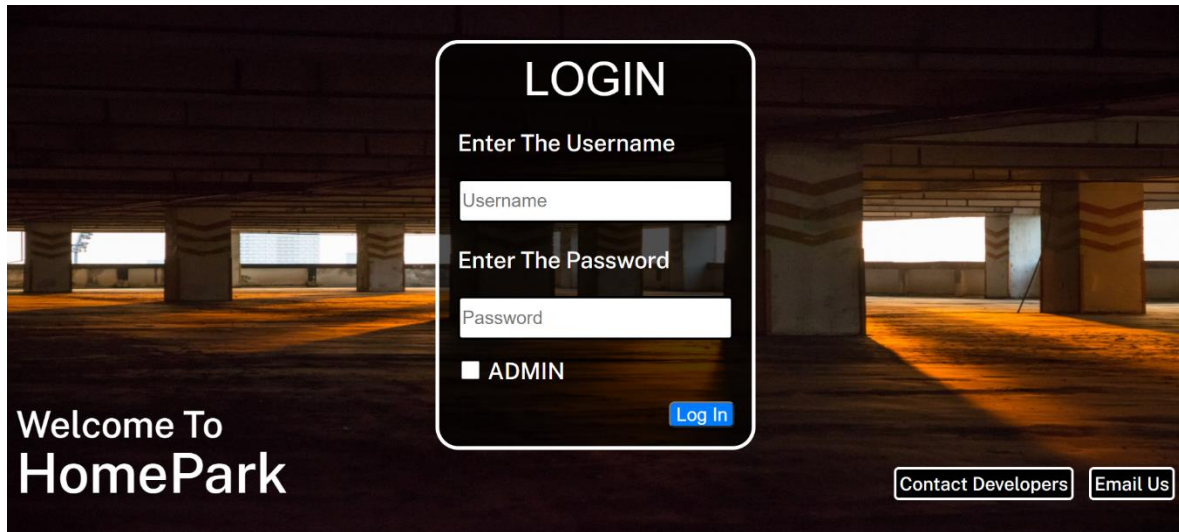
PHP:

PHP is a general-purpose scripting language especially suited to web development. PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response.

Chapter 6

SCREENSHOTS

LOGIN PAGE:



LOGIN

Enter The Username

Username

Enter The Password

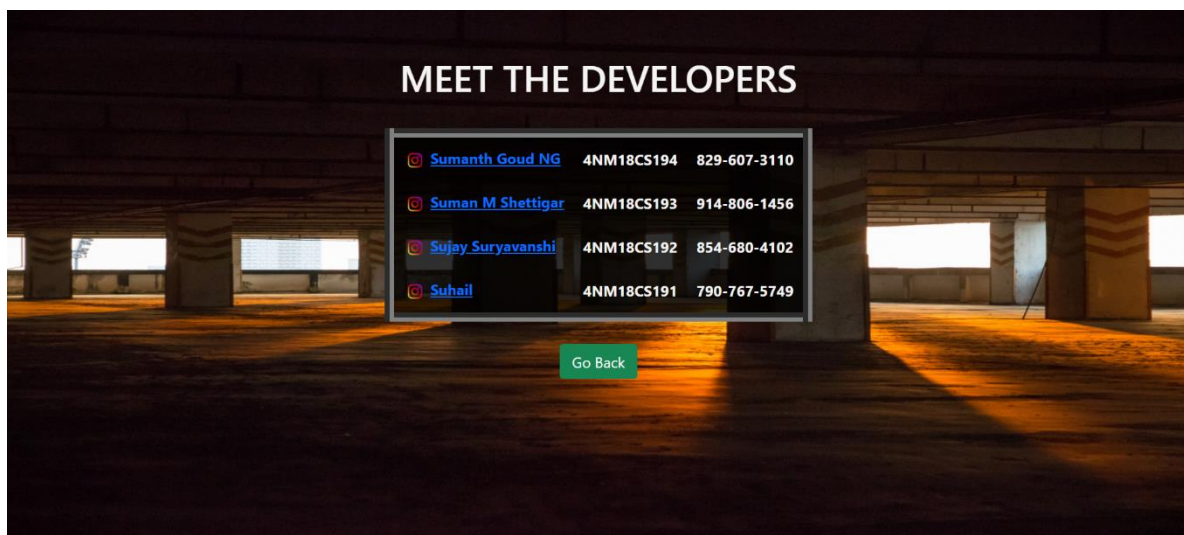
Password

☐ ADMIN





Log In

Welcome To HomePark

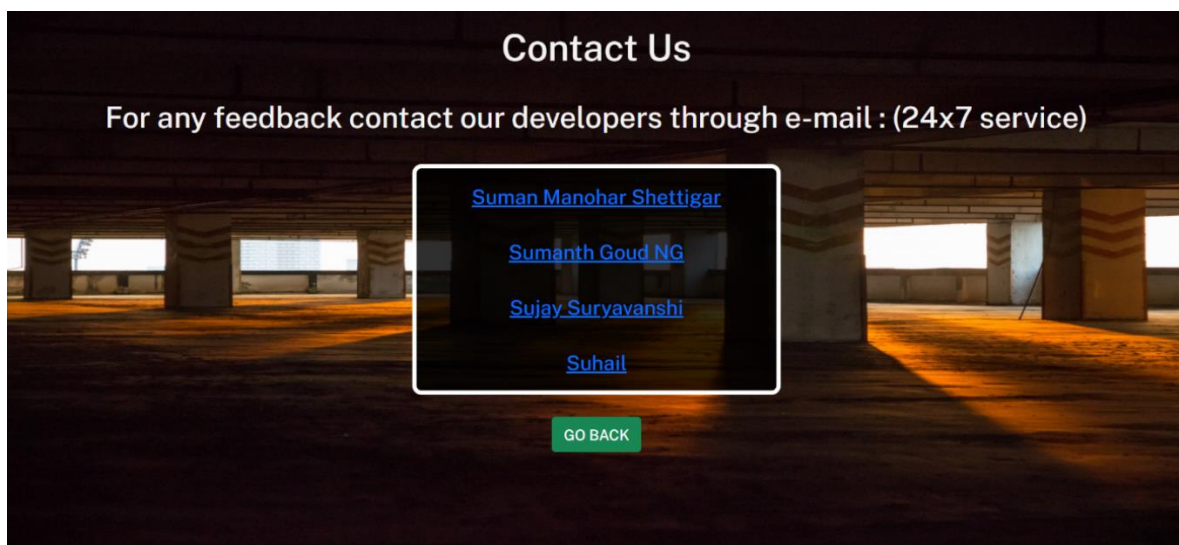
Contact Developers Email Us



MEET THE DEVELOPERS

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Go Back



Contact Us

For any feedback contact our developers through e-mail : (24x7 service)

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[Sumanth Goud NG](#)

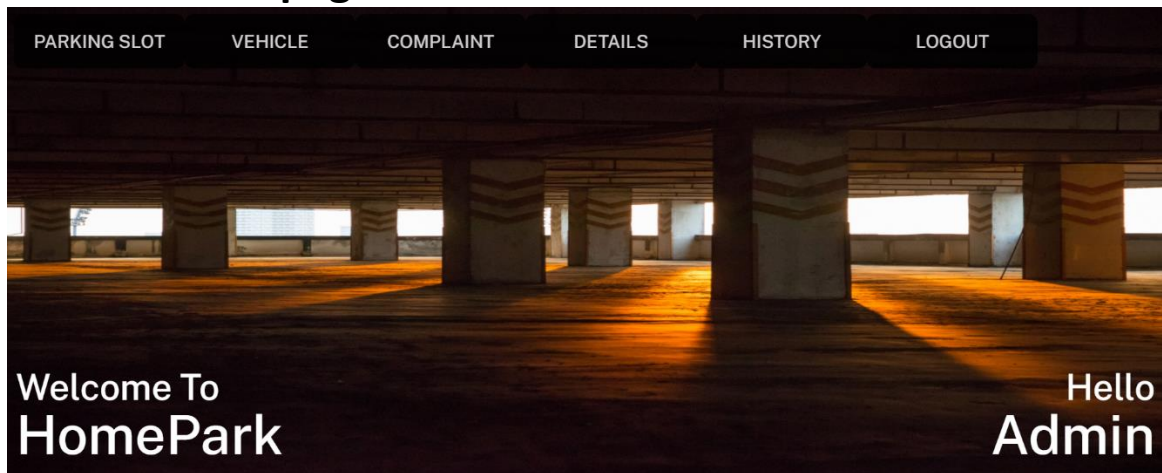
[Sujay Suryavanshi](#)

[Suhail](#)

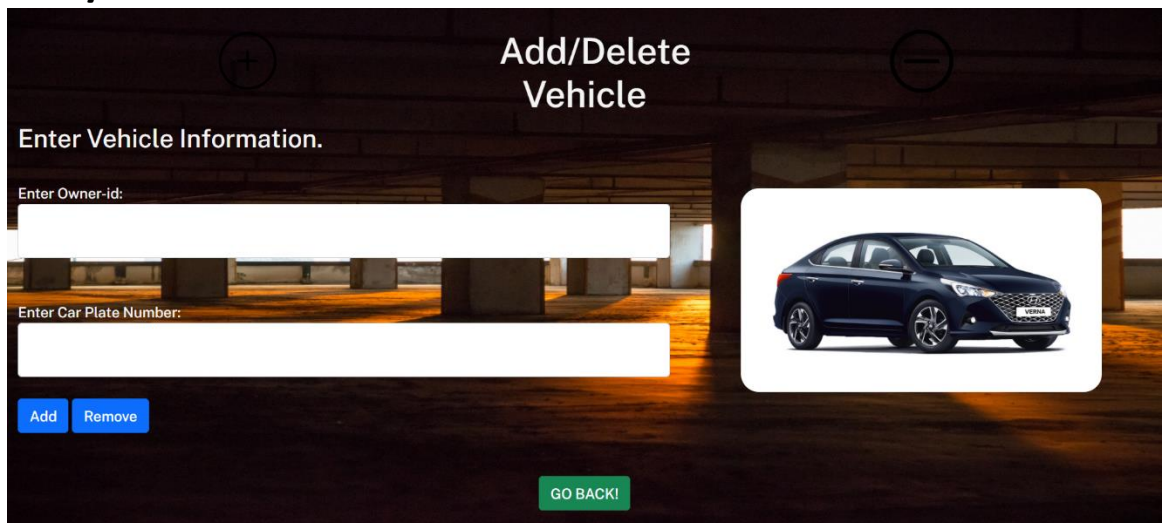
GO BACK

ADMIN:

Admin Home page:

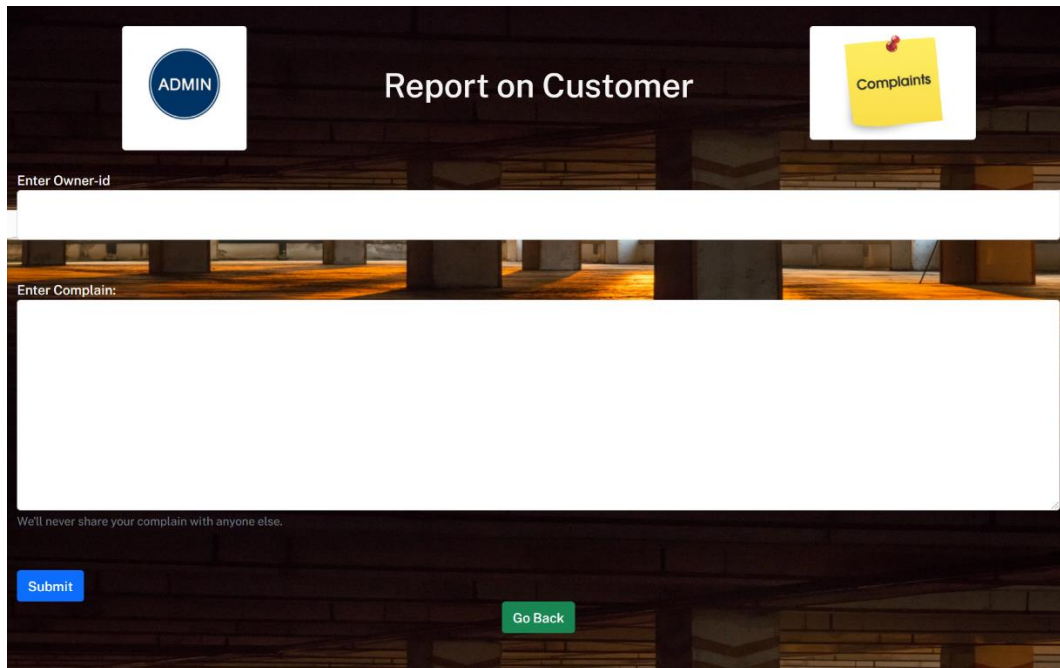


Add/Remove Car:



Complaints:

Complaints to users from Admin:



The screenshot shows a web interface for an Admin to report a customer complaint. At the top left is a blue circular icon with the word 'ADMIN'. At the top right is a yellow sticky note icon with the word 'Complaints'. The main heading is 'Report on Customer'. Below the heading, there is a text input field labeled 'Enter Owner-id'. Below that is a larger text area labeled 'Enter Complain:'. At the bottom left is a blue 'Submit' button, and at the bottom right is a green 'Go Back' button. A small disclaimer text 'We'll never share your complain with anyone else.' is located below the text area.

ADMIN

Report on Customer

Complaints

Enter Owner-id

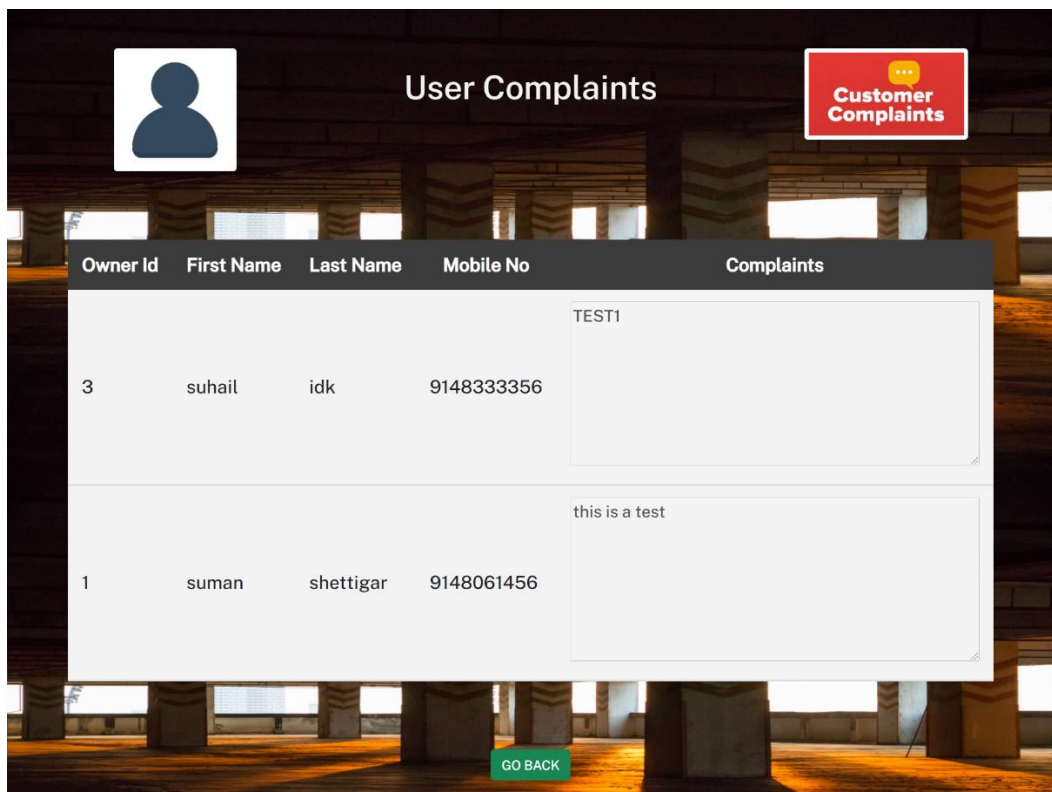
Enter Complain:

We'll never share your complain with anyone else.

Submit

Go Back

Complaints from users:




The screenshot shows a web interface for viewing user complaints. At the top left is a blue person icon. At the top right is a red speech bubble icon with the text 'Customer Complaints'. The main heading is 'User Complaints'. Below the heading is a table with the following columns: Owner Id, First Name, Last Name, Mobile No, and Complaints. The table contains two rows of data. At the bottom right is a green 'GO BACK' button.


Owner Id	First Name	Last Name	Mobile No	Complaints
3	su hail	idk	9148333356	TEST1
1	suman	shettigar	9148061456	this is a test

GO BACK

Assign Parking slot:



PARKING DASHBOARD



Enter car details to add or remove car from the parking slot

Enter Car ID:

Enter the Lot Id:

[Enter](#) [Delete](#) [See Incoming Requests](#) [See Outgoing Requests](#)

Occupied Slots

Lot Number	Car ID	Car License Plate	First Name	Last Name	License Number	Phone Number	Alloted Time
1	1	ABC11	suman	shettigar	license1	9148061456	2020-12-18 15:52:48
4	2	ABC22	sumanth	goud	license2	9148061226	2020-12-18 15:52:52

Free slots

Lot Number
2
3
5

[Go Back](#)

Parking requests:

Outgoing Slot Requests


Owner ID	Car ID	Car License Plate	First Name	Last Name	License Number	Phone Number
1	1	ABC11	suman	shettigar	license1	9148061456

[GO BACK](#)


Incoming Slot Requests

Owner ID	Car ID	Car License Plate	First Name	Last Name	License Number	Phone Number
3	3	ABC33	suhail	idk	license3	9148333356

[GO BACK](#)




OWNER DETAILS




Owner ID	First Name	Last Name	License Number	Phone Number	Address
1	suman	shettigar	license1	9148061456	Flat No 10
2	sumanth	goud	license2	9148061226	Flat No 11
3	su hail	idk	license3	9148333356	Flat No 12
4	su jay	na rayan	license4	9148666456	Flat No 13
5	ra hul	la o	license5	9133331456	Flat No 14

GO BACK



PARKING HISTORY

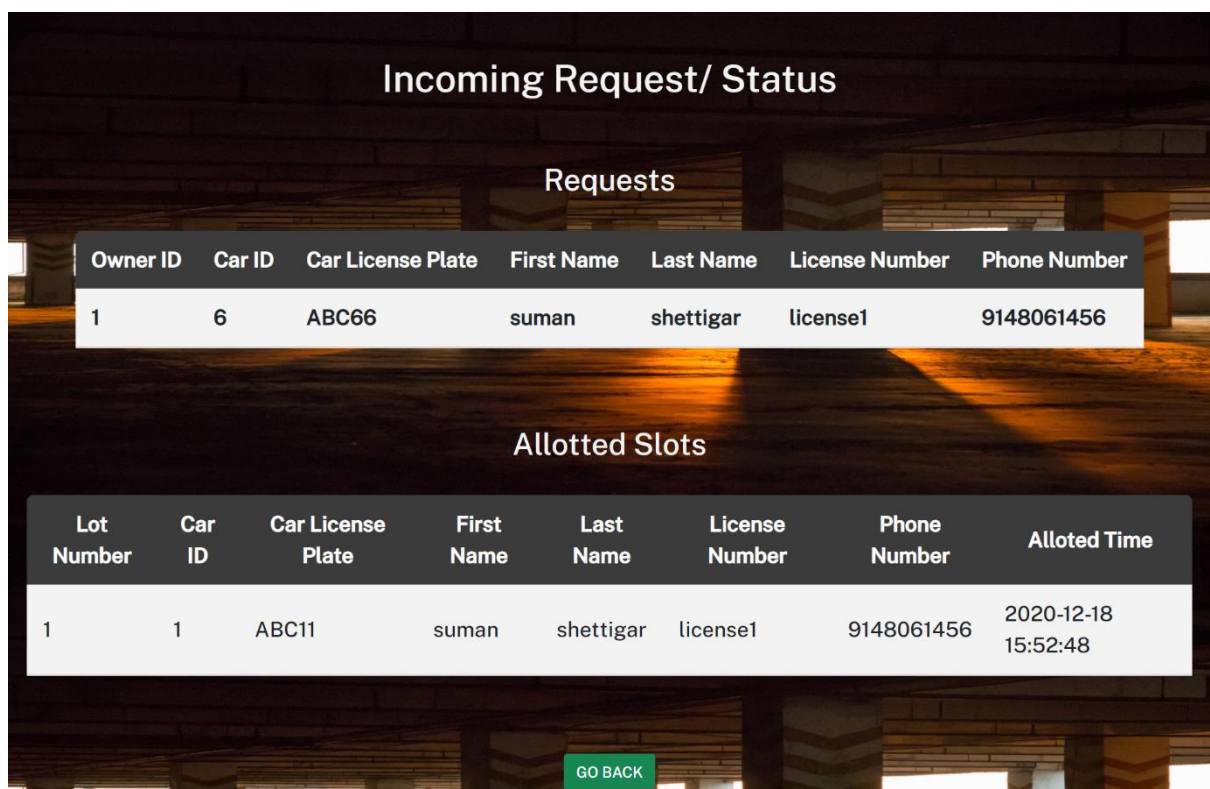
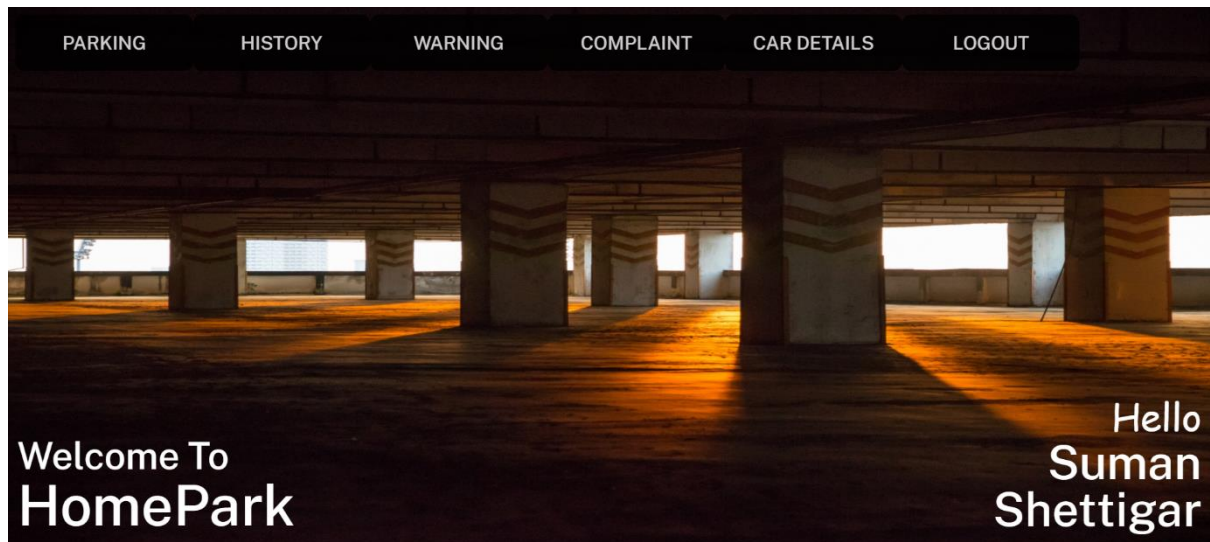


Lot Id	Car Id	Owner Id	First Name	Last Name	Mobile No	In-Time	Out Time
1	1	1	suman	shettigar	9148061456	2020-12-18 15:52:48	Currently Parked
4	2	2	sumanth	goud	9148061226	2020-12-18 15:52:52	Currently Parked

GO BACK

Users:

Users Home Page:



Requests:

Outgoing Request/s Status

Requests

Owner ID	Car ID	Car License Plate	First Name	Last Name	License Number	Phone Number
1	1	ABC11	suman	shettigar	license1	9148061456

Allotted Slots

Lot Number	Car ID	Car License Plate	First Name	Last Name	License Number	Phone Number	Allotted Time
1	1	ABC11	suman	shettigar	license1	9148061456	2020-12-18 15:52:48

GO BACK

Request Slot

Do You Want To Book A Slot for Parking your Car?

Enter car-id:

Request

Go Back

Request Freeup Slot

Do You Want To Free The Slot At Which Your Car Is Parked?

Enter the Car Id:

Request

GO BACK

Complaints by user:

Send Us Your Complain

Enter Complain:

We'll never share your complain with anyone else.

SubmitGO BACK

My Compliant History

Owner Id	First Name	Last Name	Mobile No	Complaints
1	suman	shettigar	9148061456	<div style="border: 1px solid #ccc; padding: 5px; min-height: 80px;">this is a test</div>

GO BACK

My Car Parking History

Lot Id	Car Id	Owner Id	First Name	Last Name	Mobile No	In-Time	Out Time
1	1	1	suman	shettigar	9148061456	2020-12-18 15:52:48	Currently Parked

GO BACK

My Car Details

Owner ID	Car ID	Car License Plate	First Name	Last Name	License Number	Phone Number	Address
1	1	ABC11	suman	shettigar	license1	9148061456	Flat No 10
1	6	ABC66	suman	shettigar	license1	9148061456	Flat No 10

GO BACK

CHAPTER 7

CONCLUSION

- The “APARTMENT PARKING MANAGEMENT SYSTEM” provides an easy way for the operator to interact with the database and to manipulate the data in the database.
- The operator can add, delete and update the records in the database with ease.
- The future parking record will be a computer based, multimedia record capable of including free text , high resolution images, sound(e.g., auscultations,), full-motion video and elaborate coding schemas.
- In addition, future parking records will provide new functions through links to other databases and decision support tools

CHAPTER 8

REFERENCES

[1.www.wikipedia.com](http://www.wikipedia.com)

[2.www.youtube.com](http://www.youtube.com)

[3.www.w3schools.com](http://www.w3schools.com)