DR. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous institute affiliated to Vishvesvaraya Technology University, Belagavi, Accredited by NAAC, UGC with 'A 'Grade) Near Jnana Bharathi Campus, Bengaluru – 560056

MINI PROJECT REPORT
ON

"CAR RENTAL MANAGEMENT SYSTEM"

BACHELOR OF ENGINEERING
IN

COMPUTER SCIENCE AND ENGINEERING

SEMESTER: IV

ACADEMIC YEAR: 2024

SUBMITTED BY: -

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Certificate

This is to certify that the project entitled "**CAR RENTAL MANAGEMENT SYSTEM**" submitted in the partial fulfillment of the requirement of the 4th semester DBMS laboratory curriculum during the year 2023-24 is a result of bonafide work carried out by- **Vachan U S (1DA22CS178), Sumant Shet (1DA22CS168), Suhas P (1DA22CS166)**

Signature of the guide

Mrs. Arathi P **Assistant Professor,** **Dept. of CSE Dr.AIT**	**Mrs. Megha L** **Assistant .Prof,** **Dept. of CSE Dr.AIT**	**Dr. Siddaraju,** **Head of Department** **Dept. of CSE, Dr.AIT**

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VACHAN U S

SUMANT SHET

SUHAS P

ABSTRACT

The car rental management system is a software solution designed to streamline and optimize the operations of car rental businesses. This system facilitates the management of various processes, including vehicle inventory, customer bookings, rental transactions, and fleet maintenance. By integrating these functionalities into a cohesive platform, the car rental management system aims to enhance operational efficiency, reduce administrative burdens, and improve customer satisfaction.

Key features of the system include real-time availability tracking, automated booking and reservation management, customer relationship management (CRM), billing and invoicing, and comprehensive reporting tools. Additionally, the system supports integration with online booking platforms, allowing customers to make reservations through the web or mobile applications. The implementation of a car rental management system can lead to significant cost savings by minimizing manual processes, reducing errors, and optimizing vehicle utilization. Furthermore, advanced analytics and reporting capabilities provide valuable insights into business performance, helping managers make informed decisions. Overall, the car rental management system represents a critical innovation for car rental businesses, offering a competitive edge through enhanced operational efficiency, improved customer experiences, and robust data-driven decision-making tools.

CONTENTS

CHAPTER 1

INTRODUCTION

A Car Rental Management System is looking to develop a state-of-the-art car rental portfoliomanagement system which is able to track their car rental booking history and billing and car details.This system facilitates the owner of the Car Rental Company to retrieve, update and track and deletethe bookings and cars efficiently. At the same time, can utilize this system to monitor their financial management. Currently, different locations of the car rental company have their own separated systems leading to lack of communication and inefficient data sharing. For example, the car rental company located in Mumbai uses simple Microsoft Excel to keep the record of their customers, cars and insurance of their cars which is inconvenient to retrieve and update the cars and customer's information. In the car rental company located at Dharwad, maintain a book-based ledger to keep a record of their customers and cars and the insurance for the same. The main branch of the company located in Bengaluru has to keep the customer and car details of all their branch offices on their owncomputer system. While each statement serves a distinctive process, there is no coordination,assimilation and representation of data. The systems may have duplicate data which leads to waste ofspace. The different systems also may have different application programs which cause incompatiblefiles. Due to these disadvantages of the current system, a car rental management system is proposed.Car Rental Management System is a database management system (DBMS) which is based on computer networks, using the advance database technology to construct, maintain and update various kinds of data in data base system. The DBMS can track and update all the information of the cars available and customers during a particular time span. The major advantages of the DBMS are easy to retrieve and update information, efficient data sharing and communication and reliable backup and security. Information about cars is done by just writing the car name, car model and insurance details.Whenever a new car is added to the company its information is stored freshly. Bills are generated by recording the usage of the car by the customer. Details of the customer are updated on a written sheetand at last, they all summed up.

CHAPTER 2

REQUIREMENT SPECIFICATION

The hardware and software components of a computer system that are required to install and usesoftware efficiently are specified in the SRS. The minimum system requirements need to
be met for the programs to run at all times on the system.

2.2 HARDWARE REQUIREMENTS

The hardware requirements specify the necessary hardware which provides us the platform toimplement our programs.

- 2.2 GHz processor (Pentium).
- GB RAM (System Memory).
- 20 GB of hard-drive space.
- VGA capable of 1024 x 768 screen resolution.
- Necessary computer peripherals such as keyboard etc.

2.3 SOFTWARE REQUIREMENTS

The software requirement specifies the pre-installed software needed to run the code beingimplemented in this project.

- Operating System: Windows Operating System
- Language Used: PHP5.6, PHP7.x
- User Interface Design: HTML, JQUERY, JAVASCRIPT, CSS
- Software: XAMPP v.3.3.0
- Web Browser: Google Chrome, Microsoft Edge

CHAPTER 3

DESCRIPTION

A Car Rental Management System is looking to develop a state-of-the-art car rental portfolio management system which is able to track their car rental booking history and billing and car details.This system facilitates the owner of the Car Rental Company to retrieve, update and track and deletethe bookings and cars efficiently. At the same time, can utilize this system to monitor their financial management.

Currently, different locations of the car rental company have their own separated systems leading to lack of communication and inefficient data sharing. For example, the car rental company located in Bangalore uses simple Microsoft Excel to keep the record of their customers, cars and insurance of their cars which is inconvenient to retrieve and update the cars and customer's information. In the car rental company located at Whitefield, maintain a book-based ledger to keep a record of their customers and cars and the insurance for the same. The main branch of the company located in Rajajinagar has to keep the customer and car details of all their branch offices on their owncomputer system. While each statement serves a distinctive process, there is no coordination,assimilation and representation of data. The systems may have duplicate data which leads to waste ofspace. The different systems also may have different application programs which cause incompatiblefiles.

Due to these disadvantages of the current system, a car rental management system is proposed. Car Rental Management System is a database management system (DBMS) which is based on computer networks, using the advance database technology to construct, maintain and update various kinds ofdata in data base system. The DBMS can track and update all the information of the cars available and customers during a particular time span. The major advantages of the DBMS are easy to retrieve and update information, efficient data sharing and communication and reliable backup and security.

3.1 E-R DIAGRAM

Entity	Attributes
Cars	car_id, car_nameplate, ac_price, non_ac_price, ac_price_per_day, non_ac_price_per_day, car_availability
clientcars	car_id, client_username
clients	client_username, client_name, client_phone, client_email, client_address, client_password
customers	customer_username, customer_name, customer_phone, customer_email, customer_address, customer_password
driver	driver_id, driver_name, dl_number, driver_phone, driver_address, driver_gender, client_username, driver_availability
feedback	name, e-mail, message
rentedcars	id, customer_username, car_id, driver_id, booking_date, rent_start_date, rent_end_date, car_return_date, fare, charge_type, distance, no_of_days, total_amount, return_status

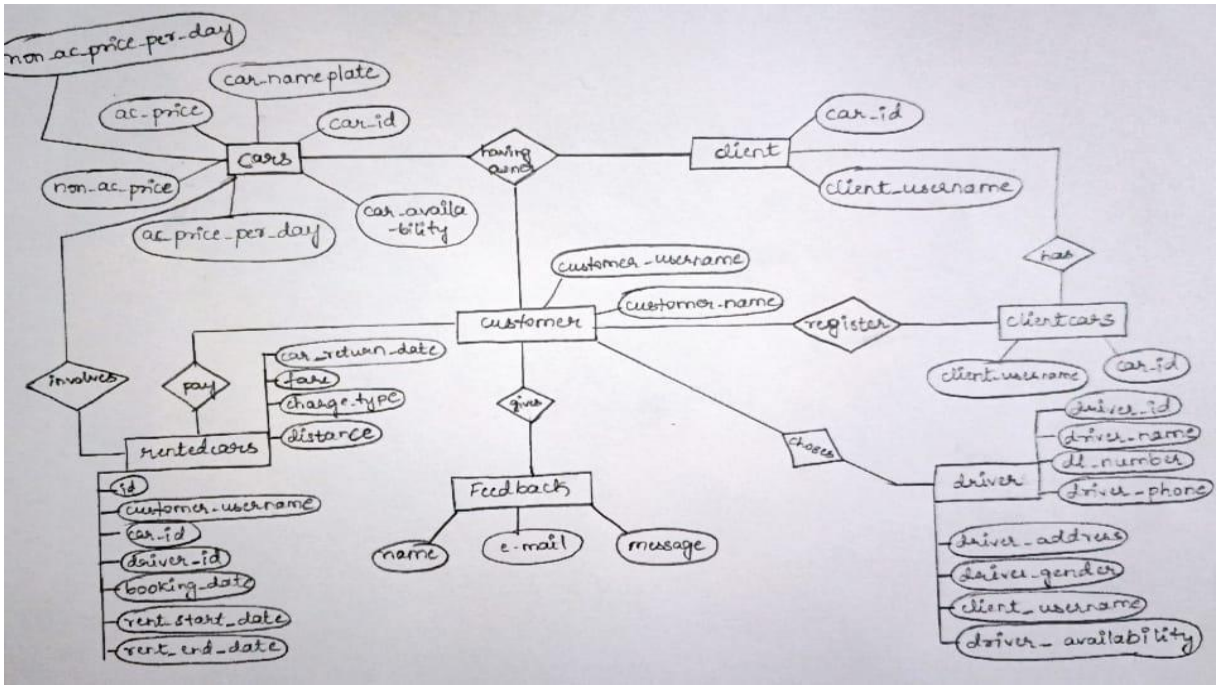


Fig 3.1 E-R Diagram

3.2 SCHEMA DIAGRAM

CAR

car_id	car_name	car_nameplate	car_img	ac_price	non_ac_price	ac_price_per_day	non_ac_price_per_day	car_availability

CLIENTCARS

car_id	client_username

CLIENTS

client_username	client_name	client_phone	client_email	client_address	client_password

CUSTOMERS

customer_username	customer_name	customer_phone	customer_email	customer_address	customer_password

DRIVERS

driver_id	driver_name	dl_number	driver_phone	driver_address	driver_gender	client_username	driver_availability

FEEDBACK

name	e-mail	message

RENTEDCARS

id	customer_username	car_id	driver_id	booking_date	rent_start_date	rent_end_date
car_return_date	fare	charge_type	distance	no_of_days	total_amount	return_status

Fig 3.2 Schema diagram

3.3 CARS TABLE:

3.3.1 CARS

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	car_id	int(20)			No	None		AUTO_INCREMENT
2	car_name	varchar(50)	utf8_general_ci		No	None		
3	car_nameplate	varchar(50)	utf8_general_ci		No	None		
4	car_img	varchar(50)	utf8_general_ci		Yes	NA		
5	ac_price	float			No	None		
6	non_ac_price	float			No	None		
7	ac_price_per_day	float			No	None		
8	non_ac_price_per_day	float			No	None		
9	car_availability	varchar(10)	utf8_general_ci		No	None		

Fig 3.3.1 Cars

3.3.2 CLIENTCARS:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	car_id	int(20)			No	None		
2	client_username	varchar(50)	utf8_general_ci		No	None		

Fig 3.3.2 Clint cars

3.3.3 CLIENTS:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	client_username	varchar(50)	utf8_general_ci		No	None		
2	client_name	varchar(50)	utf8_general_ci		No	None		
3	client_phone	varchar(15)	utf8_general_ci		No	None		
4	client_email	varchar(25)	utf8_general_ci		No	None		
5	client_address	varchar(50)	utf8_estonian_ci		No	None		
6	client_password	varchar(20)	utf8_general_ci		No	None		

Fig 3.3.3 Clients Details

3.3.4 CUSTOMERS

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	customer_username	varchar(50)	utf8_general_ci		No	None		
2	customer_name	varchar(50)	utf8_general_ci		No	None		
3	customer_phone	varchar(15)	utf8_general_ci		No	None		
4	customer_email	varchar(25)	utf8_general_ci		No	None		
5	customer_address	varchar(50)	utf8_general_ci		No	None		
6	customer_password	varchar(20)	utf8_general_ci		No	None		

Fig 3.3.4 Customers Details

3.3.5 DRIVER

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	driver_id	int(20)			No	None		AUTO_INCREMENT
2	driver_name	varchar(50)	utf8_general_ci		No	None		
3	dl_number	varchar(50)	utf8_general_ci		No	None		
4	driver_phone	varchar(15)	utf8_general_ci		No	None		
5	driver_address	varchar(50)	utf8_general_ci		No	None		
6	driver_gender	varchar(10)	utf8_general_ci		No	None		
7	client_username	varchar(50)	utf8_general_ci		No	None		
8	driver_availability	varchar(10)	utf8_general_ci		No	None		

Fig 3.3.5 Driver Details

3.3.6 FEEDBACK

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	name	varchar(20)	utf8_general_ci		No	None		
2	e_mail	varchar(30)	utf8_general_ci		No	None		
3	message	varchar(150)	utf8_general_ci		No	None		

Fig 3.3.6 Feedback

3.3.7 RENTEDCARS

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(100)			No	None		AUTO_INCREMENT
2	customer_username	varchar(50)	utf8_general_ci		No	None		
3	car_id	int(20)			No	None		
4	driver_id	int(20)			No	None		
5	booking_date	date			No	None		
6	rent_start_date	date			No	None		
7	rent_end_date	date			No	None		
8	car_return_date	date			Yes	NULL		
9	fare	double			No	None		
10	charge_type	varchar(25)	utf8_general_ci		No	days		
11	distance	double			Yes	NULL		
12	no_of_days	int(50)			Yes	NULL		
13	total_amount	double			Yes	NULL		
14	return_status	varchar(10)	utf8_general_ci		No	None		

3.3.7 Rental Cars

CHAPTER 4

CODING

4.1 Table Creation and Insertion

4.1.1 CARS Table:

Creation:

```
 CREATE TABLE cars (
 car_id int(20) NOT NULL,
 car_name varchar(50) NOT NULL,
 car_nameplate varchar(50) NOT NULL,
 car_img varchar(50) DEFAULT 'NA',
 ac_price float NOT NULL,
 non_ac_price float NOT NULL,
 ac_price_per_day float NOT NULL,
 non_ac_price_per_day float NOT NULL,
 car_availability varchar(10) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

Inserting:

```
INSERT INTO cars (car_id, car_name, car_nameplate, car_img, ac_price, non_ac_price,
ac_price_per_day, non_ac_price_per_day, car_availability) VALUES
(1, 'Wagon R', 'KA19MG9910', 'assets/img/cars/wagon-r.png', 10, 8, 2000, 1600, 'yes'),
(2, 'Alto 800', 'MH20GH9452', 'assets/img/cars/alto-800.png', 9, 7, 1800, 1400, 'yes'),
(3, 'Innova', 'GA16NM9125', 'assets/img/cars/Innova.png', 13, 11, 2600, 2200, 'yes'),
(4, 'Ford Figo', 'GJ17HZ4001', 'assets/img/cars/figo.png', 11, 9, 2200, 1800, 'yes'),
(6, 'Mahindra Bolero', 'KL18MJ8472', 'assets/img/cars/bolero.jpg', 15, 13, 3000, 2600, 'yes'),
(7, 'Honda Amaze', 'PJ16YX8820', 'assets/img/cars/amaze.png', 14, 12, 2800, 2400, 'no'),
(8, 'Tata Nexon', 'WB15EX5005', 'assets/img/cars/nexon.jpg', 12, 10, 2400, 2000, 'yes'),
(9, 'Swift Dzire', 'BR01HX8001', 'assets/img/cars/dzire.png', 10, 8, 2000, 1600, 'yes'),
(10, 'Suzuki Ciaz', 'TN17MS1997', 'assets/img/cars/Suzuki_Ciaz_2017.jpg', 12, 10, 2400,
2000, 'yes'),
(11, 'Mahindra XUV 500', 'KA12EX1883', 'assets/img/cars/Mahindra XUV.jpg', 15, 13,
3000, 2600, 'yes'),
```

(12, 'Toyota Fortuner', 'GA08MX1997', 'assets/img/cars/Fortuner.png', 16, 14, 3200, 2800, 'yes'),
(13, 'Suzuki Ertiga', 'MH02DC1997', 'assets/img/cars/maruti-suzuki-ertiga.jpg', 14, 12, 2800, 2400, 'yes');

4.1.2 CLIENT CARS Tables:

Creation:

```
CREATE TABLE clientcars (
  car_id int(20) NOT NULL,
  client_username varchar(50) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

Inserting:

```
INSERT INTO clientcars (car_id, client_username) VALUES
(1, 'nikhil'),
(2, 'nikhil'),
(3, 'nikhil'),
(4, 'nikhil'),
(10, 'nikhil'),
(11, 'nikhil'),
(6, 'roshan'),
(7, 'roshan'),
(8, 'roshan'),
(9, 'roshan'),
(12, 'roshan'),
(13, 'roshan');
```

4.1.3 CLIENTS:

Creation:

```
CREATE TABLE clients (
```

```
  client_username varchar(50) NOT NULL,
  client_name varchar(50) NOT NULL,
  client_phone varchar(15) NOT NULL,
  client_email varchar(25) NOT NULL,
  client_address varchar(50) CHARACTER SET utf8 COLLATE utf8_estonian_ci NOT
NULL,
  client_password varchar(20) NOT NULL) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

Insertion:

```
INSERT INTO clients (client_username, client_name, client_phone,
client_email, client_address, client_password) VALUES
('nikhil', 'Nikhil Amin', '8547869542', 'nikhil@gmail.com', 'Mangalore', 'root'),
('roshan', 'Roshan Raj', '8569874125', 'roshan@gmail.com', 'Surathkal', 'root');
```

4.1.4 CUSTOMERS

Creation:

```
CREATE TABLE customers (
  customer_username varchar(50) NOT NULL,
  customer_name varchar(50) NOT NULL,
  customer_phone varchar(15) NOT NULL,
  customer_email varchar(25) NOT NULL,
  customer_address varchar(50) NOT NULL,
  customer_password varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

Insertion:

```
INSERT INTO customers (customer_username, customer_name,
customer_phone, customer_email, customer_address, customer_password)
```

VALUES
('diwakar', 'Diwakar Vignesh', '9412578632', 'diwakar@gmail.com', 'Patna', 'root'),
('rakshith', 'Rakshith Kotian', '9541257862', 'rakshith@gmail.com', 'Surat', 'root');

4.1.5 DRIVER:

Creation:

```
CREATE TABLE driver (
  driver_id int(20) NOT NULL,
  driver_name varchar(50) NOT NULL,
  dl_number varchar(50) NOT NULL,
  driver_phone varchar(15) NOT NULL,
  driver_address varchar(50) NOT NULL,
  driver_gender varchar(10) NOT NULL,
  client_username varchar(50) NOT NULL,
  driver_availability varchar(10) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

Insertion:

```
INSERT INTO driver (driver_id, driver_name, dl_number, driver_phone, driver_address,
driver_gender, client_username, driver_availability) VALUES
(1, 'Ravi Moolya', 'DL_TEH5974', '9547863157', 'Goa', 'Male', 'nikhil', 'yes'),
(2, 'Nikitha Ghetia', 'DL_NDC7584', '9147523684', 'Gujarath', 'Female', 'nikhil', 'yes'),
(3, 'S M Adil', 'DL_LSC8451', '9147523682', 'Kerala', 'Male', 'nikhil', 'yes'),
(4, 'Sona Somshekar', 'DL_MND8415', '9187563240', 'Mandya', 'Female', 'roshan', 'no'),
(5, 'Aditi Naik', 'DL_GAX9452', '7584960123', 'Vasco', 'Female', 'roshan', 'yes'),
(6, 'Sudarshan Shetty', 'DL_YSH9542', '8421025476', 'Andra Pradesh', 'Male', 'roshan', 'yes'),
(7, 'Jugal Chauhan', 'DL_XEC9742', '7541023695', 'Rajashthan', 'Male', 'roshan', 'yes');
```

4.1.6 FEEDBACK:

Creation:

```
CREATE TABLE feedback (
  name varchar(20) NOT NULL,
  e_mail varchar(30) NOT NULL,
  message varchar(150) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

Insertion:

```
INSERT INTO feedback (name, e_mail, message) VALUES
('Nikhil', 'nikhil@gmail.com', 'Hope this works.');
```

4.1.7 RENTEDCARS:

Creation:

```
CREATE TABLE rentedcars (
  id int(100) NOT NULL,
  customer_username varchar(50) NOT NULL,
  car_id int(20) NOT NULL,
  driver_id int(20) NOT NULL,
  booking_date date NOT NULL,
  rent_start_date date NOT NULL,
  rent_end_date date NOT NULL,
  car_return_date date DEFAULT NULL,
  fare double NOT NULL,
  charge_type varchar(25) NOT NULL DEFAULT 'days',
  distance double DEFAULT NULL,
  no_of_days int(50) DEFAULT NULL,
  total_amount double DEFAULT NULL,
  return_status varchar(10) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

Insertion:

INSERT INTO rentedcars (id, customer_username, car_id, driver_id, booking_date, rent_start_date, rent_end_date, car_return_date, fare, charge_type, distance, no_of_days, total_amount, return_status) VALUES
(574681245, 'diwakar', 4, 2, '2018-07-18', '2018-07-01', '2018-07-02', '2018-07-18', 11, 'km', 244, 1, 5884, 'R'),
(574681246, 'diwakar', 6, 6, '2018-07-18', '2018-06-01', '2018-06-28', '2018-07-18', 15, 'km', 69, 27, 5035, 'R'),
(574681247, 'diwakar', 3, 1, '2018-07-18', '2018-07-19', '2018-07-22', '2018-07-20', 13, 'km', 421, 3, 5473, 'R'),
(574681248, 'rakshith', 1, 2, '2018-07-20', '2018-07-28', '2018-07-29', '2018-07-20', 10, 'km', 69, 1, 690, 'R'),
(574681249, 'rakshith', 1, 2, '2018-07-23', '2018-07-24', '2018-07-25', '2018-07-23', 10, 'km', 500, 1, 5000, 'R'),
(574681250, 'rakshith', 3, 2, '2018-07-23', '2018-07-23', '2018-07-24', '2018-07-23', 2600, 'days', NULL, 1, 2600, 'R'),
(574681251, 'rakshith', 10, 1, '2018-07-23', '2018-07-25', '2018-07-30', '2018-07-23', 10, 'km', 60, 2, 600, 'R'),
(574681252, 'rakshith', 11, 2, '2018-07-23', '2018-07-23', '2018-07-23', '2018-07-23', 13, 'km', 200, 0, 2600, 'R'),
(574681253, 'diwakar', 6, 7, '2018-07-23', '2018-07-23', '2018-08-03', '2018-07-23', 2600, 'days', NULL, 11, 28600, 'R'),
(574681254, 'diwakar', 12, 5, '2018-07-23', '2018-07-23', '2018-07-26', '2018-07-23', 3200, 'days', NULL, 3, 9600, 'R'),
(574681255, 'rakshith', 8, 5, '2018-07-23', '2018-07-23', '2018-08-08', '2018-07-23', 2400, 'days', NULL, 16, 38400, 'R'),
(574681257, 'rakshith', 7, 4, '2018-08-11', '2018-08-13', '2018-08-17', NULL, 14, 'km', NULL, NULL, NULL, 'NR');

4.2 QUERIES

The most common operation in SQL, the query, makes use of the declarative. SELECT statement. SELECT retrieves data from one or more tables, or expressions. Standard SELECT statements have no persistent effects on the database. Some non-standard implementations of SELECT can have persistent effects, such as the SELECT INTO Syntax provided in some databases.

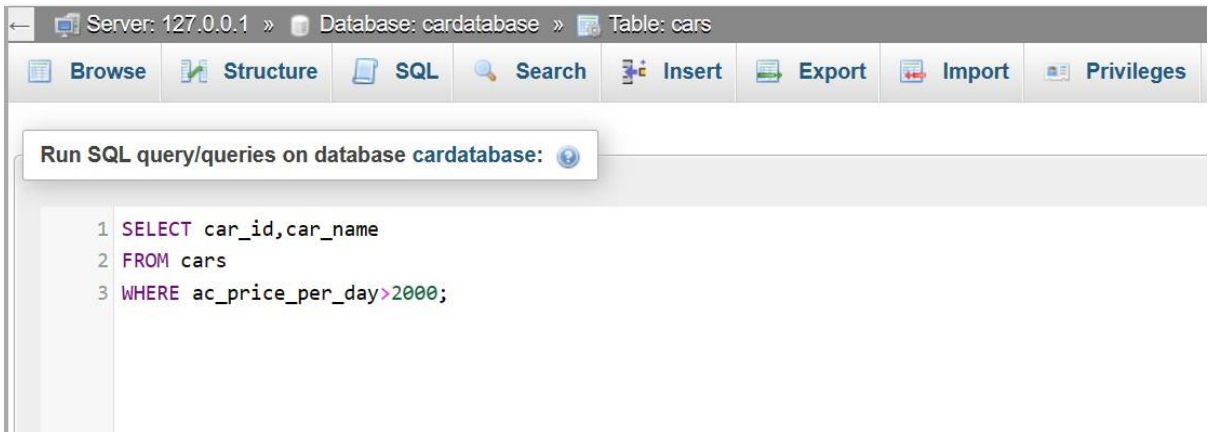
Queries allow the user to describe desired data, leaving the database management system (DBMS) to carry out planning, optimizing, and performing the physical operations necessary to produce that result, normally immediately following the SELECT keyword. An asterisk ("*****") can beused to specify that the query should return all columns of the queried tables. Select is the most complex statement in SQL, with optional keywords and clauses that include:

- The **FROM** clause, which indicates the table(s) to retrieve data from. The **FROM** clause can include optional JOIN subclauses to specify the rules for joining tables.
- The **WHERE** clause includes a comparison predicate, which restricts the rows returned by the query.The **WHERE** clause eliminates all rows from the result set where the comparison predicate does notevaluate to True.
- The **GROUP BY** clause projects rows having common values into a smaller set of rows. **GROUP BY** isoften used in conjunction with SQL aggregation functions or to eliminate duplicate rows from a result set. The **WHERE** clause is applied before the GROUP BY clause.
- The **HAVING** clause includes a predicate used to filter rows resulting from the **GROUP BY** clause. Because it acts on the results of the **GROUP BY** clause, aggregation functions can be used in the **HAVING** clause predicate.
- The **ORDER BY** clause identifies which column[s] to use to sort the resulting data, and in which direction
  to sort them (ascending or descending). Without an **ORDER BY** clause, the order of rows returned by an SQL query is undefined.
- The **DISTINCT** keyword eliminates duplicate data

Query 1:

Display the car_id and ca_name of the cars whose ac_price_per_day is greater than 2000.

Output:



Showing rows 0 - 8 (9 total, Query took 0.0003 seconds.)

```
SELECT car_id,car_name FROM cars WHERE ac_price_per_day > 2000;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

	car_id	car_name
Edit Copy Delete	3	Innova
Edit Copy Delete	4	Ford Figo
Edit Copy Delete	6	Mahindra Bolero
Edit Copy Delete	7	Honda Amaze
Edit Copy Delete	8	Tata Nexon
Edit Copy Delete	10	Suzuki Ciaz
Edit Copy Delete	11	Mahindra XUV 500
Edit Copy Delete	12	Toyota Fortuner
Edit Copy Delete	13	Suzuki Ertiga

Query 2:

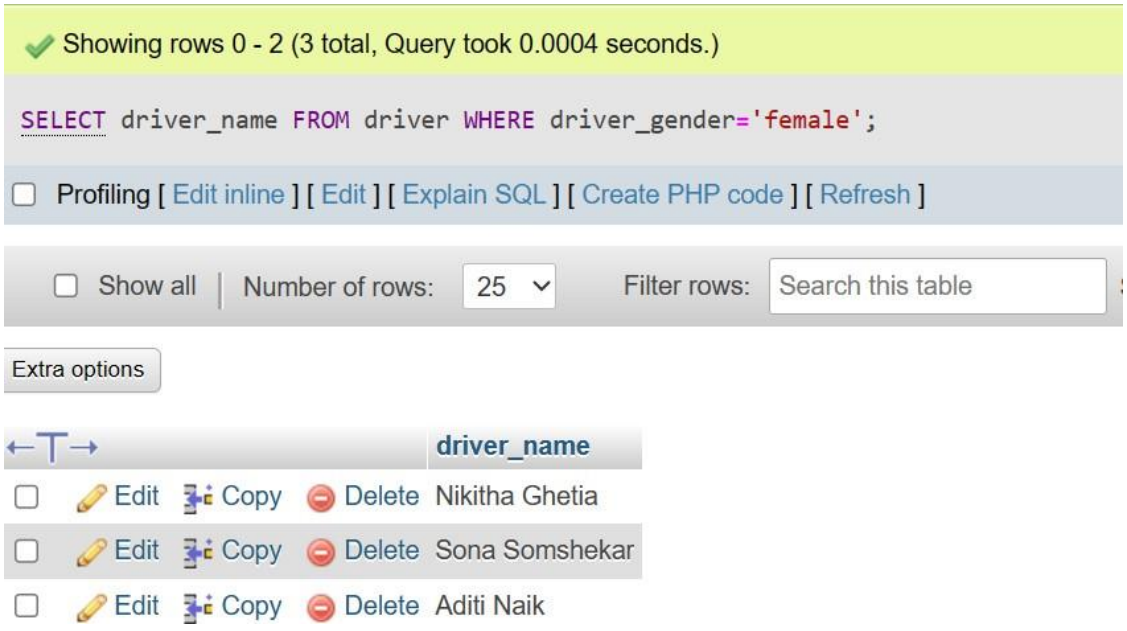
Display the names of the drivers who handled the customers whose fare was greater than 1500.

Output:

Query 3:

Display the names of all the female drivers

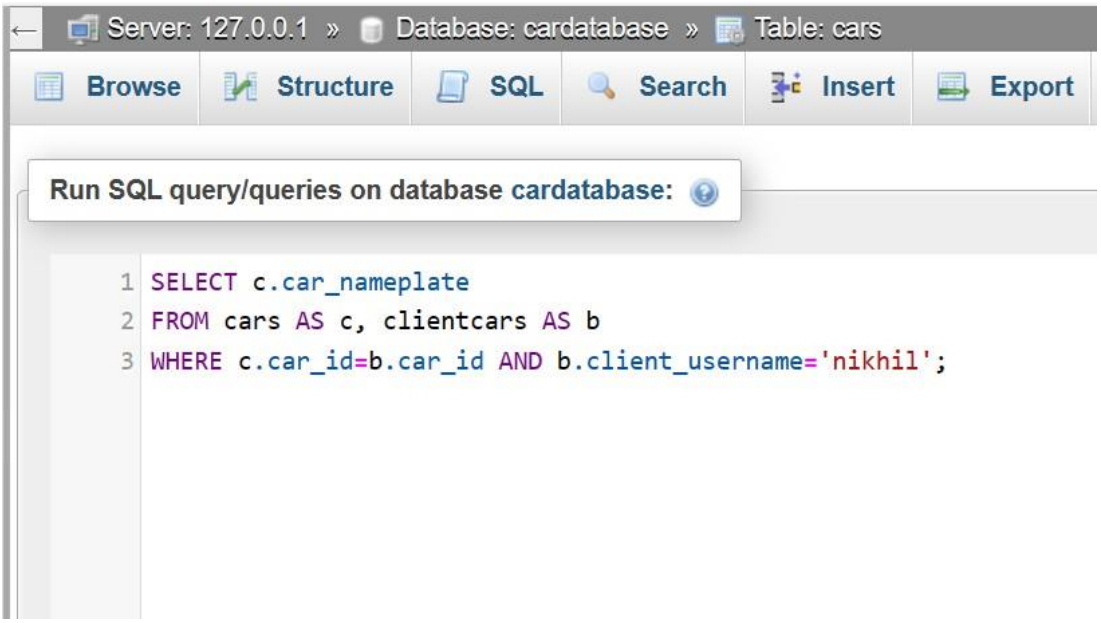
Output:

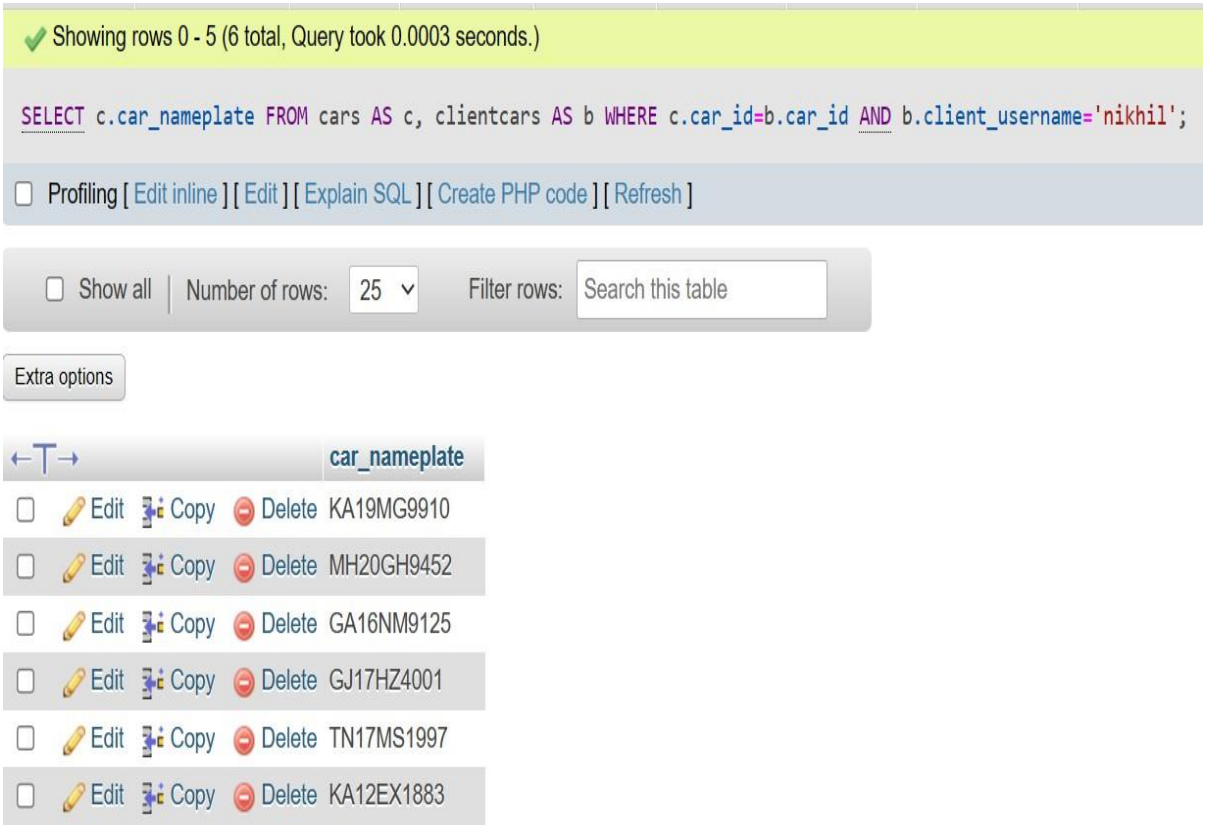


Query 4:

Display the nameplates of the cars owned by the client with username ‘nikhil’.

Output:

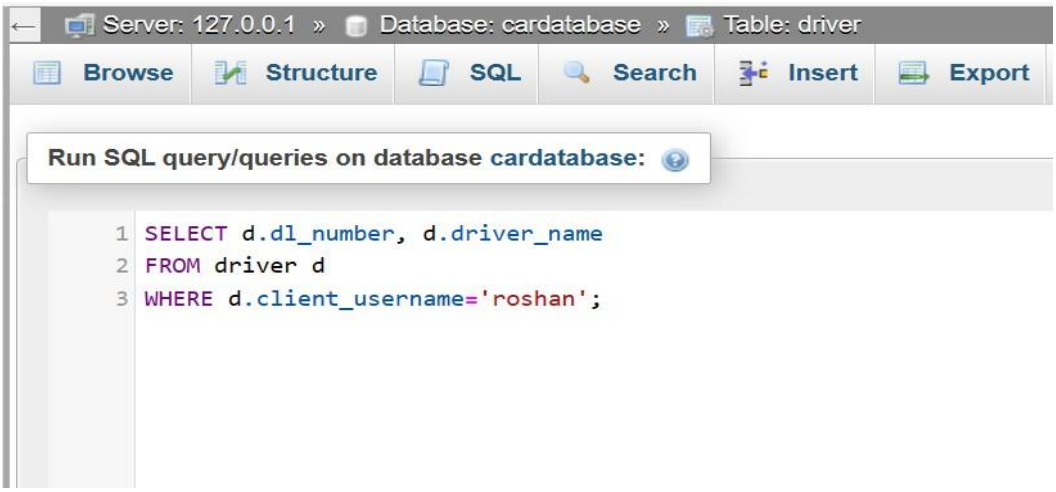




Query 5:

Display the license number and the names of the drivers of the client with user name ‘roshan’.

Output:



CHAPTER 5

SNAP SHOTS

5.1 FRONT END SNAP SHOTS

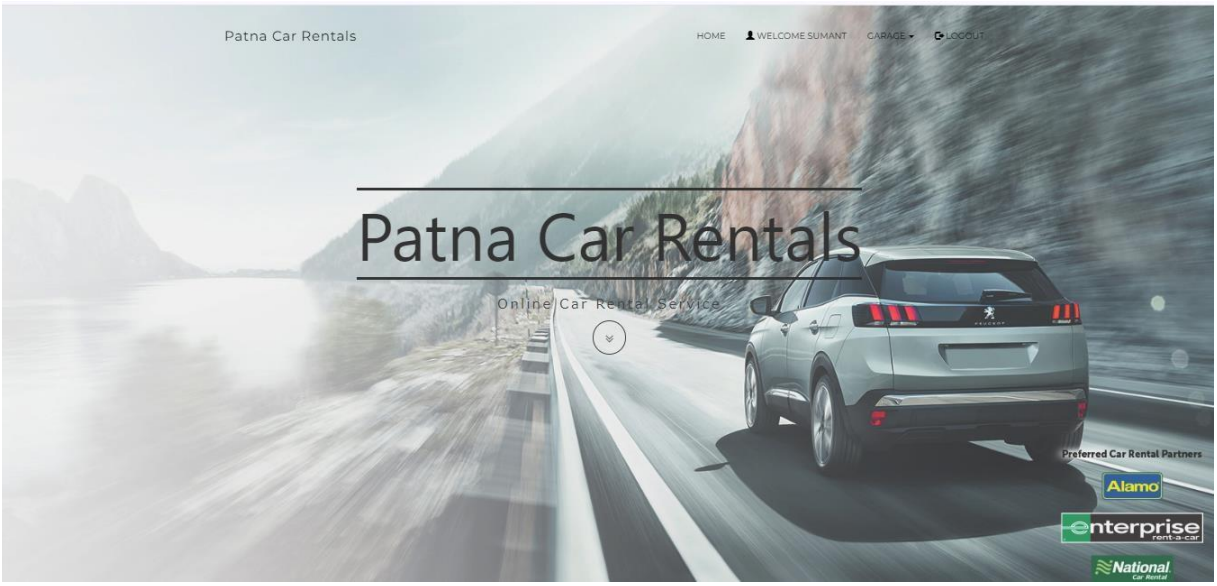


Fig 5.1 Patna Car Rentals

5.2 IMAGES OF THE AVAILABLE CARS

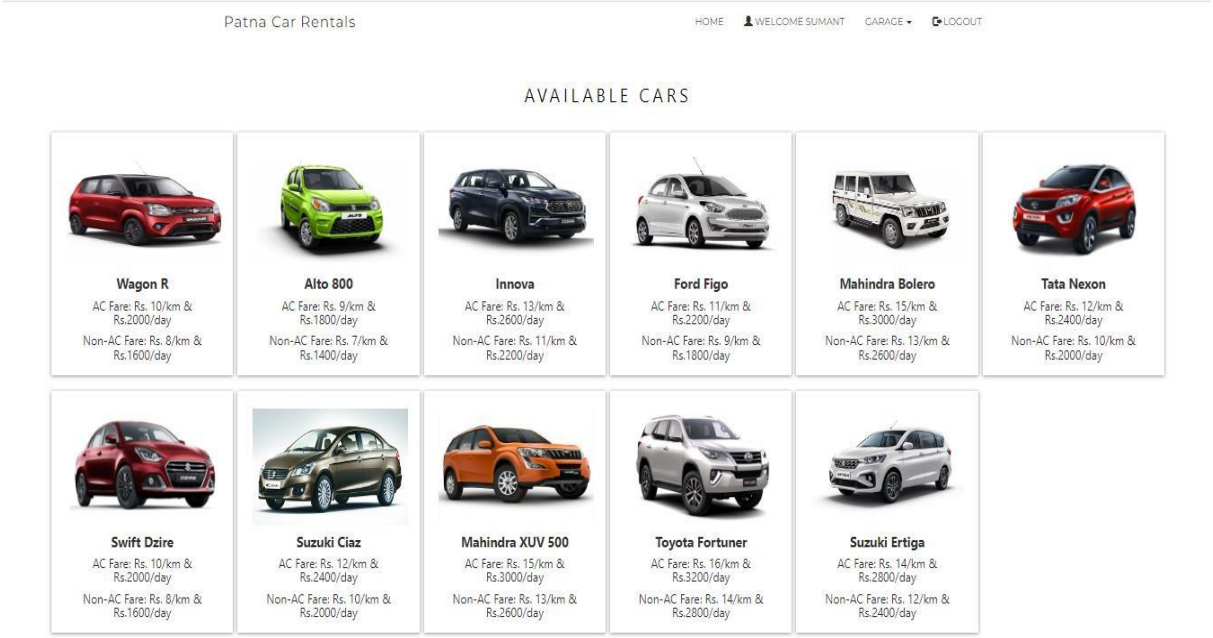


Fig 5.2 Available Cars

5.3 PAGE TO ADD THE CAR TO THE WEBSITE

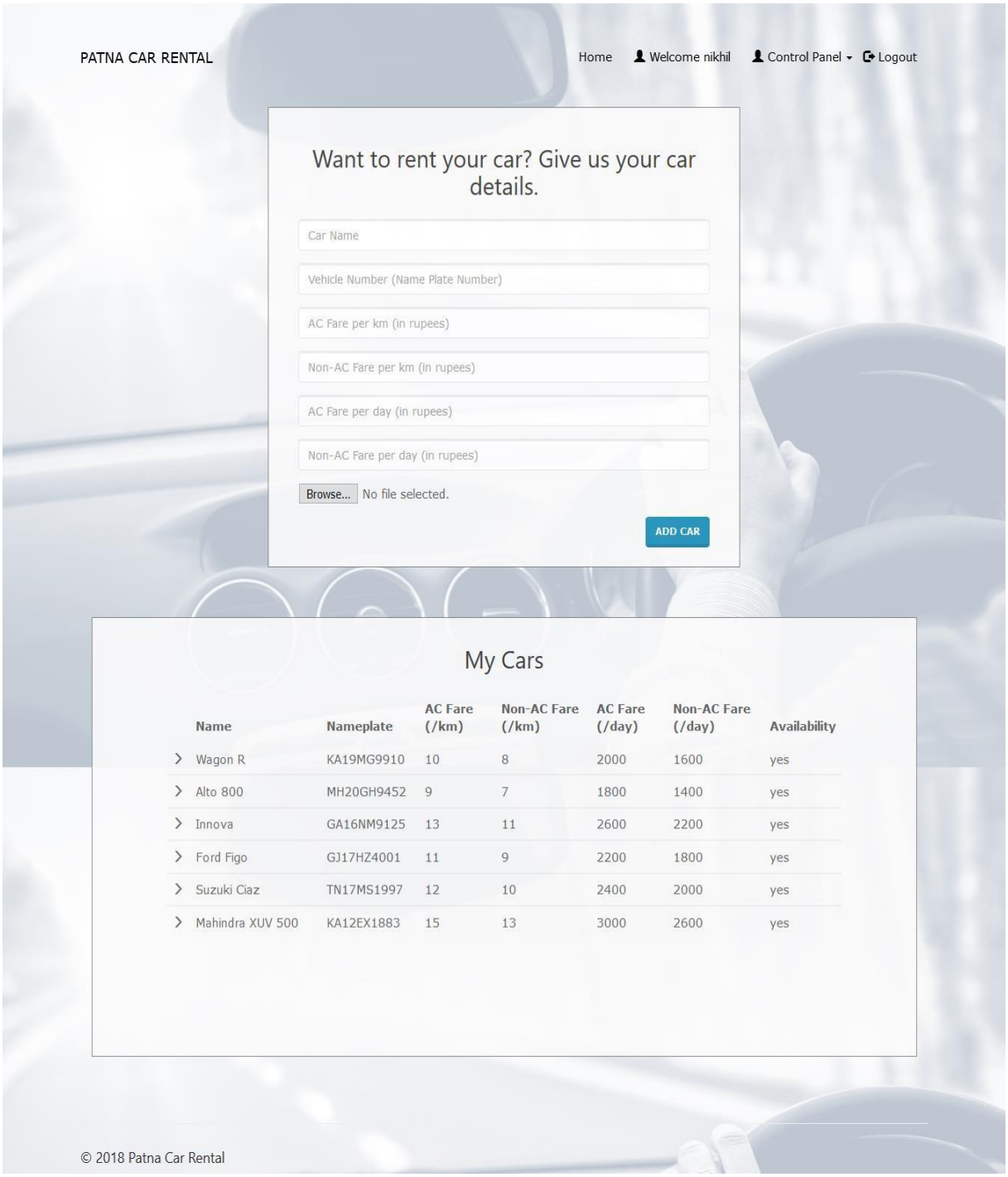
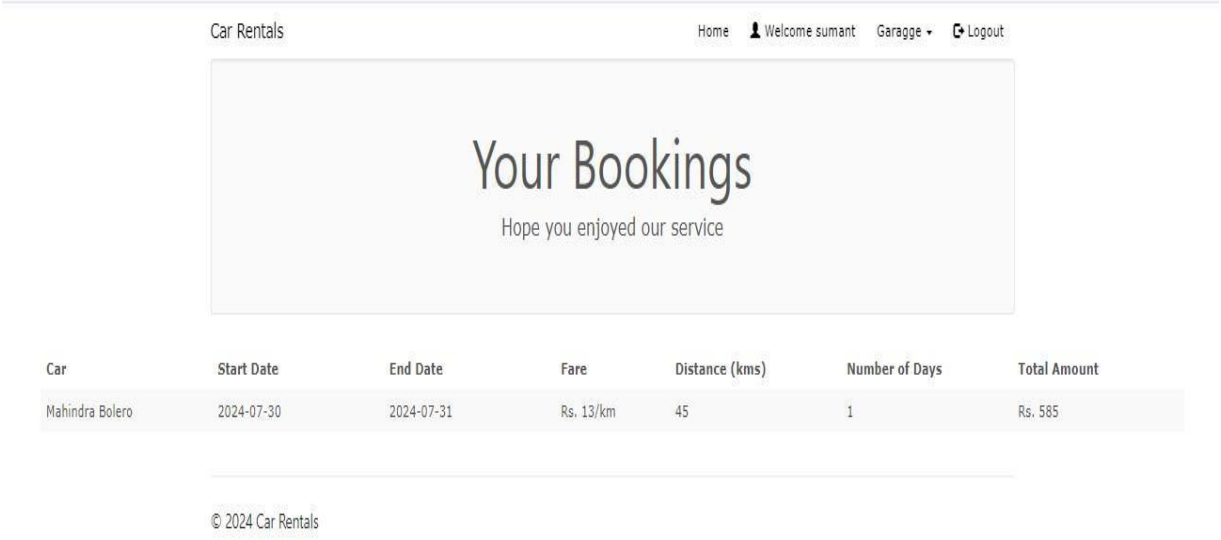


Fig 5.3 Adding Car to website

5.4 BOOKING CONFIRMATION



5.4 My Bookings

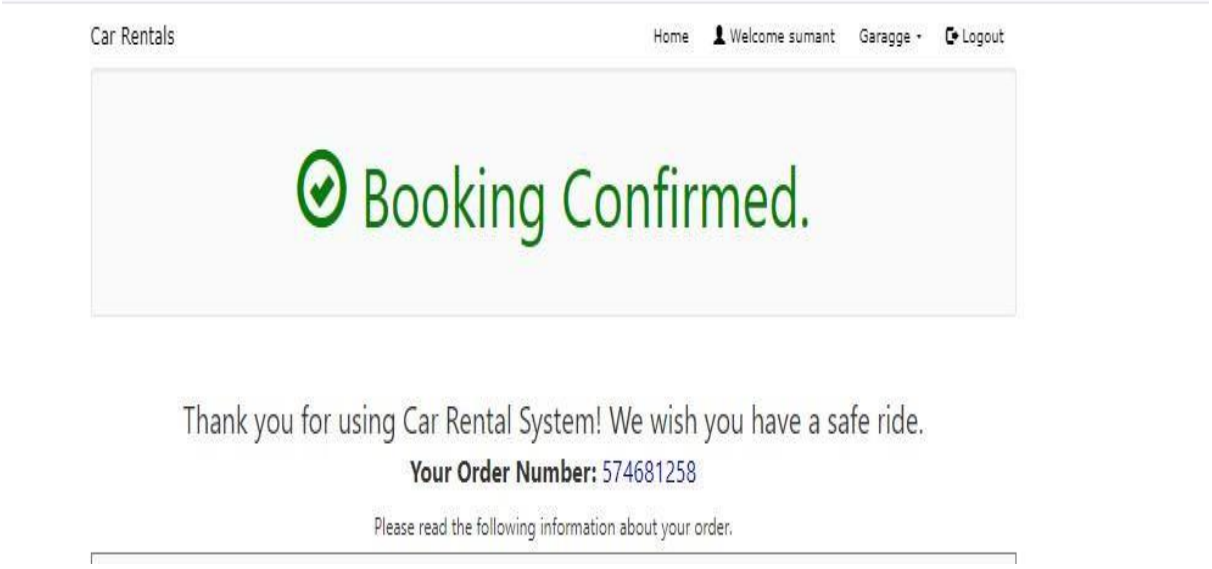


Fig 5.4 Booking Confirmation

5.5 BOOKING RETURNED

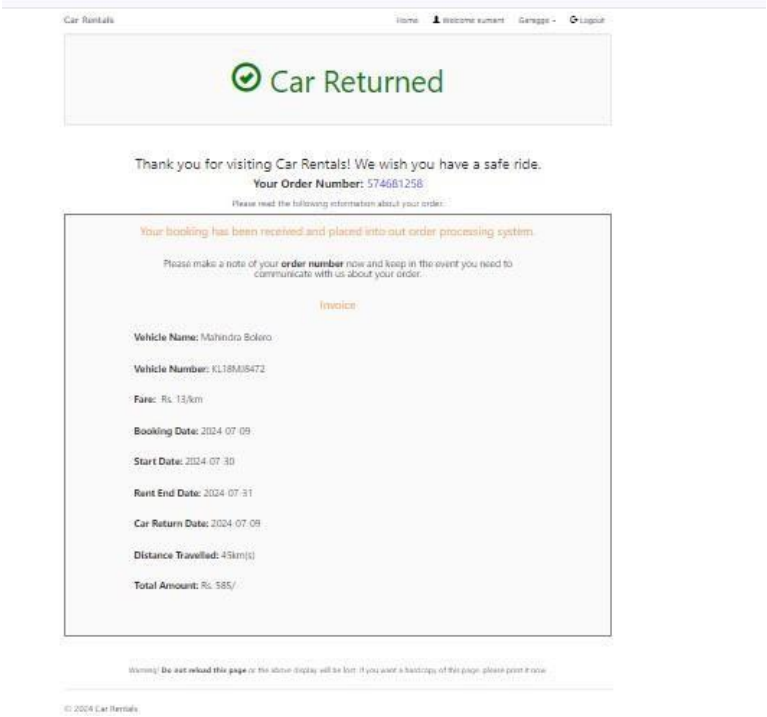


Fig 5.5 Booking Returned

5.6 INVOICE OF THE BOOKING

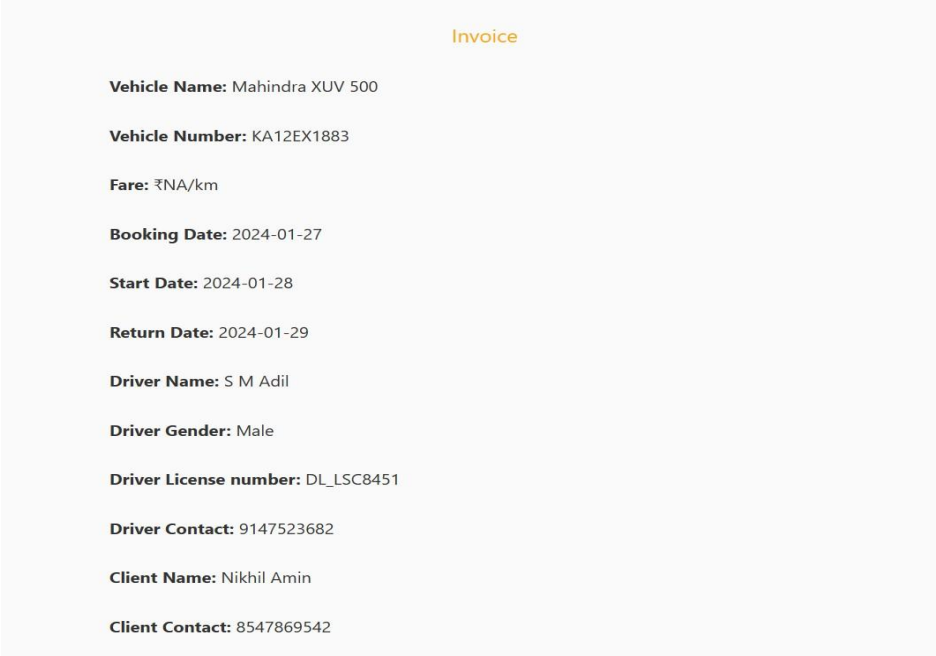


Fig 5.6 Invoice Of the booking

Fig 5.7 Invoice of the booking

CONCLUSION

The project Car Rental Management System (CRMS) is for computerizing the working in a car rental company. The software takes care of all the requirements of an average car rental companyand is capable to provide easy and effective storage of information related to cars and customers of the car rental company.

It generates bills, provides car details including car insurance and service details. It also provides customer details such as driving license number, membership id, name etc. The system alsoprovides the facility of backup as per requirement.

A Car Rental Management System is a crucial tool for enhancing the efficiency and effectiveness of car rental businesses. By automating essential tasks such as booking, inventory management, and maintenance scheduling, these systems significantly reduce manual labor and the likelihood of errors. They also improve customer satisfaction through features like online booking, real-time vehicle availability checks, and automated reminders. Centralized data storage and robust reporting tools facilitate better decision-making and strategic planning. Additionally, these systems support dynamic pricing models to optimize revenue and ensure secure handling of customer data. Overall, implementing a Car Rental Management System leads to operational efficiency, cost savings, and scalability, ultimately driving profitability and growth for car rental businesses.

BIBLIOGRAPHY

Few of the book(s) and websites that were instrumental in helping us to complete this project are asmentioned below.

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