

# Web Portal Based On Car Rental System

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**Abstract:** *This online vehicle rental system is primarily intended to allow clients to reserve cars from any area in the world. The aim of this project is to create a platform between customers and car rental companies. Users give data to this application by providing specifics. Customers who have enrolled on the car rental website can reserve a car that meets their requirements. This initiative was created to allow customers to book their preferred cars online. The growth of the Internet and technological advancements have tremendously enhanced different company processes and interactions between firms and their clients, and the cars rental sector is no exception. The suggested system is entirely compatible with these online modes of operation. The web-page was designed using html, css, javascript. It has automated the process effectively and efficiently, minimizing the need for manual intervention. This automated approach makes it easy for clients to provide relevant information. For getting user database xampp and php is used for database connection.*

**Keywords:** HTML, CSS, JAVASCRIPT, DBMS, PHP, PHPMYADMIN, XAMPP, Database connection.

## I. INTRODUCTION

This car rental system project mainly aims to help car rental companies rent cars through an online system that helps users search for available cars, view the car, and book the car for the desired period. It has a user-friendly interface that allows the users to book and rent the cars and reserve them anytime according to their needs. The consumers have to fill the application with the required information. Depending on the availability of the desired car, the user can then make a booking. With the internet technology, it has become very easy for the customers to rent a car anytime and that too in just a few steps. This online system makes bookings easier compared to other systems

## II. PROPOSED SYSTEM

Customers may reserve cars from any location utilizing the car rental system. Clients must submit their credentials into this website to provide information. Customers who have registered on the website can reserve a vehicle. This project was created for a specialized car rental company so that their customers may book their chosen vehicles online. The proposed solution fully connects with internet systems. It successfully and efficiently optimizes human work. In this way, customers can book a car through the website itself and pick it up on a specific day. This project is mainly used in big cities in India, where many people rent cars in offline mode. This project overcomes the difficulty of customers to find the stores and come to the offline car rental company for booking. Through this website, he can book a car from his preferred location and the car can be delivered to the customer or booked by the customer and picked up by the customer near his location. To promote a company's car rental services of a company, the system is provided online.

## III. TECHNOLOGIES USED

**HTML:** HTML is the language used to describe the structure of web pages that are created. HTML gives authors the ability to: publish online documents with headings, text, tables, lists, photos and so on.

**CSS:** It is used to design and layout web pages - for example, to change the font size of the text, the color, background, font style, and spacing of the content, to split it into multiple columns, or to add animations.

**JAVASCRIPT:** Add interactive features to web pages using JavaScript. Use JavaScript to let users interact with application.

Develop mobile and online applications. Developers can use a variety of JavaScript frameworks to create web and mobile applications.

**PHP:** It is able to provide dynamic page content. On the server, it can create, open, access, remove, and close files.

Data can be gathered in form. It is able to transmit and receive cookies. In a database, it has the ability to add, remove, and change data. You may use it to limit who has access. It has the ability to encrypt information.

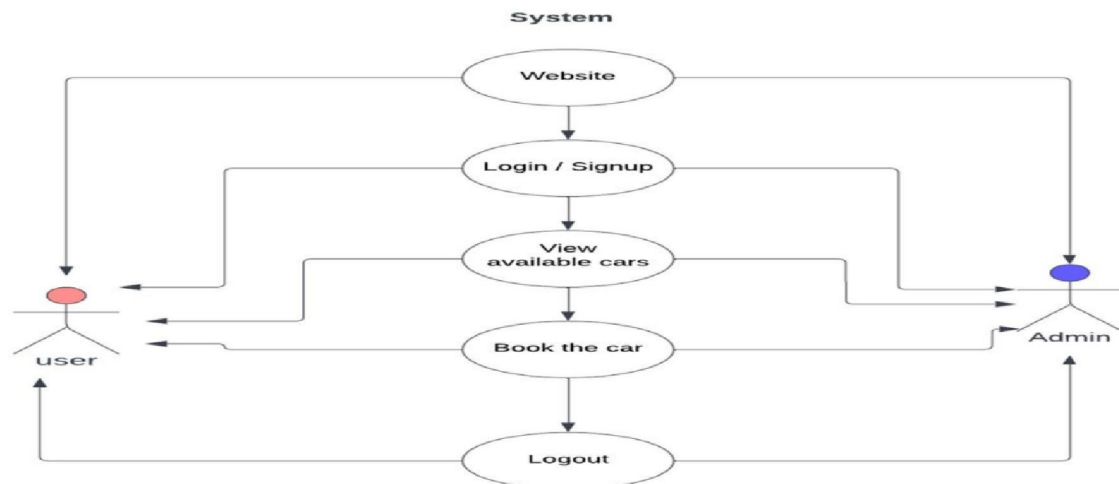
**XAMPP:** a) Apache: (Application Server) Apache, commonly referred to as Server, is an open source Java Servlet container created by the Apache Software Foundation.

b) MySQL Server: Compared to earlier techniques for managing massive datasets, it is substantially quicker. It includes a multi-threaded SQL server that supports a range of back-ends, as well as a range of client applications and libraries, management tools, and application programming interfaces. Because of its connection, speed, and security, the MySQL server is ideal for accessing databases via the Internet.

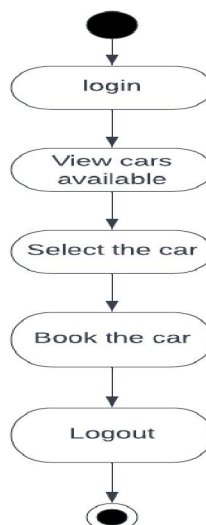
#### IV. DESIGN

**UML Diagrams:** A software developer can express an analytical model using the Unified Modelling Language by using a modelling notation determined by a set of pragmatic and syntactic-semantic rules. Five different viewpoints are used to represent a UML system, explaining the system model.

**Use Case Diagram:** It depicts a group of actors, use cases, and their relationships. Use case diagrams describe the system's static design view.



**Activity Diagram:** An activity diagram is a specific type of state chart that depicts the flow of activities inside a system. It speaks to the system's dynamic perspective.



**Figure 2:** Activity Diagrams For Car Rental System



**State chart Diagram:** It depicts a state machine, which is a device that specifies various states of an entity, each of which is governed by internal or external events.

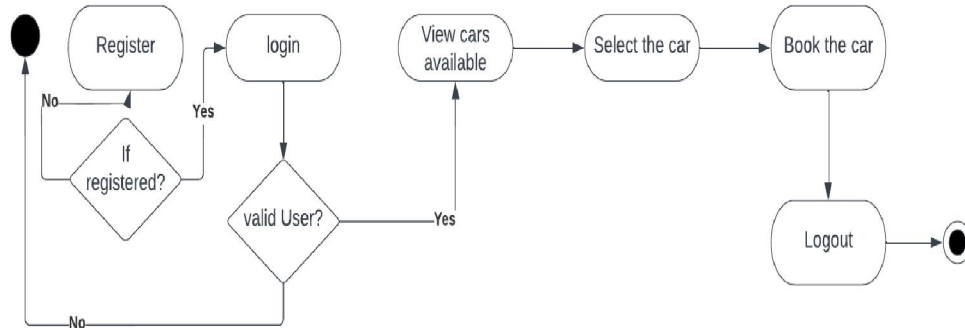


Figure 3: State Chart Diagram For Car Rental System

**Sequence diagram:** This interaction diagram places a strong emphasis on the order communications.

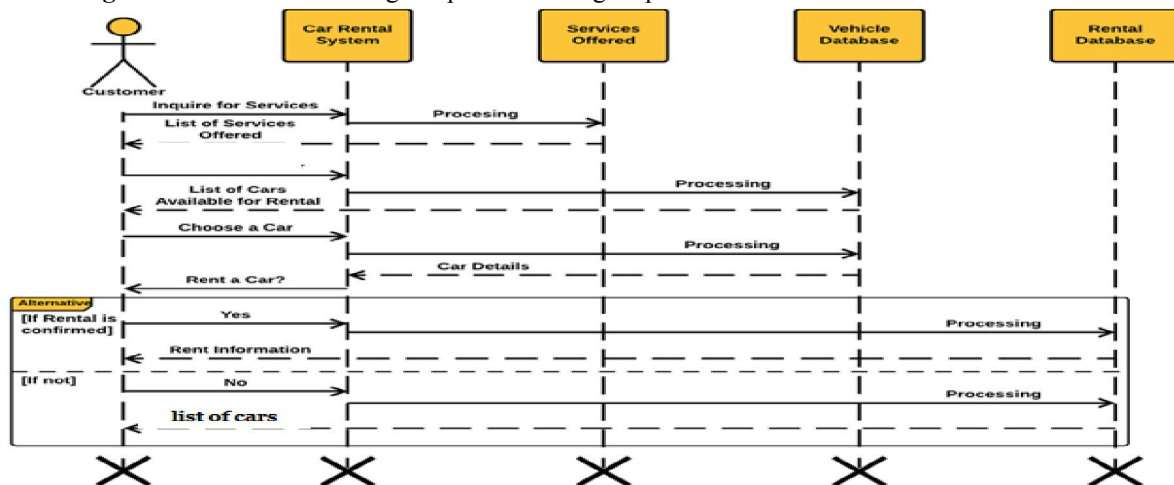


Figure 4: Sequence Diagram For Car Rental System

**Class diagram:** A class diagram displays the links and interfaces between several classes. Class diagrams discuss a system's static design perspective.

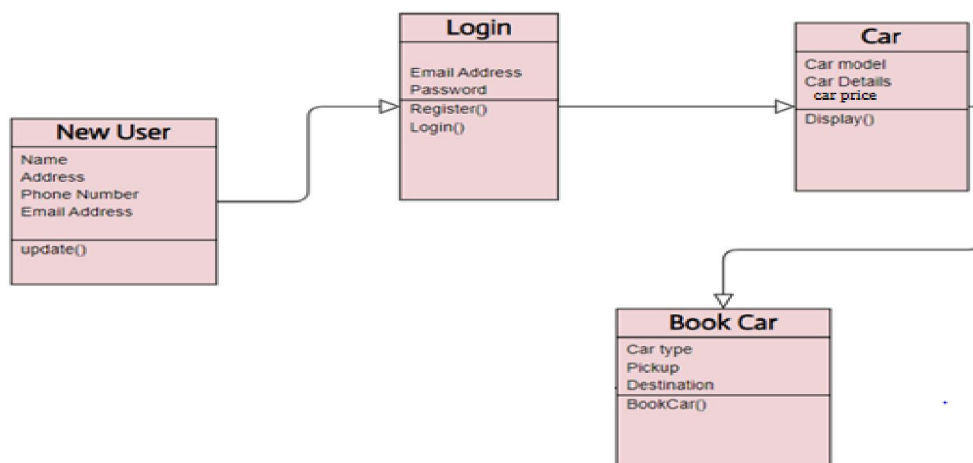


Figure 5: Class Diagram For Car Rental System

**Collaboration Diagram:** It illustrates a state machine, which is a device that specifies various states of an object and controls these states through external or internal events.



Figure 6: Collaboration Diagram For Car Rental System

## V. RESULT

### 5.1 Graphical User Interface

#### A. Back-end

**Register Database:** Here admins can see data of the users who have registered in website.

SELECT \* FROM `register`

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

	id	First_Name	Last_Name	Email	Phone_no	Password_e	C_Password	gender
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Reshma	Gullapalli	19501a1232@pvpsiddhartha.ac.in	2147483647	Reshma Gullapalli	Reshma Gullapalli	f
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Tanvi	Signa	tanvi@gmail.com	2147483647	tanvi@123	tanvi@123	f
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	Rajiv	Singh	singh@gmail.com	2147483647	singh_12	singh_12	m
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	Jeff	Forbis	jeff@gmail.com	2147483647	Forbisjeffy	Forbisjeffy	m
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Indu Priya	Thota	indu@gmail.com	2147483647	ginger	ginger	f

Figure 7: Registration Database For Car Rental System

**Confirm Database:** Here admins can see the data of the users who have confirmed their booking.

SELECT \* FROM `info`

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

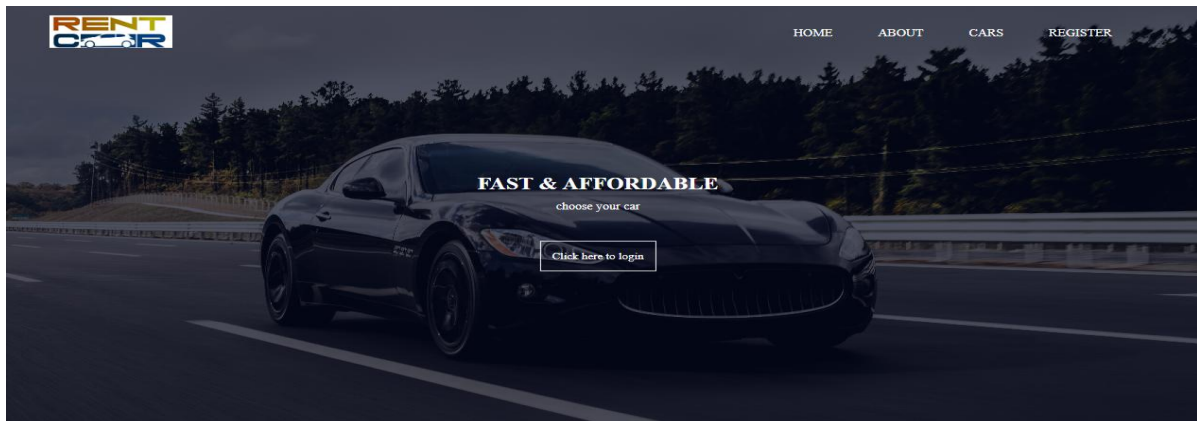
Extra options

	id	Full_Name	Phone_no	Email	Car_Model	Pick_Up_Date	Return_Date	Location_entry
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Indu Priya Thota	8745698547	indu@gmail.com	Mercedes-Benz C-Class	2022-11-13	2022-11-14	kanuru,Vijayawada
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Reshma Gullapalli	7894567894	19501a1232@pvpsiddhartha.ac.in	Mahindra Bolero Neo	2022-11-17	2022-11-25	Tadigadapa,vijayawda

Figure 8: Confirm Database For Car Rental System

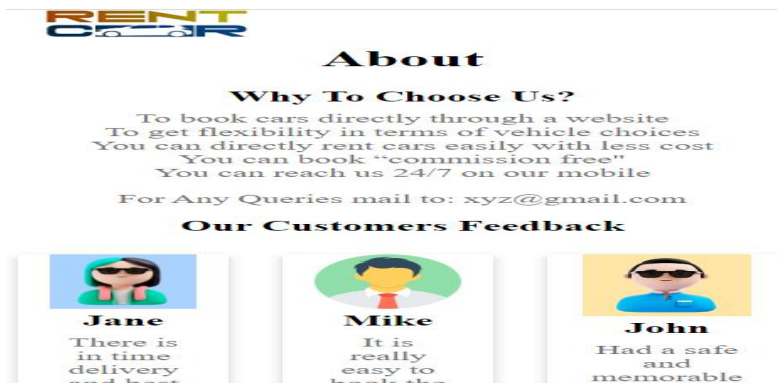
#### B. Front-end

**Home page:** This the first page the user can see from this page user can navigate to other pages like home, login, cars, register, about.



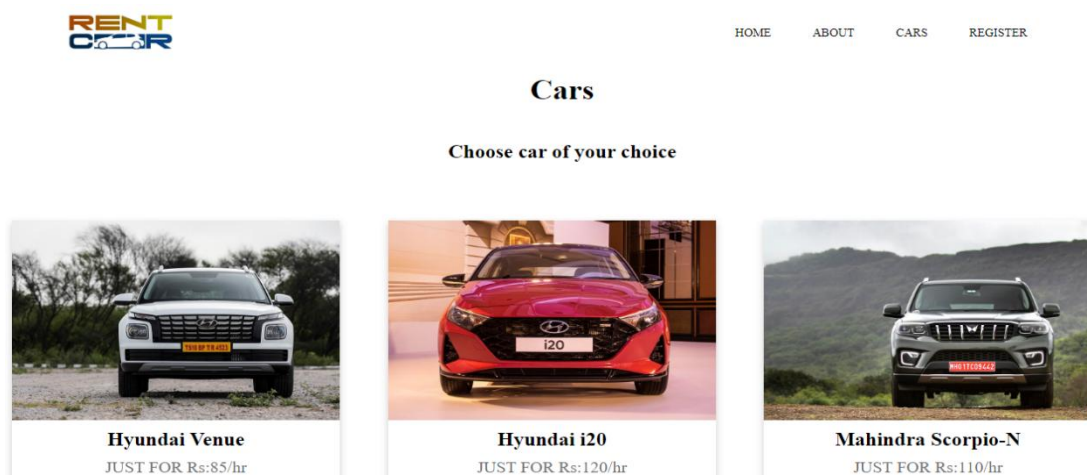
**Figure 9: Home Page For Car Rental System**

**About Page:** Here users can see what is the main purpose of the website, we can see contact email-id and finally customers feedback.



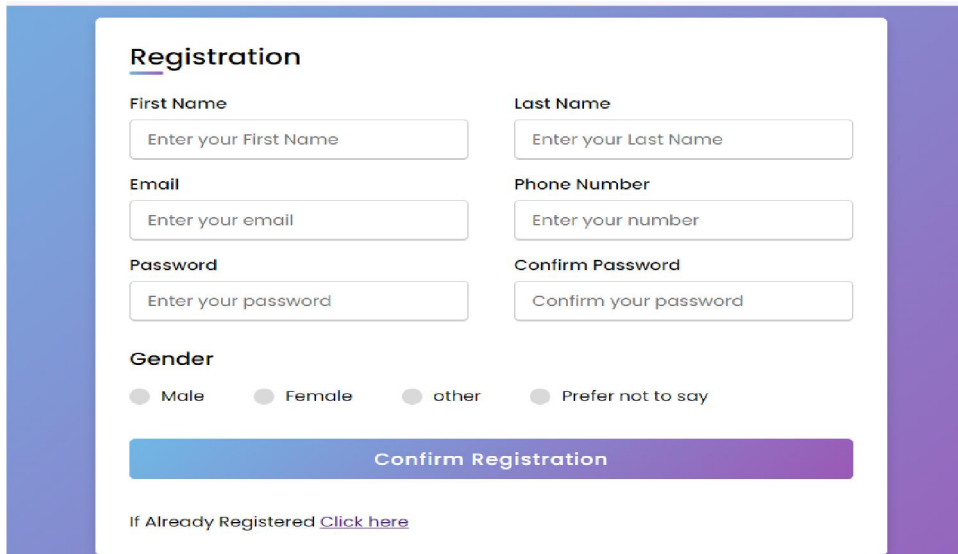
**Figure 10: About Page For Car Rental System**

**Cars Page:** In cars page user can see all the available and can see the cost of the car and model of the car and can book the car.



**Figure 11: Cars Page For Car Rental System**

**Registration Page:** In registration page user need to fill the basic details about the user such as their first name, Last name, email, phone number and few basic details as shown above these are stored in confirm database in register table.



**Registration**

First Name

Last Name

Email

Phone Number

Password

Confirm Password

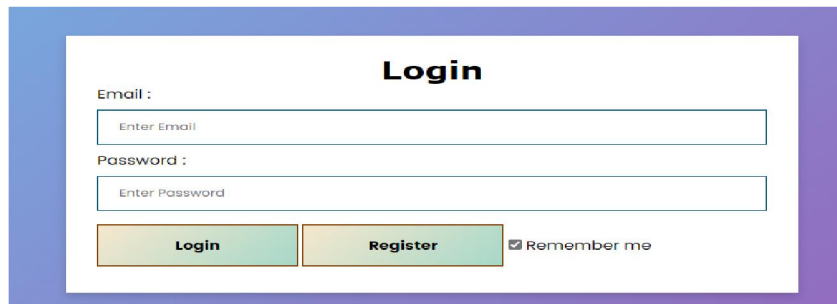
Gender  
☐ Male ☐ Female ☐ other ☐ Prefer not to say

**Confirm Registration**

If Already Registered [Click here](#)

**Figure 12: Registration Page For Car Rental System**

**Login Page:** Here, user will login by giving email and password that are given at the time of confirmation. After this they can view cars.



**Login**

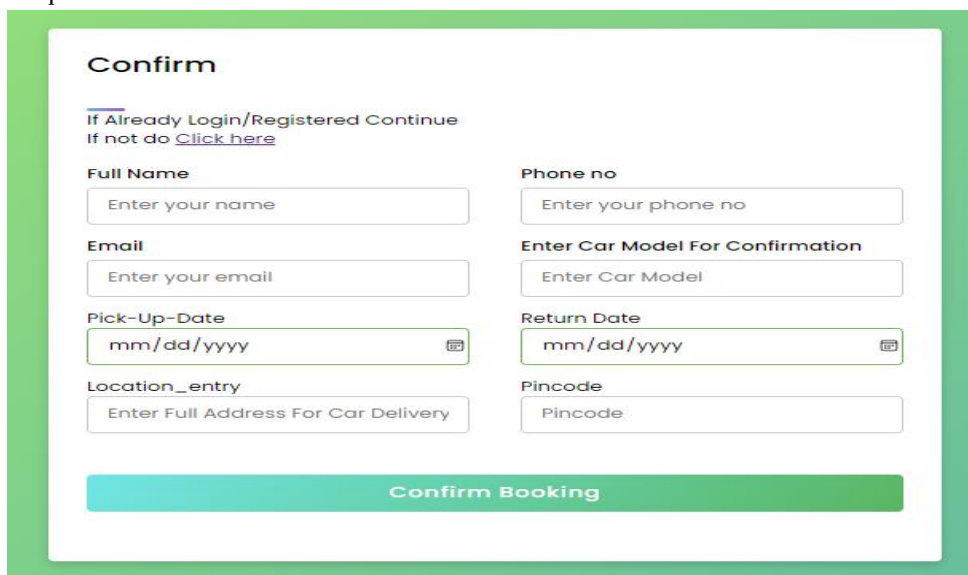
Email :

Password :

**Login** **Register** ☒ Remember me

**Figure 13: Login Page For Car Rental System**

**Confirmation Page:** If the user is already logged they can easily book the desired car they have selected and should enter date of pickup and date of return and address details.



**Confirm**

If Already Login/Registered Continue  
If not do [Click here](#)

Full Name

Phone no

Email

Enter Car Model For Confirmation

Pick-Up-Date

Return Date

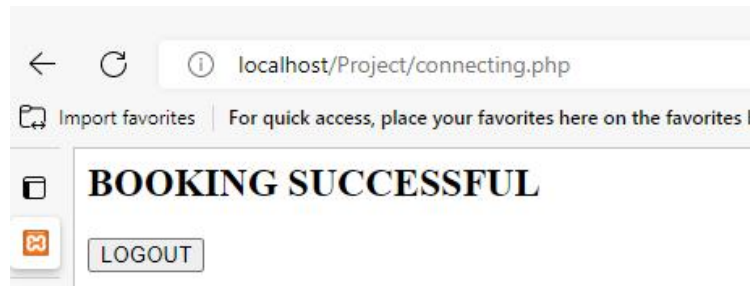
Location\_entry

Pincode

**Confirm Booking**

**Figure 14: Confirmation Page For Car Rental System**

**Logout:** After confirmation the logout is visible. On clicking it redirects to the home page.



**Figure 15:** Logout For Car Rental System

## VI. SCOPE OF FUTURE USE

The demand for this sector of the economy has risen significantly over the past few years, and the online car rental business is expanding quickly. The future of the global automobile rental market is bright, with plenty of chances. The sector anticipates further expansion and promising business possibilities as a result of the rise in domestic and foreign tourism in various nations.

## VII. CONCLUSION

The online application is independently maintained, and the project already covers an amount of cars. Support for implementation is not required. The administrator may quickly access, examine, add, update, and remove information as needed. So, this online car rental system is convenient for both car rental owners as well as the renting customers.

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