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Car Rental System

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Abstract: *This Paper gives a quick summary of web based car rental system , where you can rent a car from this website. Customer can rent what ever car they want for a short period of time . It is safe and secure website cause we use some verification process example: information of aadhar card number and driver licence to ensure the driver who is driving the car is above 18 age and has driver licence . this website include the feature like customer login ,password ,check availability od vehicle ,and direct chat with the admin, make payment through credit or debit card .for admin the features are admin login , adding cars ,deleting the cars ,accept or reject the request from the customer.*

This set of less time consuming and slightly secured when compared to the traditional method ,but still requires the admin to manually key in all client information .This study are develop the vehicles to rent online which include cars, motorcycles and vans and etc. to enhance the coverage of online vehicles rental services in Nashik and finally is to improve the online system for increasing the brands and models over hales for cars and motorcycles and vans to rent online Nashik .other companies are trying to revolutionize their business to adapt the mobile technology that been growing rapid in recent years .Therefore in the work the project aimed to propose a mobile car rental system prototype that is secured and allowed the cars to make reservation of the vehicle that desired. The mobile car rental system includes features as register and login page ,list of vehicles and database related to mobile car rental system.

Keywords: car rental, Payment, Admin, User

I. INTRODUCTION

Over the past few decades ,car rentals companies have been running their business using the traditional method of advertising this business by publishing advertisements in newspapers and broadcasting advertisement on TV channels and other approaches .In addition ,all clients records are stored in hard copy or soft copy depending on the methods the company use .The technology plays a vital role in changing the way of people do their business .All of them is searching for rental cars .Traditionally, if anyone wants to locate a car rent service ,they can call the rental service manager by phone(if any) and go to the store to search the vehicles rental applications has existed prior to the study .However, there is still a number of limitations from the existing online vehicle rental system. To this ,limitations such a type of vehicles and area of coverage have yet to solve and retrieving information and certainly not secured .If they use a slightly modern method ,company would use a computer to key in their customers information in excel format and store it in computer storage .

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II. OVERALL DESCRIPTION

Product Perspective:

The main motive of this car rental system is to make the cars available for every people. There is also imported cars for the customer who wants the driving experience of some cars. There is also chat box which is convenient for the customer to ask any queries to the admin. And ask the queries through the email.

This project has three modules:

1. **Users**
2. **Admin**
3. **Guest**

Guest Users

- Guest user can view the website and check out the information about rental cars.
- Guest users can also inquiry through contact us page.

Register Users

- Anyone can register through the registration page.
- After a successful registration user can log in with valid email and password. User can recover own password by providing some registered info.

After successful login user can do the following things

- Car Booking
- View Car booking history
- Update His/Her profile
- Update his/her password
- Post Testimonials
- View Testimonials
- Logout

Admin

- Admin is the superuser of the website who can manage everything on the website. Admin can log in through the login page

Admin Features

- Admin can create vehicle brands
- Manage Vehicle Brands(Edit, Delete)
- Post Vehicle
- Manage vehicle(Edit,Delete)
- Manage Booking(Admin can confirm and Cancel Booking)
- Manage Testimonials (Active and Inactive)
- Manage to Contact us Query
- Admin Can the details of registered users
- admin can also update the page content
- Admin can update the contact us details
- Manage Subscribers
- Admin Dashboard(Admin can view the count of reg users, total booking, total subscribers, total queries, etc)
- Change Password(admin can change own password)

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- logout

Car Rental System features

- **Efficiency**: Reduces administrative burden through automation and integration.
- **Accessibility**: Offers 24/7 access to essential services and resources.
- **Transparency**: Improves accountability and tracking across all modules.
- **Engagement**: Fosters communication and connection within the campus community.

III. SYSTEM ANALYSIS

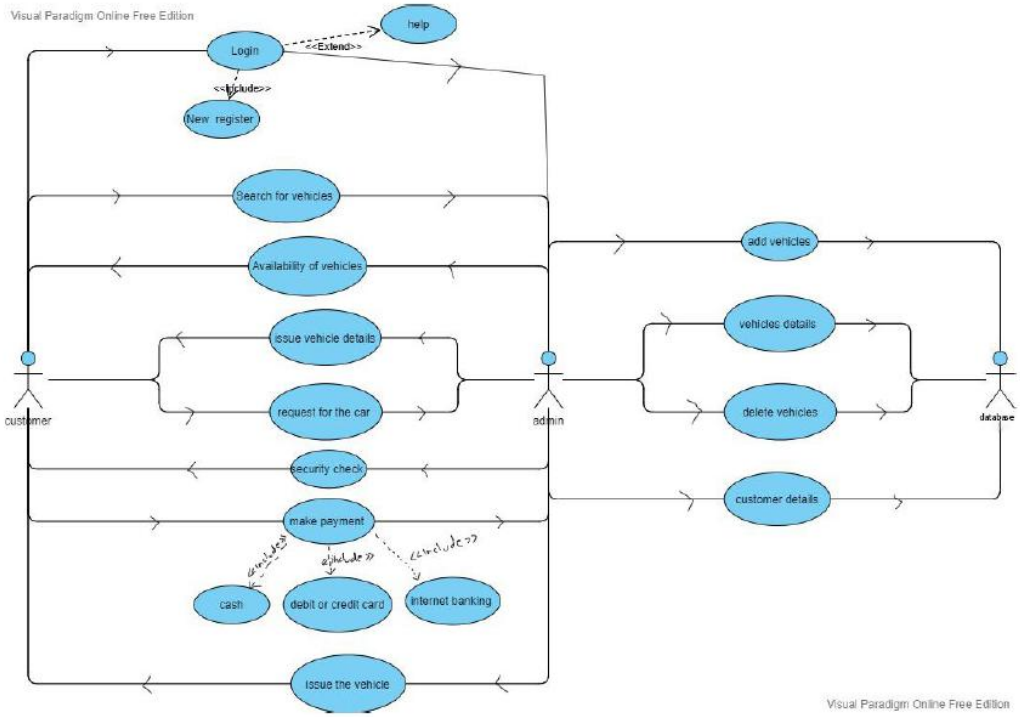

Figure 3.1: System architecture

IV. REQUIREMENT SPECIFICATIONS

Hardware Requirements:

- Memory: 2 GB Hard Disk: 500 GB
- Processor: Intel Core i3, i5

Software Requirements:

- Operating System: Windows 10,11
- Front Design: Sublime Text Editor
- Frontend Language: HTML, CSS, BOOTSTRAP
- Backend Language: PHP, SQL (phpMyAdmin)

Features Requirements:

- It saves time organizing different events.
- It helps to control the problems that usually happening an daily life.
- Online data submission is secure

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- It gives real-time results.

Reliability
If the university LAN goes down or the server goes down due to a hardware or software failure, the software will not be able toconnect to the central database.

Availability
The application is only available to authorized users of the university. The teachers will be able to mark the student's attendance and display all the enrolled courses, whereas admin will be able to add and update student records and perform operations on variousparameters.

Portability:
The software is a Windows-based application, written in Java and SQL(phpMyAdmin), so it is platform-independent and operatingsystem independent.

V. DESIGN

Input design:
The input design is part of the overall system design and requires special attention. The input data design aims to make data entrysimple and error-free. The input form is designed using the controls available in the Java framework. Input design is the process of converting user input into a computer-based format. System users interacting through the workstation must be able to instruct the system to accept inputs in order to generate a report.

Output Design:
Output Design of the given application "Car Rental System" generally refers to the results and informations that the system produces for many end users. Output is the main reason for developing a system and is the basis for assessing the usefulnessof an application. The output needs to be attractive, convenient, and informative

VI. PROJECT DESCRIPTION

6.1 Problem Definition

The main motive of this car rental system is to make the cars available for every people. There is also imported cars for the customer who wants the driving experience of some cars. There is also chat box which is convenient for the customer to ask any queries to the admin. And ask the queries through the email.

VII. SYSTEM TESTING

After the source code is generated, you need to test the software and find (and fix) as many errors as possible before delivering it to your customers. Our goal is to design a set of cases that are likely to find bugs. Software techniques are used to reveal the error. These techniques provide a systematic guide for testing the internal logic of software components and the input and output domains of a program to design tests that reveal errors in program functionality, behavior, and performance. The internal program logic is executed using the white-box test case design technique. Software requirements are performed using the block box test case design technique. In both cases, the goal is to find the maximum number of errors with as little effort and time as possible.

VIII. SYSTEM MAINTAINANCE

Software Maintenance does a lot of things other than just finding bugs. You should be prepared for any changes in the environment that might affect one's computer or other parts of his/her computerized system. Such activities are commonly referred to as maintenance. This includes both improving system functionality and eliminating failures that occur when operating a new system. This may include the ongoing involvement of most of the resources of the computer department. The most crucial task of the application or existing system is to change the environment.

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IX. CONCLUSION

Conclusion:

As the conclusion this car rental system will allow you to rent a car for your personal needs and where you can drive without any driver ,and it would be the next gen of the rental cars through the website ,it provides the platform for the people to rent a car for an hour to a week ,with the use of the three software HTML, PHP, MySQL we could give a fine website . The main motive of this car rental system is to make the cars available for every people. There is also imported cars for the customer who wants the driving experience of some cars. There is also chat box which is convenient for the customer to ask any queries to the admin. And ask the queries through the email.

Scope of future development:

The project has a very large future scope. The project can be implemented on the intranet in future. The project is very much flexible in terms of expansion that it can be updated in the near future if needed. With the proposed Database Space Manager software ready and fully functional, customers have the ability to manage and perform multiple tasks in a much better, more accurate as well as error-free way.

REFERENCES

[1] Sapuan, M. K. M. (2012). Rental Car Online System (Doctoral dissertation, UMP).

[2] M. Sumithra and Dr. S. Malathi, “A Novel Distributed Matching Global and Local Fuzzy Clustering (DMGLFC) FOR 3D Brain Image Segmentation for Tumor Detection”, IETE Journal of Research, doi.org/10.1080/03772063.2022.2027284, 2021

[3] Kesrarat, D., Songcharoenkit, S., Nanthapornpisut, P., & Thawonthammarat, L. (2017, February). Smart Matching for Car Rental. In Proceedings of the 9th International Conference on Machine Learning and Computing (pp. 529-533). ACM.

[4] B. Buvanswari and T.Kalpalatha Reddy, “A Review of EEG Based Human Facial Expression Recognition Systems in Cognitive Sciences” International Conference on Enenrgy, Communication, Data analytics and Soft Computing(ICECDS),CFP17M55-PRJ:978-1-5386-1886-8”,August 2017.

[5] Manalu, S. R., Wibisurya, A., Chandra, N., & Oedijanto, A. P. (2016,November). Development and evaluation of mobile application for room rental information with chat and push notification. In 2016 International Conference on Information Management and Technology (ICIMTech) (pp. 7-11). IEEE.

[6] Chethana, C., Subbiah Swaminathan, S. Sharanyaa, E. Sathish, R. Prathipa, and Anuradha Thakare. "Application Of Reverse Engineering in the Process of Utilization of Human Brain in Artificial Intelligence." Journal of Optoelectronics Laser 41, no. 3 (2022): 89-93.

[7] Li, Z. (2013). Design and realization of car rental managerment system based on AJAX+ SSH. Information Technology Journal, 12(14), 2756-2761.