SYNOPSIS

ONLINE CAR RENTAL

SYSTEM

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**INTRODUCTION**

Car Rental System is an online facility to book cars online within few clicks only. Car rental agencies primarily serve people who require a temporary vehicle, for example those who do not own their own car, travelers who are out of town, or owners of damaged or destroyed vehicles who are awaiting repair or insurance compensation. It is an online system through which customers can register, view available cars, view profile and book car.

**ABSTRACT**

Online Car Rental System is specialized in hiring cars to customers. It is an online system through which customers can view available cars, view their profile and book cars. The customer can book a car by viewing all the car details and its price. It allows the customers to book their car online from their home or office. The individual who want to hire/rent a car must supply some information such as dates of rental, and type of car. The cars are categorized into Hatchback, SUV, Sedan and Luxury.

Following Processes are involved in Car rental System-

**1. Registration Process-** User must be registered before booking a car. All the data supplied by the user will be stored in the database and it will be used for further validation and authentication. User has to fill up his contact information like his name, address, mobile number, username and password in the registration form.

**2. Login Search-** The customers have to give out the login details i.e. username and password and then only he can be logged on. The username and password specified by the customer is checked whether he is a valid user or not.

**3. Car Search-** Customers can search for any car based on their choice and availability of such car at the time of reservation.

**HOW CAR RENTAL SERVICES WORK**

A car rental is a vehicle that can be used temporarily for a period of time with a fee. Renting a car assists people to get around even when they do not have access to their own personal vehicle or don’t own a vehicle at all. The individual who want to rent a car must first contact the car rental company for the desire vehicle. This can be done online. At this point, this person has to supply some information such as dates of rental, and type of car. After these details are worked out, the individual renting the car must present a valid Identification Card.The rental cars are categorized into Hatchback, SUV, Sedan and Luxury. Customers are free to choose any car of their choice based on their purse and availability of such car at the time of reservation.

**EXISTING SYSTEM**

In present system all booking work is done manually and it is very hard to maintain the information of cars and its booking. It takes a lot of time to check whether the desired vehicle is available or not. There are many chances of error like wrong entry of journey date, journey time and destination as everything is recorded manually in a register. There is lack of security as anyone can access the data. The existing system only provides text-based interface, which is not as user-friendly as Graphical User Interface. The user has to go to the office where the user can get the car on rent and book their car and performance is not achieved up to the requirements.

**OBJECTIVES**

* The main objective of Car Rental System is to enhance and upgrade the existing system by increasing its efficiency and effectiveness.
* To transform the manual process of hiring a car to a computerize system.
* To create a system that will reduce paper work and consumes less time.
* The system helps to maintain all the details of the customer, the cars available and the booking details.
* Increase processing speed and avoid errors.
* User friendly software
* The system should provide accurate information at any time.
* Reduce the cost of maintenance.

**FUNCTIONAL SPECIFICATIONS**

**USER SPESIFICATION**

* **Admin:** Admin can view booking report, feedback and can change the password.
* **User:** User can view information of available car and book the desired car.

**MODULE SPECIFICATION**

* **View available cars:** The user can view available cars. The cars are categorized into Hatchback, SUV, Sedan and Luxury.
* **Booking car:** The user can select from the available cars and can book that car.
* **Easily get the car on rent:** The customer can easily get the car whenever they need for rent with use of this system.

* **Manage rent:** The admin can manage the rent so that the user can see the rent for each car.

**BENEFITS OF ONLINE CAR RENTAL SYSTEM**

* The system is available 24/7 as the system is web based.
* Car is delivered at your doorstep.
* Brand new serviced cars.
* Easy booking.
* Cars have all-India permits.
* The system is GUI based making it easy to use.
* Details of the user and cars are easily maintained with no errors.
* Extensive car details with its picture.
* Very secure.
* User friendly environment
* Time efficient
* Cost efficient

**LIMITATION**

* In order to rent a car, customers must login to their own profiles. Guests must create their own accounts.
* Since it is an online project customers need internet connection to take cars on rent.
* Without license car cannot be booked.
* Without depositing the security money car cannot be booked.
* User is responsible if the car is damaged or any accident takes place.
* Limited number of people can sit.

**FEASIBILITY STUDY**

Feasibility study is the phase in which the analyst checks that the candidate system is feasible for the organization or not. This entails identification, description and evaluation of the system.

**Feasible considerations**

Three key considerations are involved in the feasibility study. They are as follows:-

**Economic Feasibility:** Economic analysis is the most frequently used method for evaluating the effectiveness of the candidate system. We analyze the candidate system (computerized system) is feasible than the manual system as it saves the money, time and manpower. It also feasible according to cost benefits analysis.

**Technical Feasibility:** Technical feasibility centers on the technology used. It means the candidate system is technically feasible i.e. it don’t have any technical fault and work properly in the given environment. Our system is technically feasible as it is providing us required output.

**Behavioral Feasibility:** Behavioral feasibility determines how much effort will go into educating, selling, and training the user staff on a candidate system. The project was also evaluated to be behaviorally feasible as it is very user-friendly and hardly needs any extra efforts to educate users for its utility and functionality.

**ER DIAGRAM**

An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database. An entity in this context is a component of data. In other words, ER diagrams illustrate the logical structure of databases.

ADMIN

A\_ID

A\_NAME

CONTACT

ATTEND

USER

HIRE

CAR

MANAGE

EMAIL

U\_NAME

CONTACT

EMAIL

U\_ID

LICENSE

FUEL TYPE

C\_ID

MILEAGE

CAR TYPE

MODELNAME

BRAND

CAR RENT

**DATA FLOW DIAGRAM**

A Data Flow Diagram (DFD) is a graphical representation that depicts the information flow and the transforms that are applied as data moves from input to output.

**0 LEVEL DFD**

ONLINE

CAR RENTAL

SYSTEM

SELECT CAR

CAR BOOKING

BOOKING REPORT

ADD CAR

CAR RENTAL

SYSTEM DATABASE

DATABASE

**LEVEL 1 DFD**

LOGIN TO

SYSTEM

ADD CAR

VIEW CUSTOMER DETAILS

REGISTER

LOGIN TO

SYSTEM

LIST OF CARS

SELECT CAR

BOOK CAR

FEEDBACK

RECEIPT

**FUTURE SCOPE**

A mail or message can be delivered to the respective email or mobile number of a particular customer informing him/her about his/her completion of registration along with ‘username’ and ‘password’. The customer will get all the details regarding the booking through e-mail or sms.

**HARDWARE AND SOFTWARE REQUIREMENTS**

**SOFTWARE REQUIREMENT**

* Operating system- Windows/Linux
* Database- MYSQL
* Platform- PHP
* Web server- XAMPP

**HARDWARE REQUIREMENT**

* Processor- Intel core i3(2.30GHz)
* RAM- 1GB
* Hard Disk- 250GB HDD
* LCD Monitor