AHS: AUTOMOBILE HIRING SYSTEM

ASHISH TRIVEDI[a1], SUNIL KUMAR DEWANGAN[b] AND SAURABH KATURE[c]

[abc]Department of Information Technology from SSIPMT, Raipur, Chhattisgarh, India

ABSTRACT

The Automobile hiring system is a system which is used to hire vehicle for a particular time period to the people who are seeking vehicle for their transportation. It is operated by the owner of our system who provides the vehicle hiring facility. Using this system, the people who do not have much use of their vehicle can rent the vehicle for specific time period, and those rented vehicles will be hired to the people who are in need of any vehicle. This system also facilitates the user by providing only drivers to them in case they have their own vehicle and they need only a driver.

KEYWORDS: Renter, Vehicle, Customer, Drivers, Hiring process.

A vehicle is a transportable machine that transports people or consignments. Typical vehicles include bicycles, wagons, motor vehicles (motorcycles, cars, trucks, and buses), railed vehicles (trains, trams), watercraft (ships, boats), aircraft and spacecraft. Many people around the world own or finance an automobile for regular use. For the people who can't buy a vehicle can also use the same by means taking in a rent and can pay desired amount as per the standard. On the basis of this concept this system is made.

Through Automobile hiring system the user who wants to give the vehicle in rent or who want to hire the vehicle they can just connect with the system just by a simple phone call, we assure the security of the vehicle rented by the users as well as the customers who hire vehicle and drivers after a proper validation process [1].

The automobile hiring system is developed for the company which takes the two and four wheeler vehicle in a rent from the people who seeks to rent their vehicle for a particular time period in a day. Those rented vehicles with driver are used to provide services to the people who are in need of vehicles for their transportation. It also facilitates customers who only want the driver for the particular period of a time [2].

The purpose in developing this application was to save the time of so many people who due to lack of their knowledge couldn't get the medical services in time and has to roam uselessly and get there time wasted. This system is so reliable that a person with a lesser knowledge can also operate this system very efficiently.

PROBLEM IDENTIFICATION

Most of the existing system is the android application which needs to be operated by the users only and for that they need a smart phone and an internet connection too. The system available today demands to rent the vehicle for the time according to the organization under which the vehicle is being rented. It is sometimes a hectic work for those who rented their vehicle, because they might need their rented vehicle in the time of emergency. It is very difficult for those users who are new to any place and also do not had any smart phone to book a cab for them. The existing is not in the reach of each and every person.

In existing system we face problems like the renter had to rent their vehicle according to the terms and condition of the company, but in vehicle hiring system this issue has been resolved by removing those terms and condition from the renter and renter can rent their vehicle according to their convenience.

The existing systems available are mostly online applications which are run in android platform, but it is not possible that each and every person might have an android device. So the vehicle hiring system facilitates user in a manner such that one who seeks for a hiring any two wheeler or four wheeler vehicle would simply call to our system and the request will be registered in our system. A driver with a car will as soon as possible will reach to the customer and would drop the passenger to its desired destination.

METHODOLOGY

In our system we faciliates vehicle hiring by call to our system and we also pay a keen attention towards the security of the vehicle as well as the verification of the drivers associated with our system.

The system consists of registration page for owner, login page for owner, registration for the users renting their vehicle, registration for the drivers associated with the system, registration of the customers hiring vehicles and a module performing the hiring process. There are following modules available in vehicle hiring system:-

- Login Page:- It is the first window of the system where the owner of the system by using username and password owner will get access to the main window. If the username and password is not valid then the owner

will not get access to the main page. It will send him back to the login page.

- Registration:- In registration page the details of the user hiring a vehicle has to be entered.The basic details of the users would be registered in the system like their name,address,contact,idproof etc.
- Main Window:- It is the main window of the system where user perform all the operations associated with vehicle hiring system. Here the owner gets the five options which are following:-
    1. Renter
    2. Vehicles
    3. Customers
    4. Dtrivers
    5. Hiring
    6. Rate Chart

Renter

It is the window where the owner can register for two and four wheeler vehicle which are coming for renting purpose. Here all the details of the person renting the vehicle is being submitted with proper identity proof.

Vehicles

Here the owner can see the list of vehicles that has been registered under our vehicle hiring system.

Customers

It is the window where owner can register the request of the customers who are seeking to hire the vehicles from vehicle hiring system. Here all the details of the customer hiring the vehicle is being submitted with proper identity proof .

Drivers

In this registration page the owner will register the details of the drivers associated with the company with proper verification of the identity. It is the window which is being subdivided in two categories:-

Drivers:- It is the section where owner register the drivers to whom any particular area and vehicle is allotted with the proper validation of driver's identity.

Free drivers list:-It is the registration page of those drivers who are not allotted with any area or vehicle. If any customer seeks only for a driver then these drivers will be allotted to them.

Hiring

It is the window where allotment of vehicle to the appropriate customer is done by searching for the driver who is currently available and them that driver is allotted to the customer.

Rate Chart

There is a proper fare fixed in vehicle hiring system for both the two wheeler and four wheeler vehicle. The fare of each passenger will be as per the distance travelled by the vehicle for reaching the

destination. The fare will be paid in cash mode. The rate chart for the vehicle hiring system is mentioned below table 1:-

Table -1 Rate Chart

Vehicle type	Distance(in km)	Fare (in rupees)
2 Wheeler	1 Km	8/-
4 Wheeler	1 Km	10/-

The graphical representation of the system where the working process of the system in represented in the form of various shapes where each shape has its appropriate meaning is shown in figure 1.
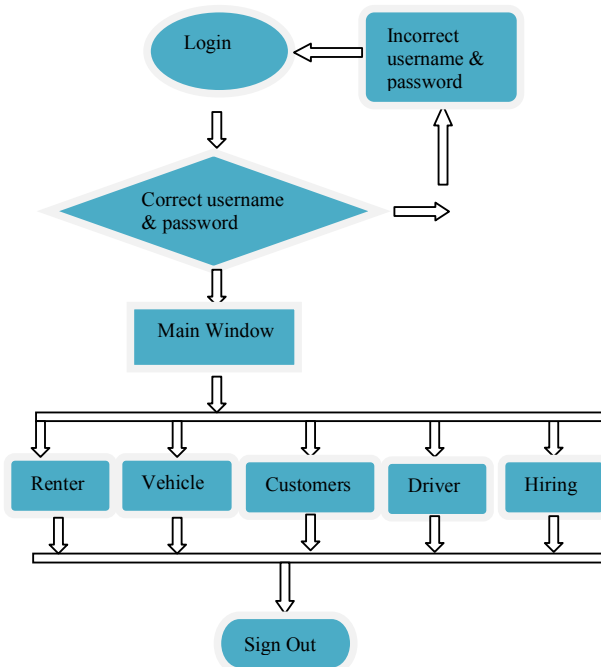

Figure 1: Data flow diagram

SCREENSHOTS OF THE SYSTEM

Login Page

It is the login page of the system where user will give the username and password for getting access to the system shown in figure 2.
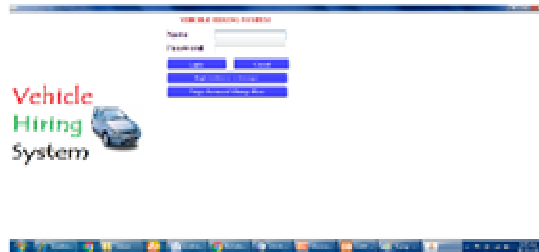

Figure 2: Login page

Main Page

This is the main page where owner/user of the system get different options such as Renter, Vehicle, Customers, Drivers, Hiring to process the respective request shown in the fig 3.
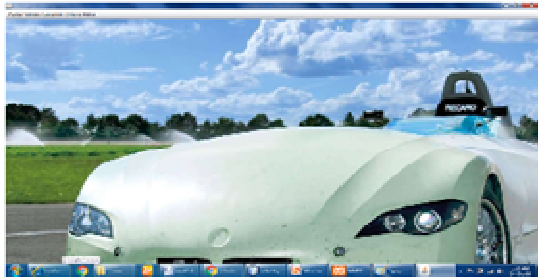

Figure 3: Main page

Renter Two Wheeler

This is registration page of our system where the donor of two wheeler vehicle has to enter his/her credentials to get registered It is the registration page for the two wheelers vehicles entry, the users who are giving their vehicle for rent shownin fig 4.
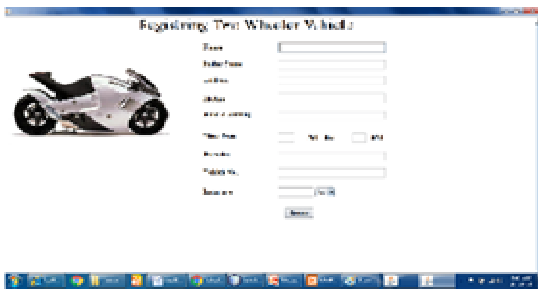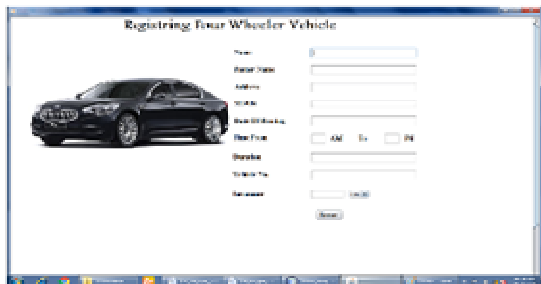

Figure 4: Renter two wheeler

Renter Four Wheeler

This is registration page of our system where the donor of four wheeler vehicle has to enter his/her credentials to get registered It is the registration page for the four wheelers vehicles entry, the users who are giving their vehicle for rent shown in fig 5.

Figure 5: Renter four wheeler

Vehicle

It is the window where the owner can go to the page to see the entry of the registered vehicles shown in fig 6.
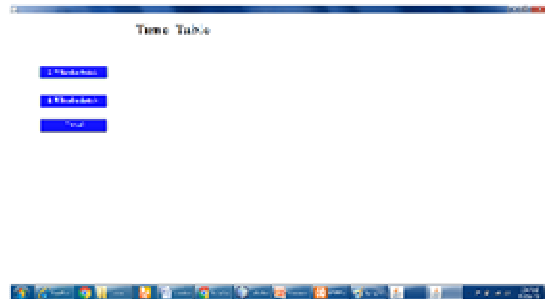

Figure 6: Vehicle

Vehicle Availability

It is the window where the owner can see the entry of the registered vehicles shown in fig 7.
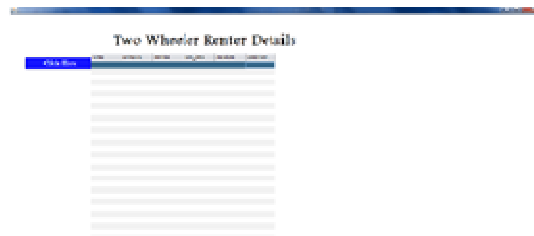

Figure 7: Vehicle availability

Customer Registration

It is the registration page for the customers who need to hire vehicles from our system shown in fig 8.

Figure 8: Customer registration

Driver Registration

It is the registration page for the drivers who are associated with the vehicle hiring system shown in fig 9.
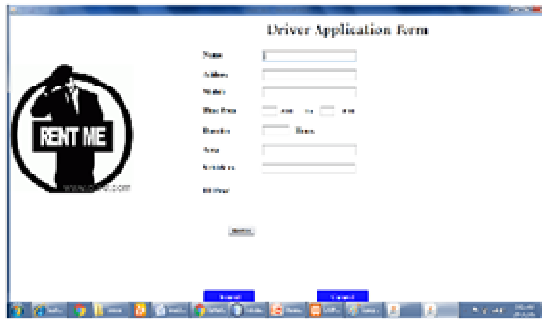
Figure 9: Driver registration

Free Driver List Registration

It is the registration page for the drivers who are associated with the vehicle hiring system shown in fig 10.
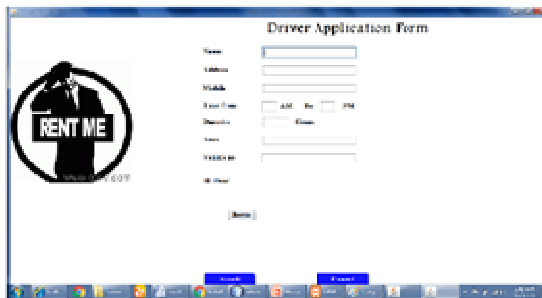

Figure 10: Free driver list registration

Hiring Process

It is a page where owner will search for the driver according to his area and will go to the allocating pageshown in fig 11.

The vehicle hiring system is developed for the company which takes the two and four wheeler vehicle in a rent from the people who seeks to rent their vehicle for a particular time period in a day.

Figure 11: Hiring process

Allocating Process

Here owner will allocate the driver with a particular customer who's request has came to the owner shown in fig 12.
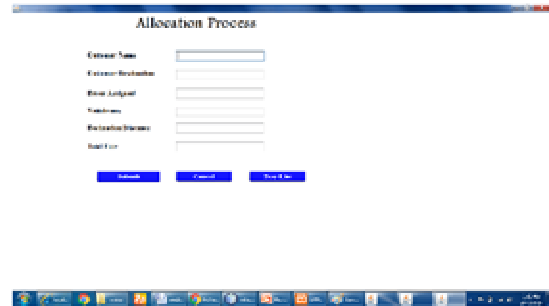

Figure 12: Allocating process

Front End

The front end used in this system is Java. The system is designed under the platform Netbeans Ide. It is a software through which we can design and code the system in the manner such that we can get the desired output. Java is a general-purpose computer programming language that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible.

Back end

It is that part of the system where coding is done to establish a connection between the software and the database. For vehicle hiring system the back end used is Mysql. MySQL is an open source relational database management system. Information in a MySQL database is stored in the form of related tables. MySQL databases are typically used for web application development.

RESULTS

The person who seeks for renting the vehicle will rent their vehicle through our system, for that purpose the renter details will be registered in our system. The user who wants to hire the vehicle will make call at contact provided by the system and the request of the customer will be registered. Then the proper operation is performed by searching the free driver for that particular area from where the request has come then allotting that driver to the task. After completing the task then getting the required confirmation from the driver that he has dropped the passenger to their requested destination process halts and the passenegr will pay the billed amount to the four wheeler driver and in case fo two wheeler the payment will be done when the customer wil return the two wheeler.

CONCLUSION AND FUTURTE SCOPE

Those rented vehicles with driver are used to provide services to the people who are in need of vehicles for their transportation.

The problem in the existing system was that it does not allow the renters to rent their vehicle according to their convenience, secondly existing system are mostly android application and that too online so most of the public still do not have access for that.

The system developed fulfills the disadvantages of the existing system such that no requirement of any internet connection to the person hiring and renting the vehicle. One can rent the vehicle according to their own convenience and in case if they need it back that facility is also available. No need of any smartphone for running this system.

The system developed is fully functional system and in future there will be in the system regarding the payment mode so that the online mode of payment can be also be accepted by the company.

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