# Get Wheels Application Developed For Vehicle Rental

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**ABSTRACT:** Nowadays, there are online car reservations which provide a lot of benefits to the user. The existence of this online system can solve the problem of availability and provide user convenience when renting a vehicle, but users still need more convenience system, such as helping them recommend a vehicle for hire based on car-specific requirements. The user selects his favorite car from the car catalog. Reservation can be made online and users need to come at the hotel to pick up the reserved car. This system works in retrieving, creating, updating and deleting data or the information depends on the security level and allows the organization to find user information from the database on their identification. In addition to that, this system can produce reports such as payment receipt, rental information and vehicle rental statistics by year, month or week. The discovery of this project is the Android-based car rental system with recommended vehicle to rent and the output that will output the information following the user's requirements. In This car owner track car system means the location of the car is easily obtained by the owner.

**KEYWORDS:** Global Positioning System (GPS), Android,Data Base, Marketplace, Mobile Application, Private Vehicle, Rental Online.

## I. INTRODUCTION

The development of technology from time to time increasingly rapidly both in developed countries and in developing countries. Information technology, especially in the field of mobile applications is also increasingly looked at by the public because of the many smartphone users at this time.

We certainly consider online shopping, e-banking, etc. Correspondingly, The Car Rental System is the online office to book vehicles online inside hardly any snaps in a manner of speaking. A couple of individuals can't remain to have a vehicle, for those people this system ends up being outstandingly helpful. This framework incorporates different vehicles, according to the client request and solace it put in the request and got according to the pickup-sloping edge area inside the zone. Booking should be possible by means of network access as it were. This undertaking navigates plenty of territories going from business idea to registering field and required to play out a few explore to have the option to accomplish the venture goals.

Car rental business is becoming big, and competition is getting high. Considering the success of online reservation in business like airline, hotel and restaurants, adopting the strategy of online reservation in car rental business will not give a different success and acceptance.

A rented car is a vehicle used temporarily for a period of time with a fee. An individual who wants to rent a car must first contact the car rental company for the desired vehicle. The person has to supply some information such as rent period, the desired type of car. The rental cars are categorized into economy, compact, compact premium, premium and luxury. Customers are free to choose any car based on their budget and availability of such car at the time of reservation.

The general objective of this research was to develop a system for Car Rental Business. The outcome was an outline of a car rental service based on a wide online access and utilization of location-based services. That is both acceptable by both the customers and the company.

The Specific objectives of the study were:

- To reduce the time consumed in applying to rent a car using scheduling algorithm;
- To organize transaction records; and
- To provide customers a comprehensive and detailed information of services offered by Car Rental business.

In addition, motor vehicles that are rarely used can cause various problems, such as car batteries or motorcycles that will lose energy so the car or motorcycle cannot be started and in the end the car or motorcycle battery must be filled returned or replaced with a new one. The solution to these problems is to create a mobile application that

is used to rent vehicles that are not being used. This application is able to make private vehicles more useful and at the same time provide additional income for vehicle owners.

## II. LITERATURE REVIEW

S Durai, C Shyamalakumari, S Florence, in Sep 2018, "Online High-Priced Motor Vehicle Rental System". This project purely based upon two factors, first the vehicle type and second the duration of the vehicle going to use in days or hours. So in this mechanism, it will help the user to communicate with the owner through mobile phones. There is no any kind of paperwork. The main goal of this project is to avoid the third party that reduces the cost-effectively. Any user can access this website without registration but to hire the car, the user must have to enter the required detail.

MohdNizam Osman, NurzaidMohd. Zain, in October 2017, "Online Car Rental System using Web-Based and SMS Technology". This paper described a notification-based content alert and web-based system using SMS technology, where it specifies a notificationbased content alert. It was specifically developed for the alert notification to the customers about car rental information, and availability of the car reserved. The main purpose of developing SMS based technology is to reduce the cost and time consumed. The system developed using SDLC methodology.

Rahul Kulkarni , Chaitanya R , Pratibha , Pooja A Patil , NikeetaBiradar, August 2021, IJIRT, Volume 8 Issue 3 "Online Car Rental System" Our structure and spotlights on renting Self Drive Cars, where the customer with significant License will have the alternative to book similarly as will have the choice to drive his/her own rented vehicle. The customer selection and endorsement are outstandingly straightforward and made with the goal that it makes the structure almost 0% paper vocations. The customer will have the alternative to select and enter his nuances and move remotely from his home, and the association will have the choice to favor every one of his information without even truly meeting the customer.

Michael G. Albino, 2021, "Development of Car Rental Management System with Scheduling Algorithm". Many businesses are now engaged with the implementation of information system to expedite the transaction of their companies. In a car rental business, a need to implement such system to easily manage the transaction of the business owner and its customer. Just like an e-commerce business, the car rental management system could also offer online advertisement. It is the most affordable way of advertising compared to some paid commercials that even small businesses can easily implement.

## III. METHODOLOGY

**Login Module**

The login module authenticates both the user and the admin. Once the authentication is done, the user and admin can perform their individual activities.

### A. Admin Module:

Admin can add a vehicle, manage booking any vehicle and rent and also view feedback and enquiry. The Admin can add the vehicle so that the user can see thenavailable vehicles and book the vehicle. The Admin can manage the rent so that the user can see the rent and book the vehicle. The admin easily view the feedbacks and solve the query. The administration area allows to set up the system and control all the information related to vehicle rentals. Common sections of the admin system are: "Add New Element", search box on each page to provide easy access to data, and a data editing page (on each section).After entering the system you'll have access to control different areas of information.

### B. User Module:

User are of two categories:

### I. Vehicle owner :

Vehicle owner have to login/register into system.After that they can rent out their vehicle on the system in following way:

- Login/register as a vehicle owner.
- Fill the required details of own vehicle. Fore.g.Vehicle no.,vehicle name, photograph of vehicle, upload required documents, Available area location etc.
- Rent out the Vehicle.
- After that they received payment.
- Update the details of vehicle on the basis of current information.

### II. Customer:

Customer can view available vehicle and book it on rent as per their need.

- Login/register as a customer.
- Search for Vehicle as per their requirement.
- Book a vehicle on rent with respect to terms and conditions.

- Customer have to submit their document manually also for identity proof and security purpose.
- After payment, he/she will received reference via email and mobile number.
- Customer can share the vehicle with another customer who having same route for travelling.

## IV. TECHNOLOGY

**Android:**
Android is an open source software platform and Linux-based operating system for mobile devices. The Android platform allows developers to write managed code using Java to manage and control the Android device. Android applications can be developed by using the Java programming language and the Android SDK. So, familiarity with the basics of the Java programming language is a prerequisite for programming on the Android platform. Java fits in mobile application development and how we can use Java and Android SDK to write applications that can work on Android devices.

**Android Studio:**
Android Studio is the official integrated development environment (IDE) for Android application development. It is based on the IntelliJ IDEA, a Java integrated development environment for software, and incorporates its code editing and developer tools.To support application development within the Android operating system, Android Studio uses a Gradle-based build system, emulator, code templates, and Github integration. Every project in Android Studio has one or more modalities with source code and resource files. These modalities include Android app modules, Library modules, and Google App Engine modules.

**Java:**
Java is a general-purpose, advanced and object-oriented programming language whose syntax is close to C. Its characteristics as well as the richness of its ecosystem and its community have allowed it to be very widely used for the development of applications of very different types. Java is particularly used for developing business and mobile applications.

**Extensible Markup Language (XML):**
The XML (Extensible Markup Language) format allows you to reuse data from a file or automate the process of replacing data from one file with data from another file. The XML format uses tags to describe different parts of a file such as a header or an article. These tags mark the data, which can then be stored in an XML file and used correctly when exported into other files. The XML format can be compared to a data translation mechanism.

## V. CONCLUSION

This is a complete online Vehicle Rental solution that offers the standard operating functions of a Vehicle Rental Company, namely to search for a Vehicle, to reserve, to return and to know its invoice. It has a GUI, and there are two profiles of people who can use this Online Rental: Client and Administrator.

Vehicle rental is a service offered by professionals who own passenger cars or utility vehicles. This service consists for the customer (professional or individual) of reserving and enjoying a vehicle for a given period ranging from a few hours to several months.

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