

## Online Car/Bike Rental Management System

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### ABSTRACT

Customers will be able to reserve their vehicles from anywhere in the country due to the car/bike rental system. Consumers provide information to this application by filling in their personal information. Each type of car/bike should have a different rental fee per day. Rental fee depends on number of days, brand and how fast the car/bike runs. A car/Bike rental agency is a company that rents car/bikes for short period of time for a fee whether in a few hours or a few days or week. When the customer makes a decision about the type of car/bike and the Dates, the system should be able to reserve the requested type of bike for requested dates. The customer should be given a confirmation number. The customer then asked to supply a driver license. The System process a return. The System should record the date, time and processes by depending on these parameters; the systems calculate the final rental amount. In short, it is a system design especially for large, premium and small car/bike rental business. The car/ bike rental system provides complete functionality of listing and booking bike.

**KEYWORDS**- Booking, Reserve Cars/Bikes, Payment, Application (App), ios, Android etc..

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### I.INTRODUCTION

This project is designed so as to be used by Car/Bike Rental Company specializing in renting cars/bikes to customer. It is online systems through which customers can view available car/bikes, register, view profile and book car/bike. Nowadays almost human life becomes more and more easy. It is possible only because of the technology. Various online systems make the life of human very comfortable. By some clicks only, we can get whatever you want at home. When people go to trip outside the towns or country and want to be free of time so instead of going through metros and taxis people prefer to have our own vehicle for rent. Using this system users can register us customer who want to take cars/bikes on rent can register themselves as renters and take any car/bike on rent. Proofs likes license, pan card and identity card are compulsory so that no one could run taking the car/bike. Any customer whose proofs are not account who verifies the registering user and the user account. From this amazing platform, you can get the best model of car/bikes like Bullet, Fazer, Pulsar and many more according to your wish. You can get each and every car/bike in A1 condition without burning the hole in your pocket.

### II. PROBLEM DESCRIPTION

A Car/Bike Rental is a rented vehicle that can be uses temporarily for a fee during a specified period. Getting a rental car/bike help people get around despite the fact they do not have access their own personal vehicle or don't own a vehicle at all. The individual who needs a car/bike must contact a rental car/bike company and contract out for a vehicle. This System Increases customer retention and simplify vehicle and staff management and there is huge amount of amount of paperwork involved in the process. And also they will be inventory damage and repair problem and they will be competition from city car/bike rents. The contract a rental individual that needs a car/bike must bike a company and contract out for a vehicle. This system increases customer retention and simplify vehicle and staff management.

### III. PROPOSED SYSTEM

1. In this Car/Bike rental system we are going to introduce online booking of Car/Bike rent will be available. So the Burdon of the customer will be reduced. Our Aim is to design and create a data management System for a Car/Bike rental company.
2. This enables admin can rent a vehicle that can be used by a customer. By paying the money during a Specified Period of time. This system increases customer retention and simplify vehicle and staff Management in an efficient way.

3. Convenient and easy way of commuting: Car/Bike renting brings ease and convenience in travelling and roaming around in a new city.
4. Car/Bikes are environment friendly: Car/Bike rental system are great for the environment. Obviously, cars/bikes do not produce any emissions.
5. Healthier Population: Car/Bike renting a boon for people with sedentary lifestyles. It has given people a better option to hop. People are automatically involved in an involuntary workout, which bring in a healthier population.
6. Billing and Invoicing.
7. Vehicle Management.
8. Reliability.

#### IV. ARCHITECTURE OF THE PROPOSED ALGORITHM

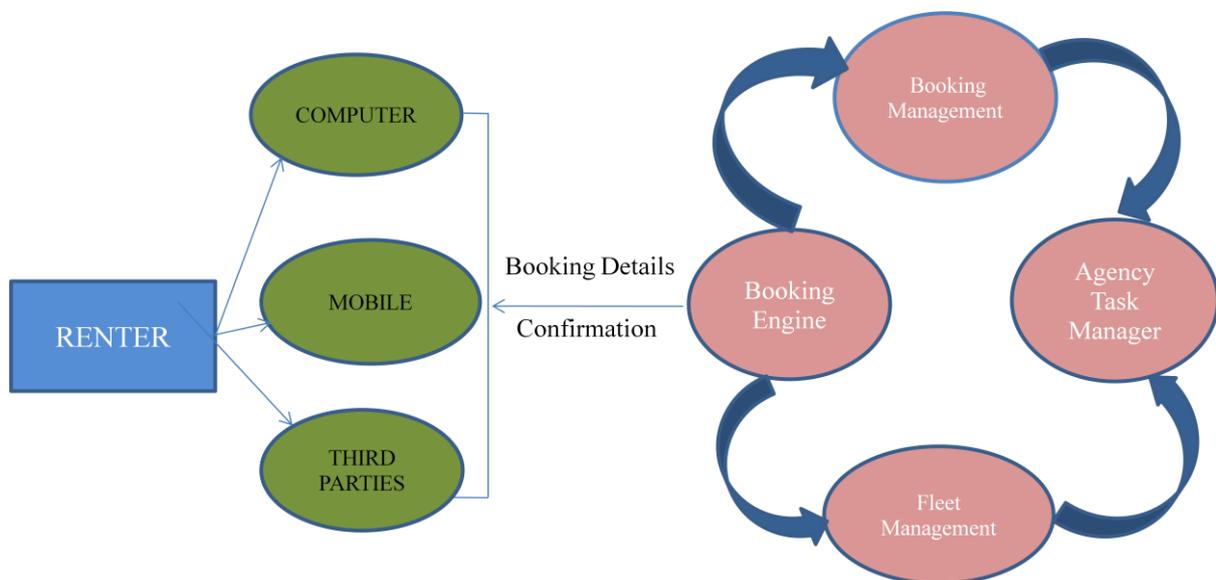


Figure 4.1: ARCHITECTURE OF ONLINE BIKE RENTAL SYSTEM

**Car/Bike Rental Booking:** A Booking engine is at the forefront of the car/bike rental reservation system. Synced up with the inventory database, the engine obtains the updated list of available cars/bikes for the dates, accessories that comes with them and their quotes.

**Payment Reservations:** Connected with a payment (such as PayPal, Braintree and Stripe), the booking engine accepts online payments from customer and issues electronic invoices

**Rental Car Distribution:** The system can measures vehicles usage and distribute the load equally throughout the fleet and avoid putting rundown assets on the road.

**Overbooking:** When it comes to overbooking there are two ways of thinking. Similar to airlines and hotels, some rental car/bike companies overbook to compensate for no-shows and to offset drivers who return cars/bikes early.

**Car/Bike Rental agents task management:** While managing the assets, Car/Bike rental agents need to streamline their work behind the counter. Car/Bike RRS bring tangible improvements to how agents perform their duties.

## V. BASIC OPERATIONS OF PROPOSED ALGORITHM

1. Admin
2. User
3. Car/Bikes
4. Payments

**1. Admin:** This Module is present only for one account. That's, no one can register after one account is created. The admin has all the privileges, to check about the particular car/bike seller or customer. To block any account, to calculate the salary of them employees after deducting their leaves, to update the status about any event, to calculate the payment, to make change into accounts of users, etc.

- Registration:
  - User Registration
  - Vehicle Registration
- Booking Operation
  - Booking Cancellation.
  - Booking Confirmation.

**2. User:** As explained in the login section, the user can be of two types and both the users will have different interfaces and after the user has registered and login then the features provided can be used by the users. A user who has registered as the seller can update about the cars/bikes that free card can be given on rent. If the User is a customer, then he can see all the available cars/bikes that he can take on rent.

- Booking Details
  - Online Booking
  - Manual Booking
- Search
  - Vehicles Catalogues
  - Booking
  - Search Car

**3. Car/Bike:** This is the one of the most important most important modules. This module help the customers to make any car/bike rent from any car/bike seller. The status of car/bikes can be updated as soon as it gets free or it gets books so that no other customer tries to book the same car/bike. The information that is added to a car/bike is its model no, vehicle no, and owner name.

**4. Payment:** This module is present so that customers can easily pay the amount as the amount paid through this system goes to admin and then admin can make the payments to all the events managers according to their work. The customer can pay through net banking, debit card or credit card.

## VII. RESULT AND DESCRIPTION

Once the final Car/Bike Rental System is built, business students will become involved with an economic and marketing analysis. The engineering programs will pay for the construction of the Car/bike system from funds budgeted for the capstone class. An initial thought is for local business to sponsor each of the car/bikes. As an incentive, they will be allowed to put an advertisement for their business on the car/bike they sponsor. A small monthly fee will then be charged to continue the sponsorship. The fees collected will be used to contract with a local car/bike shop to maintain the condition car/bikes. The implementation of the final car/bike rental system is truly the final step in maintaining the community relations link.

Further Enhancement can also be done by providing access permissions to the employees, Try to Implement the GPS System in Car/Bikes. To maximize the use of Car/Bike Renting System, the lead agency needs to have the support of stakeholders and partners. These stakeholders may be including Local municipality (funding and space), Public transit operators, User association and other groups (e.g. vehicle sharing companies).

## VIII. CONCLUSION

Car/Bike Rental System is a web application and it is restricted to only limited type of users. In this application, Admin have been given access rights and are restricted up to certain functionalities, so that the data is maintained securely and redundant data is prevented. As the Data is stored electronically, it is necessary to have a Computer and Network connection to access the Application. It is software which helps the user to rent car/bike base on their need. This software reduces the amount of manual data entry and gives greater efficiency. The User Interface of it is very friendly and can be easily used by anyone. It also decreases the amount of time

taken to write details and other modules. At the end, this software can perform all the tasks accurately and can do the work for which it is made.

### REFERENCES

- [1]. Osman, MohdNizam, NurzaidMdZain, ZulfikiriPaidi, Khairul Anwar Sedek, Mohammad NajmuddinYusoff, and MushahadahMaghrhribi. "Online Car Rental".
- [2]. Elmasri, Nawathe, Fundamentals of Database System, Pearson Education, 5<sup>th</sup> Edition, 2006, ISBN-978-81-317-1625-0,
- [3]. Raghuram Krishna and Johannes Gehrke, Database Management System, Tata McGrawHill, 3<sup>rd</sup> Edition, 2003, ISBN-0-07-123151-X.
- [4]. Database management system, Ramakrishna, and Gehrke, 3<sup>rd</sup> Edition, 2014, McGrawHill, 2013.
- [5]. SilberschatzKorth and Sudharshan, Database System Concepts, 6th Edition, McGraw Hill, 2013.
- [6]. Fundamentals of Database Systems, RamezElmasri and Shamkant B. Navathe, 7<sup>th</sup> Edition, 2017, Pearson.
- [7]. Database management systems, Ramakrishna, and Gehrke, 3rd Edition, 2014, McGraw Hill, 2013.
- [8]. SilberschatzKorth and Sudharshan, Database System Concepts, Tata McGraw-Hill, 5<sup>th</sup> Edition, 2002, ISBN-007-124476-X
- [9]. H.P Mooney, J.W. Evans, 'A complete relational DBMS for an EMS product', IEEE Transactions on Power Systems, Volume:3, Issue:1, Feb 1988.
- [10]. <https://www.tutorialspoint.com/index.html>
- [11]. <https://www.javatpoint.com>
- [12]. <https://www.w3schools.com>

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