## 2.1 LITERATURE SURVEY:

**Title**: **ONLINE CAR RENTAL**

**Author: Rahul Kulkarni**

**Summary:**

As our structure relies upon the useful Car Renting System which is an authentic application we inspected the present working circumstance of the renting technique. At present renting, organizations are dependent on manual work which consolidates packages of work area work similarly as a human resource. To date we find Cab Services incredibly easy to book, pay, or drop as they have formed their structures into helpful applications similarly as locales. So there is a need to change the arrangement of the Car Renting Service. But, Car rental business, notwithstanding everything, uses the central methodology for Renting a vehicle to a customer as the customer ought to go genuinely at centre, the owner will similarly be accessible there and the owner will permit the vehicle with his/her own supported driver (which costs more). 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 pieces of information without even truly meeting the customer.

**Title: Mastering the Challenge: Crafting a Comprehensive Literature Review on Car Rental Management Systems**

**Authors: P. Nahnisha**

**Summary:**

The advancement in Information Technology and internet penetration has greatly enhanced various business processes and communication between companies (services provider) and their customers of which the car rental industry is not left out. This E-Car Rental System is developed to provide the following services: Enhance Business Processes: To be able to use internet technology to project the rental company to the global world instead of limiting their services to their local domain alone, thus increase their return on investment (ROI) Online Vehicle Reservation: A tool through which customers

can reserve available cars online prior to their expected pick-up date or time. Customer's registration: A registration portal to hold customer's details, monitor their transactions and use the same to offer better and improve services to them.

**Title: Development of Car Rental Management System**

A**uthors: Michael G. Albino1, Victor Acebedo2**

**Summary:**

Information and Communication Technology (ICT) has become and will continue to be an integral part of the day-to-day life of every Filipino across all levels of our society. The occurrence of communication technology around the world necessitates that government get on a cohesive and coordinated strategy on how to prepare its citizens to survive, live and thrive in a digital world. (The Philippine Digital Strategy Transformation 2.0: Digital Empowered Nation 2011) The main objective of the paper is to have a competitive society where everyone has a reliable, affordable and secure information access in the Philippines. As stated by Charles W. Bachman in 1960's who invented the database management system and the concept of database was put in use and also began grow in commercial. Databases are important in businesses, especially when it comes to keeping of inventory. Databases can be used for controlling inventory as well as reducing the time, cost, and effort of inventory management. Controlling your inventory is essential in order to have good and efficient business. As reported by Lee (2006) that one indisputable benefit of e-commerce is its ability to reduce transaction costs. For consumers or buyers, this is most likely to take the form of lower search costs and better information on products and services. There could be drastic savings in production and delivery costs of electronic or digital goods as well. Hossain (2009) stated that company's websites should have significant influence on sales and corporate image, and are expected to contribute to overall customer satisfaction. The easiest way to be reliable to the customer is to maintain an easy and simple image in the company's website, which created positive web experience to the customer. This can be done by having transparent interface, rich content, easily accessible information and having a design that facilitates multiple audiences. This is simply emphasizing the importance of knowing the target visitors as they have different tastes in terms of color and design as a whole. Also, a good design is not enough to make your customers stay in the website; it must be informative as well especially on the product and services. 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. E-Commerce allows consumers to electronically exchange goods and services with no barriers of time or distance. Electronic commerce has expanded rapidly over the past five years and is predicted to continue at this rate, or even accelerate (Franco & Regie, 2016, p. 7).

## 2.1 EXISTING SYSTEM

In this system user (or) client will directly interact with the car owner and owner will decide whether the car is available or not. Then if it is available he will give rent a car to the customer. The main drawback of this system is customer need to meet the car owner. this is time waste process.

### DISADVANTAGES OF EXISTING SYSTEM:

- Car rental process is done manually.
- These tasks are time consuming.
- People around the world cannot book.
- Not accuracy and time-consuming process.
- We may have less choices.

## 2.2 PROPOSED SYSTEM

In this car rental system, we are going to introduce online booking of car 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 rental company. 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.

## ADVANTAGES OF PROPOSED SYSTEM:

1 Its online system so that from anywhere can book the car and can take for rent

2. Friendly usage and budget friendly

3. We can cancel the booking at any time

4, We have more choices of cars

## 2.3 FEASIBILITY STUDY

- The possibility of the undertaking is broke down during this stage and strategic plan is advanced with an exceptionally broad arrangement for the task and a few quotes. During project examination the likelihood investigation of the proposed project is to be completed. this is often to ensure that the proposed project isn't a weight to the organization. For practicality examination, some comprehension of the many necessities for the project is prime.
- After the approval of the request to the organization and project guide, with an investigation being considered, the project request must be examined to determine precisely what the system requires.
- Not all request projects are desirable or feasible. Some organization receives so many project requests from client users that only few of them are pursued. However, those projects that are both feasible and desirable should be put into schedule. After a project request is approved, it cost, priority, completion time and personnel requirement is estimated and used to determine where to add it to any project list. Truly speaking, the approval of those above factors, development works can be launched
- An important outcome of preliminary investigation is the determination that the system request is feasible. This is possible only if it is feasible within limited resource and time. The different feasibilities that have to be analyzed are.

### 2.3.1 TECHNICAL FEASIBILITY :

- According to Roger S. Pressman, Technical Feasibility is the assessment of the technical resources of the organization. The system is developed for platform Independent environment. The technical feasibility has been carried out. The system is technically feasible for development and can be developed with the existing facility.
- This investigation is completed to see the technical practicality, that is, the specialized prerequisites of the framework. Any framework created must not have a popularity on the accessible specialized assets. this may prompt high requests on the accessible specialized assets. this may prompt high requests being assail the customer. The created framework must have a humble prerequisite, as just insignificant or invalid changes are required for actualizing this framework.

### 2.3.2 OPERATION FEASIBILITY :

**User-friendly**

Customer will use the forms for their various transactions i.e. for adding new routes, viewing the routes details. Also the Customer wants the reports to view the various transactions based on the constraints. These forms and reports are generated as user friendly to the Client.

**Reliability**

The package wills pick-up current transactions on line. Regarding the old transactions, User will enter them in to the system.

**Security**

The web server and database server should be protected from hacking, virus etc

**Portability**

The application will be developed using standard open source software (Except Oracle) like Java, tomcat web server, Internet Explorer Browser etc these software will work both on Windows and Linux o/s. Hence portability problems will not arise.

**Availability**

This software will be available always.

**Maintainability**

The system uses the 2-tier architecture. The 1st tier is the GUI, which is said to be front-end and the 2nd tier is the database, which uses My-Sql, which is the back-end. The front-end can be run on different systems (clients). The database will be running at the server. Users access these forms by using the user-ids and the passwords.

## 2.3.3 ECONOMICAL FEASIBILITY

The computerized system takes care of the present existing system's data flow and procedures completely and should generate all the reports of the manual system besides a host of other management reports.

It should be built as a web based application with separate web server and database server. This is required as the activities are spread throughout the organization customer wants a centralized database. Further some of the linked transactions take place in different locations.

Open source software like TOMCAT, JAVA, Mysql and Linux is used to minimize the cost for the Customer.

## 2.3.3 SOCIAL FEASIBILITY

The a part of study is to see the degree of acknowledgment of the framework by the client. This incorporates the way toward preparing the client to utilize the framework effectively. The client must

not feel undermined by the framework, rather should acknowledge it as a requirement . The degree of acknowledgment by the clients exclusively relies upon the techniques that are utilized to show the client about the framework and to form him familiar with it. His degree of certainty must be raised with the goal that he is likewise able to make some helpful analysis, which is invited, as he's the last client of the framework.

## 2.4 HARDWARE AND SOFTWARE REQUIREMENTS

### 2.4.1 HARDWARE REQUIREMENTS:

The hardware requirement specifies each interface of the software elements and the hardware elements of the system. These hardware requirements include configuration characteristics.

- Processor Intel I3 Processor
- RAM 4 GB
- Monitor 15 inch color monitor or LED
- Hard disk 160 GB
- Key board Standard 102 keys

Mouse Optical

### 2.4.2 SOFTWARE REQUIREMENTS:

The software requirements specify the use of all required software products like data management system. The required software product specifies the numbers and version. Each interface specifies the purpose of the interfacing software as related to this software product.

- Operating system Windows
- IDE Eclipse
- Language Java
- Framework Jsp and JDBC
- Back End MYSQL
- Front End HTML,CSS,JS,Bootstrap
- Server Apache Tomcat