SYNOPSIS

1. Name of the college: **-** D.Y. Patil Technical Campus Faculty of Engineering   & Faculty of Management Talsande, Kolhapur.

2. Name of the Course: - Second Year B. Tech (Computer Science &Engineering)

3. Name of the Students: -

 1) Mr. Pramod Sanggapa Kamble   [PRN 2020078734]

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4. Name of the Guide: -   Prof. More S. M.

5. Proposed Title: -   Car Rental System

6. Introduction: -

- C++ is a general-purpose programming language that was developed as an enhancement of the C language to include object-oriented paradigm. It is an imperative and a compiled language. C++ is a middle-level language rendering it the advantage of programming low-level (drivers, kernels) and even higher-level applications (games, GUI, desktop apps etc.). The basic syntax and code structure of both C and C++ are the same

- Car Rental is based on the concept of renting cars and generate a rental invoice for a rental company. This system has an admin and user sections. Before stepping into the main system an admin has to pass through a login system to get access, then only the admin can add cars with a different model and reset available cars, add admins, and so on. This mini project contains limited features, but the essential one.

- The system automates the basic car rental functions to aid in the day-to-day operations of a car rental staff. Also, the goal of the system is to allow for storing details of a large number of car details and allow for add, retrieve and update details of any car.

7. Literature Review: -

➢ It also allows the administrator managed data source in short time.

➢ It accepts new reservation vehicles, View vehicles model, view date reservation for vehicles.

➢ The system wills keep records for the customers, and purchases items. So that administrator can manage customer's reservation lists.

8. Objectives: -

1. The main objective of Car Rental System in C++ is to manage the details of cars, customer's information's. It manages all the information about cars.
2. The project is totally built at administrative end and thus only the administrator is guaranteed the access.
3. The purpose of the project is to build an application program to reduce the manual work for managing the cars, customer's information. It tracks all the details about the customers and car booking.

9. Proposed work: -

▪ MySQL Database is used in backend to store the customer records and vehicle related all information.
▪ C++ Based Desktop application.
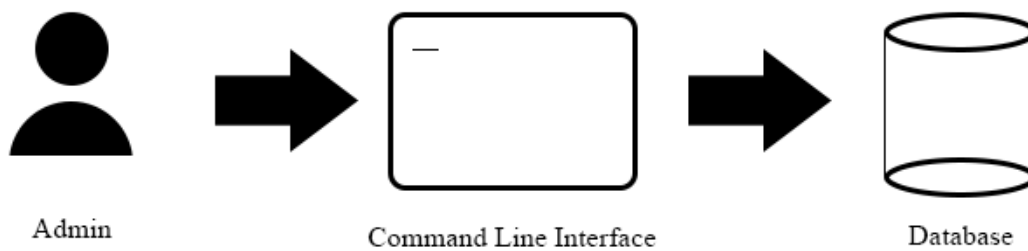▪ There are two part of our System

1. User Module

o Customers can see the available cars and select the car as per their requirements.

2. Admin Module

Using this application, the admin can register the user in database and update or modify the car record. Admin can add new Cars and update car status.
o Central management system

10.1 Architecture: -

Admin   Command Line Interface   Database

10.2 Implementation steps: -

1.Database Design

       i. Create and design database for application

       ii. Using MySQL database

2. Application

We are going to create application which can consist 2 parts

- ❖ User Module

    Register a new account

    See the all available cars list and Choose

    Request for register, select vehicle and pay rent.

    After registering customer receive vehicle.

- ❖ Admin Module

    Admin can see the all available vehicles

    They can see vehicle allocated to customer
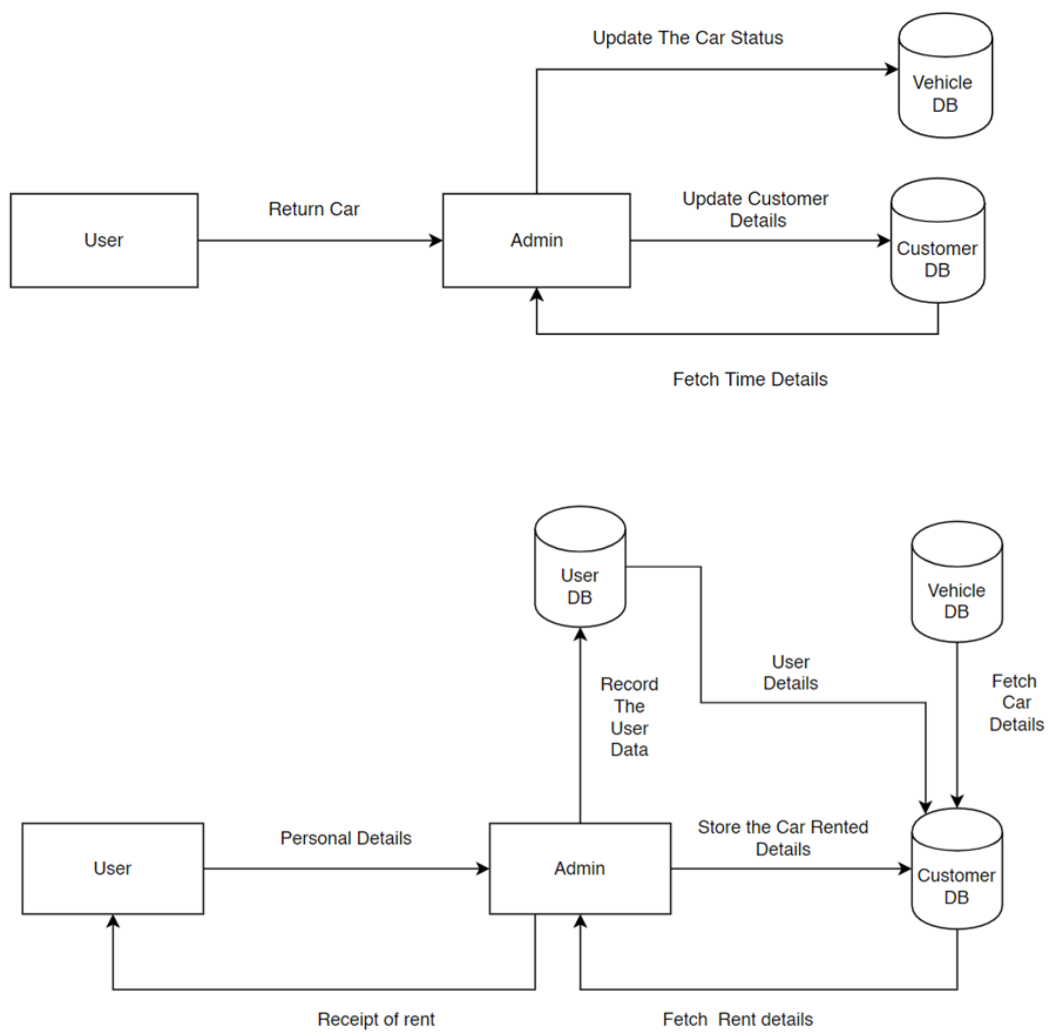
    They can modify all vehicle details

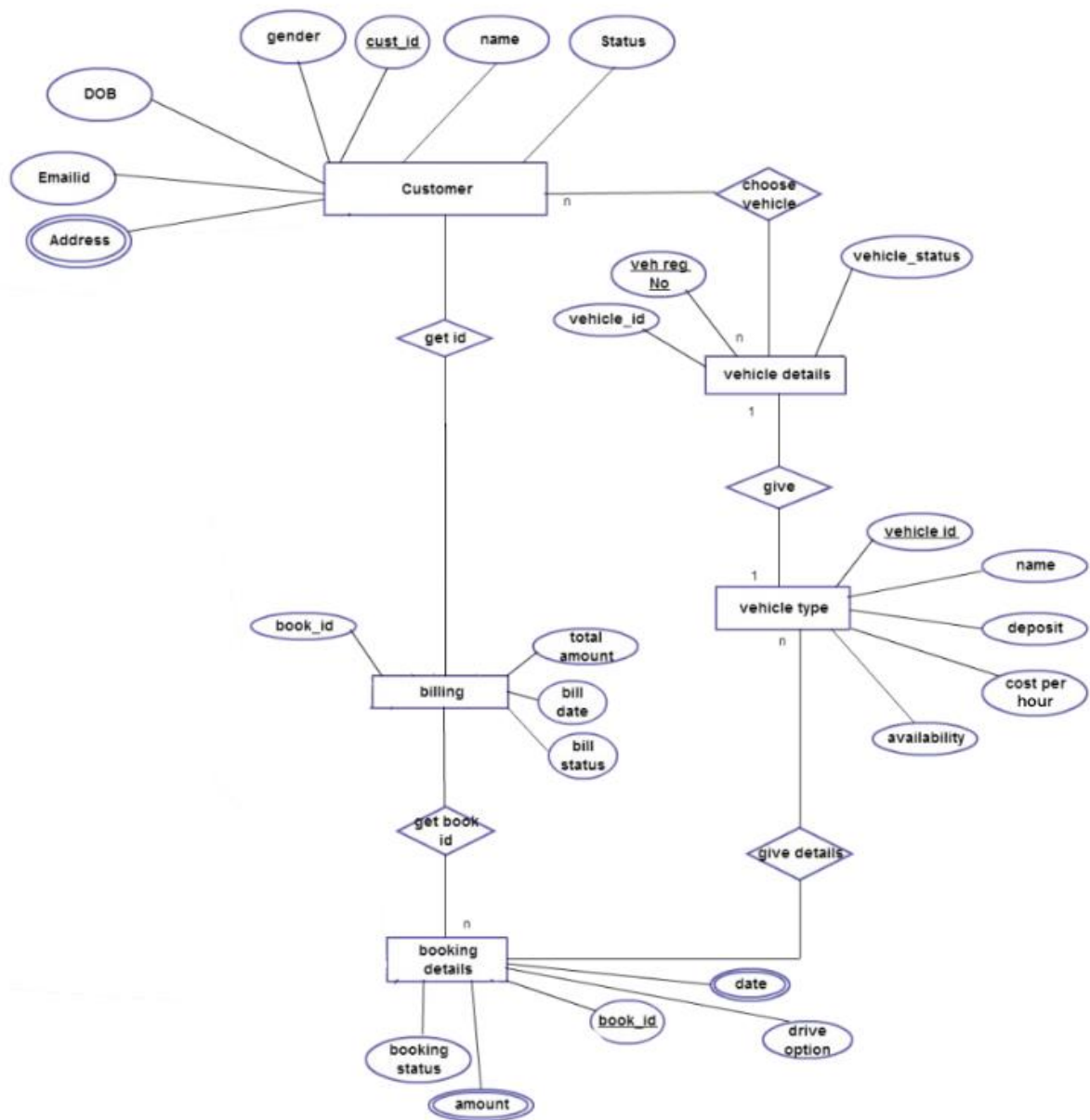## 10.3 Hardware Requirement: -

- ▪ Laptop
- ▪ RAM 512GB+
- ▪ Windows XP, Linux

10.4 Future Scope: -

1. Web Based service.

2. User Friendly.

11.1. DFD (Data Flow Diagram): -

Update The Car Status

Vehicle DB

Return Car

User → Admin

Update Customer Details

Customer DB

Fetch Time Details

User DB

Vehicle DB

Record The User Data

User Details

Fetch Car Details

Personal Details

User → Admin

Store the Car Rented Details

Customer DB

Receipt of rent

Fetch Rent details

11.2. E-R Diagram

12. Requirements: -

- **Languages**
  C++

- **Software Requirement**
  MySQL database

- **Hardware Requirement**
  Desktop / Laptop

  RAM 512 MB +

- **Server Requirement**

  MySQL server

13. References: -

- Object-Oriented Programming in C++ - Rajesh K. Shukla(Wiley) India Edition

- C++ by Balguru Swami

Date: -

Place: - Talsande

Name of Student	Roll No.	Signature
1) Mr. Pramod Sanggapa Kamble	25	
2) Mr. Prathmesh Ramesh Sutar	26	

Guide   **HOD of Computer Science & Engineering**

Prof. S. M. More