Annexure-1

Online car rental system

E-box

A training report

Submitted in partial fulfillment of the requirements for the award of degree of

Computer Science And Engineering

Data Science And Engineering

Submitted to

LOVELY PROFESSIONAL UNIVERSITY

PHAGWARA, PUNJAB

From 05-12-2021 to 07-13-2021

SUBMITTED BY

Name of student: Shaik Malika Sulthana

Registration Number: 11902389

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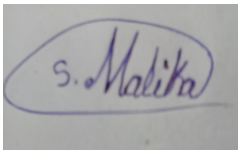
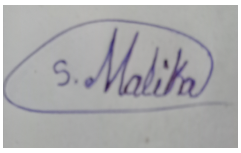


Annexure-2: Student Declarations

To whom so ever it may concern

I, Shaik Malika Sulthana, Reg no: 11902389, hereby declare that the work done by me on "**Object-oriented Programmimg Using C++**" from **May, 2021** to **jul, 2021** is a record of original work for the partial fulfillment of the requirments for the award of the B.Tech, CSE.

Shaik Malika Sulthana(11902389)



From 05-12-2021 to 07-13-2021


CERTIFICATE
OF COMPLETION
This is to certify that
Shaik Malika Sulthana
has successfully completed the E-Box Online Certification Course on
"LPU - Object Oriented Programming using C++ - Internship"
during the period May 2021 - Jul 2021.
Managing Director
Amphisoft

INTRODUCTION OF ONLINE CAR RENTAL SYSTEM

1.Introduction：

fig.no: 1.1

CAR RENTAL SYSTEM (CRS) is a web based system for a company that rents out cars. This system enables the company to make their services available to the public through the internet and also keep records about their services. This project is designed so as to be used by Car Rental Company specializing in renting cars to customers. It is an online system through which customers can view available cars, register, view profile and book car.

Fig.no : 1.2

2. How Car Rental Services Work:

A car rental is a vehicle that can be used temporarily for a period of time with a fee. Renting a car assists people to get around even when they do not have access to their own personal vehicle or don't own a vehicle at all. The individual who want to rent a car must first contact the car rental company for the desire vehicle. This can be done online. At this point, this person has to supply some information such as; dates of rental, and type of car. After these details are worked out, the individual renting the car must present a valid Identification Card.

Most companies throughout the industry make a profit based of the type of cars that are rented. The rental cars are categorized into economy, compact, compact premium, premium and luxury. And customers are free to choose any car of their choice based on their purse and availability of such car at the time of reservation.

3. Objectives of the work undertaken:

Fig no : 3.1

- To produce a web-based system that allow customer to register and reserve car online and for the company to effectively manage their car rental business.
- To ease customer's task whenever they need to rent a car.
- The main objective of the Car Rental System is to manage the details of Car,Payment,Customer, Supplier, Insurance. It manages all the information about Car, Booking, Insurance, Car.
- The project is totally built at administrative end and thus only the administrator is guaranteed the access. The pur pose of the project is to build an application program to reduce the manual work for managing the Car, Payment, Booking, Customer.
- It tracks all the de tails about the Customer Supplier,Insurance.

4. Scope of the work:

Fig.no : 4.1

This project traverses a lot of areas ranging from business concept to computing field, and required to perform several researches to be able to achieve the project objectives. The area covers include:

- Car rental industry: This includes study on how the car rental business is being done, process involved and opportunity that exist for improvement.
- PHP Technology used for the development of the application.
- General customers as well as the company's staff will be able to use the system effectively.
- Web-platform means that the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

5. Imortance of applicability:

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 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 tools 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 transaction and used same to offer better and improve services to them.
- Group bookings: Allows the customer to book space for a group in the case of weddings or corporate meetings (Event management).

6. Benefits of Online Car Rental Services :

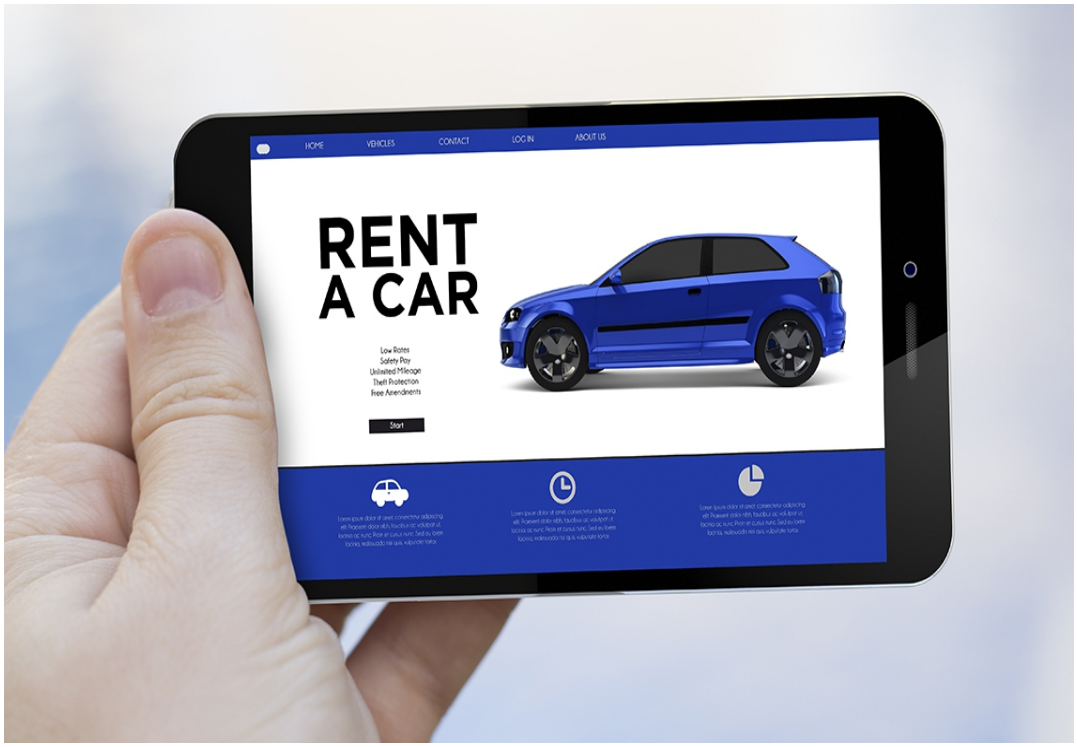


Fig.no: 6.1

- This online car rental solution is fully functional and flexible.
- It is very easy to use.
- This online car rental system helps in back office administration by streamlining and standardizing the procedures.
- It saves a lot of time, money and labour.
- Eco-friendly: The monitoring of the vehicle activity and the overall business becomes easy and includes the least of paper work.
- The software acts as an office that is open 24/7.
- It increases the efficiency of the management at offering quality services to the customers.
- It provides custom features development and support with the software.

7. Reason for the Project :

Fig.no: 7.1

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 car rental industry is not left out. This E-Car Rental System is developed to provide the following services:

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- Group bookings: Allows the customer to book space for a group in the case of weddings or corporate meetings (Event management).

8. Role and profile :

8.1 Admin:

Admin is basically a superuser. Admin can add a car, manage booking cars, and rent and view feedback and inquiry. Admin will keep track of each booking. Manage organization representatives. Admin is responsible for any error in the system. So, he needs to alter at any point in time. Admin should keep tracking car renting service, maintenance of cars.

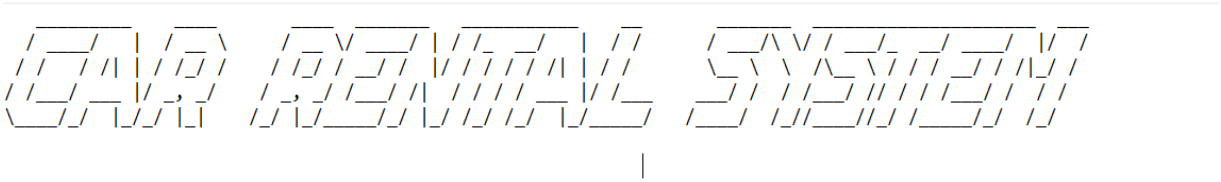


Fig.no : 8.1

8.2 User:

The user is the end-user of our service. Users can view information of the available car, booking a car, easily get the car on rent, and also give feedback and an inquiry. User also views the discount and other information to get best deals.

8.3 Login Page:

Basically, for any software security is a major concern. So, we have developed a secure application. Without being authenticated no user is allowed to view any other interfaces. For the login page, we have a User ID, Password, Profile. After being authenticated user is authorized to perform certain work according to his/her profile.

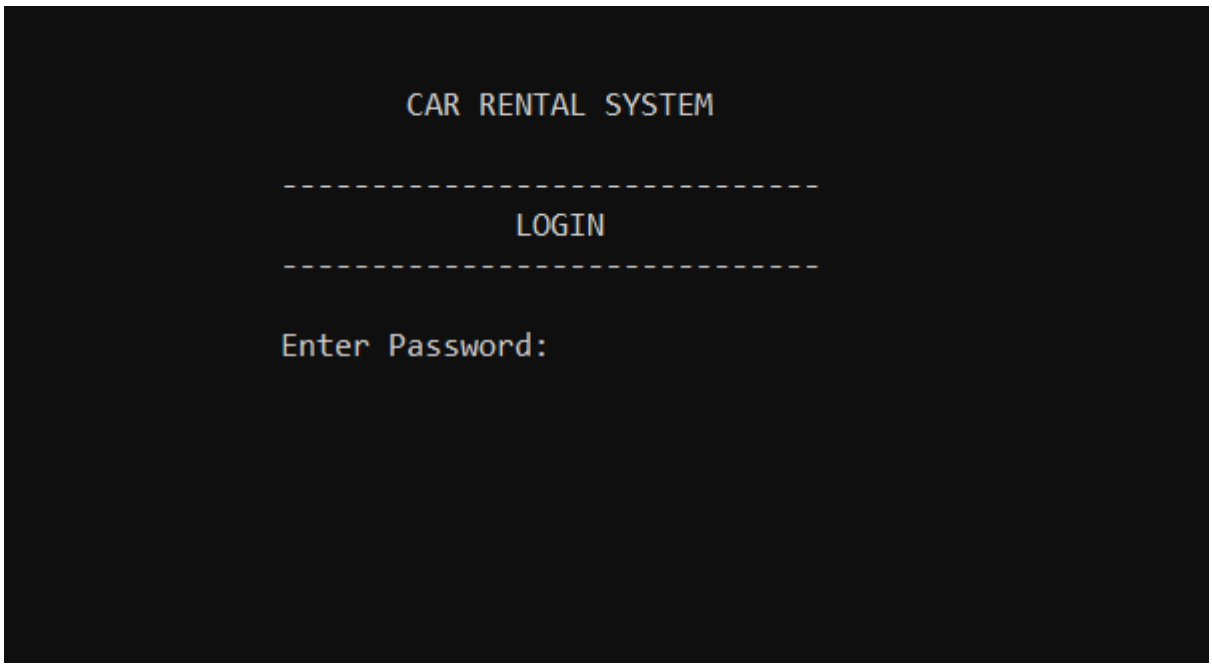


Fig.no:8.3

8.4 View Available Cars:

It is a system design specially for large, premium, and small car rental businesses. The user can view Available cars and the user can book for that car. While viewing a car users can view the interior and exterior on our website with a price tag.

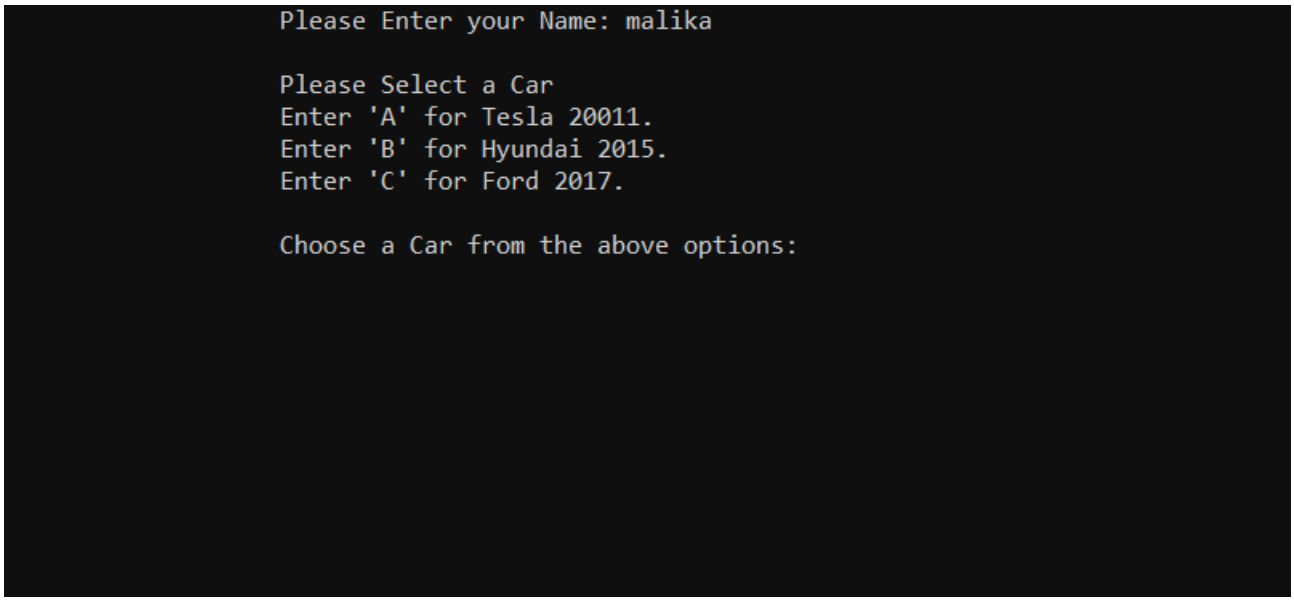


Fig.no : 8.4

8.5 Booking Car:

If the customer is satisfied with viewing the car details. He/she can be booking a car for a particular date. The booking car interface is a real-time interface that helps the customer to get the best information.

```
You have choosed Tesla model 2011
Specifications:

40 kWh and 60 kWh
Range                                EPA: 139 mi 224 km      EPA: 210 mi 340 km
Max. power, motor                    382 hp 285 kW           382 hp 285 kW
Max. power, battery                  235 hp 175 kW           302 hp 225 kW
-------------------------------------------------------------------------------
Please provide following information:
Please select a Car No. :
```

Fig.no:8.5

8.6 Easily Get the Car on rent:

The Customer can easily get the car whenever they need to on the rent with the use of this system. They just need a browser or app with an active internet connection.

```
Calculating rent. Please wait......

                        Car Rental - Customer Invoice
                    ////////////////////////////////////////////////////////
                    | Invoice No. :-----------------| #Cnb81353 |
                    | Customer Name:----------------|    malika |
                    | Car Model :-------------------|         A |
                    | Car No. :---------------------|       786 |
                    | Number of days :--------------|         3 |
                    | Your Rental Amount is :-------|       168 |
                    | Caution Money :---------------|         0 |
                    | Advanced :--------------------|         0 |
                     ____________________________________________________

                    | Total Rental Amount is :------|       168 |
                     ____________________________________________________
                     # This is a computer generated invoce and it does not
                     require an authorised signture #

                    ////////////////////////////////////////////////////////
                    You are advised to pay up the amount before due date.
                    Otherwise penelty fee will be applied
                    ////////////////////////////////////////////////////////
Press any key to continue . . .
```

Fig.no: 8.6

8.7 THANK YOU PAGE

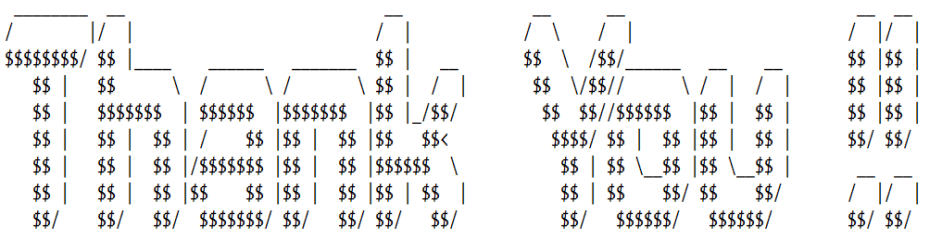


Fig.no:8.7

9.Advantages of Online Car Rental System

fig.no: 9

There are many advantages of the Car Rental system. This online system helps the service-providing company to manage their business remotely. Customers are finding everything on their mobile with few clicks. The new system is a totally computerized system.

User Satisfaction Level:

This online system gives each and every service to customers at their doorstep. They can give their feed to a higher authority. They can book, visit, and enjoy the travel.

Time efficiency:

A new system provides features like time efficiency to show car details, user profiles, and whatever the customer will give the feedback to the admin. Customers do not need to waste two-three hours to get a car. They just need a smartphone and Car Renting app and get a car at their own place with few minutes.

Various type of Service:

This system provides tourism and traveling facilities. This system provides a car for a meeting, visiting the mall, visiting the market, marriage functions, office, etc.

Easy Inquiry:

An inquiry is easily done by the user in the system. Inquiry is basically an automated and computerized task which really makes the inquiry process faster than previous.

Infrastructure:

It is an online-based application. So, it does not require a big infrastructure. This business can be run running a room because our main dealing with customer is online.

INTRODUCTION OF THE WORK

WORK'S VISION AND MISSION

1. The Vision of Online Car Rental System:

We will be a growth-oriented car rental association by efficiently serving value-conscious clients for all of their car rental events.

2. The Mission of Online Car Rental System:

We will constantly deliver a quality product, friendly service, and great value that make customers assured that Cost-effective is their best car rental choice.

3. Profile of the Problem :

Fig.no : 3.1

The main objective of the Car Rental System is to manage the details of Car,Payment,Customer,Supplier. It manages all the information about Car, Booking Car. The purpose of the project is to build an application program to reduce the manual work for managing the Car, Payment, Booking, Customer.

Although many online portals have come into the picture for providing online car booking services. But most of the car renting company are using the traditional way to deal with the customer. Which

are time and labor-consuming? An existing system can provide manual paperwork or an excel sheet to track the booking and registered vehicle details.

4. Functional Requirements and Non Functional Requirements :

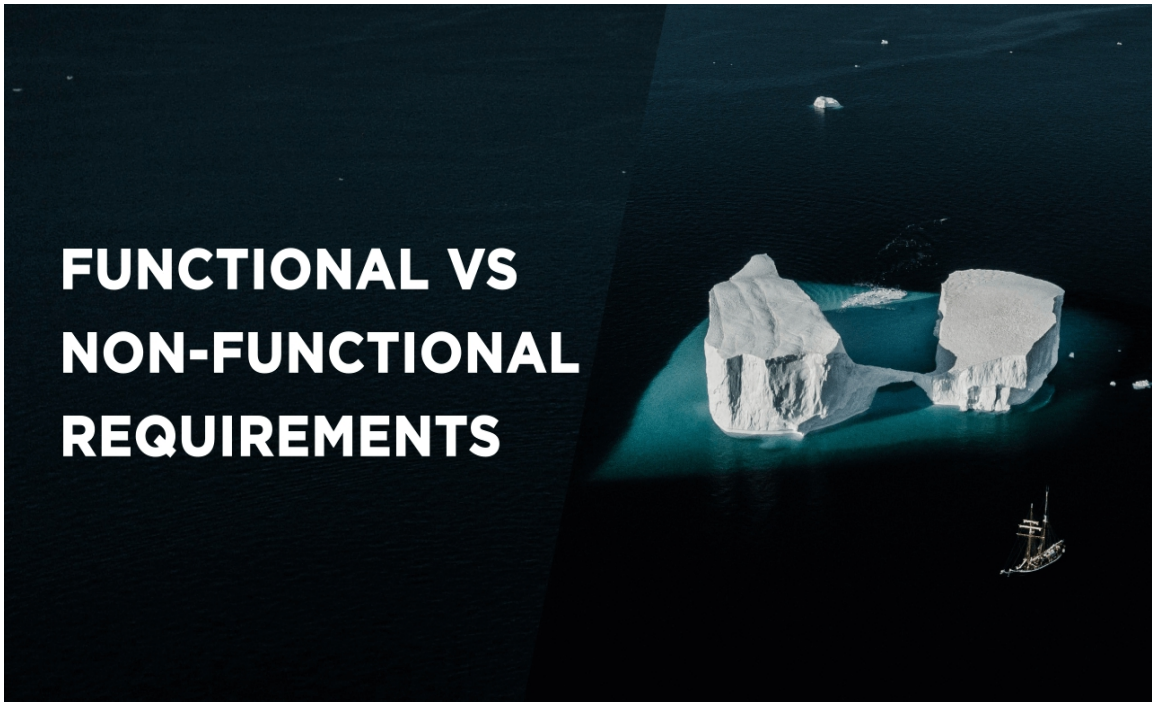


Fig.no:4.1

4.1 Functional Requirements

Requirement analysis is a software engineering technique that is composed of the various tasks that determine the needs or conditions that are to be met for a new or altered product, taking into consideration the possible conflicting requirements of the various users.

Functional requirements are those requirements that are used to illustrate the internal working nature of the system, the description of the system, and explanation of each subsystem. It consists of what task the system should perform, the processes involved, which data should the system holds and the interfaces with the user. The functional requirements identified are:

- Customer's registration: The system should allow new users to register online and generate membership card.
- Online reservation of cars: Customers should be able to use the system to make booking and online reservation.

- Automatic update to database once reservation is made or new customer registered: Whenever there's new reservation or new registration, the system should be able update the database without any additional efforts from the admin.
- Feedbacks to customers: It should provide means for customers to leave feedback.

4.2 Non-Functional Requirements

It describes aspects of the system that are concerned with how the system provides the functional requirements. They are:

- Security: The subsystem should provide a high level of security and integrity of the data held by the system, only authorized personnel of the company can gain access to the company's secured page on the system; and only users with valid password and username can login to view user's page.
- Performance and Response time: The system should have high performance rate when executing user's input and should be able to provide feedback or response within a short time span usually 50 seconds for highly complicated task and 20 to 25 seconds for less complicated task.
- Error handling: Error should be considerably minimized and an appropriate error message that guides the user to recover from an error should be provided. Validation of user's input is highly essential. Also the standard time taken to recover from an error should be 15 to 20 seconds.
- Availability: This system should always be available for access at 24 hours, 7 days a week. Also in the occurrence of any major system malfunctioning, the system should be available in 1 to 2 working days, so that the business process is not severely affected.
- Ease of use: Considered the level of knowledge possessed by the users of this system, a simple but quality user interface should be developed to make it easy to understand and required less training.

5.Existing System :

Fig.no:5.1

The user has to go to the office where the user can get the car on rent and book their car. Most of the time user does not get a sight of the car in which he is planning to travel. Which results in compromising the travel comfort. In the existing system, you cannot provide feedback of the user to the admin directly. The user gets fluctuation every time he/she travels.

Maintaining an excel sheet or paper book record of the reservation is very laborious work. Chances of error are more. No automation involves which means they are very slow to process.

If anybody want to rent a product from a particular city from their own home, how it is possible? If one person is going to another city, but if he want products for rent before he reach is destination, then how it possible? So answer to these questions is our website.

There are many rental systems which are available online. But, they are not providing all products at one place. Also many of them restricted to only one city. That means car rental system in online deals only with cars. Also many of them are not providing effective communication between customer and the vendor. Also present rental systems restricted to only one vendor means products are supplied only from one rental show room.

Drawbacks:

ïƒ˜ They limited to only one product and limited cities.
ïƒ˜ No effective communication between user and the vendor.
ïƒ˜ Products limited to only one rental show room.

6.Proposed System:

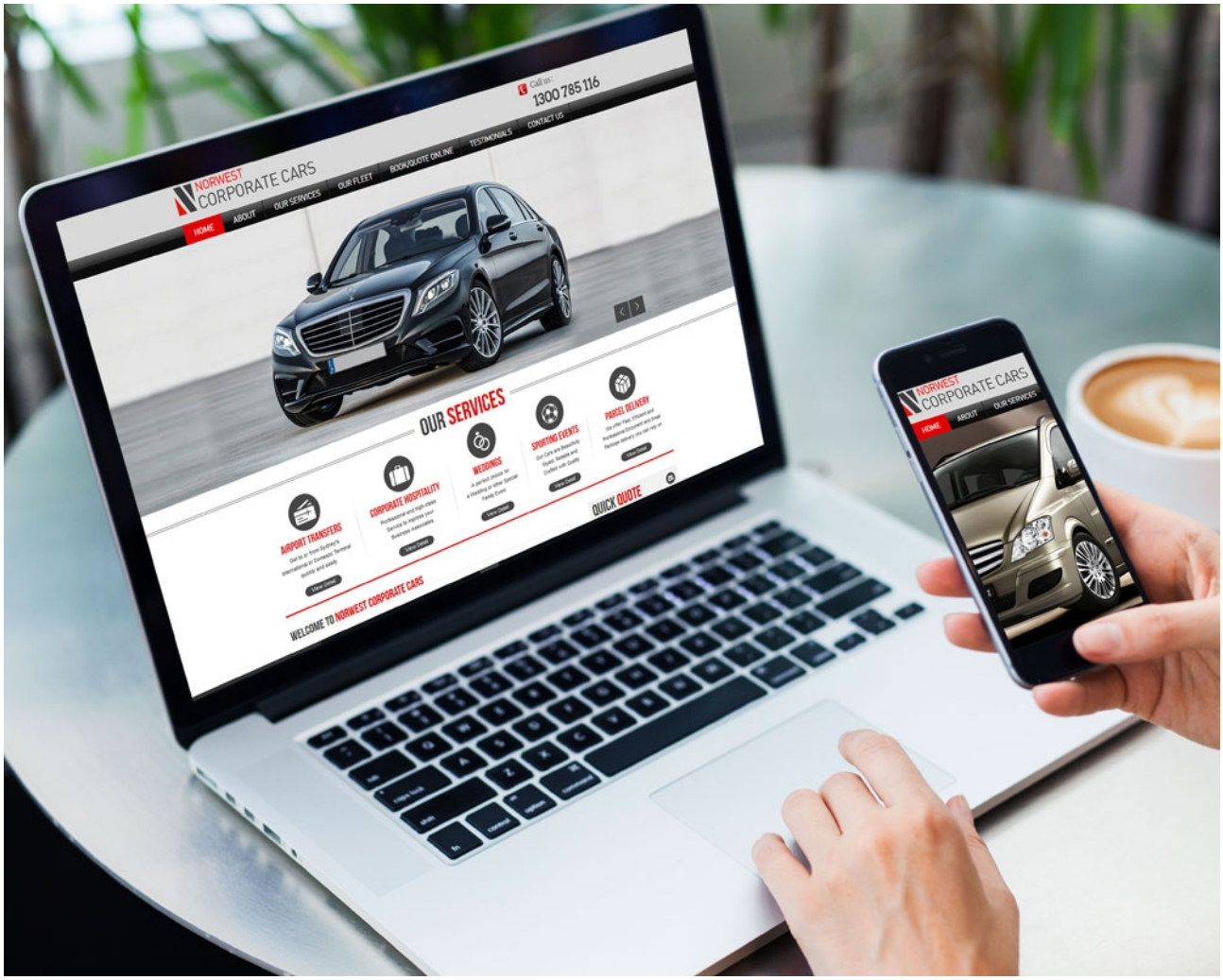


Fig.no:6.1

The proposed system is a web based system which can be accessed by customer from anywhere around the world. The system can offer number of products from vendor in different locations.

A vendor directly registers into this system using this system user interface without any manual approach.

The proposed system can accept any type of product for rental, this system interface support to the vendors to upload their product image into the system. A customer directly interacts with this product image and gets necessary information regarding the rental products. The proposed system accepts an online request from the customers to reserve any rental system product for his own purpose. Administration play vital role here. Administrator can able to communicate the reservation information of any product to that particular vendor using this system.

7. Architectural Design:

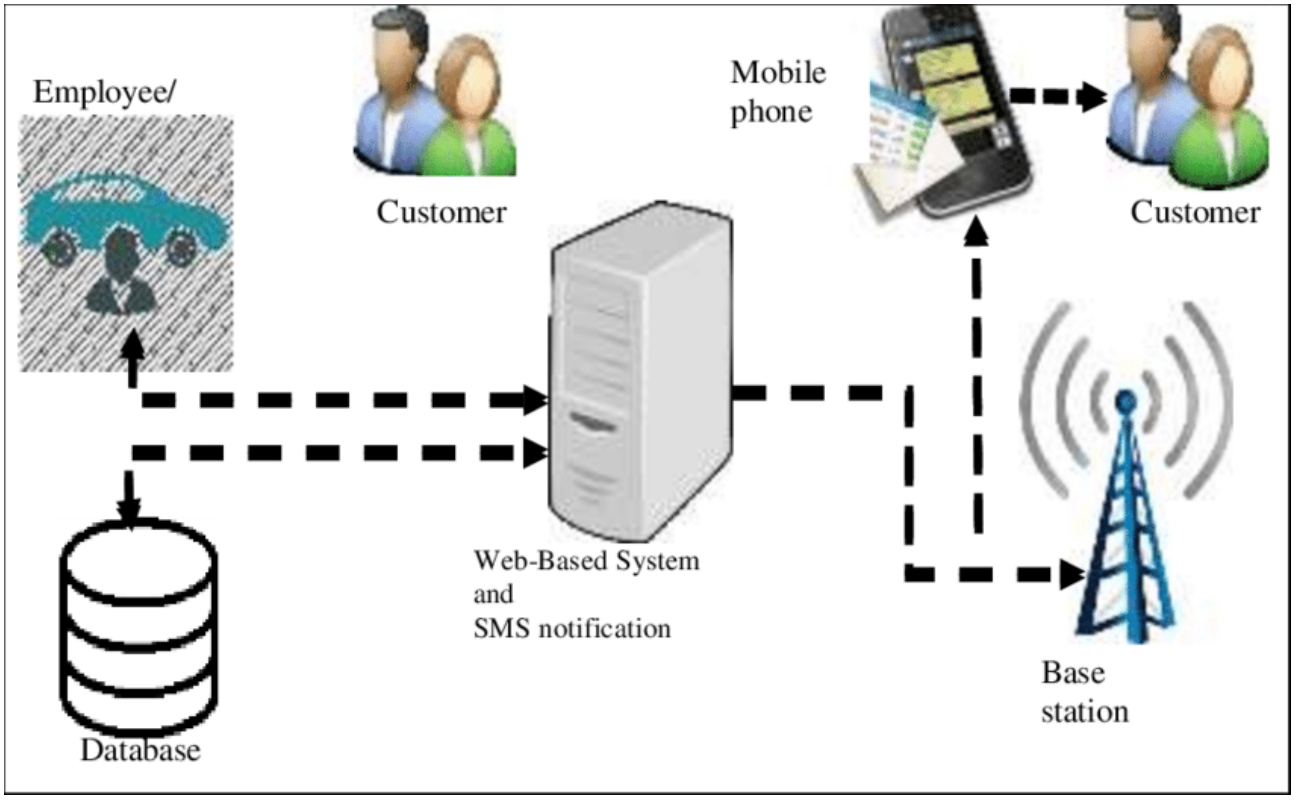


Fig.no: 7.1

ïƒ˜ This Web Application (Online Renting System) is based on 3-tier Architecture:
ïƒ˜ Data Service layer.
ïƒ˜ Business/ application layer.
ïƒ˜ User/presentation layer.

In the architecture based on 3-tier, functions are split in 3 layers, which are presentation layer, business application layer and the data layer. Three-tiered model also called as multitier architecture came up in order to conquer limitations that were prevailing in 2-tier architecture model. In 3-tier architecture model, middle tier was introduced in between the user interface client environment and the database system server environment. The middle tier can be implemented in many ways like transaction processing monitors, message servers or else application servers. Middle tier has the ability to perform the queuing process on the application execution as well as database staging. Such architecture provides more versatility and also supports the changes made in business layer, technology layer as well as data layer. The 3-tier architectural model is described as the client system computer, the application system server and the data server.

3rd-tier in the 3-tiered architecture furnishes functionality in the database management and is committed to the data as well as file services, which is optimized without the use of any kind of proprietary DBMS languages. Its data management part which ensures the consistency of data in distributed environment, with the usage of certain features like data locking process, consistency and the replication process. Depending on the request by the user for the services and the data, the process of connectivity in between the tiers can show a dynamic change.

- Client tier:

Items the responsibility of the client-tier to present data, receive the user events and management of user interface.

- Application Server tire:

Its application server actually, where the business logic resides. Itâ€™s the responsibility of the business application layer to implement the business rules. Itâ€™s in this layer, where the business objects actually reside, which is not the case in 2-tier model. Data in this layer is not in any case vulnerable, as compared to data in 2-tier architectural model.

- Data Server tier:

This layer allows the storing of data. Moreover, the prevalent RDBMS and legacy databases are usually reused over here.

In 3-tier architecture all tiers can run on just single machine, since there exist logical boundaries in between the three tiers. The most important significance lies in the efficiently structured application. Today itâ€™s the three tier model that is given preference over the 2-tier model. Itâ€™s because of the benefits provided by 3 tier (or multi-tier) architectural models, which are as follows:

ïƒ˜ Since application layer is a separate layer over here, it provides better versatility and load distribution.
ïƒ˜ Since the middle-tier is distributed among several servers, it eradicates the problem of fast recovery.
ïƒ˜ As the applications are managed on server side, the system administration process is quite easy.
ïƒ˜ Enhanced modularity assures the software reusability along with integration of older application.

8. Problem Analysis :

fig.no 8.1

- **Product definition :**

If a driver decides to rent a car beforehand, they go to a car rental website or app and find a vehicle that meets their needs. Then, they book it and pay for the chosen rental period, if upfront payment is required.

On the appointed day, this customer arrives at the car rental location to pick up the chosen car. An agent makes copies of their IDs, explains the terms of the lease, instructs them on any special features of the car, and finally hands them the keys. When the customer drops off the car, the agent checks its mileage and inspects for any damages.

In fact, the car rental process involves many more operations under the hood. Automating them improves the speed and quality of service.

- **Feasibility Analysis :**

The main goal of this project is to provide a system that will be useful and beneficial to the user/client. All the requirements needed for this system requires and necessary to the client requests. Thus, this system acquires information inputs from the user and generates reports so that the client can monitored their entire vehicle, drivers and booking transactions information. Vehicle Booking and Management System would be able to save time and efforts of employees of the company. In that way some information are attained. The practicality of getting result along with its automation would be more that what the manual way does from it. The researches that are involved with this project would undergo the same process, hand in hand. As the system continues to develop, the researchers will be likewise. The checking also of the software and the hardware conditions should be a must because the developing of the system is dependent on those things.

9. Software Requirement Analysis :

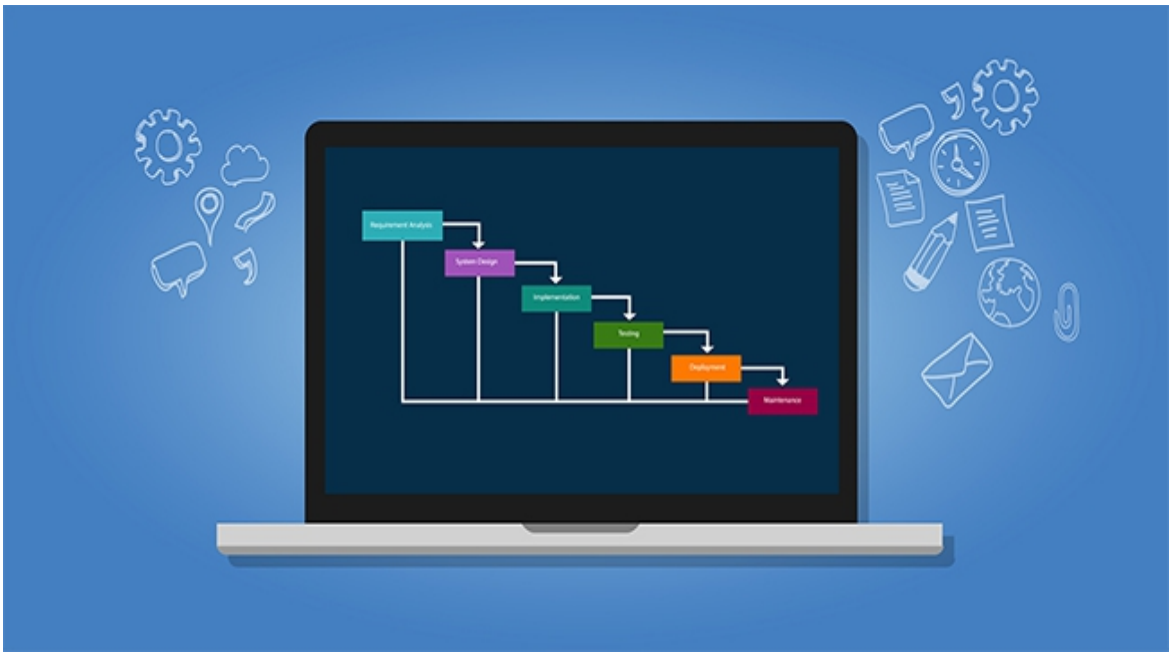


Fig.no:9.1

All the users will see the same page when they enter in this website. This page asks the users a password. After being authenticated by correct password, user will be redirect to their corresponding profile where they can do various activities.

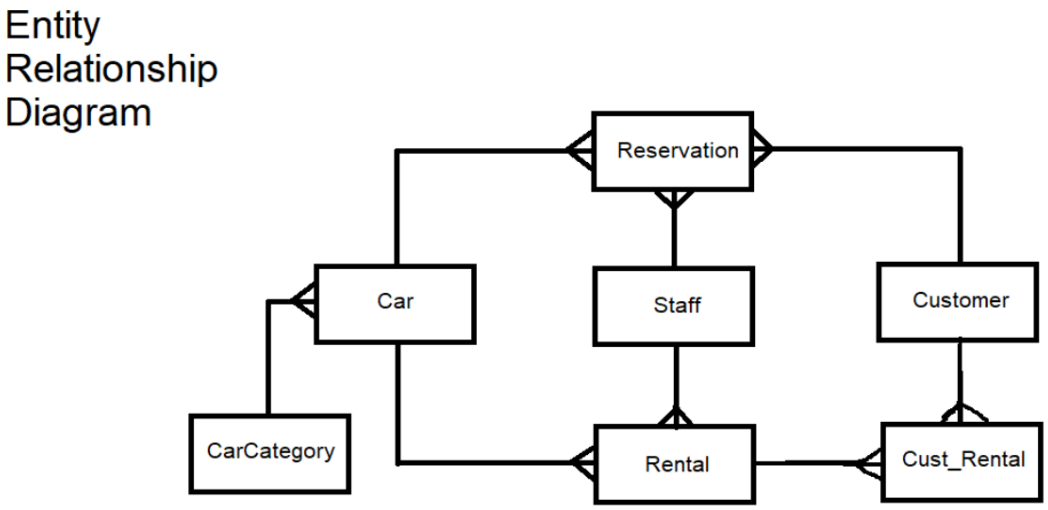
Web Browser: The system is a web based application; clients need a modern web browser such as Mozilla Firebox, Internet Explorer, Opera, and Chrome. The computer must have an Internet connection in order to be able to access the system.

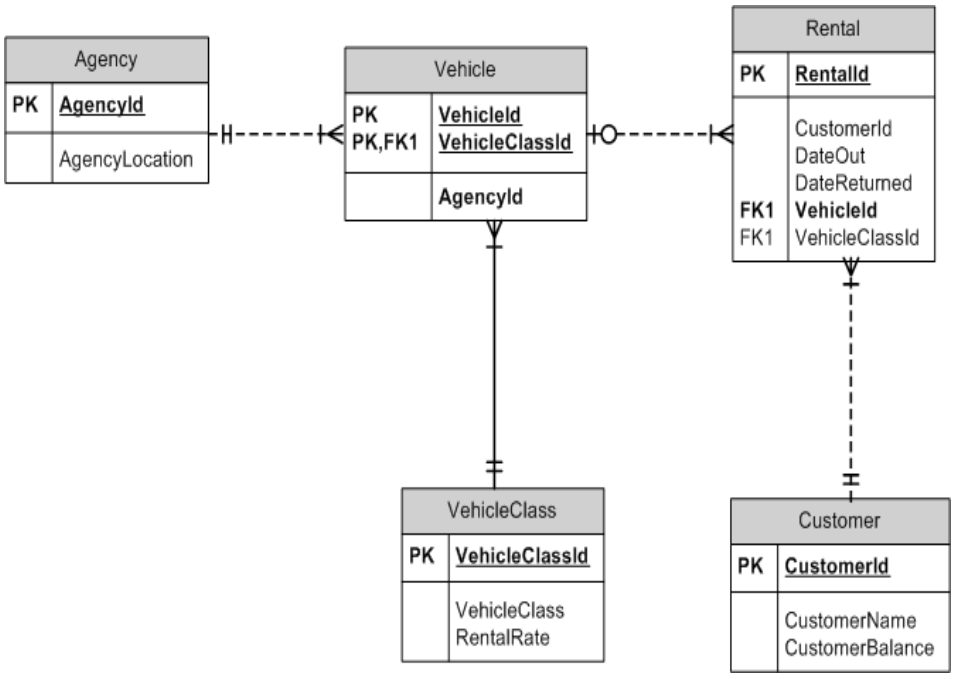
Client Side (minimum requirement):

Processor: Intel Dual Core
HDD: Minimum 80GB Disk Space
RAM: Minimum 1GB
OS: Windows 7, Linux

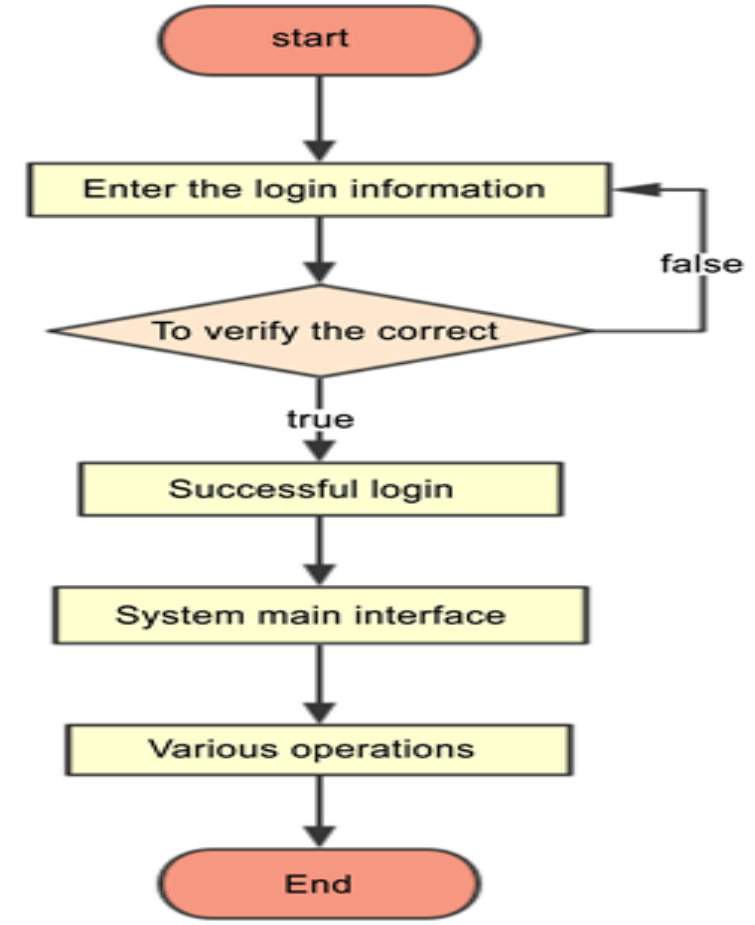
10. Design :

• Tables and their relationships :





- **Flowcharts/Pseudo code :**



11.Implementation :

A car rental or car hire agency is a company that rents automobiles for short period of time for a fee whether in a few hours or a few days or week. It is an elaborate form of a rental shop, often organized with numerous local branches (which allow a user to return a vehicle to a different location), and primarily 'located near airports or busy city areas and often complemented by a website allowing online reservations.

Car rental agencies primarily serve people who have a car that is temporarily out Of reach or out of service. Because of the variety of sizes of their vehicles, car rental agencies may also serve the self-moving industry needs, by renting vans or trucks, and in certain markets other types of vehicles such as motorcycles or scooters may also be offered (Mohd, 2012).

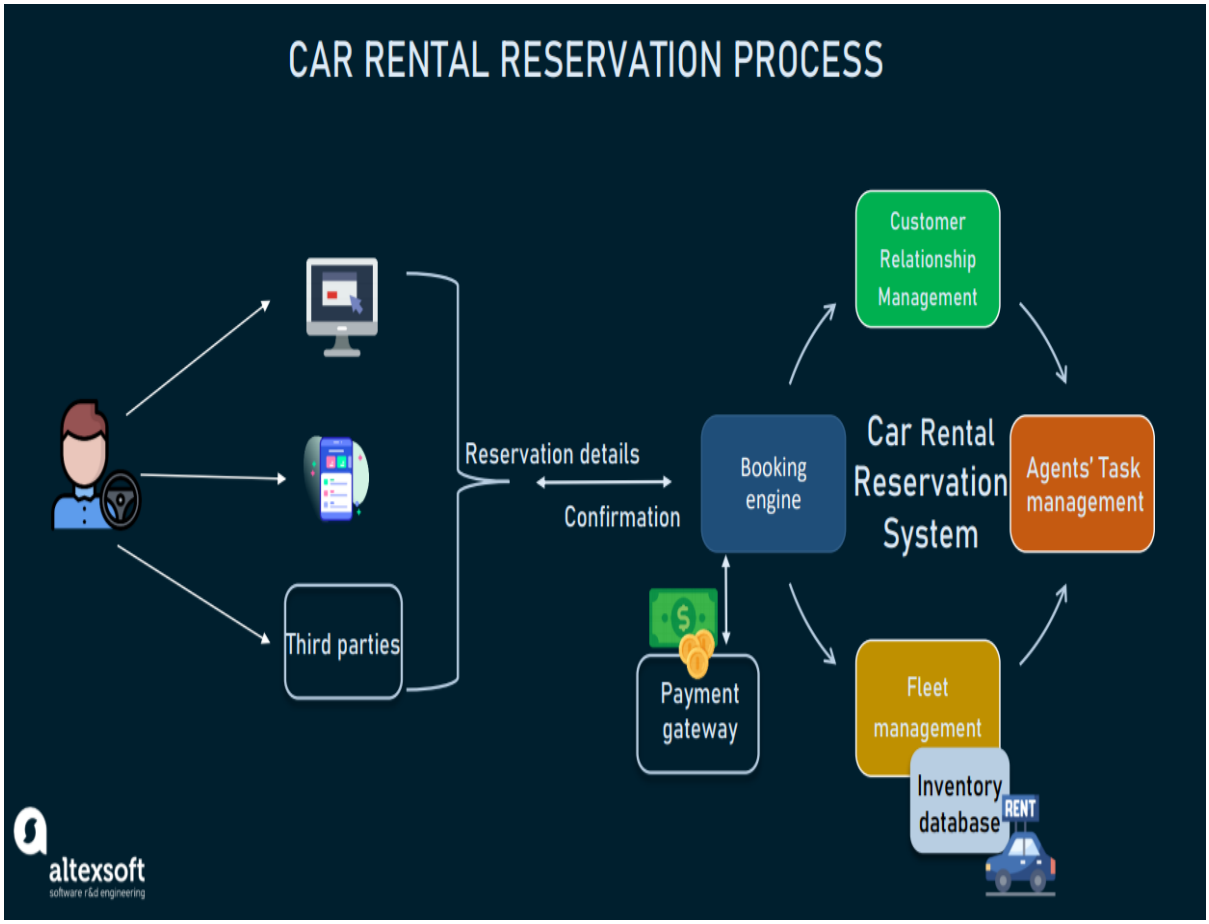


Fig.no:11.1

Car rental companies operate by purchasing or leasing a number of fleet vehicles and renting them to their customers for a fee. Rental fleets can be structured in several ways – they can be owned outright (these are known as ‘risk vehicles’ because the car rental operator is taking a risk on how much the vehicle will be sold for when it is removed from service), they can be leased, or they can be owned under a guaranteed buy-back program arranged directly through a manufacturer or manufacturer’s financial arm (Walter, 2012).

Source Code:

```
#include <iostream>
#include <fstream>
#include <conio.h>
#include <stdlib.h>
#include <unistd.h>
#include <dos.h>
#include <iomanip>
//Brought To You by code-projects.org
// included required library files
using namespace std;
class customer // customer class
{
        private:
        public:
        string customername;
    string carmodel;
    string carnumber;
    char data;
    // variables defined in this class in public mode.
};
class rent : public customer // inhereted class from customer class
{
        public:
        int days=0,rentalfee=0; // additional int vatiables defined
        void data()
        {
                int login();
        login();
        cout << "\t\t\t\tPlease Enter your Name: "; //taking data from the user
    cin >> customername;
    cout<<endl;
    do
    {
       cout <<"\t\t\t\tPlease Select a Car"<<endl; //giving user a choice to
```

```
select among three different models
        cout<<"\t\t\t\tEnter 'A' for Tesla 20011."<<endl;




      cout<<"\t\t\t\tEnter 'B' for Hyundai 2015."<<endl;
        cout<<"\t\t\t\tEnter 'C' for Ford 2017."<<endl;
        cout<<endl;
        cout<<"\t\t\t\tChoose a Car from the above options: ";
        cin >>carmodel;
        cout<<endl;

cout<<"--------------------------------------------------------------------------------"<<e
ndl;
 if(carmodel=="A")
 {
        system("CLS");

                cout<<"You have choosed Tesla model 2011"<<endl;
                 ifstream inA("A.txt"); //displaying details of model A
        char str[200];
        while(inA) {
        inA.getline(str, 200);
        if(inA) cout << str << endl;
}
sleep(2);
  }
  if(carmodel=="B")
  {
        system("CLS");

                cout<<"You have choosed Hyundai model 2015"<<endl;
                 ifstream inB("B.txt"); //displaying details of model B
        char str[200];
        while(inB) {
        inB.getline(str, 200);
        if(inB) cout << str << endl;
```

```
    }
    sleep(2);
 }
 if(carmodel=="C")
 {
        system("CLS");
            cout<<"You have choosed Ford model 2017"<<endl;
                ifstream inC("C.txt"); //displaying details of model C
        char str[200];
        while(inC) {
        inC.getline(str, 200);
        if(inC) cout << str << endl;
    }
    sleep(2);
}
if(carmodel !="A" && carmodel !="B" &&  carmodel !="C" )

     cout<<"Invaild Car Model. Please try again!"<<endl;
       }
while(carmodel !="A" && carmodel !="B" &&  carmodel !="C" );

cout<<"--------------------------------------------------------------------------"<<e
ndl;
   cout << "Please provide following information: "<<endl;
       //getting data from user related to rental service
   cout<<"Please select a Car No. : ";
   cin >> carnumber;
   cout<<"Number of days you wish to rent the car : ";
   cin >> days;
   cout<<endl;
       }
       void calculate()
       {
              sleep(1);
              system ("CLS");
              cout<<"Calculating rent. Please wait....."<<endl;
              sleep(2);
              if(carmodel == "A"||carmodel=="a")
```

```
        rentalfee=days*56;
        if(carmodel == "B" ||carmodel=="b")
        rentalfee=days*60;
        if(carmodel == "C" ||carmodel=="c")
        rentalfee=days*75;
    }
void showrent()
    {
    cout << "\n\t\t                    Car Rental - Customer Invoice
"<<endl;
    cout << "\t\t   ////////////////////////////////////////////////////////"<<endl;
    cout << "\t\t   | Invoice
No. :"<<"-----------------|"<<setw(10)<<"#Cnb81353"<<" |"<<endl;
    cout << "\t\t   | Customer
Name:"<<"---------------|"<<setw(10)<<customername<<" |"<<endl;
    cout << "\t\t   | Car
Model :"<<"-----------------|"<<setw(10)<<carmodel<<" |"<<endl;
    cout << "\t\t   | Car
No. :"<<"--------------------|"<<setw(10)<<carnumber<<" |"<<endl;
    cout << "\t\t   | Number of
days :"<<"--------------|"<<setw(10)<<days<<" |"<<endl;
    cout << "\t\t   | Your Rental Amount
is :"<<"--------|"<<setw(10)<<rentalfee<<" |"<<endl;
    cout << "\t\t   | Caution
Money :"<<"---------------|"<<setw(10)<<"0"<<" |"<<endl;
    cout << "\t\t   | Advanced :"<<"-------------------|"<<setw(10)<<"0"<<"
|"<<endl;
    cout << "\t\t
_____________________________________________________________________"<<e
ndl;
    cout <<"\n";
    cout << "\t\t   | Total Rental Amount
is :"<<"-------|"<<setw(10)<<rentalfee<<" |"<<endl;
    cout << "\t\t
_____________________________________________________________________"<<e
ndl;
    cout << "\t\t    # This is a computer generated invoce and it does
not"<<endl;
    cout << "\t\t    require an authorised signture #"<<endl;
```

```
    cout <<" "<<endl;
    cout << "\t\t   ////////////////////////////////////////////////////////"<<endl;
    cout << "\t\t   You are advised to pay up the amount before due
date."<<endl;
    cout << "\t\t   Otherwise penelty fee will be applied"<<endl;
    cout << "\t\t   ////////////////////////////////////////////////////////"<<endl;
    int f;



  system("PAUSE");

    system ("CLS");

     ifstream inf("thanks.txt");


  char str[300];

  while(inf) {
    inf.getline(str, 300);
    if(inf) cout << str << endl;
  }
  inf.close();
        }
};
class welcome //welcome class
{
        public:
        int welcum()
        {
 ifstream in("welcome.txt"); //displaying welcome ASCII image text on
output screen fn1353

  if(!in) {
    cout << "Cannot open input file.\n";
  }
  char str[1000];
  while(in) {
```

```
    in.getline(str, 1000);  // delim defaults to '\n' cp
    if(in) cout << str << endl;
  }
  in.close();
  sleep(1);
  cout<<"\nStarting the program please wait....."<<endl;
  sleep(1);
  cout<<"\nloading up files....."<<endl;
  sleep(1); //function which waits for (n) seconds
  system ("CLS"); //cleares screen
}

};
int main()
{
welcome obj1; //object created for welcome class
obj1.welcum(); //welcum function is called
rent obj2;
//object created for rent class and further member functions are called
obj2.data();
obj2.calculate();
obj2.showrent();

return 0; //end of the program
}

int login(){
   string pass ="";
   char ch;
   cout<<"\n\n\n\n\n\n\n\n\t\t\t\t\t       CAR RENTAL SYSTEM \n\n";
   cout<<"\t\t\t\t\t----------------------------";
   cout<<"\n\t\t\t\t\t\t     LOGIN \n";
   cout<<"\t\t\t\t\t----------------------------\n\n";
   cout << "\t\t\t\t\tEnter Password: ";
   ch = _getch();
   while(ch != 13){//character 13 is enter
      pass.push_back(ch);
      cout << '*';
      ch = _getch();
```

```
   }
   if(pass == "pass"){
      cout << "\n\n\n\t\t\t\t\t\tAccess Granted! \n";
      system("PAUSE");
      system ("CLS");
   }else{
      cout << "\n\n\t\t\t\t\t\t\tAccess Aborted...\n\t\t\t\t\t\t\tPlease Try
Again\n\n";
      system("PAUSE");
      system("CLS");
      login();
   }
}
```

Brief description of the work done

1. Position of internship and roles:

Fig.no: 1.1

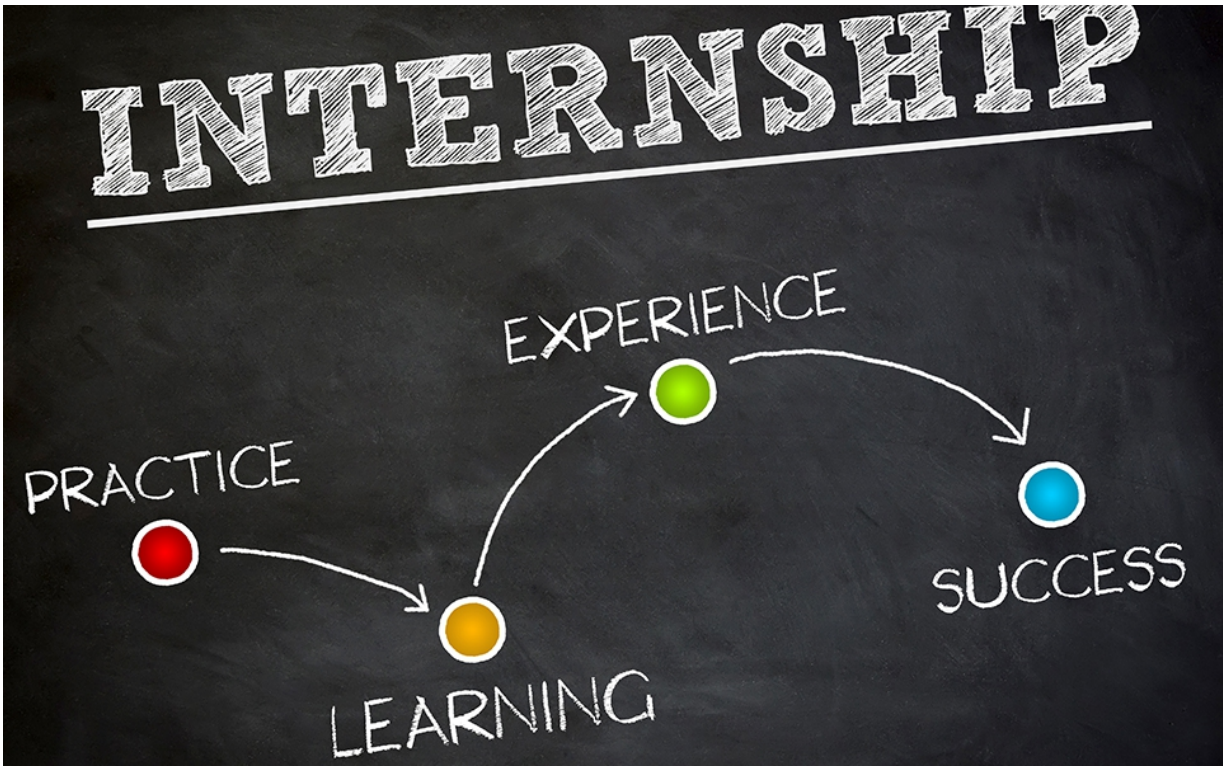
An intern is a trainee who has signed on with an organisation for a brief period. An intern's goal is to gain work experience, occasionally some university credit, and always an overall feel for the industry they're interning in.

Contrary to popular belief, an internship isn't about organising a filing cabinet or fetching coffee for your boss. The responsibilities of an intern has evolved. In many internships programs, you'll find yourself working on project, managing a small team and even working along some executives.

It's important you enter your internship with the right mindset. If you don't know what to expect from your internship role, you'll be better prepared and know what you need to do to succeed. Also, carrying out your intern responsibilities successfully will assist you in building up a potent skillset that will shine in your next role.

- **Assist and contribute to the team**

As an intern, don't expect to spearhead a critical project right off the bat…at least not yet. In the beginning of your internship, you may your time simply trying to learn how the company works. You may shadow an employee to get an understanding of their role. After a day or a few days of learning the ins-and-outs of the company. You'll start to assist and contribute more to the team.



Here are some day-to-day roles and responsibilities:

Performing clerical duties:

Creating PowerPoint presentations, drafting reports, designing creatives, researching trends and the like.

Picking up hard skills:

Hard skills are the technical skills you need to carry out your intern responsibilities, and eventually job duties, successfully. Examples include learning some technical skills to management skills to understanding data analytics.

Brushing up on your soft skills:

Soft skills are as important as hard skills. Soft skills are all about your ability to relate to people and building mutually-beneficial relationships. Examples are emotional intelligence, motivation, people-skills, listening, and excellent communication. You need soft skills to manage clients, not to mention get along with your bosses and colleagues. Soft skills are key to navigating your work environment and can even contribute to job progression. Word of the wise, don't underestimate them.

Take on an increasing amount of responsibility:

As time goes by, expect to shoulder an increasing amount of responsibility. Initially, they'll gauge your current skill set and reliability with your initial workload. As you prove yourself to your colleagues and bosses, you'll be entrusted with more crucial tasks. The better you perform, the more the responsibilities you'll be given.

Make a career call :

Finally, usually at the tail-end of your internship, you have to make a career-defining decision: continue in the field you interned in or try your hand at something else entirely.

Final Thoughts:

Internships are usually short-term. They're smaller investments in time and energy than full-time jobs. But they are certainly without a doubt a great investment of your time. Consequently, they're perfect opportunities to explore your options. You deserve work that's fulfilling. If necessary, you can sign up for a different but related internship role elsewhere to see if you're happier there.
Your internship is going to shape the course of your career. It'll assist you in acquiring the skills you need to perform up-to-par when you're hired full-time. It's essential you use your internship as the training opportunity it represents.
You're sure to have a bright future if you work hard, build positive relationships, and use the skills you develop in your internship to your advantage.

Problem Statement:

A car rental is a vehicle that can be used temporarily for a fee during a specified period. Getting a rental car helps people get around despite the fact they do not have access to their own personal vehicle or don't own a vehicle at all. The individual who needs a car must contact a rental car company and contract out for a vehicle. This system increases customer retention and simplify vehicle and staff management.

Learning Outcome from training/technology learnt :

1: To describe the advantages of a high level language like C/C++, the programming process, and the compilation process

1.1: Describe and compare machine language and a high level language

1.2: Discuss the advantages of a high-level language

1.3: Distinguish between source code, object code and executable code

1.4: Describe the function of the compiler in the language translation process

2: To describe and use software tools in the programming process

2.1: Describe the functions of an IDE

2.2: Use an IDE to compile, load, save, and debug a C/C++ program

3: To apply good programming principles to the design and implementation of C/C++ programs

3.1: Demonstrate an understanding of algorithms in the problem-solving process

3.2: Identify the necessary properties of good problem-solving techniques

3.3: Create and analyze algorithms for solving simple problems

3.4: Use incremental program development to create, test, and debug algorithms for solving simple problems

3.5: Write readable code that follows accepted style and documentation guidelines

3.6: Apply techniques of structured (functional) decomposition to decompose problem and a program solution into smaller pieces

3.7: Create and call functions that use parameter passing and return values

3.8: Design and implement code that includes the reuse of both existing code and calling functions in the C/C++ libraries

4: To design, implement, debug and test programs using the fundamental elements of C/C++

4.1: Demonstrate an understanding of the overall syntax and semantics of C/C++ programs by writing small programs from specifications given in class

4.2: Describe the fundamental components of a C/C++ program (e.g.,. source files, header files, main() function, functions, and libraries)

4.3: Explain and apply fundamental syntax rules for identifiers, declarations, expressions, statements, and functions

4.4: Demonstrate an understanding of scope, lifetime and duration rules for variables and functions

4.5: Analyze, explain and trace the behavior of simple programs involving the fundamental programming constructs addressed in the course

4.6: Modify and extend short programs that use standard conditional and iterative control structures and functions

4.7: Write programs that use each of the following fundamental programming constructs: basic computations, simple console I/O, standard conditional and iterative structures (including pretest and posttest loops, counter-controlled loops, and conditionals)

4.8: Choose appropriate conditional and iterative constructs for a given programming task

4.9: Debug and test programs in order to determine that the program performs as expected: Demonstrate the ability to create test cases to determine that a solution produces expected outputs for given inputs

4.10: Test user input for erroneous values

5: To demonstrate an understanding of primitive data types, values, operators and expressions in C/C++

5.1: Discuss the representation and appropriate use of primitive data types

5.2: Select appropriate primitive data types for solving a variety of problems (e.g.,, integer, real, character and string data)

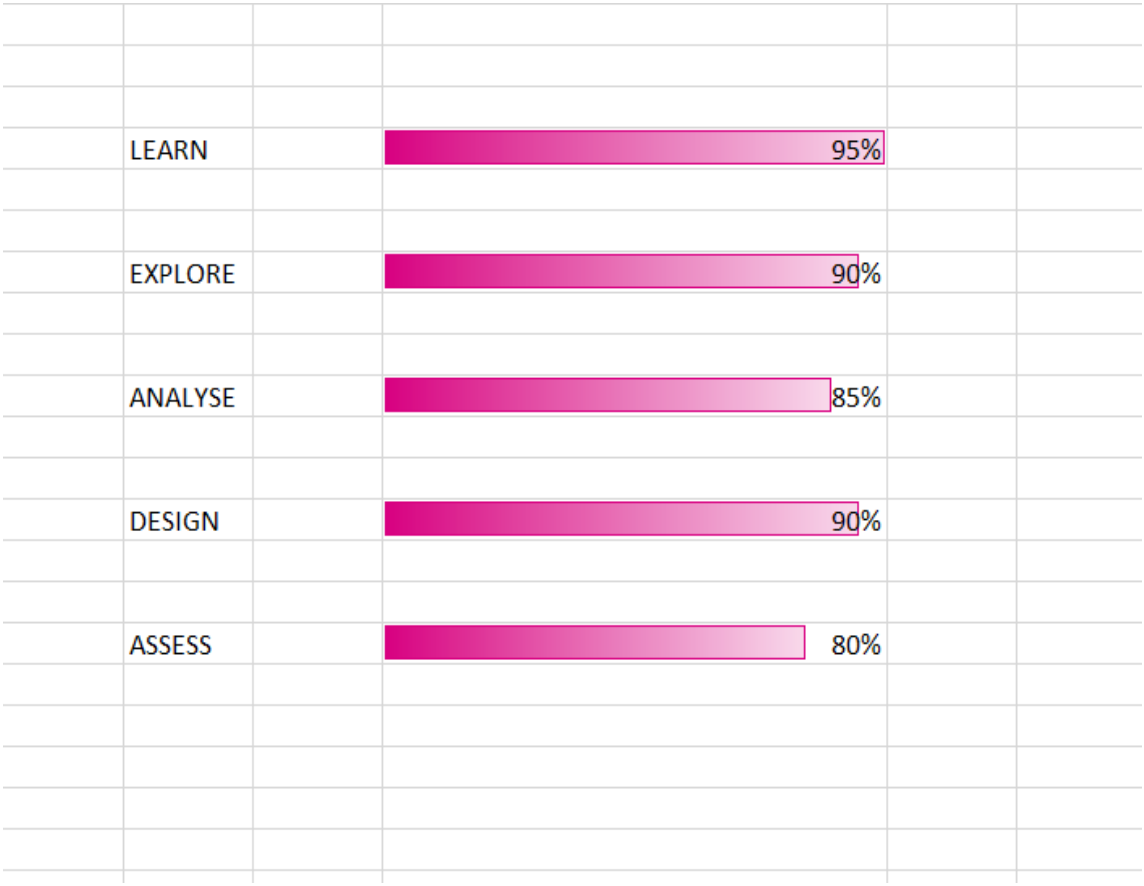
5.3: Demonstrate the use of arithmetic and relational operators including operator precedence and the use of parentheses

5.4: Describe automatic type conversion rules, related issues of magnitude and precision, type casting, and determine the value and type of an expression involving mixed types

5.5: Demonstrate the use of numeric arrays and c-style strings

5.6: Trace the execution of source code containing pointers

Gantt chart (Describing a timeline of how did you act in six weeks of training?) :



CONCLUSION:

Car rental business has emerged with a new goodies compared to the past experience where every activity concerning car rental business is limited to a physical location only. Even though the physical location has not been totally eradicated; the nature of functions and how these functions are achieved has been reshaped by the power of internet. Nowadays, customers can reserve cars online, rent car online, and have the car brought to their door step once the customer is a registered member or go to the office to pick the car.

The web based car rental system has offered an advantage to both customers as well as Car Rental Company to efficiently and effectively manage the business and satisfies customers' need at the click of a button.

REFERENCE

Google

Notes taken from training classes

https://www.altexsoft.com/blog/car-rental-reservation-system/

https://www.programiz.com/

https://e-box.co.in/