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INTRODUCTION

1.1 INTRODUCTION

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. Car rental agencies primarily serve people who require a temporary vehicle, those who do not own their own car, travelers who are out of town, or owners of damaged or destroyed vehicles who are awaiting repair or insurance compensation.

Alongside the basic rental of a vehicle, car rental agencies typically also offer extra products such as insurance, global positioning system (GPS) navigation systems, entertainment systems. People need to peregrinate at different places due to their official work, family issues and other major things. If the travelling is of a more preponderant distance then a person needs a car to peregrinate because it is comfortable apart from the other public conveyances consequently people prefer cars rather than public conveyances. The public transport is not very flexible and halcyon like the trains, buses etc. After technological advancement, every family needs a personal conveyance for themselves because of the desire to travel to different places which are far from their residence.

The proposed system provides an opportunity to the middle class people who cannot afford to buy a car even if they don't know how to drive. The system provides a driver option while charging a minimal amount for equipment.

1.2 REASON OF PROJECT

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).

1.3 PROBLEM STATEMENT

The Manual car rental system provides services only during office hours. So; customers have limited time to make any transactions or reservations of the cars. The existence of the online car rental systems nowadays have overcome the limitation of the business operation hour. However , there are still a few numbers of these online car rental systems in India and most of the systems offer reservation service for tourists or travelers. Besides that, there are some customers who faced a problem in choosing a car to be rented which is suitable with some of the important requirements.

- 1 To rent a car a prospective renter must first go to the car system website to register as a client.
- 2 Cars that provide difficulties to rent out are normally advertised in local or national newspapers.
- 3 It involves a lot of paperwork and consumes time.

OBJECTIVES

2.1 AIMS AND OBJECTIVES

- 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 study is to design and implement a car rental system for an organization. Specific objectives of the study are:
- To develop a simple and secure system that protects clients information.
- To design a system that enables clients to pay their car rent online.
- To develop a system that stores bookings and reservation information as well as payment history to help the organization keep track of transactions.
- All types of data and the activities related to the system will be kept in a single place so that it is easy to monitor the system and provide the customer the best service.

2.2 SCOPE

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.

CAR RENTAL SERVICES

3.1 HOW CAR RENTAL SERVICE WORKS

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.

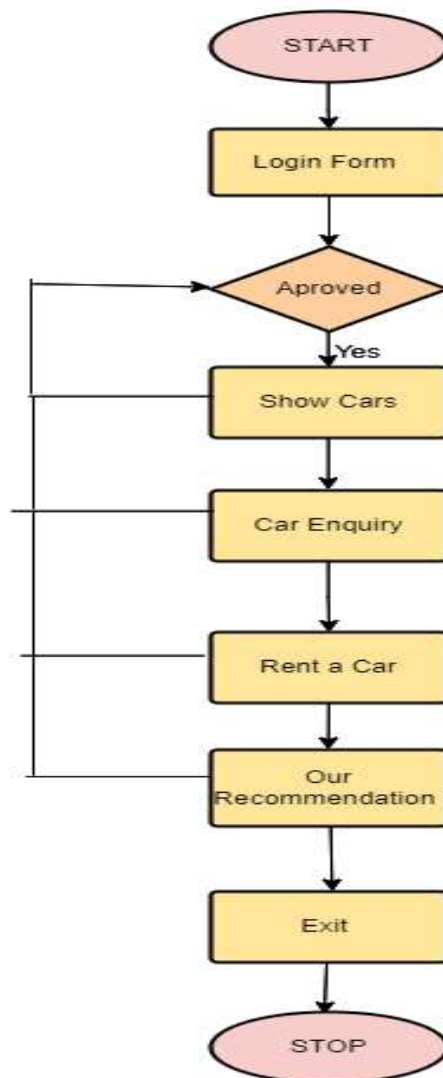
3.2 BENEFITS OF ONLINE CAR RENTAL SERVICES

This online car rental solution is fully functional and flexible.

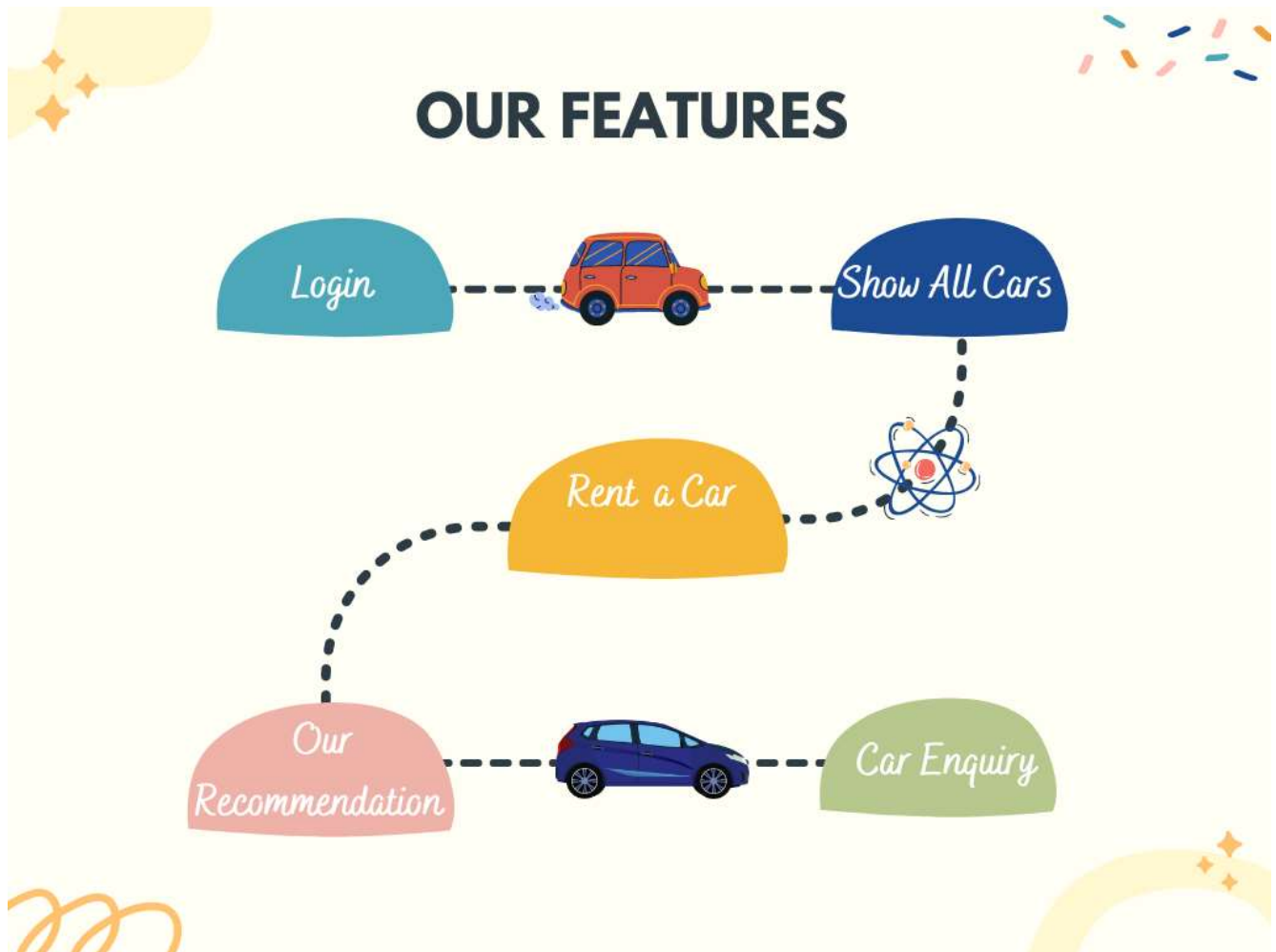
- It is very easy to use.
- This online car rental system helps in back office administration by streamlining and standardizing the procedures.
- It saves a lot of time, money and labour.
- Eco-friendly: The monitoring of the vehicle activity and the overall business becomes easy and includes the least 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.

PROJECT STRUCTURE

FLOW CHART



POSTER



CODE:

```
#include<iostream>  
#include<cstdlib>  
#include<fstream>  
#include<string>  
using namespace std;  
  
class car;  
class Bill  
{  
    int rate[7];  
    public:  
    void setdata(){  
        rate[0]=10;  
        rate[1]=15;  
        rate[2]=20;  
        rate[3]=25;  
        rate[4]=30;  
        rate[5]=35;  
        rate[6]=40;  
    }
```

```

friend void Kharcha(Bill,car,int);
};

class locatiion
{
    public:
    char pick[100];
    char drop[100];
};

class car: public locatiion    // Class Car
{
    int distance;
    public:
    int dis;
    int z;
    int choice ,p , b , c , t ;
    void recommend ();
    int all_details();
    void enquiry();
    int rent();

```

```
friend void Kharcha(Bill,car,int);  
void dist(){  
    cout<<"Enter distance to be travelled\n";  
    cin>>dis;  
    distance = dis;  
}
```

```
void show_cars()  
{  
    cout<<" 1. Tata "<<endl;  
    cout<<" 2. Tesla "<<endl;  
    cout<<" 3. BMW "<<endl;  
    cout<<" 4. Audi "<<endl;  
    cout<<" 5. Lamborghini "<<endl;  
    cout<<" 6. Rolls Royce "<<endl;  
    cout<<" 7. Electric (Ola S1 , S1 pro) "<<endl;  
}  
};
```

```

void Kharcha(Bill r , car t,int j){
    t.dist();
    r.setdata();
    cout<<"Total Rent will be"<<((t.distance)*(r.rate[j-1]))<<endl;
}

```

```

class customer
{
    public :
    char name[100];
    string cusername;
    string phone_no;
    string phone_no1;
    int age;
    string Pass,rePass;
    string Password;
    string uname;
    void registration(){
        cout<<"||-----Registration Form-----||"<<endl<<endl;
        cout<<" Enter your name: ";

```

```

cin>>name;
cout<<"Enter your mobile No: ";
cin>>phone_no;
try{
if(phone_no.size()!=10){
    throw phone_no;
}
}
catch(string a){
    cout<<"\tEnter a valid mobile number\n";
    exit(0);
}
cout<<"Enter your age: ";
try{
cin>>age;
if(age<18 || age>80){
    throw age;
}
}
catch(int a){
    cout<<"You are not eligible due age\n";

```

```

    exit(0);
}
cout<<"Create a username: ";
cin>>cusername;
cout<<"Create a password: ";
cin>>Pass;
try{
    cout<<"Enter the same password: ";
    cin>>rePass;
    if(rePass!=Pass){
        throw(rePass);
    }
}
catch(string a){
    cout<<"wrong Password entered";
    exit(0);
}
}

void login1(){
    cout<<endl<<"<-----LOGIN FORM----->\n"<<endl<<endl;
    cout<<"ENTER THE USERNAME\n";

```



```

cin>>uname;
cout<<"ENTER Phone_no\n";
cin>>phone_no1;
cout<<"Enter Password\n";
cin>>Password;
if(Password!=Pass || uname!=cusername || phone_no!=phone_no1){
    cout<<"DATA NOT MATCHING \n";
    login1();
}
}
void login()
{
    cout<<"||----- Login Form -----||"<<endl<<endl;
    cout<<" Enter your name : ";
    cin>>cusername;
    try{
        phone_no;
        cout<<" Enter your mobile no. : ";
        cin>>phone_no;
        cout<<" Enter your age : ";
        cin>>age;
    }
}

```

```

        if(phone_no.size()!=10){
            throw phone_no;
        }
    }
    catch(string a){
        cout<<"\tEnter a valid mobile number\n";
        exit(0);
    }
}
};

```

```

void car :: recommend()
{
    cout<<" Enter the number of passengers : ";
    cin>>p;
    cout<<" Enter the number of babies : ";
    cin>>b;
    cout<<endl;
    if (p>=1 && b>=1)
    {
        cout<<" We would recommend SUV , Sedan "<<endl;
    }
}

```

```

        cout<<"    Baby on the board "<<endl;
    }
    else if(p==1)
    {
        cout<<" We would recommend Bike"<<endl;

    }
    else if(p==2)
    {
        cout<<" We would recommend Auto"<<endl;
    }
    else
    {
        cout<<" We would recommend Prime Sedan , Prime SUV ,
Mini"<<endl;
    }
}

void car :: enquiry()
{
    cout<<" Get in touch "<<endl;

```

```
cout<<" Call us at 9910010011 "<<endl;
cout<<" Mail us at carrentalsys@gmail.com "<<endl;
cout<<" Visit our website www.rentyurcar.com "<<endl;
}
```

```
int car :: rent()
{
    show_cars();
    cout<<" Enter your car choice : ";
    cin>>c;
    cout<<endl;
    car d;
    Bill b;
    switch(c)
    {
        case 1:
            cout<<" You have selected Tata "<<endl;
            break;

        case 2 :
            cout<<" You have selected Tesla "<<endl;
```

break;

case 3 :

cout<<" You have selected BMW "<<endl;

break;

case 4 :

cout<<" You have selected Audi "<<endl;

break;

case 5 :

cout<<" You have selected Lamborghini "<<endl;

break;

case 6 :

cout<<" You have selected Rolls Royce "<<endl;

break;

case 7 :

cout<<" You have selected Electric (Ola S1 , S1 pro) "<<endl;

break;

}

```
cout<<endl;
cout<<" 1. Rentals "<<endl;
cout<<" 2. Reserve "<<endl;
cout<<" 3. Intercity "<<endl;
cout<<" Select your Type ";
cin>>t;
cout<<endl;
switch(t)
{
    case 1 :
        cout<<" You have selected Rentals "<<endl;
        break;
    case 2 :
        cout<<" You have selected Reserve "<<endl;
        break;
    case 3 :
        cout<<" You have selected Intercity "<<endl;
        break;
}
cout<<" Enter your Pick-up location : ";
cin>>pick;
```

```
cout<<" Enter your Drop location : ";
```

```
cin>>drop;
```

```
cout<<endl;
```

```
Kharcha(b,d,c);
```

```
return c;
```

```
}
```

```
int car :: all_details()
```

```
{
```

```
cout<<"-----"<<endl;
```

```
cout<<" Welcome to Car Rental System "<<endl;
```

```
cout<<"-----"<<endl;
```

```
cout<<" 1. Show all cars "<<endl;
```

```
cout<<" 2. Car Enquiry "<<endl;
```

```
cout<<" 3. Rent a car "<<endl;
```

```
cout<<" 4. Our recommendation "<<endl;
```

```
cout<<" 5. Exit "<<endl;
```

```
cout<<" Enter your choice : ";
```

```
cin>>choice;
```

```
switch(choice)  
{  
    case 1:  
        show_cars();  
        break;  
  
    case 2 :  
        enquiry();  
        break;  
  
    case 3 :  
        rent();  
        break;  
  
    case 4 :  
        recommend();  
        break;  
  
    case 5 :  
        cout<<"Thank You for Visiting";
```



```

        break;

    }
    return choice;
    cout<<endl;
}
int main()
{

    car c;
    Bill b;
    customer c1;
    int d;
    cout<<"IF YOU ARE REGISTERED USER\n"
        <<"ENTER 1 FOR YES\n"
        <<"ELSE 0\n";
    cin>>d;
    if(d==1){
        c1.login();
    }
    else{

```

```
c1.registration();
```

```
c1.login1();
```

```
}
```

```
cout<<endl<<endl;
```

```
while(c.all_details()!=5){
```

```
    c.all_details();
```

```
}
```

```
ofstream out;
```

```
out.open("file.txt");
```

```
out<<"User's name is: "<<c1.cusername<<"\n";
```

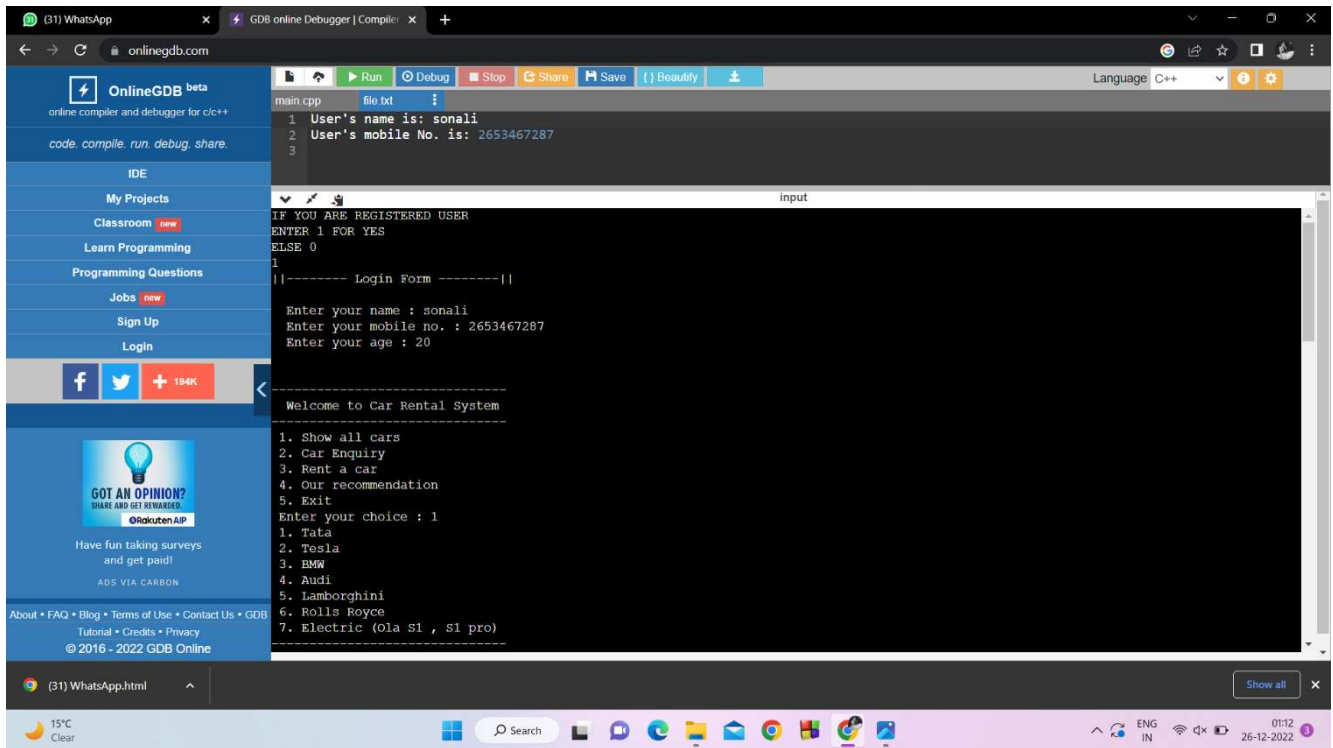
```
out<<"User's mobile No. is: "<<c1.phone_no<<"\n";
```

```
out.close();
```

```
return 0;
```

```
}
```

OUTPUT:



The screenshot displays the OnlineGDB web interface. The left sidebar contains navigation links such as 'My Projects', 'Classroom', 'Learn Programming', 'Programming Questions', 'Jobs', 'Sign Up', and 'Login'. The main editor area shows a C++ program for a car rental system. The code includes a login form and a menu of car rental options. The output window on the right shows the program's execution, including the login form and the car rental menu.

```
main.cpp
1 User's name is: sonali
2 User's mobile No. is: 2653467287
3

IF YOU ARE REGISTERED USER
ENTER 1 FOR YES
ELSE 0
1
||----- Login Form -----||
Enter your name : sonali
Enter your mobile no. : 2653467287
Enter your age : 20

Welcome to Car Rental System

1. Show all cars
2. Car Enquiry
3. Rent a car
4. Our recommendation
5. Exit
Enter your choice : 1
1. Tata
2. Tesla
3. BMW
4. Audi
5. Lamborghini
6. Rolls Royce
7. Electric (Ola S1 , S1 pro)
```

OnlineGDB beta
online compiler and debugger for c/c++
code.compile.run.debug.share.

IDE

My Projects

Classroom new

Learn Programming

Programming Questions

Jobs new

Sign Up

Login

f t + 194K

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```
main.cpp
1 User's name is: sonali
2 User's mobile No. is: 2653467287
3

7. Electric (Ola s1 , s1 pro)

Welcome to Car Rental System

1. Show all cars
2. Car Enquiry
3. Rent a car
4. Our recommendation
5. Exit
Enter your choice : 2
Get in touch
Call us at 9910010011
Mail us at carrentalsys@gmail.com
Visit our website www.rentyurcar.com

Welcome to Car Rental System

1. Show all cars
2. Car Enquiry
3. Rent a car
4. Our recommendation
5. Exit
Enter your choice : 3
1. Tata
2. Tesla
3. BMW
4. Audi
5. Lamborghini
```

(31) WhatsApp.html

15°C Clear

Search

ENG IN

01:13 26-12-2022

OnlineGDB beta
online compiler and debugger for c/c++
code.compile.run.debug.share.

IDE

My Projects

Classroom new

Learn Programming

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```
main.cpp
1 User's name is: sonali
2 User's mobile No. is: 2653467287
3

5. Lamborghini
6. Rolls Royce
7. Electric (Ola s1 , s1 pro)
Enter your car choice : 4

You have selected Audi

1. Rentals
2. Reserve
3. Intercity
Select your Type 1

You have selected Rentals
Enter your Pick-up location : pune
Enter your Drop location : chinchwad

Enter distance to be travelled
12
Total Rent will be 300

Welcome to Car Rental System

1. Show all cars
2. Car Enquiry
3. Rent a car
4. Our recommendation
5. Exit
Enter your choice : 4
```

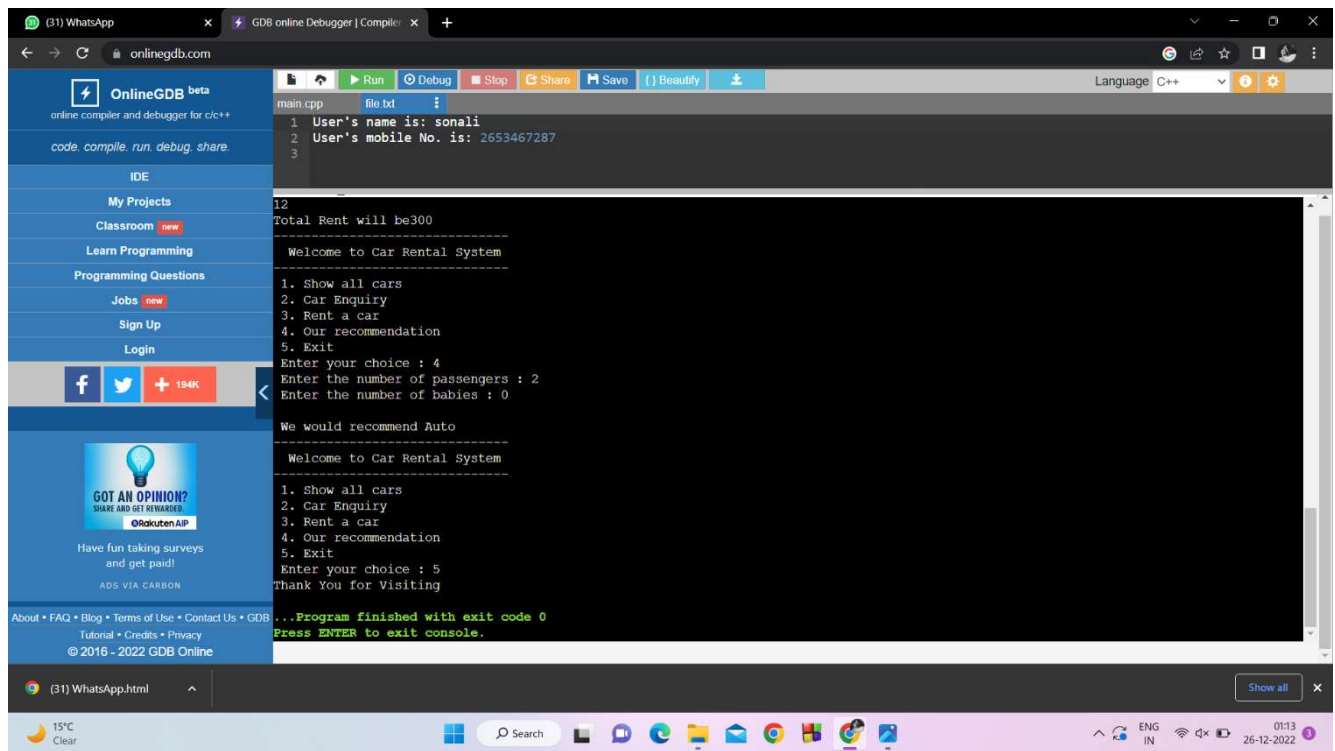
(31) WhatsApp.html

15°C Clear

Search

ENG IN

01:13 26-12-2022



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.

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