

GROUP-7

Presenting ...



OOPs Based Project On Vehicle Rental System



V A H A A N _ W A L L A H

D O N ' T D R E A M I T ! D R I V E I T !

ABOUT US :

 Vaahan Wallah is a system time based simulator for customers seeking flexible vehicle rentals on variety of classic cars , bikes and buses. for ease of transportation and availability around the streets, anywhere and anytime.

 Team Members →

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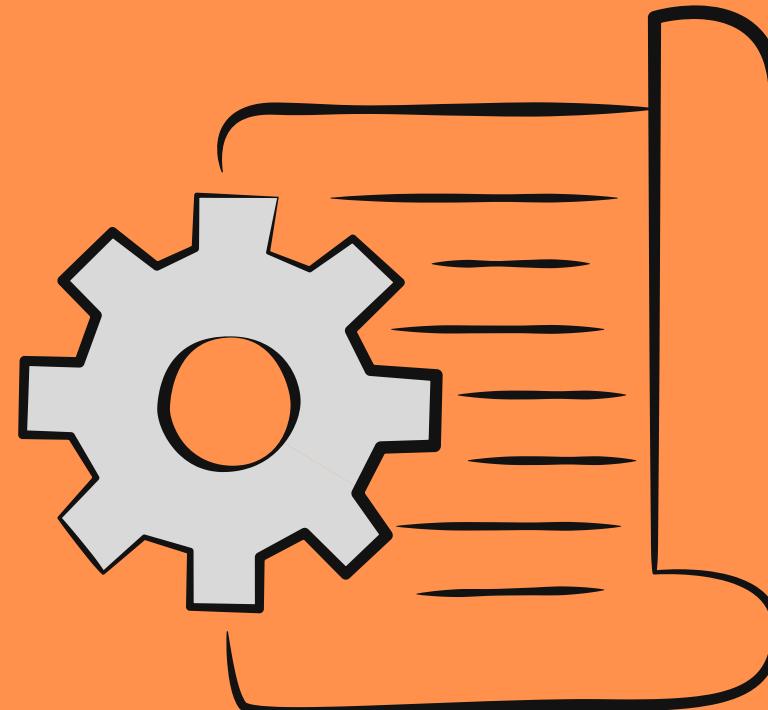
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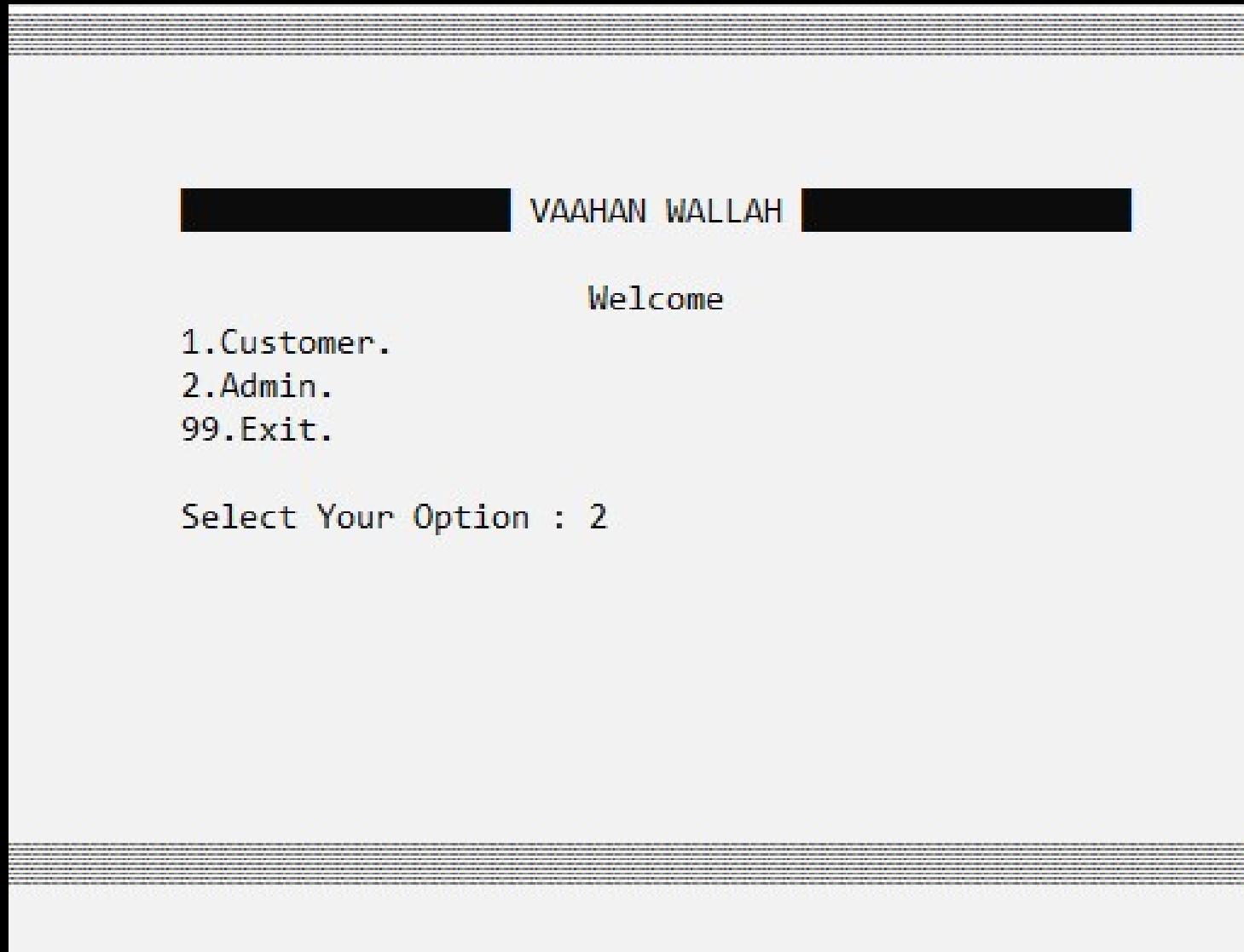
OVERVIEW :

- Prototype
- Features
- Requirements
- Working Methodology
- Concepts Used
- Scope Of Improvement



PROTOTYPE :

1) Classic Menu Driven Style Program.



2) Easy Sign-Up And Login For Preserving And Securing Users Data.



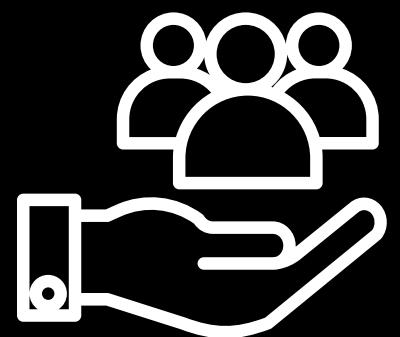
3) Equiped With Services Of Your Concern.
Handy For Both Customer And Provider.

```
DASHBOARD
1.Check for available Vaahan.
2.Rent a Vaahan.
3.Return Vaahan.
4.Add Money.
5.Display my details.
99.Log-out.

Your option : 2
RENT A VAAHAN

Which Vaahan would you to rent ?
1.car
2.bus
3.bike
99.back

Your choice : 1
```



4) Minimalistic Interface Design For Easy Deployment Over Other Platforms

```
LOGIN DASHBOARD

1.Add Vaahan.
2.Repair Vaahan.
3.Display all Vaahans.
4.Display available Vaahans for rent.
5.Display all users data.
99.Exit.

Your Choice :
```



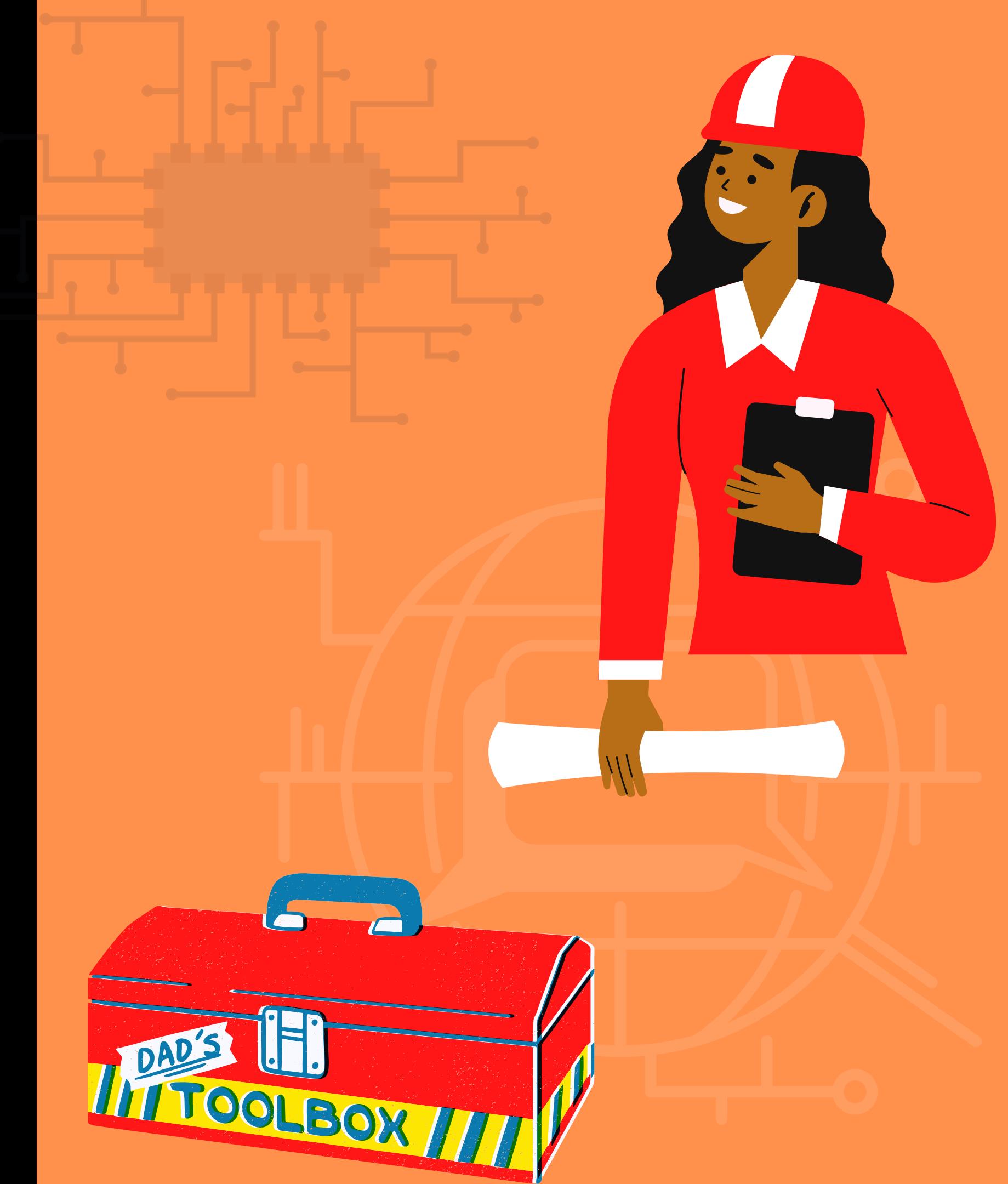
Features :

1. Login System For Both Customer And Service Provider.
2. Variety Of Branded Vehicles Depending Upon Your Choice And Seamless Renting With Flexible Deployment.
3. Customer Invoice Provided For Transparency.



Requirements For Building This Project :

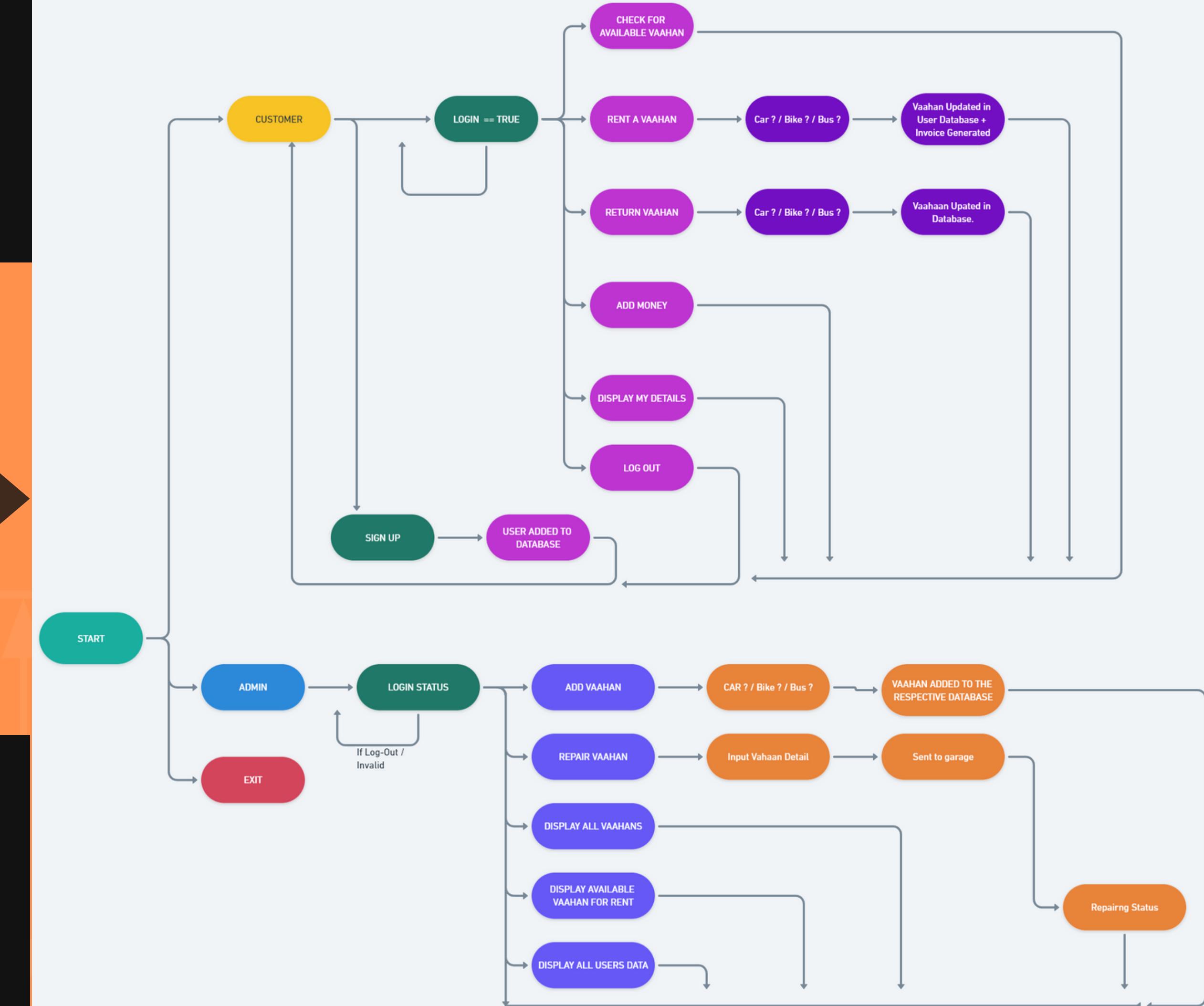
1. Visual Studio Code For C/C++ for systematic working environment.
2. Knowledge of Object Oriented Design and Programming and file handling.
3. Database Management Skills.
4. CLI Designing.



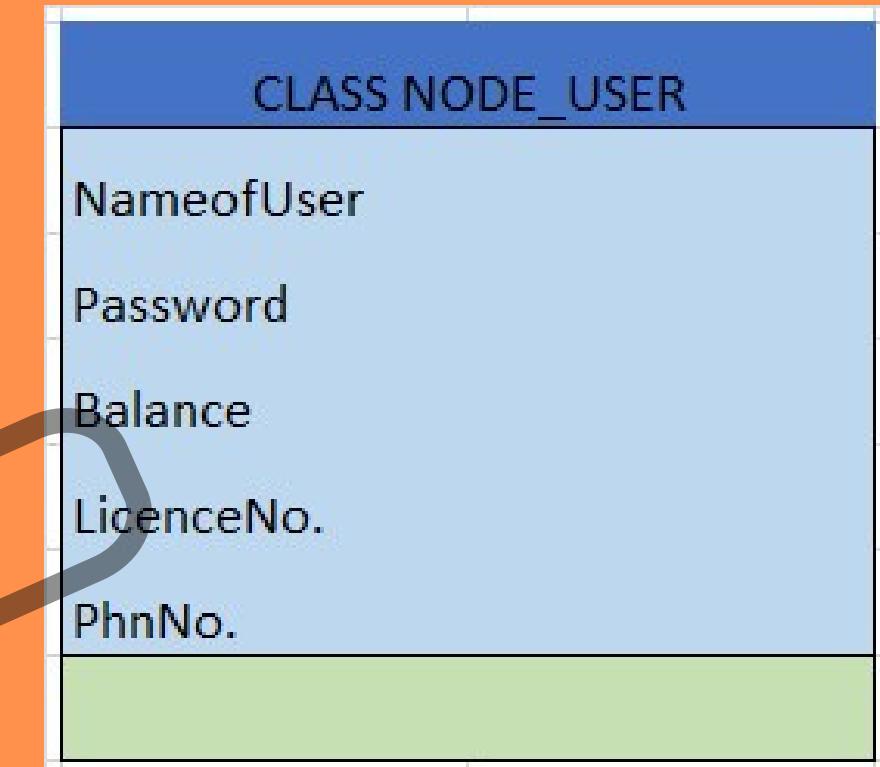
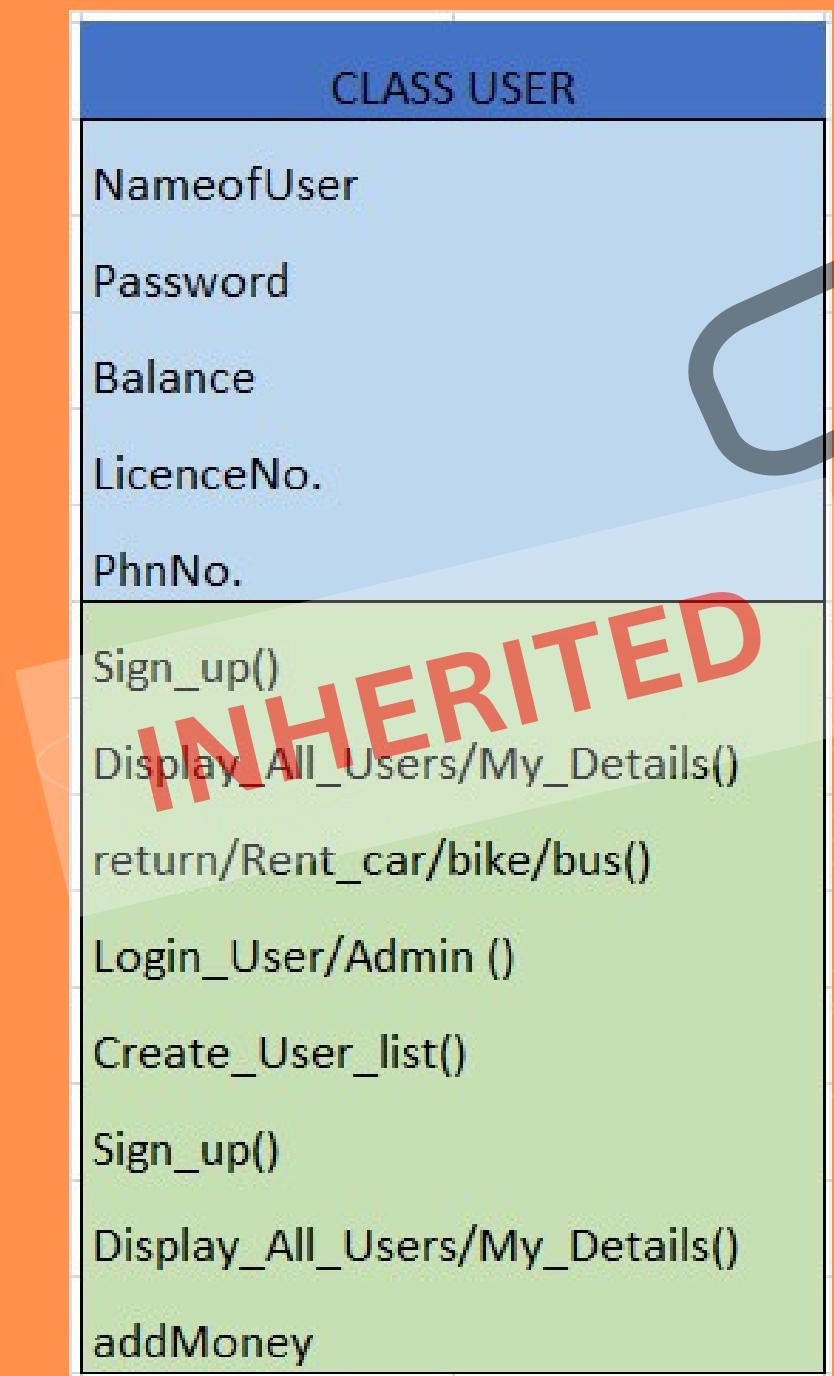
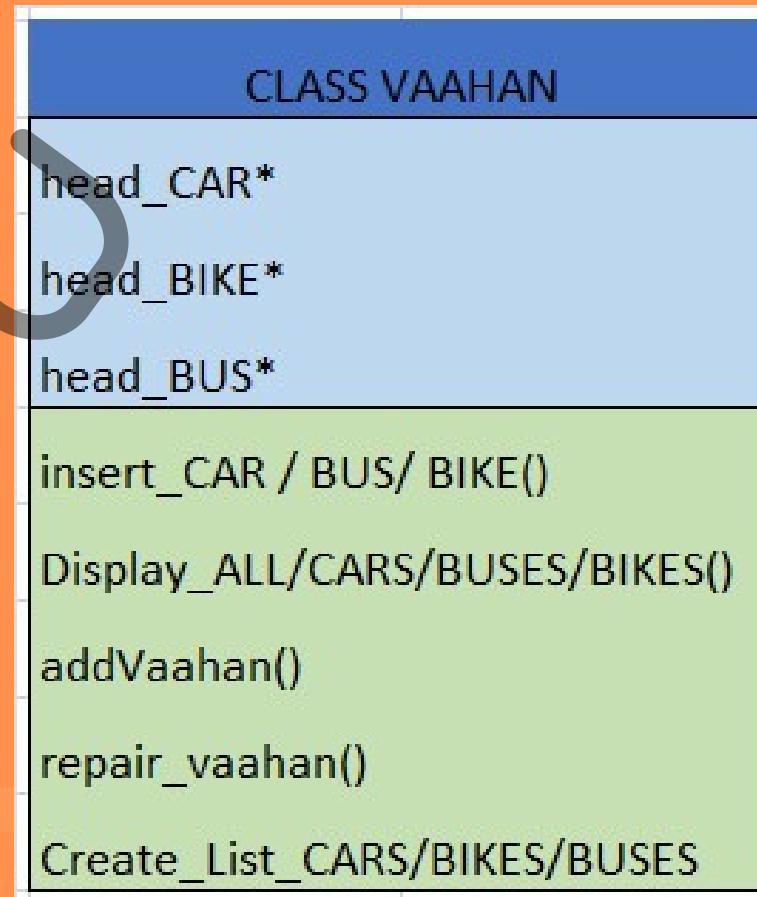
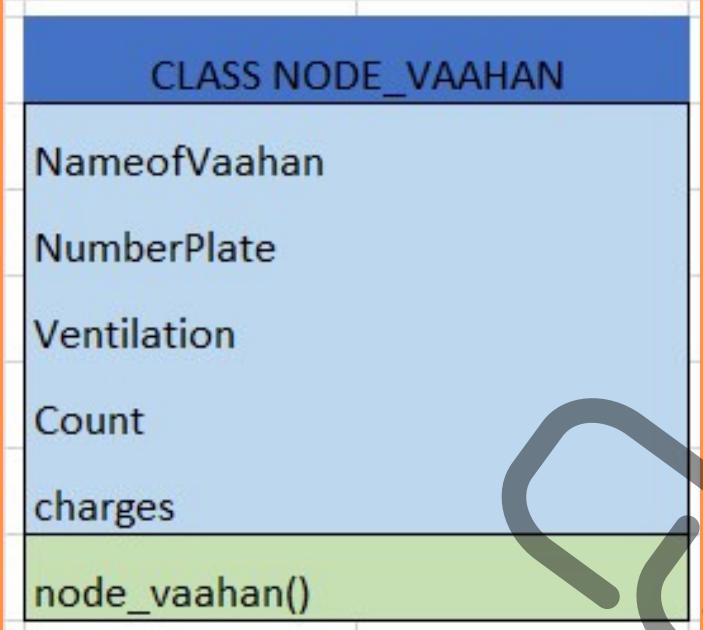
WORKING METHODOLOGY

<https://whimsical.com/vaahan-wallah-NHcnVTUqyVJPYEUgYa7vCz>

FLOWCHART OF SYSTEM



BLUEPRINT OF OUR SYSTEM



INHERITED

PROGRAM PROFILE & CONCEPTS USED :

- FRONT-END :
- BACK-END :

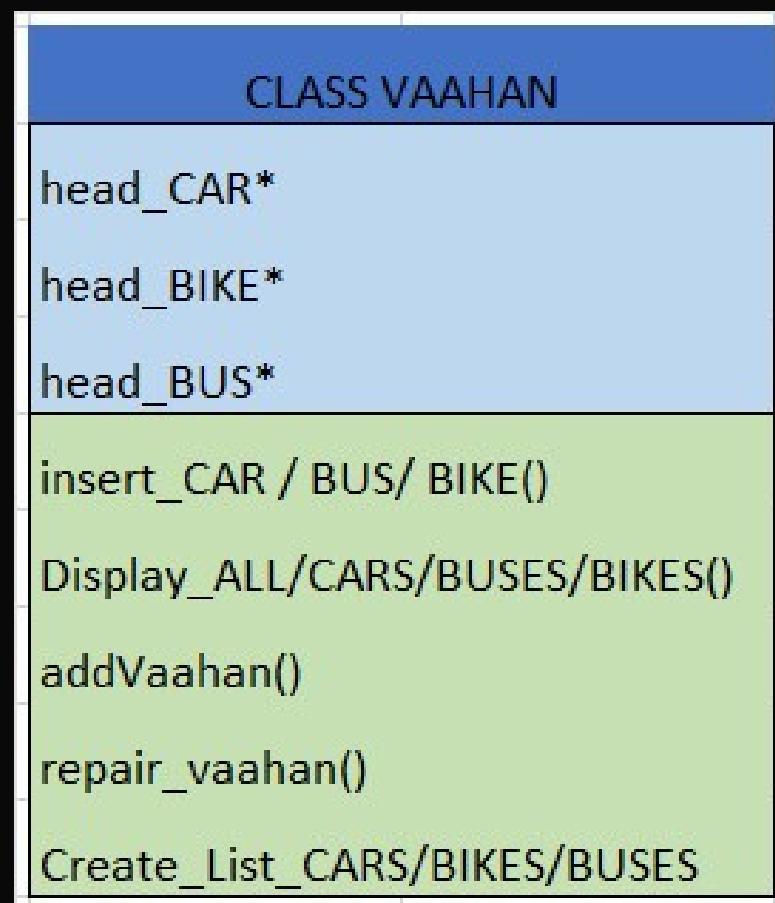


1. Designing / Animating CLI Using C++
1. ENCAPSULATION
2. ABSTACTION
3. INHERITANCE (SINGLE LEVEL)
4. FILE HANDLING USING .TXT FILE

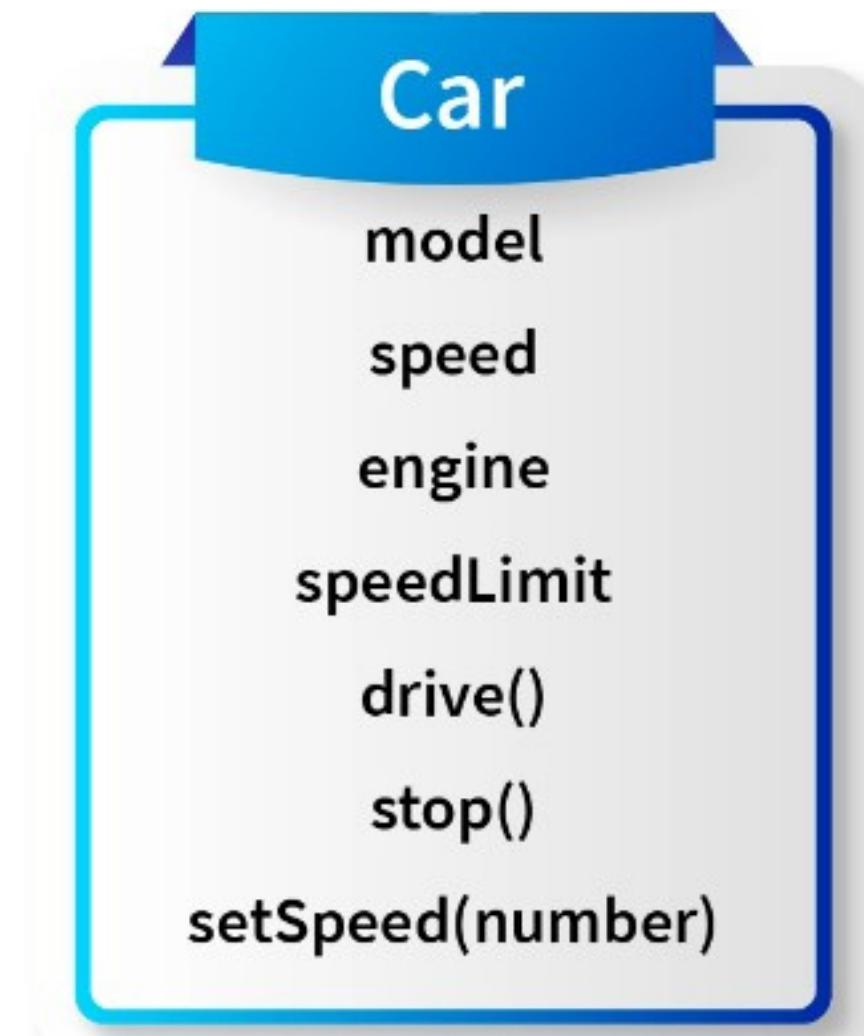
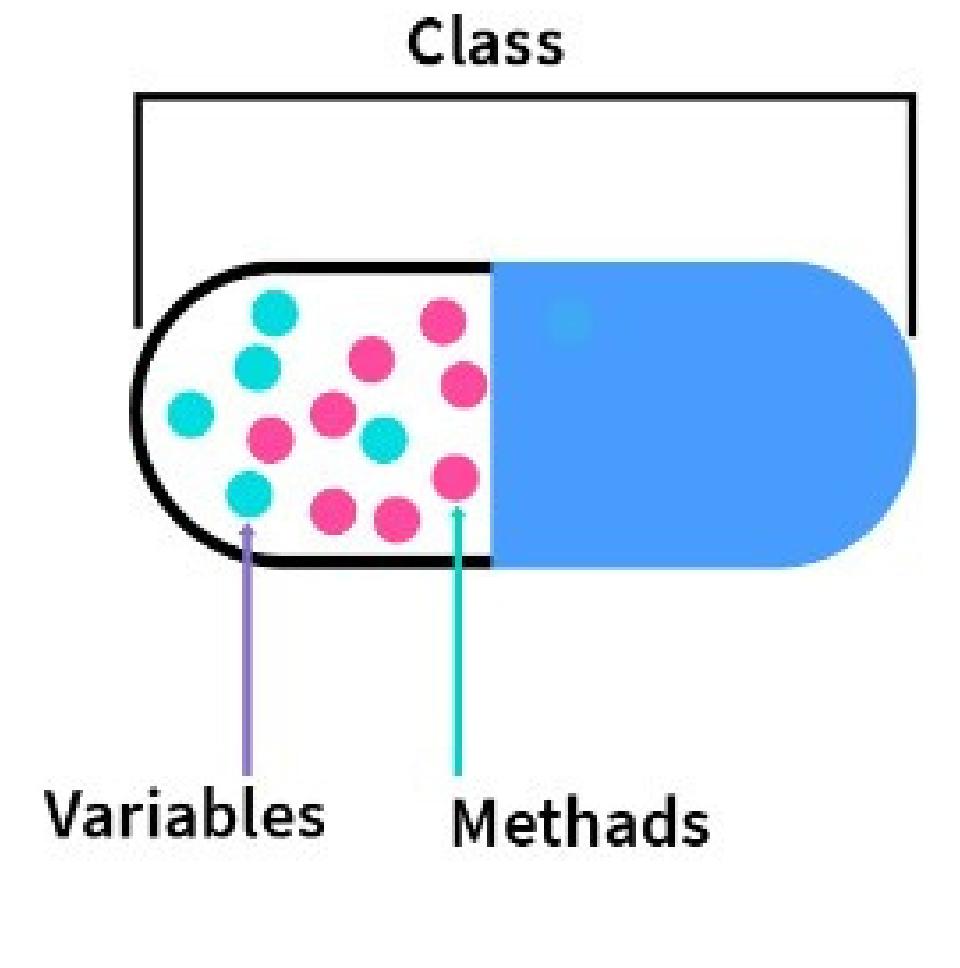
FRONTEND
BACKEND

• ENCAPSULATION :

Encapsulation is defined as the wrapping up of data under a single unit. It is the mechanism that binds together code and the data it manipulates. Another way to think about encapsulation is, that it is a protective shield that prevents the data from being accessed by the code outside this shield.

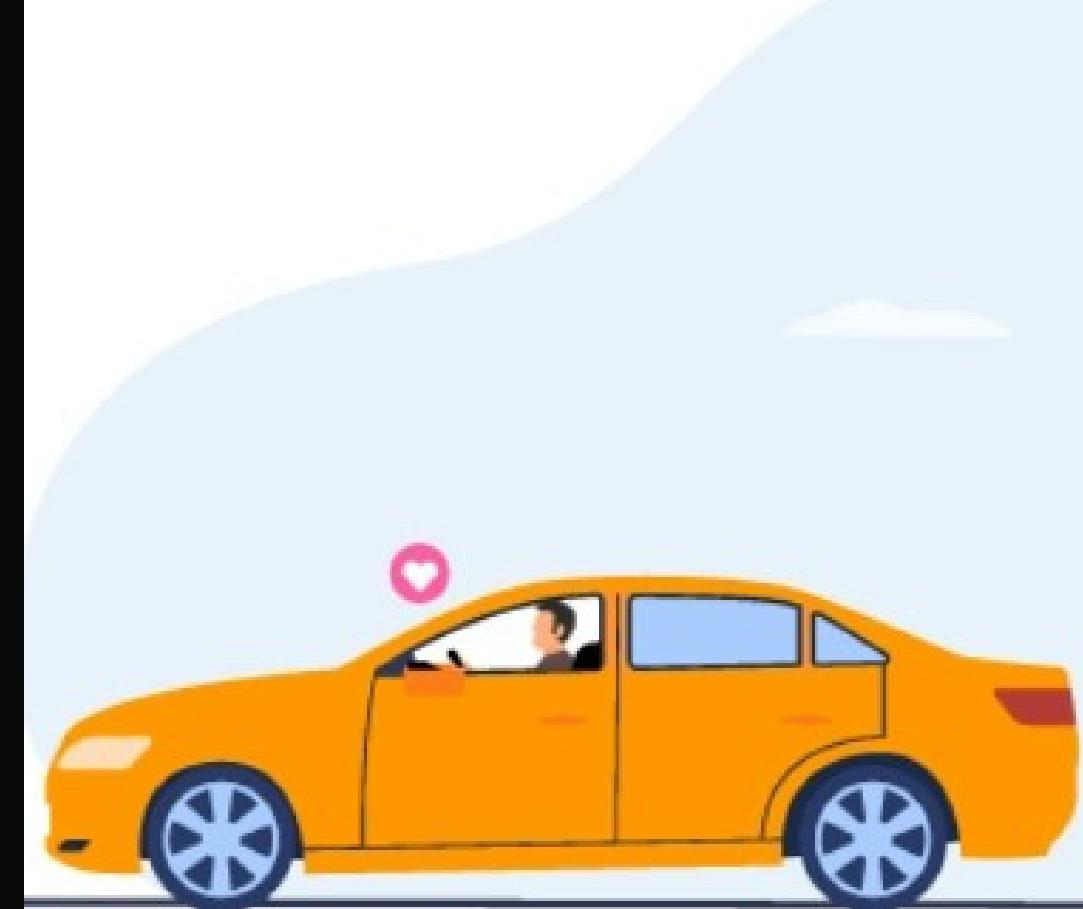
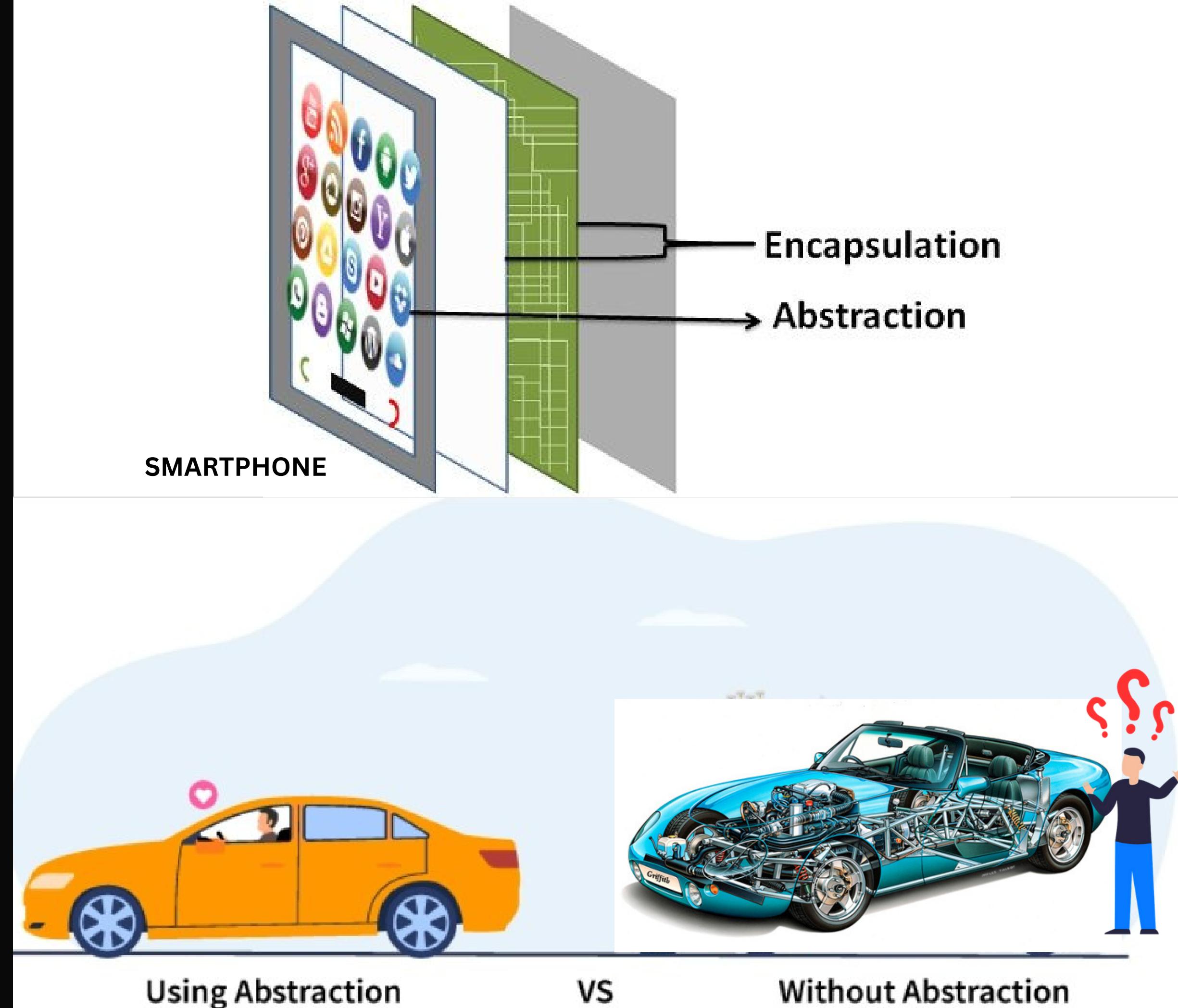
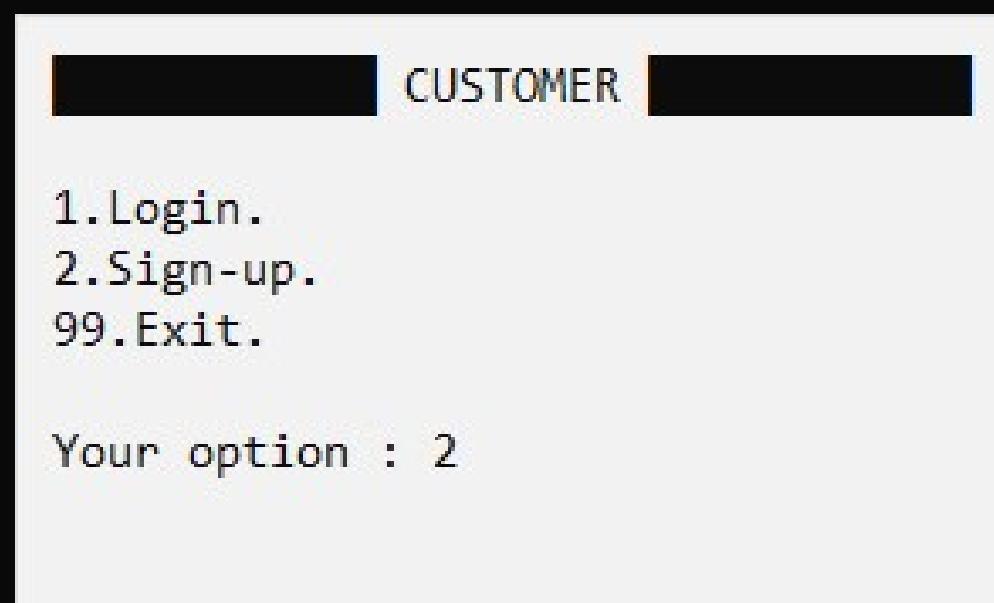


```
Classs  
{  
    data members  
    +  
    methods (behavior)  
}
```

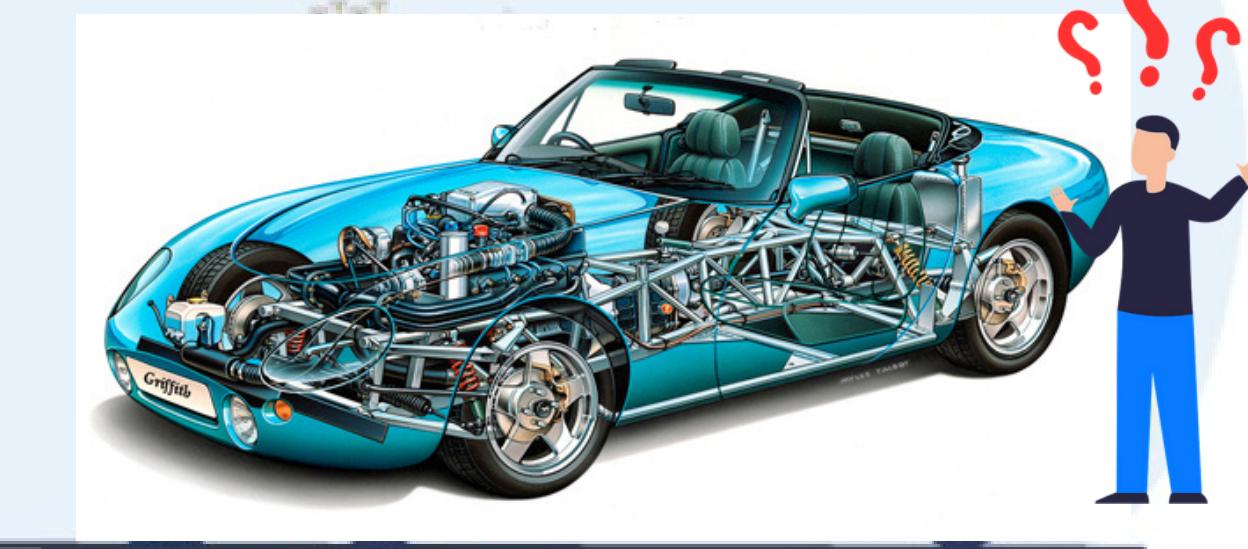


• ABSTRACTION:

Abstraction is one of the key concepts of object-oriented programming (OOP) languages. Its main goal is to handle complexity by hiding unnecessary details from the user. That enables the user to implement more complex logic on top of the provided abstraction without understanding or even thinking about all the hidden complexity.



Using Abstraction



VS

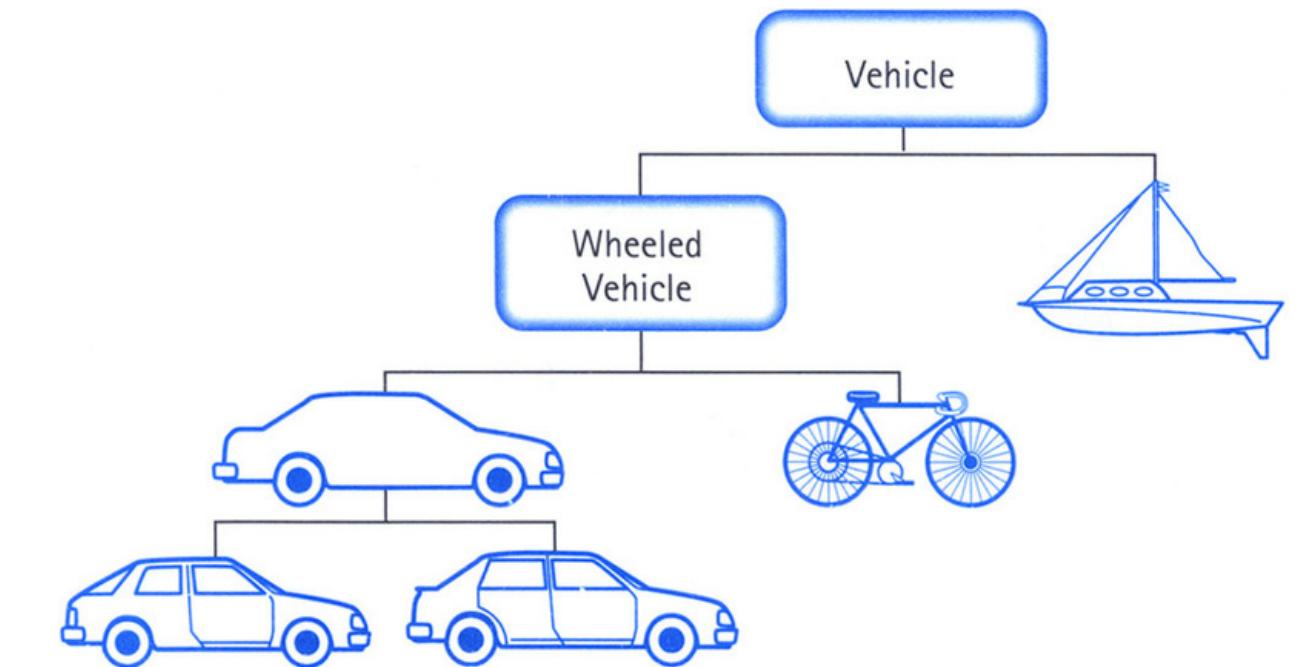
Without Abstraction

• INHERITANCE :

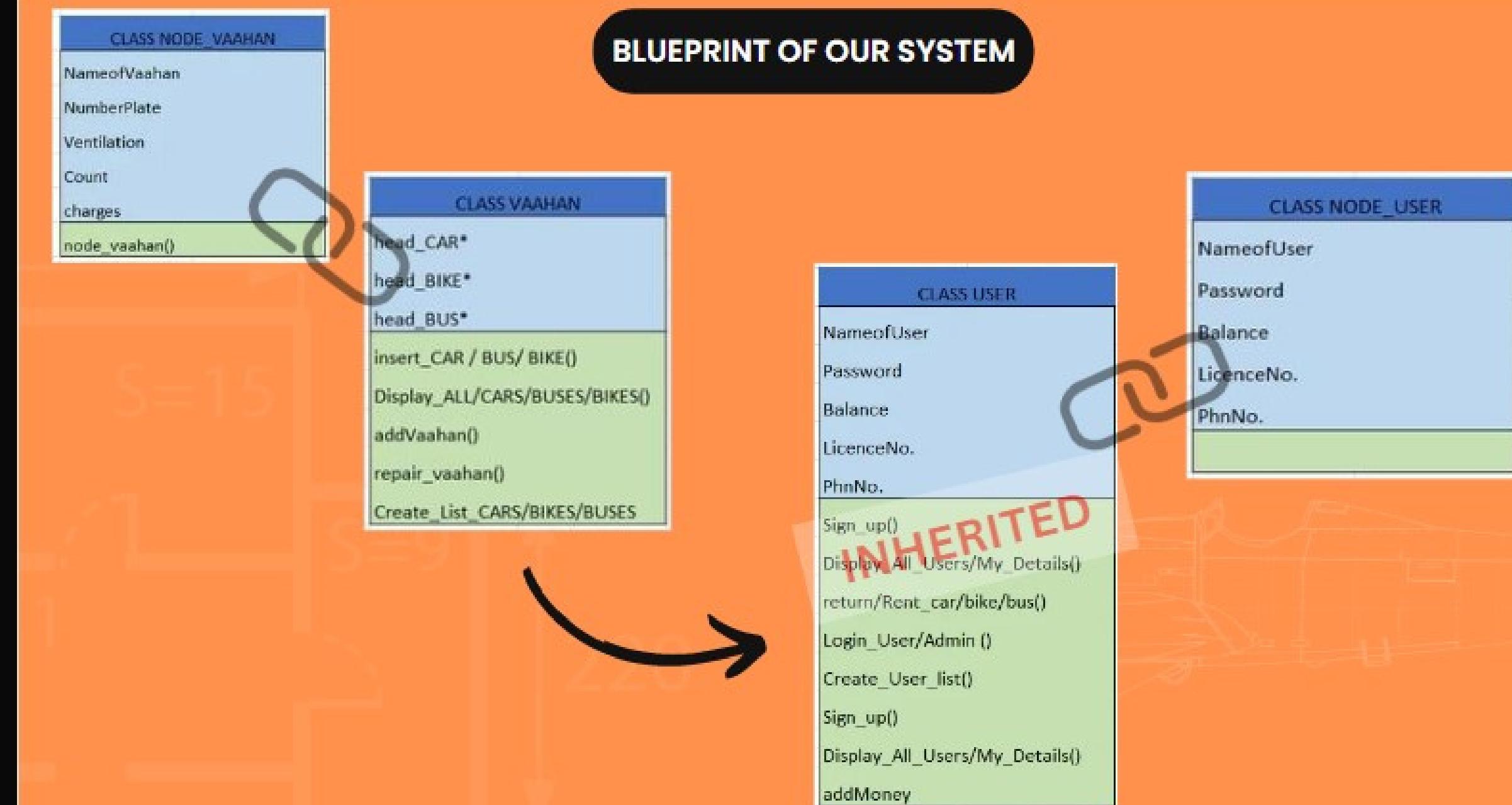
The capability of a class to derive properties and characteristics from another class is called Inheritance.

Inheritance is one of the most important features of Object-Oriented Programming.

Inheritance is a feature or a process in which, new classes are created from the existing classes. The new class created is called “derived class” or “child class” and the existing class is known as the “base class” or “parent class”. The derived class now is said to be inherited from the base class.



BLUEPRINT OF OUR SYSTEM



SCOPE OF IMPROVEMENT

FOR BETTER USER EXPERIENCE

EXPANSION IN PROGRAM

1. Shifting From CLI TO GUI - Personalised Websites , Mobile And Desktop Apps.

1. More Types of Vaahans can be added.
2. GPS Monitoring System Can Be Added For Public And Asset Safety.



THANK YOU