

GROUP-7

Presenting ...



OOPs Based Project On Vehicle Rental System



VAHAAN_WALLAH

DON'T DREAM IT ! DRIVE IT !

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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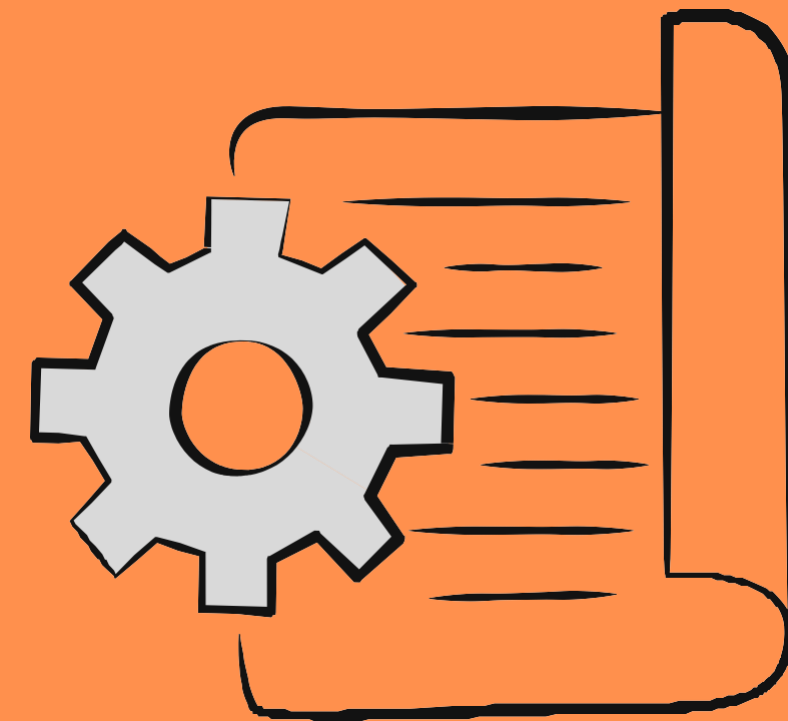
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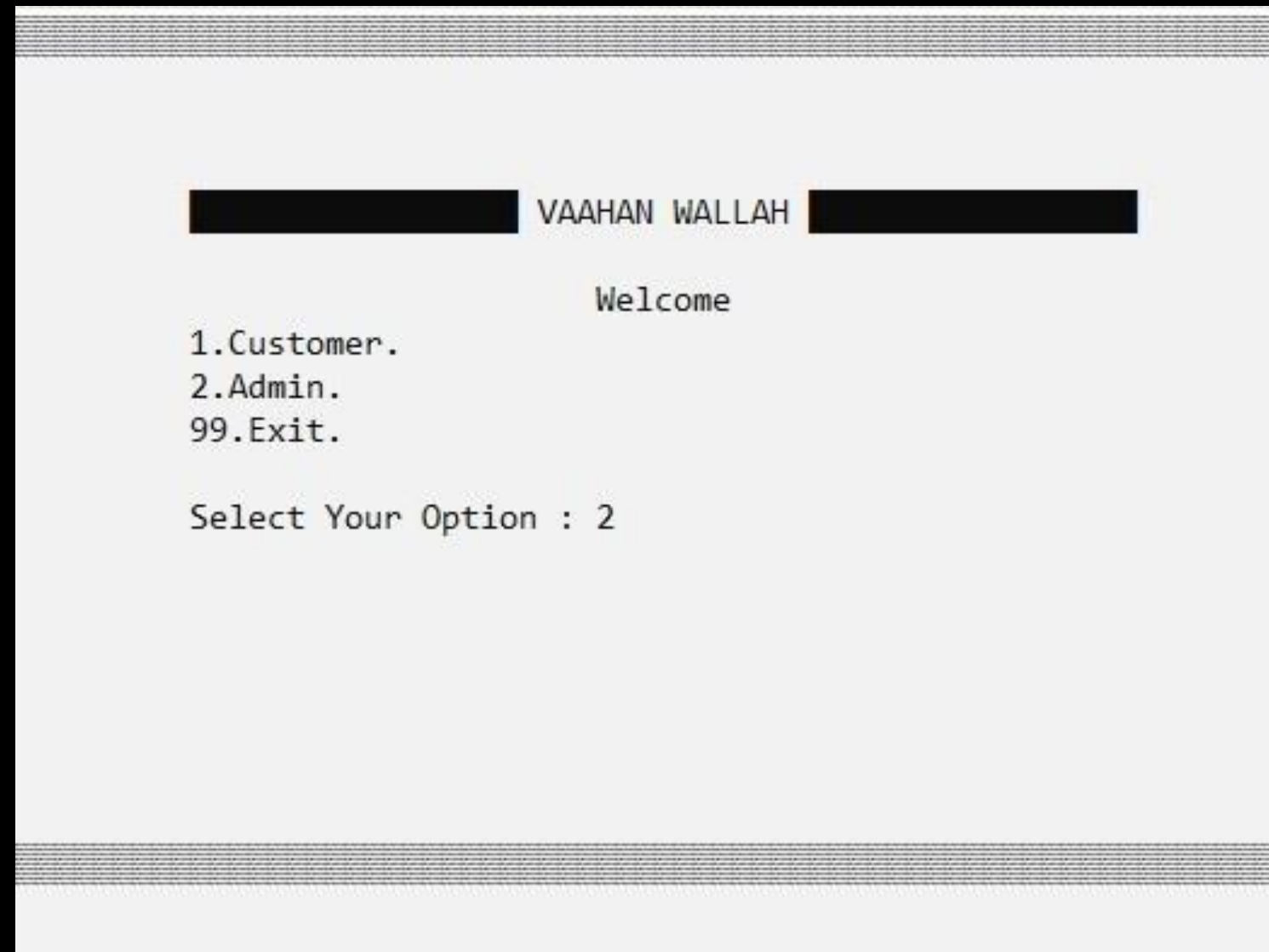
OVERVIEW :

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



PROTOTYPE :

1) Classic Menu Driven Style Program.



A screenshot of a classic menu-driven program interface. The interface is displayed in a window with a title bar. The main content area shows a welcome message and a menu of options. The user has selected option 2.

```
██████████ VAAHAN WALLAH ██████████  
  
Welcome  
  
1.Customer.  
2.Admin.  
99.Exit.  
  
Select Your Option : 2
```

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



A screenshot of a sign-up and login interface. The interface is displayed in a window with a title bar. The main content area shows a sign-up form and a login form. A large, semi-transparent padlock watermark is overlaid on the right side of the window.

```
██████████ CUSTOMER ██████████  
  
1.Login.  
2.Sign-up.  
99.Exit.  
  
Your option : 2  
  
Your Name : JC  
Choose a strong password : ABC@123  
Add money to your account : Rs.969696  
License number : ABC123  
Phone number - 9098199735  
  
██████████ ADMIN ██████████  
  
Dear admin, to login enter your username : admin  
  
Please enter your password : admin123
```

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

4) Minimalistic Interface Design For Easy
Deployment Over Other Platforms

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

LOGIN DASHBOARD

1.Add Vaahan.

2.Repair Vaahan.

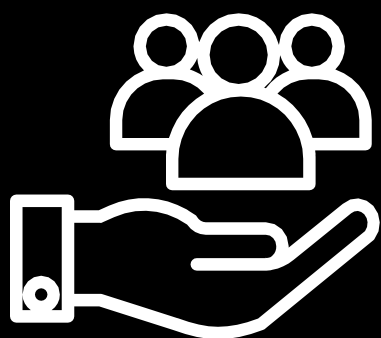
3.Display all Vaahans.

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 :

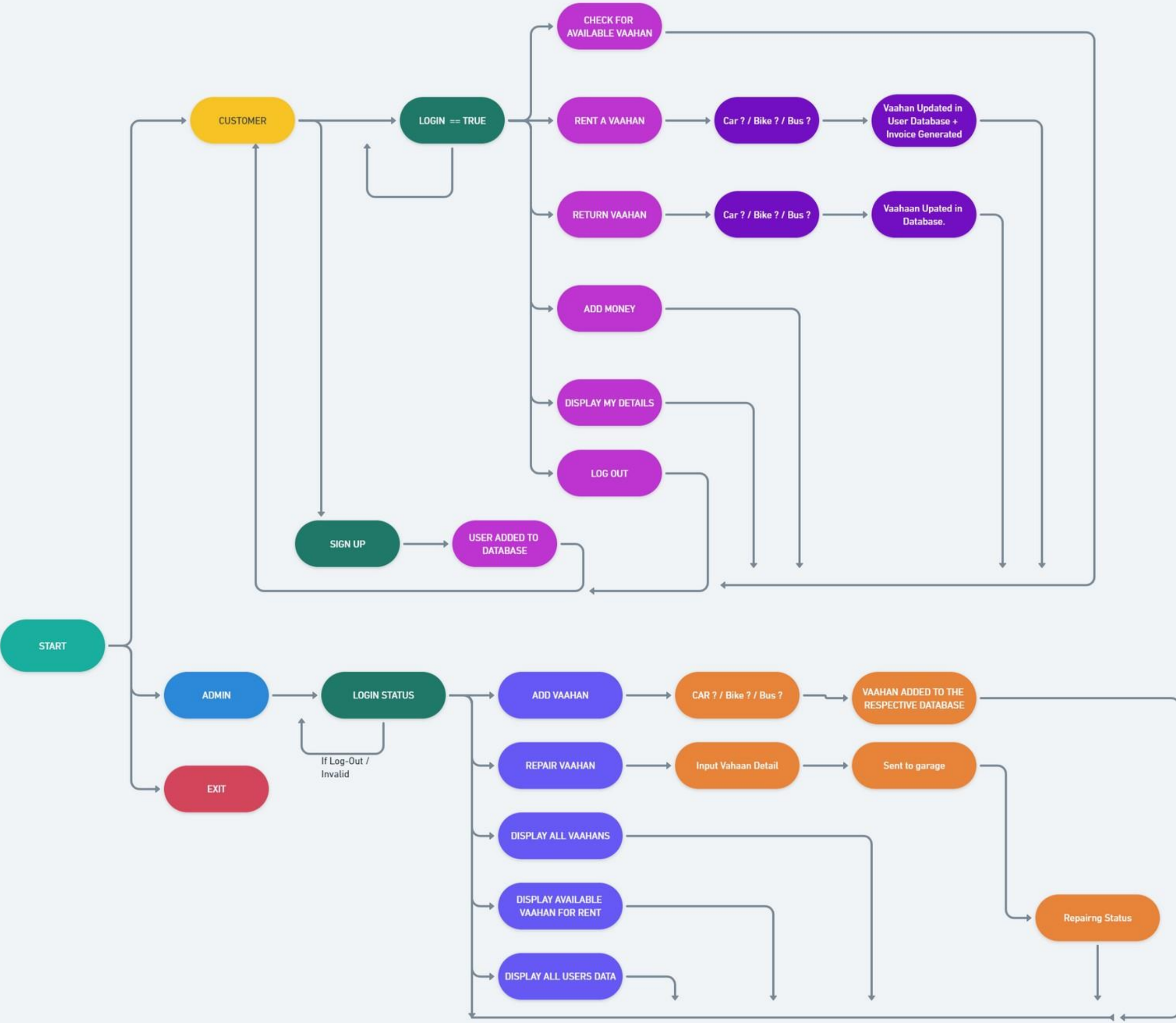
1. Visual Studio Code For Java for systematic working environment.
2. Knowledge of Object Oriented Design and Programming and file handling.
3. Database Management Skills.
4. CLI Designing.



WORKING METHODOLOGY

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

FLOWCHART OF SYSTEM



BLUEPRINT OF OUR SYSTEM

CLASS NODE_VAAHAN
NameofVaahan
NumberPlate
Ventilation
Count
charges
node_vaahan()

CLASS VAAHAN
head_CAR*
head_BIKE*
head_BUS*
insert_CAR / BUS/ BIKE()
Display_ALL/CARS/BUSES/BIKES()
addVaahan()
repair_vaahan()
Create_List_CARS/BIKES/BUSES

CLASS USER
NameofUser
Password
Balance
LicenceNo.
PhnNo.
Sign_up()
Display_All_Users/My_Details()
return/Rent_car/bike/bus()
Login_User/Admin ()
Create_User_list()
Sign_up()
Display_All_Users/My_Details()
addMoney

CLASS NODE_USER
NameofUser
Password
Balance
LicenceNo.
PhnNo.

INHERITED

PROGRAM PROFILE & CONCEPTS USED :

- FRONT-END :



1. Designing / Animating CLI Using Java

- BACK-END :

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.

CLASS VAAHAN
head_CAR*
head_BIKE*
head_BUS*
insert_CAR / BUS/ BIKE()
Display_ALL/CARS/BUSES/BIKES()
addVaahan()
repair_vaahan()
Create_List_CARS/BIKES/BUSES

Classs

{

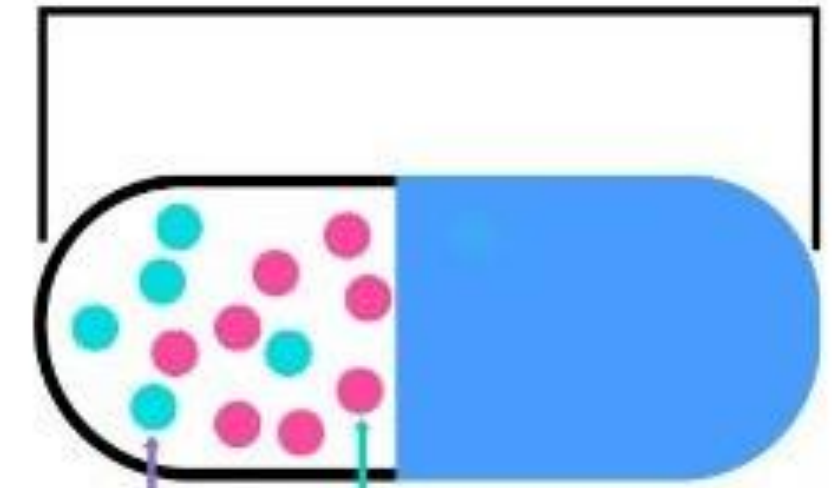
data members

+

methods (behavior)

}

Class



Variables

Methads



Car

model
speed
engine
speedLimit
drive()
stop()
setSpeed(number)

• 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.

CUSTOMER

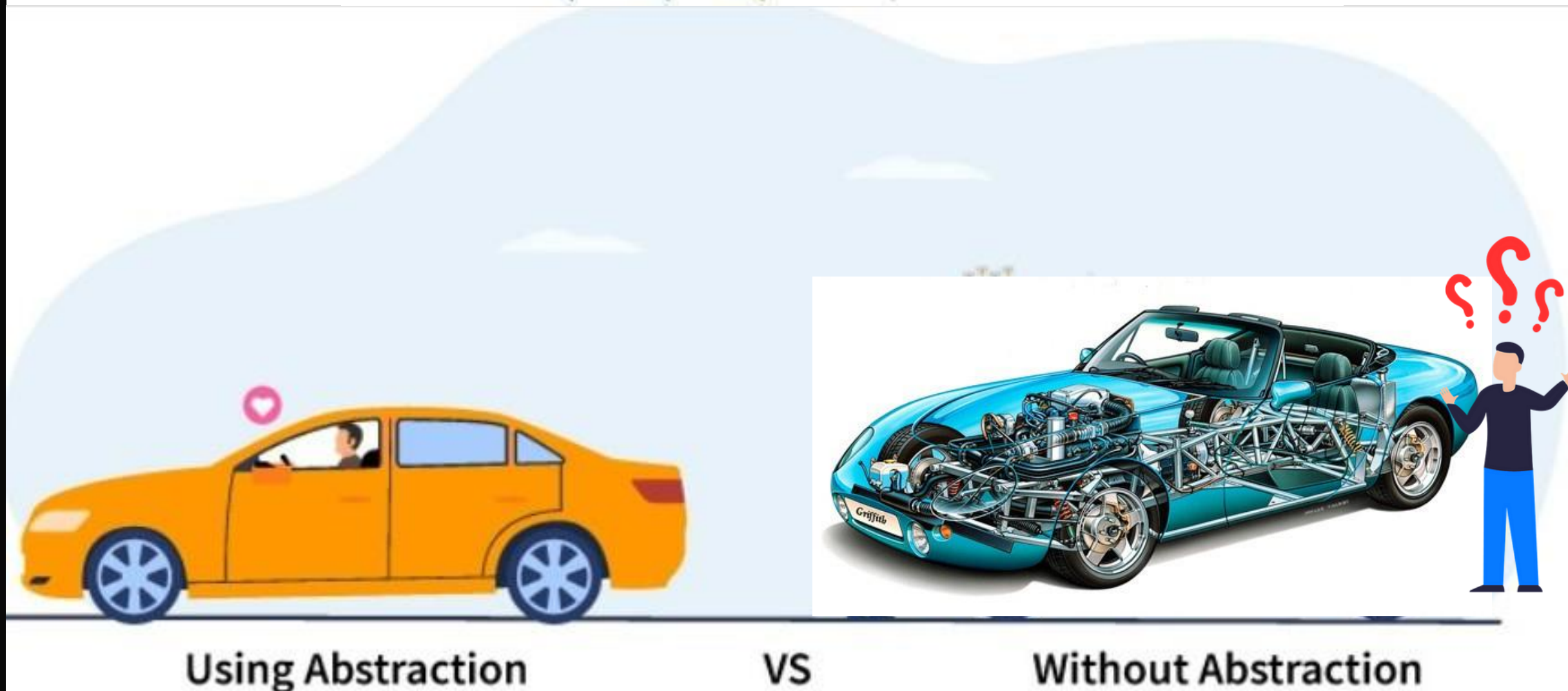
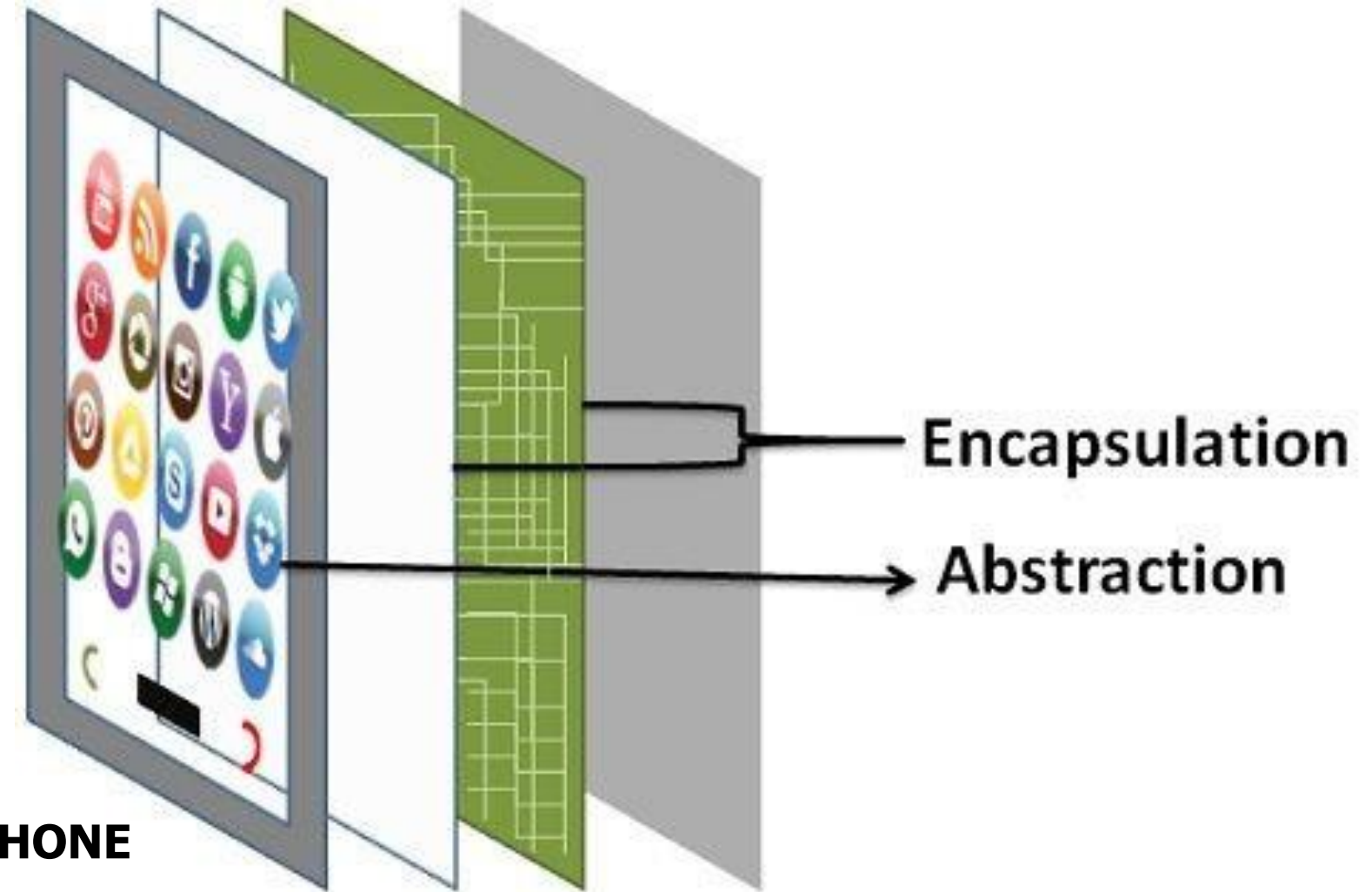
1.Login.

2.Sign-up.

99.Exit.

Your option : 2

SMARTPHONE

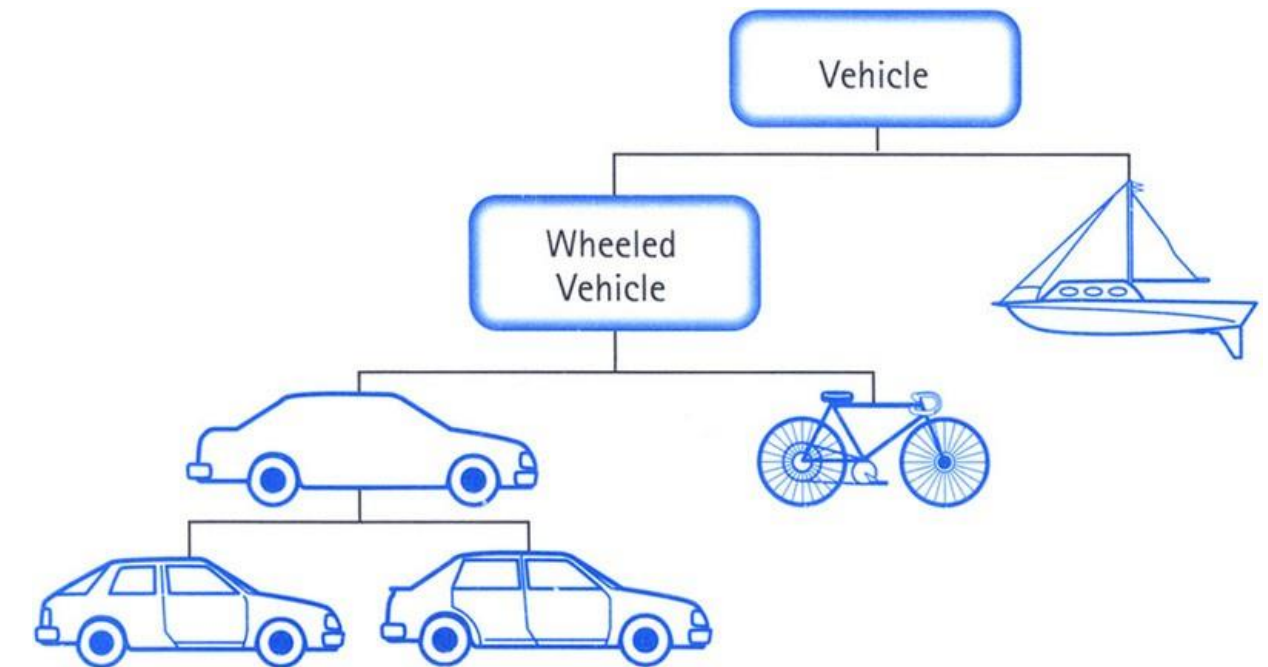


• INHERITANCE :

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.



CLASS NODE_VAAHAN
NameofVaahan
NumberPlate
Ventilation
Count
charges
node_vaahan()

BLUEPRINT OF OUR SYSTEM

CLASS VAAHAN
head_CAR*
head_BIKE*
head_BUS*
insert_CAR / BUS/ BIKE()
Display_ALL/CARS/BUSES/BIKES()
addVaahan()
repair_vaahan()
Create_List_CARS/BIKES/BUSES

CLASS USER
NameofUser
Password
Balance
LicenceNo.
PhnNo.
Sign_up()
Display_All_Users/My_Details()
return/Rent_car/bike/bus()
Login_User/Admin ()
Create_User_list()
Sign_up()
Display_All_Users/My_Details()
addMoney

CLASS NODE_USER
NameofUser
Password
Balance
LicenceNo.
PhnNo.

INHERITED

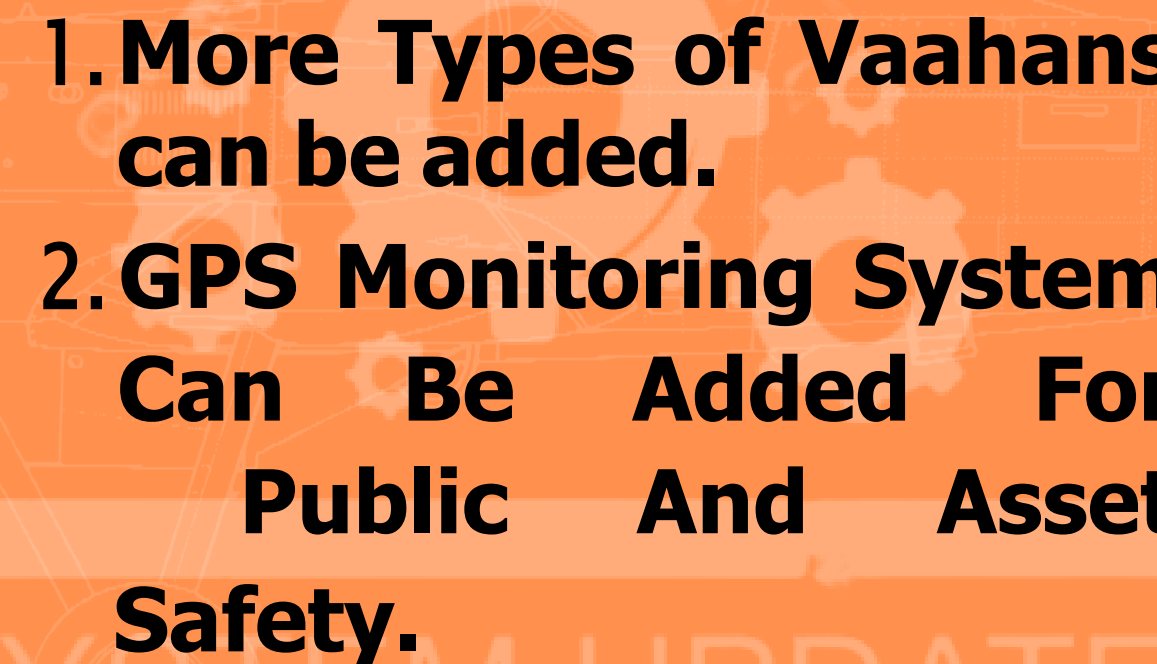
SCOPE OF IMPROVEMENT

FOR BETTER USER EXPERIENCE



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

EXPANSION IN PROGRAM

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

SYSTEM UPDATE



THANK YOU