

# **East West University**

Department of Computer Science and Engineering

CSE103: Project Description [Fall 2022]

# **Vehicle Management System**

This project "Vehicle Management System" is to design and develop an automated system that will be used to automate Vehicle Management. You must use Pointers, Structures (struct), Functions, Strings Array, Switch, etc.

# **Specific Objective:**

- To save time and resources.
- To keep individual Vehicle information secure.
- To overcome the manual Vehicle recording system.
- To increase employee satisfaction.
- To reduce the errors and the paperwork.
- It enables fast data retrieval.

# List of the functions that should be used in the "Vehicle Management System project in C"

#### head\_Message():

It prints the message on the top of the console and prints the message as per operation. For example:

# print\_Message\_in\_Center():

This function prints the message in the middle of the head massage. You will have to pass a message and this function will print the message in the Center of the head massage.

For this, when the login() function is called inside the login() function the head\_Message() function is also called like this "head\_Message("Login");". So, the head\_Message() function is called with the "Login" Message. Now, inside the head\_Message() function, this function is called with a message like this "print\_Message\_in\_Center(message);". So, now print the message in such a way that it is in the middle like the example.

### welcome\_Message():

This function displays the first welcome screen of the "Vehicle Management System" and asks the user to press any key to access the Vehicle Management application. For example:

# is\_Name\_Valid():

In this function, it checks whether the User Name, Vehicle Name, Vehicle Manufacturer Name..etc. is valid or not. For example: if Vehicle Name is "@%0h" then it is wrong so it should take input and check the validation. You can be permitted this function to take the space in names.

# is\_Valid\_Date():

Same as the is\_Name\_Valid() function. This function read the date in the format of dd/mm/yyyy and also it validates the entered date.

#### menu():

This function displays the" Vehicle Management System" menu and asks the user to select the option. If the user selects 6, then the application will close. For example:

#### addVehicleInDataBase():

When the user enters Choice 1. This function is called then in the function the user will input the "VEHICLE DETAILS" as required:

Vehicle ID NO = 1

Vehicle Name = Tesla Model S

Vehicle Manufacturer Name = Tesla

Vehicle issued date by Manufacturer (day/month/year): 22/06/2012

#### For example:

Then Store them for further use.

#### searchVehicles():

When the user enters Choice 2. This function is called then in this function the user will input the Vehicle Name that the user wants to search then the program will show the all available "VEHICLE DETAILS" of that Vehicle. If the Vehicle is not available in the list, it shows the message Vehicle not found in records.

#### For example:

User input: Vehicle Name = Tesla Model S

As the Vehicle is available in the list, it shows:

User input: Vehicle Name = Ford Mustang Mach E

As the Vehicle is not available in the list, it shows:

#### viewVehicles():

When the user enters Choice 3. This function is called then it will display all the stored Vehicle details. If there is no Vehicle available in the records, then it displays the message record is empty.

All the stored Vehicle details:

```
VIEW VEHICLE DETAILS
Vehicle Count = 1
Vehicle id = 1
Vehicle name = Tesla Model S
Vehicle Manufacturer Name = Tesla
Vehicle issued date by Manufacturer (day/month/year) = (22/6/2012)
Vehicle Count = 2
Vehicle id = 2
Vehicle name = Bugatti Divo
Vehicle Manufacturer Name = Bugatti
Vehicle issued date by Manufacturer (day/month/year) = (23/7/2021)
Press any key to go to main menu.....
```

If there is no Vehicle available in the records:

#### deleteVehicles():

When the user enters Choice 4. This function is called then this function asks for the "Vehicle ID" from the user for which the user wants to delete Vehicle details. If the user enters the wrong id which is not available in the records, then it displays the message "Record not found". If Vehicle ID is found in the record then it deletes the Vehicle details from the record and displays "Record deleted successfully.....".

If Vehicle ID is found in the record:

If Vehicle ID is not in the record:

# update Credential ():

When the user enters Choice 5. This function is called then It asks the user for the new username and password. After taking the password and username it updates the existing username and password and displays "Your Password has been changed successfully" then asks the user to login again then if any key is pressed the program will take you to the login page the user has to login again using the updated username and password.

Entering New Username and Password:

Login again using the updated Username and Password:

Finally, if the user enters Choice 6. The program shows "Thank you!!!" and exit the program.

| <~><~><~>  |   | <n><n><n><n><n><n><n><n><n><n><n><n><n>&lt;</n></n></n></n></n></n></n></n></n></n></n></n></n> |
|--|---|---|
| <~><~><~>  | Vehicle Management System   | <~><~><~><  |
| <~><~><~>  |   | <~><~><~><  |
| <~><~><~><~><~>  | <~><~><~><~><~><~><~><~>  | ·<~><~><~><~><~><   |
| <~><~><~><~><~>  | <~><~><~><~><~><~><~><~><~><~>  | <~><~><~><~><~><  |
| <~><~><~><~>   | <n><n><n><n><n><n><n><n><n><n><n><n><n>&lt;</n></n></n></n></n></n></n></n></n></n></n></n></n> | ·<~><~><~><~>   |
|  | MAIN MENU   |   |
| <~><~><~><~><~>  | <~><~><~><~><~><~><~><~>  | ·<~><~><~><~><~><   |
| 1.Add Vehicle<br>2.Search Vehicles<br>3.View Vehicles<br>4.Delete Vehicle<br>5.Update Password<br>6.Exit |   |   |
| Enter Choice: 6  |   |   |
|  | Thank you!!!  |   |

| <br>End |  |
|---------|--|
|         |  |