

Final Project

1) I tested to see if I could display my inventory.

```
New vehicle information added successfully
***Menu***
1.Display Inventory
2.Add a vehicle
3.Update a vehicle
4.Sell or lease a car
5.Search inventory by Make and model and category
6.Read catalog from file
7.Write catalog to file
8.Display Vehicles in Price Range
9.Exit
Enter your choice: 1

***Vehicle Inventory***
Vehicle:1
VIN:1231
Make: 2341
Model: Tesla
year: 1324
Price: 254323
Category: old
```

2) Then I tested to make sure I could add a vehicle.

```
***Menu***
1.Display Inventory
2.Add a vehicle
3.Update a vehicle
4.Sell or lease a car
5.Search inventory by Make and model and category
6.Read catalog from file
7.Write catalog to file
8.Display Vehicles in Price Range
9.Exit
Enter your choice: 2
Enter VIN: 1231
Enter make: 2341
Enter model: Tesla
Enter year: 1324
Enter price: 254323
Enter Category: old
New vehicle information added successfully
***Menu***
```

3) After that I tested to see if I could update the vehicle.

```
***Menu***
1.Display Inventory
2.Add a vehicle
3.Update a vehicle
4.Sell or lease a car
5.Search inventory by Make and model and category
6.Read catalog from file
7.Write catalog to file
8.Display Vehicles in Price Range
9.Exit
Enter your choice: 3
Enter vehicle VIN to update data:1324
Enter new make: 2432
Enter new model: Tesla
Enter new year: 2016
Enter new price: 20000
Enter new or old: old
Vehicle data updated successfully
***Menu***
```

4) Forth I tested to make sure I could delete a vehicle from my inventory if it was sold or leased.

```
***Menu***
1.Display Inventory
2.Add a vehicle
3.Update a vehicle
4.Sell or lease a car
5.Search inventory by Make and model and category
6.Read catalog from file
7.Write catalog to file
8.Display Vehicles in Price Range
9.Exit
Enter your choice: 4
Enter vehicle VIN to delete vehicle info: 1324
Vehicle info deleted sucessfully
***Menu***
```

5) Then I made a search function to be able to search by make, model or category.

```
***Menu***
1.Display Inventory
2.Add a vehicle
3.Update a vehicle
4.Sell or lease a car
5.Search inventory by Make and model and category
6.Read catalog from file
7.Write catalog to file
8.Display Vehicles in Price Range
9.Exit
Enter your choice: 5
Enter Make, Model or Category to search a vehicle info:
1231
Insight
old
**Vehicle found**
VIN:8998
Make: 3678
Model: Insight
year: 2006
Price: 4565
***Menu***
```

6) I made sure my program could receive input from a text file.

```
***Menu***
1.Display Inventory
2.Add a vehicle
3.Update a vehicle
4.Sell or lease a car
5.Search inventory by Make and model and category
6.Read catalog from file
7.Write catalog to file
8.Display Vehicles in Price Range
9.Exit
Enter your choice: 6
VIN:8993
Make:1456
Model:Civic
Year:2005
Price:3456
Category: Old
VIN:8998
Make:3678
Model:Insight
Year:2006
Price:4565
Category: New
VIN:8993
Make:3546
Model:Civic
Year:2005
Price:7896
Category: New
VIN:9800
Make:3234
Model:Prius
Year:2008
Price:6786
Category: Old
VIN:9995
Make:5865
Model:Insight
Year:2010
Price:7899
Category: New
VIN:8998
Make:6234
Model:Insight
Year:2006
Price:8907
Category: Old
```

7) I made sure my program could output into that same text file.

```
New vehicle information added successfully
***Menu***
1.Display Inventory
2.Add a vehicle
3.Update a vehicle
4.Sell or lease a car
5.Search inventory by Make and model and category
6.Read catalog from file
7.Write catalog to file
8.Display Vehicles in Price Range
9.Exit
Enter your choice: 7

***Vehicle Inventory***

Successfully written to file
```

8) I made a function to be able to search for cars in a specific price range given from the user.

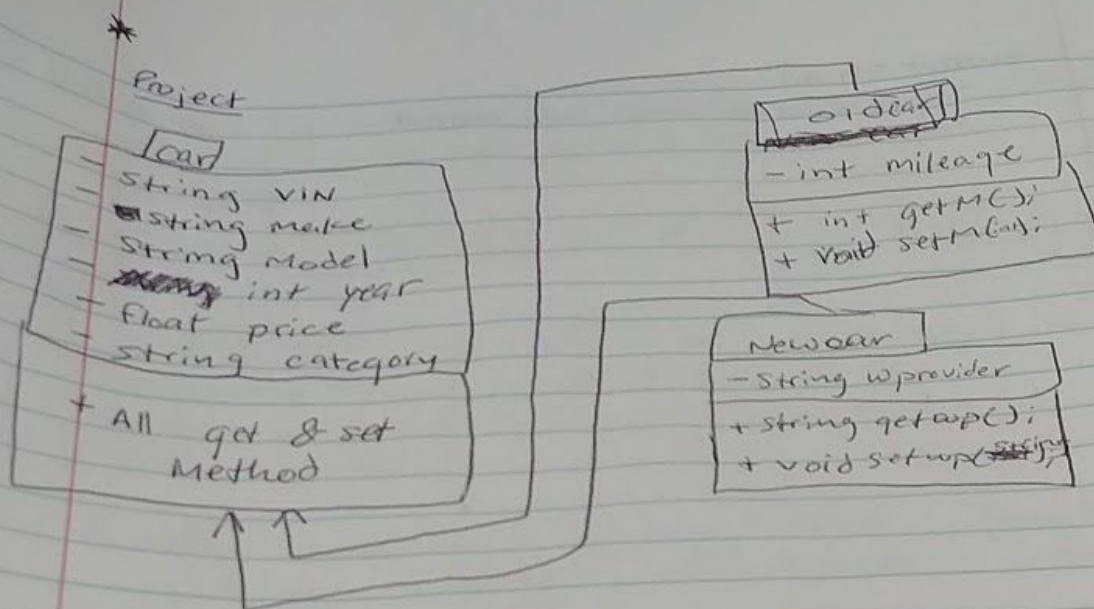
```
***Menu***
1.Display Inventory
2.Add a vehicle
3.Update a vehicle
4.Sell or lease a car
5.Search inventory by Make and model and category
6.Read catalog from file
7.Write catalog to file
8.Display Vehicles in Price Range
9.Exit
Enter your choice: 8
Enter Lowest Price
8000
Enter Highest Price
9000

***Vehicle Inventory within price range***:8000-9000
Vehicle:6
VIN:8998
Make: 6234
Model: Insight
year: 2006
Price: 8907
Category: Old
Vehicle:9
VIN:10000
Make: 2376
Model: Prius
year: 2008
Price: 8906
Category: Old
Vehicle:10
VIN:10000
Make: 2378
Model: Insight
year: 2010
Price: 8978
Category: New
Vehicle:15
VIN:9998
Make: 3423
Model: Prius
year: 2008
Price: 8675
Category: New
```

9) Then I made a exit function.

The exit function worked properly.

I used this template to create my project.



```

int main()
{
    vector<oldcar> oCar;
    vector<newcar> nCar; } inventory

    Showmenu();
    searchInventory();
    removeInventory();
    (sell or lease car())
}
  
```

As shown above I first created a vehicle class with all my functions(set, get, and otherwise) inside of it. Then I created a separate file for the implementation of all my functions. Finally I created a main function to display my menu. Inside the main I put the menu.