

The program shall keep track of information regarding the dealerships available vehicles, including number, brand, type, and capacity. *Program will do so by storing vehicle information in a class hierarchy*

The program shall prompt for user input and produce a list of cars corresponding to the customer's capacity preferences. *The user should be able to input a desired number of seats, and receive a list of available cars that match this requirement.*

The program shall have an option to display all inventory that is in stock at any given time. *Program may use a menu option to ask the user if they want to search for a vehicle for the customer or view the entire inventory.*

### **Structured specification of a requirement for the Car Rental Company:**

#### **Function**

Provide a list of available vehicles that match the customers required capacity

#### **Description**

Lists all available vehicles that match the information provided by the user in order to create an easily accessible and accurate documentation of all available inventory that fits the needs of the customer

#### **Inputs**

Number of seats required in the vehicle (car's capacity)

#### **Source**

User input

#### **Outputs**

List of vehicles that have the same capacity requirements as are input

#### **Destination**

Terminal

#### **Action**

If the the number input by the user is equal to the car's capacity, car information will be displayed for all matching vehicles in the inventory

#### **Requirements**

User input

Car Rental Inventory

#### **Pre-condition**

There are cars available for rental that match capacity requirements of the customer

#### **Post-condition**

The information of these vehicles is displayed on the console