SECJ1023 Programming Technique 2

Assignment 1: Associations, Aggregations, and Compositions (5%)

Instructions:

1. You need to put your name and the description of the program at the top of your \*.h and \*.cpp files.
2. You are also required to give some comments regarding the program as your documentation.
3. // put all members names at the top of your header and cpp files

Questions:

Consider the class diagrams which show data model for a car rental company.

Put the class definitions in the header files.

|  |
| --- |
| Phone |
| - phoneNumber: string |
| + Phone (string)  + getPhone (): string |

|  |
| --- |
| Customer |
| - name: string  - phone: \*Phone  - car: \*Car |
| + Customer (string, phone: \*Phone, car: \*Car)  + getName (): string  + getCar(): string  + print (): void |

|  |
| --- |
| Car |
| - carPlate: string |
| + Car(string)  + getPlate (): string |

Note the company has set the rule that each customer can only rent one car at a time.

Create a C++ program to implement all three classes with the given attributes and operations.

Test the class by creating an object of Car and an array of customers:

Customer Name Phone Number Rented Car Plate

ABC +60123456789 JJJ28

XYZ +60109876543