Vehicle

- vehicleRego: string
- **make: string**
- model: string
- year: int
- vehicleGrade: VehicleGrade
- numSeats: int
- transmission: TransmissionType
- fuel: FuelType
- GPS: bool
- sunRoof: bool
- dailyRate: double
- colour: string
- stringGPS: string
- **stringSunRoof: string**

+ToString(): string

EconomyVehicle

+ EconomyVehicle()

FamilyVehicle

+ FamilyVehicle()

CommercialVehicle

+ CommercialVehicle()

LuxuryVehicle
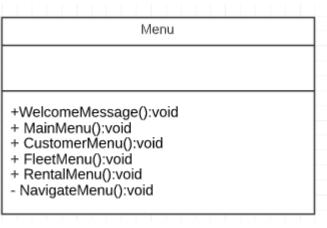
+ LuxuryVehicle()

Fleet

+Vehicles: List<Vehicle>

+ DisplayFleet():void
+ CheckVehicleExist():bool
+ AddVehicle():void
- CreateVehicle():void
- GetVehicle():Vehicle
+ RemoveVehicle():void
+ ModifyVehicle():void
- SaveVehiclesToFile():void
+ LoadFromFile():void
- GetVehicleRate():double
+ VehicleIsRented():bool
+ CustomerIsRenting():bool
+ RentVehicle():void
+ ReturnVehicle():void
+ DisplayRentals():void
- SaveRentalsToFile():void
+ LoadRentalsFromFile():void

Search

+UnrentedRegistrations: List<string>

+ Query():string
+ ParseQuery():List<Token>
+ ShuntingYard():List<Token>
- GetAttributeList():List<string>
- GetAttributeSet():SortedList
+ SearchVehicles():void

Validation

+ ReadAlphabeticalString():string
+ ReadAlphanumericString():string
+ ReadRegistration(): string
+ ReadRegistration():string<<overloaded>>
+ ReadCustomerID():int
+ ReadGender():Gender
+ReadTransmission():TranmissionType
+ ReadFuel():FuelType
+ReadDate:DateTime
+ReadNumber():int
+ReadNumber():int<<overloaded>>
+ReadNumber():int<<overloaded>>
+ ReadDouble():double
+ ReadBool():bool

Menu

+WelcomeMessage():void
+ MainMenu():void
+ CustomerMenu():void
+ FleetMenu():void
+ RentalMenu():void
- NavigateMenu():void

Customer

- customerID: int
- title: string
- firstNames: string
- lastName: string
- gender: Gender
- DOB: DateTime

+ToString(): string
+Customer()

CRM

+Customers: List<Customer>

- FindMaxID(): int
+ AddCustomer():void
+ DisplayCustomers():void
+ CheckCustomerExist():bool
- GetCustomer():Customer
+ RemoveCustomer():void
+ ModifyCustomer():void
- SaveToFile():void
+ LoadCustomersFromFile()

Token

OperatorToken

+ OperatorToken()
+ToString()

LeftParenthesisToken

+ToString()

RightParenthesisToken

+ ToString()

AttributeToken

+ AttributeToken()
+ToString()