

Classes:

Customer :

- ID: string
 - firstName:string
 - lastName:string
 - phoneNumber:string
 - gender:enum
 - dateOfBirth:string
 - Vehicle: Vehicle
 - salesperson: Salesperson
- +displayDetails():string
+ setSalesperson(salesperson: Salesperson):
+ getSalesperson(): Salesperson

Employee

- ID: int
 - firstName:string
 - lastName:string
 - phoneNumber:string
 - gender:enum
 - dateOfBirth:string
 - department: string
 - jobTitle: string
 - basicSalary: float
- + displayDetails(): None
+ displaySalesDetails(): None
+displayName():None
+addVehicle(vehicle:Vehicle):
+removeVehicle(VIN:string):

Manager(Employee) :

- salespersons: List[Salesperson]
- + addSalesperson(salesperson: Salesperson): None
+ removeSalesperson(salesperson: Salesperson): None
+addVehicle(vehicle:Vehicle):
+removeVehicle(VIN:string):

Salesperson(Employee) :

- manager: Manager
 - sales: List [vehiclesSale]
 - customers: List[Customer]
- +addSales(vehicleSale: VehicleSale)
+calculateCommission():float
+calculateSalary():float
+ addCustomer(customer: Customer): None
+ removeCustomer(ID: int): None

Vehicle :

- VIN: string
 - name: string
 - price: float
 - type:string
 - maxSpeed:float
 - numOfDoors:int
 - numOfWheels:int
 - color:enum
- +displayVehicleDtails():none

ElectronicCar(Vehicle)

- batteryCapacity:float
- MaxDistanceSingleCharge:float
- chargingTime:float

FuelCar(Vehicle)

- fuelType:string
- fuelCapacity:float

VehicleSale

- saleperson:Saleperson
 - vechicle:Vehicle
 - customer:Customer
 - salePrice:float
- +calculatePrice():none

- Manager and salesperson are subclasses that inherit attributes from the employee (parent) class.
- ElectronicCar and FuelCare are subclasses that inherit attributes from the Vehicle class(parent)class.

Multiplicity :

- A manager has a one-to-many association with salesperson(One manager can manage multiple
- The salesperson has a one-to-many association with VehicleSale(one salesperson can make multiple vehicle sales)
- A VehicleSale has a one-to-one association with Vehicle, as each vehicle sale consists of one vehicle.
- A VehicleSale has a one-to-one association with the Customer, as each vehicle sale is made to one customer.
- A VehicleSale has a one-to-one association with Salesperson (one salesperson makes each vehicle sale)