|  |
| --- |
| Car |
| -amenities:amenities;  -fp:fileParser  -model:string  -color:string  - platform:string  - transmissionType:string  - gears:int  - cylinders:int  - year:int  - numDoor:int  - vinNumber:string  - mileage:int  - milesPerGallon:int  - isElectric:bool  - priceOfAmenities:double  - baseCost:double |
| +Car(mod:string, col:string, plat:string, trans:string,  gear:int, cylinder:int, yearMade:int, numDrs:int, vin:string, milesdriven:int, mpg:int, elec:bool,amens:double,bcost:double):Car  +getModel():const string  +getColor():const string  +getPlatform():const string  +getTransmissionType():const char  +getGears():const int  +getCylinders():const int  +getYear():const int  +getNumDoor():const int  +getVinNumber():const string  +getMileage():const int  + getMilesPerGallon():const int  +checkElectric():const bool  +getPriceAmenities():const double  +getBaseCost():const double  + setModel(mod:const string &):void  +setColor(col:const string &):void  +setPlatform(plat:string):bool  +setTransmissionType(tt:const string &):bool  +setGears(ngears:int):bool  +setCylinders(ncylinder:int):bool  +setYear(yr:int):bool  +setNumDoor(ndoors:int):bool  +setVinNumber(vi:const string &):bool  +setMileage(mi:int):bool  +setMilesPerGallon(mg:int):bool  +setElectric(el:bool):bool  +setAmenities(am:double):bool  +setAmenitiesPrice(totalPrice:double):void  +setBaseCost(bc:double):bool  +calculateDeprecation():const double  + calculateCost():const =0 virtual double |
| Friends:  //operator<<(outputFile:ostream&,car:const Car&):ostream&  //operator>>(input:istream&,car:Car&):istream& |

|  |
| --- |
| Amenities |
| -amenities:string[8]  -previousChoices: vector<int>  -amenityPrices:double[8]  -numAmenities:int |
| +addToPreviousChoices(choice:int):void  +printAmenitiesList():const void  +getPriceOfAmenity(index:int):const double  +getPreviousChoices():const vector<int>  +setNumAmenities(num:int):bool |
| No Friends. |

|  |
| --- |
| CarDealerShip |
| - inventory:vector<Car\*>  -name:string |
| +CarDealerShip(n:string):CarDealerShip  +getInventory():const vector<Car\*>  +addToInventory(toad:Car\*):void  +removeFromInventory(index:int):bool  +setName(n:const string&):void  +getName():const string  +getTotalInventoryPrice():const double  +checkInventory(ind:int):bool  +checkInventory():bool |
| Friends:  //operator<<(output:ostream&,cds:const CarDealerShip&):ostream& |

|  |
| --- |
| FileParser |
| No Private Members. |
| +CheckWord(filename:const string&, search:string):bool |
| No Friends. |

|  |
| --- |
| Sedan |
| -isLuxury:bool |
| +Sedan(isLux:bool, mod:string, col:string, plat:string, trans:string,  gear:int, cylinder:int, yearMade:int, numDrs:int, vin:string, milesdriven:int, mpg:int, elec:bool,amens:double,bcost:double):Sedan  +calculateCost() const double  +setLuxury(luxStat:bool):bool  +getLuxury():const bool |
| No friends. |

|  |
| --- |
| Truck |
| -lengthOfBed:double |
| +Truck(mod:string, col:string, plat:string, trans:string,  gear:int, cylinder:int, yearMade:int, numDrs:int, vin:string, milesdriven:int, mpg:int, elec:bool,amens:double,bcost:double,  lenBed:double):Truck  +calculateCost() const double  +setLengthOfBed(lb:double):bool  +getLengthOfBed():const double |
| No friends. |

|  |
| --- |
| SUV |
| -horsePower:int |
| +SUV(mod:string, col:string, plat:string, trans:string,  gear:int, cylinder:int, yearMade:int, numDrs:int, vin:string, milesdriven:int, mpg:int, elec:bool,amens:double,bcost:double, seats:int):SUV  +calculateCost() const double  +setSeats(seats:int):bool  +getSeats():const int |
| No friends. |

|  |
| --- |
| SportsCar |
| -numSeats:int |
| + SportsCar(mod:string, col:string, plat:string, trans:string,  gear:int, cylinder:int, yearMade:int, numDrs:int, vin:string, milesdriven:int, mpg:int, elec:bool,amens:double,bcost:double, hp:int):SportsCar  +calculateCost() const double  +setHorsepower(hp:int):bool  +getHorsepower():const int |
| No friends. |