

Car
<ul style="list-style-type: none"> - gallonsOfGas : double - miles : int - milesPerGallon : int
<ul style="list-style-type: none"> + Car(gallons : double, mpg : int) + getGallonsOfGas() : double + setGallonsOfGas(gallons : double) : void + getMiles() : int + getMilesPerGallon() : int + drive(distance : int) : void

Notice that the Car constructor takes two arguments, but we have three fields. What do we initialize a field to by default when we aren't given an initial value?

Our setters and getters are straightforward, just like we've written them before.

The drive method is given a distance (in miles) of how far the car will travel. We will want to increase miles by distance, then update gallonsOfGas to reflect the amount of gas used while driving.

(Remember, miles and milesPerGallon are both ints, but gallonsOfGas is a double. How can we ensure that the correct calculation is performed?)