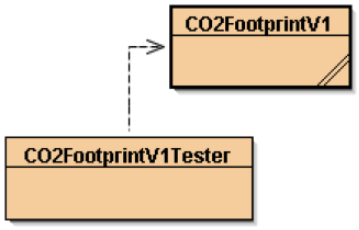
08.09 Assignment Instructions

Instructions: Using a program that calculates the amount of carbon dioxide emitted for each gallon of gas consumed by a car, insert **`Javadoc`** comments where appropriate.

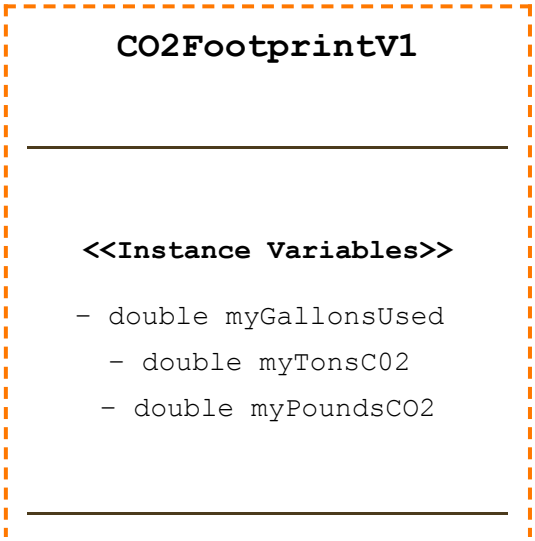
1. Create the 08.09 Assignments project in the Mod08 Assignments folder.
2. Carefully read the instructions before you attempt the assignment.
3. Download the classes **`CO2FootprintV1`** and **`CO2FootprintV1Tester`** to the newly-created project folder.

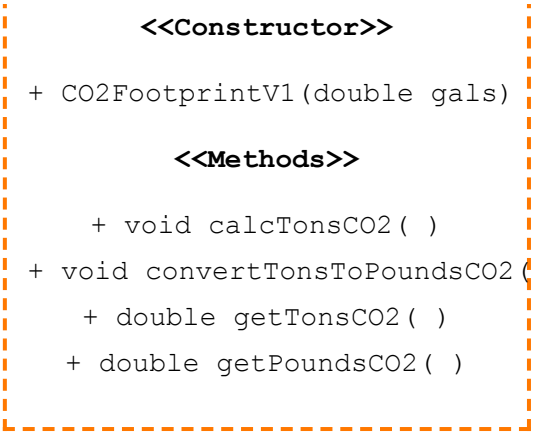


4. Rename the classes to version 2. Be sure to update all occurrences of V1 to V2.
5. Compile and run the program. Study the code and perform a desk check.
6. Use **`Javadoc`** comments to update the heading to include the author and version. Complete the statement related to the purpose and description of the class.
7. Create **`Javadoc`** comments for the constructor and each method in the CO2Footprint class. Use the demo program in the lesson as a model.
8. Be sure to document any relevant preconditions or postconditions.
9. Make sure all formulas are explained so another programmer would know what is happening.
10. In the client class, update the heading to include the purpose, your name, and the date. Throughout the program, document key sections of code using in line comments.

About the program:

- Use the class diagram for **`CO2FootprintV1`** as a guide while analyzing the program.
- How many metric tons of CO2 are emitted for the number of gallons of gas projected to use in a year is calculated using the following: 8.78 x 10-3 metric tons of CO2 are emitted per gallon of gas.
- Another calculation converts convert the metric tons of CO2 to pounds.




<<Constructor>>
+ CO2FootprintV1(double gals)
<<Methods>>
+ void calcTonsCO2( )
+ void convertTonsToPoundsCO2( )
+ double getTonsCO2( )
+ double getPoundsCO2( )

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