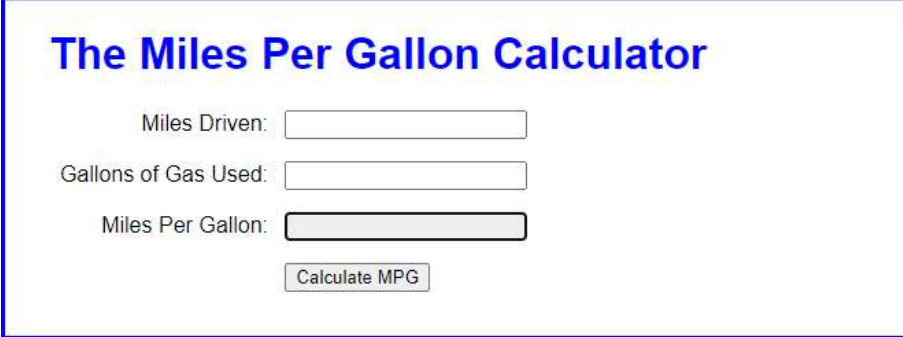# Short Exercises

Each of these exercises is designed to test just one or two JavaScript or jQuery skills, and each is designed so it can be done within 5 to 30 minutes. At the start of each exercise, you'll see an estimated time for the exercise.

# Short 4-1     Enhance the MPG application

In this exercise, you'll make a couple of quick enhancements to the Miles Per Gallon application, like clearing the two entries if the user double-clicks in the Miles Per Gallon text box. Estimated time: 10 to 15 minutes.

**The Miles Per Gallon Calculator**

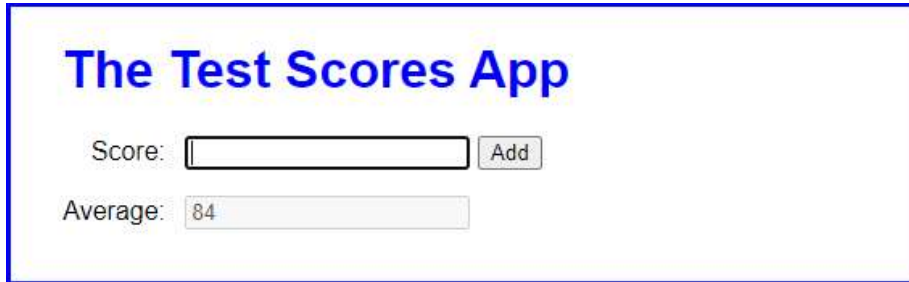Miles Driven: [                    ]

Gallons of Gas Used: [                    ]

Miles Per Gallon: [                    ]

[ Calculate MPG ]

1.  Open the application in this folder:

    `exercises_short\ch04\mpg`

2.  Run the application to see that it works just like the one in the book. Then, in the JavaScript file, note that there's a clearEntries() function that isn't used.

3.  Enhance the application so the entries are cleared when the user double-clicks in the Miles Per Gallon text box. (Incidentally, this won't work if the text box is disabled.)

4.  Enhance the application so the Miles Driven text box is cleared when it receives the focus. Then, do the same for the Gallons of Gas Used text box.

5.  Enhance the application so the calculation is done when the focus leaves the Gallons of Gas Used text box. To do the calculation, you just need to run the processEntries() function when that event occurs.

# Short 4-2     Use arrow functions with the Test Scores application

In this exercise, you'll modify a version of the Test Scores application so it uses arrow functions instead of function expressions. This version displays the average score after each score is entered as shown below. You'll also use an anonymous function for the DOMContentLoaded event handler. Estimated time: 10 to 15 minutes.



1.  Open the application in this folder:

    `exercises_short\ch04\test_scores`

2.  Run the application and add two or more scores to see that the new average is displayed each time another score is added.

3.  Review the code in the JavaScript file and note that all of the functions are written as function expressions.

4.  Modify the $(), addScore(), and calculateAverage() functions so they use arrow functions instead of function expressions.

5.  Modify the document.addEventListener() method so it uses an anonymous function for the event handler instead of the processDOM() function.