Lab 2 Instructions for Group C - JavaScript Functions

CS 133JS, Beginning Programming: JavaScript

Overview

The objective of this lab is to give you practice:

- Writing functions
- Calling functions

- Linking to a JavaScript file
- Interacting with HTML elements

Part 1: Exercises

Do the exercises listed on the **Function Exercises** page.

Part 2: Web Pages

For part 2, you will create two web pages.

A web page for converting temperature

Create a web page that a person can use to convert either Celsius to Fahrenheit or vise-versa .

- 1. Create a .js file and put the function you wrote in part 1 for converting temperature in it.
- 2. Modify the function so it converts in the other direction, converting Celsius to Fahrenheit. Here is the formula: temperature F = 9/5 * temperature C + 32
- 3. Create a web page and add code to the head element so that this page can use your js file.
- 4. Add HTML code to the web page to:
 - a. Give the page a title and a heading.
 - b. Provide some brief instructions to the user.
 - c. Get the temperature to be converted using a JavaScript prompt or an HTML input element and convert the string to a number.(All the code to do I/O should be in the HTML file.)
 - d. Call the function to convert the temperature and display it on the web page.

Implementation notes:

- Use prompts to get the user's input.
- Use parseFloat() to convert the string value from the prompt to a numbera. See this tutorial to learn how and why to use parseFloat().
- Use getElementById and innerHTML to show the result on the web page.

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A "fill in the blank" quiz web page

Create a web page that presents seven "fill in the blank" questions on any topic you choose. An example topic might be athletes. You could ask questions like, "______ is the coach of the Portland Trailblazers".

- 1. Create a .js file, and in it write a function that:
 - a. Has two parameters
 - i. The user's answer.
 - ii. The right answer.
 - b. Checks to see if the answer is right.
 - c. Returns ether the word "right" or the word "wrong".
- 2. Create a web page with seven questions.
- 3. Add a script element that:
 - a. Uses JavaScript prompts or HTML input elements to get the user's answer and call the function you wrote.
 - b. Code in the script element will put the correct answer, and whether it was right or wrong, in an HTML element under the question on the web page.

Submitting your lab work on Moodle

Beta Version

Post the following in the *Lab Beta forum*:

- 1. The web page files (.html and .js) you created for part 2. (Zip the files for you web pages and attach them to the post.)
- 2. A code review of your lab partner's web page for part 2. (Review one of your lab partners' web pages using the Code Review Form provided.)

Code Review

1. Submit a copy of the code review above to the *Lab Code Review assignment*.

<u>Production Version</u>

Based on the review and helpful advice from your lab partner, you may revise your web page. On the code review from your lab partner, complete the "Production" column to show what you revised. Upload the following to the *Lab Production Version* assignment:

- 1. The .html and .js files for part 1.
- 2. The web page files (.html and .js) you created for part 2.
- 3. The code review from your lab partner with the "Prod" column filled in by you.