

CPSC 1045: Assignment 3 [15 marks]

Objectives:

1. Use values, types, operators, expressions, and statements
2. Use prompt() and functions to make an interactive web page

Resources

- http://www.w3schools.com/js/js_popup.asp
- https://www.w3schools.com/js/js_functions.asp

Overview

The purpose of today's lab is to create a JavaScript to practice taking input from the user and returning output to the user. This lab will also allow you to practice using functions to accomplish small programming tasks.

Lab work [20 marks]

1. Go to mylinux.langara.bc.ca/~jmckeescott/1045/a3.html. The video here shows you how the completed Assignment 3 webpage should work.
2. Download A3.zip and extract the html file it contains. Have a look at the HTML file and notice the buttons and divs that have been created for you. **Do not modify the HTML code.**
3. In Atom/Brackets create a new file and save it as a3.js. Make sure that this file is in the same directory as a3.html.
4. In a3.js, write the JavaScript to complete the following exercises.
 - a) Write a function called convertWeight() that prompts the user to enter their weight in pounds and then displays that weight in kilograms in div1 on webpage. One pound is 0.454 kilograms.
 - b) Write a function called calculateTip() that prompts the user to enter the cost of the meal as well as how much they would like to tip (as a percentage). The function should then display a summary in div2 on the webpage. The summary should contain the cost and percentage entered by the user, as well as the amount of the tip, and the grand total of the meal.
 - c) Write a function called makeUsername() that prompts the user to enter three separate pieces of information to store in variables: the first name, the last name, and the 4 digit birth year.

The function should then print a username to the webpage. The user name should contain the first letter of the first name, followed by the first 4 letters of the last name, followed by the last two digits of the birth year. The first two letters of the user name should be capitalized, and the remaining letters should be lower cased.

Test that your JavaScript correctly executes for all of the problems by opening a3.html in the browser and testing all of the buttons.

Submission

- Submit to D2L ONE zip/archive file containing the JavaScript file you created as part of this lab
- If you do not zip your files, you will receive **ZERO** for this lab (<http://www.wikihow.com/Zip-Files-Together>)

5. Grading

Marks will be assigned as follows:

- 3 marks for correctly implementing exercise A
- 4 marks for correctly implementing exercise B
- 5 marks for correctly implementing exercise C
- 3 marks for proper indentation and formatting