Mandatory Assignment 1

Forfall 20. sep. 2019 av 23.59   **Poeng** 0   **Må leveres** en nettsteds-URL

Introduction

Please read the page called Mandatory Assignments - Information before continuing this assignment.

The goal of the assignment is to test whether you have acquired the most basic skills necessary to proceed with Javascript programming. This includes:

- Properly separating Javascript from CSS and HTML code
- Declaring variables and assigning values
- Applying simple operators
- Using getElementById to obtain input and set output values
- Correcting bugs

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Task 0

Create a directory in your htdocs-folder at _itstud.hiof.no_ containing an _index.html_ file, which is going to be used to contain all the answers of this mandatory assignment. This should act like a home-page for the assignment. It can link to a different page for each of the following tasks or contain the code required to solve all tasks on the same page.

The link to your site and also the link you hand in would then become:

> https://itstud.hiof.no/~yourusername/folderyoucreated

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Task 1

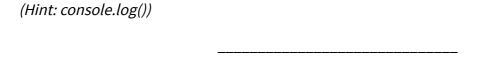Copy the linked file from this GitHub Repository, (https://github.com/xZyph/prog1_oblig1/blob/master/task1/task1.html) segment (https://www.google.com/search?q=to+segment) the HTML, CSS, and Javascript code into different files and link to them from the HTML file. This task is to encourage separation of technologies (like JavaScript, HTML and CSS) into different files, so that code is easier to manage and debug. You will have to rewrite some of the JavaScript in order to make it work, as the use of inline JS is not recommended.

(Hint: Task 6)

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Task 2

In a Javascript script, declare two variables and calculate the result of applying each of the four mathematical operators to them; addition, subtraction, multiplication and division. Then log the result to the console.

(Hint: console.log())

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Task 3

Reformulate the code from Task 2 so that you prompt the users for two input values. Then use the DOM (for example in order to change the text of a paragraph) to show the result of the calculation. Is the outcome different when you explicitly convert the input values to a number? Write down your reflections either in the code comments, or in an HTML paragraph.

(Hint: prompt(), getElementById().innerHTML, parseInt())

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Task 4

Create a function that will take two numerical values from two HTML textboxes as input, and perform a calculation when a button is pressed. It is up to you to decide what calculation to do. After the calculation, update the text of a paragraph to show what calculation you did, the result, and whether the result is even or odd.

(Hint: getElementById().value, getElementById().innerHTML)

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Task 5

Explain some use cases for the modulo operator in programming. For example, how can we as programmers use this operator to check numbers for certain properties?

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Task 6

Copy the files from this **GitHub Repository** **(https://github.com/xZyph/prog1_oblig1/tree/master/task6)**. The page asks you how may cups of coffee you have had today. When a number is entered in the input field and the button is pressed, it should produce a text that describes your coffee status. If the

amount of cups is less than 3, it suggests that you need more coffee. Even if you had more than 3 cups, it still suggests you have one more cup.

However, the program is buggy. There are a total of 5 errors in the *task6.html* and *task6.js* files that must be corrected for the program to work correctly. Scout through the code for bugs and correct them.

(Hint: Task 1)

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