

Laboratory 08 – JavaScript

Task 01

Take the “index.html” and “style.css” files from the Teams folder and analyze their contents and structure. Create a JavaScript file and add it to your HTML document. In this laboratory, use “strict mode”. Read more about “strict mode” in C08.

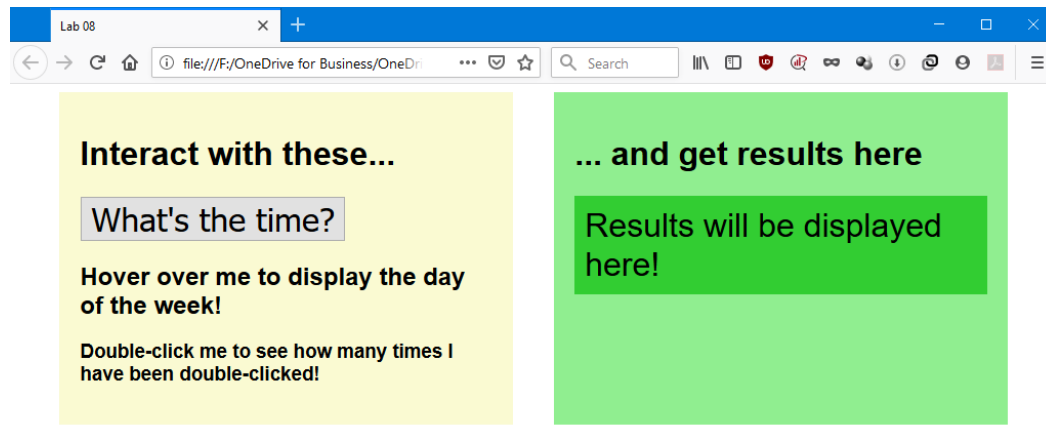


Figure 1. Rendering of the provided HTML document

Task 02

Write a function that displays the current time in HH:MM:SS format in the dark-green div whenever the “What’s the time?” button is clicked.

Notice that when the hours/minutes/seconds have a single digit, an extra “0” is added to them at the beginning (e.g.: the time looks like: “15:09:04” and not “15:9:4”).

Hint: write a function that adds the beginning “0” to a number that has only a single digit and call it for the hours/minutes/seconds, before displaying them.

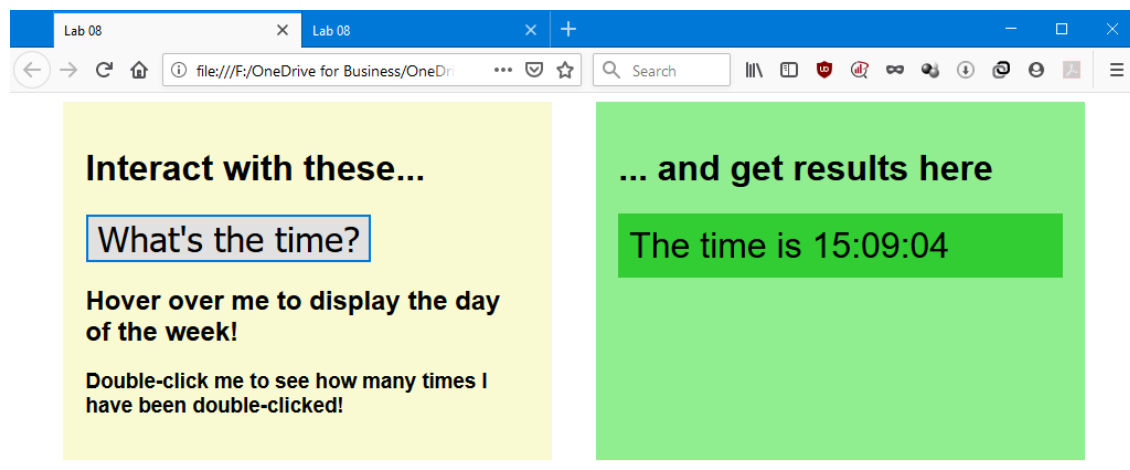


Figure 2. Task 02 – Clicking the button displays the current time

Task 03

Implement a function that displays the current day of the week (e.g.: “Today is Thursday”) in the dark-green div whenever the text “Hover over me to display the day of the week!” is hovered over.

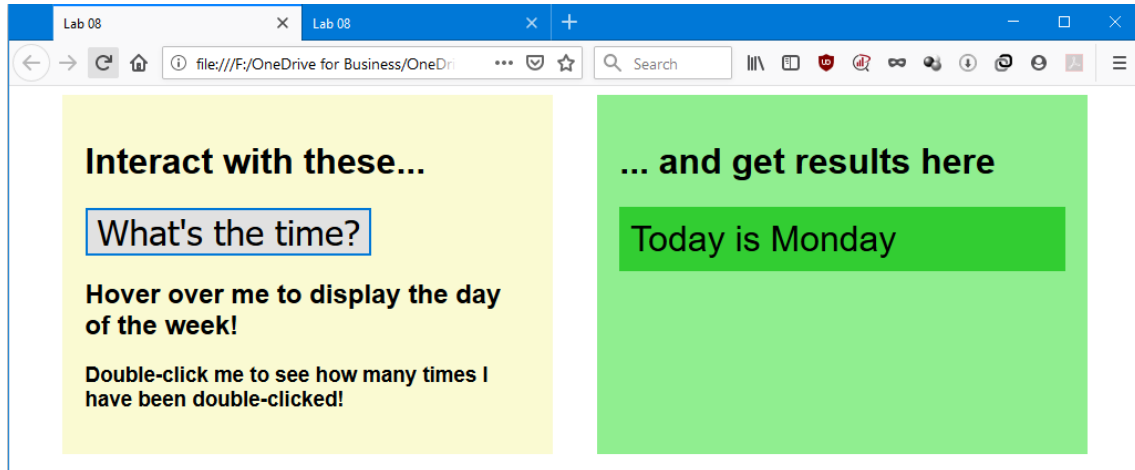


Figure 3. Hovering over the `<h2>` elements displays the current day of the week

Task 04

Create a function that counts how many times the element “Double-click me to see how many times I have been double-clicked!” has been double-clicked. Display the information “I have been double-clicked x times” in the dark-green div.

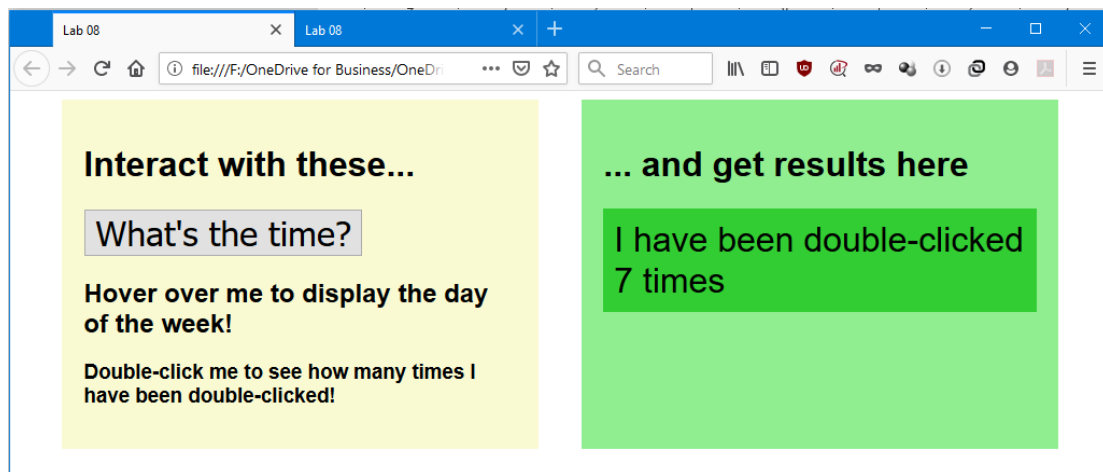


Figure 4. Double-clicking the `<h3>` elements counts and displays how many times it has been double-clicked

Task 05

Create a function that when the “Calculate” button is pressed, calculates the sum of the first “n” numbers, where “n” is the number that was input by the user on the “number field” next to the button.

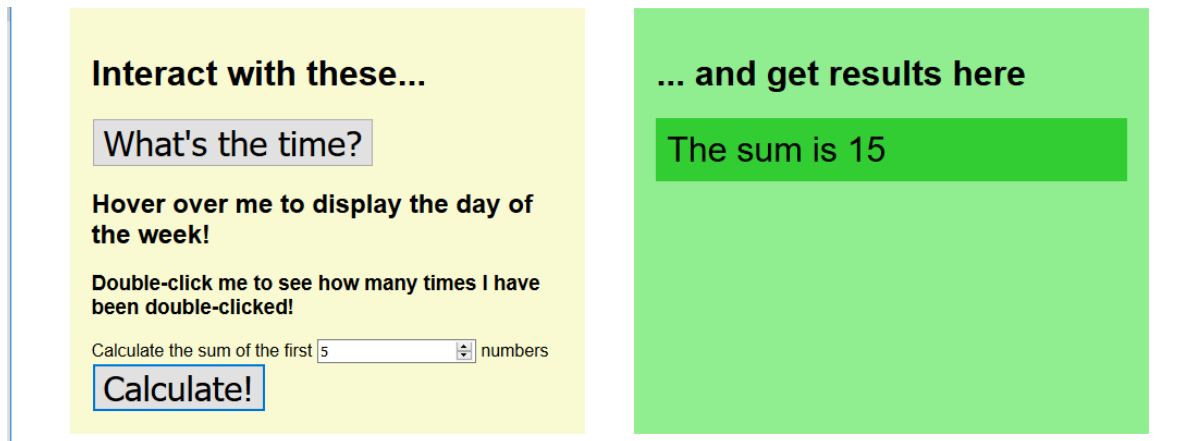


Figure 5. Pressing the “Calculate” button will display the sum of the first “n” numbers input in the number field

Task 06

Activate the “Developer Tools” by pressing F12 in your browser window. Navigate to the console and place a breakpoint inside any of your functions. Execute an action (e.g.: clicking a button) that calls the respective function. Use the Watch Window to add your variables and the “Step into/over” buttons to execute your code step by step. Follow the execution of your code and the values your variables take as it is executed.

Upload your work in a ZIP file to the Assignment and “Hand in” the files!