

JAVASCRIPT | DAY 4 | CLASSWORK

Basic Exercises

Exercise 1

Create a form in HTML with input fields for your firstname, lastname and age. After the form is submitted, write a function to extract and display these values in a separate div on the webpage.

- If the length of your firstname is longer than 5 characters, display it in green.
- If it's 5 characters or shorter, display it in red.

Exercise 2

Extend the form you created in Exercise 1 by adding a dropdown (select option) for choosing a profession. You can include options like IT, hospitality, education, etc.

Once the form is submitted, the background color of the div displaying the form's information should change based on the selected profession:

- If 'IT' is selected, change the background color to purple.
- If 'hospitality' is chosen, switch the color to yellow.

Feel free to add more professions and corresponding colors.

(Hint: extracting the selection value is done in a similar way as extracting the input values)

Intermediate Exercises

Exercise 1 | Disappearing Santas

Create a Javascript program that will make the Santa Clauses disappear on a click from the following 3x3 matrix. Each click should only remove the specific Santa that was clicked, leaving the rest of the images unchanged.



Feel free to use the following image URLs.

[*Gift Image*](#)

[*Santa Image*](#)

Exercise 2 | Dynamic Background

Create a JavaScript function to create random background colors each time we click a button that we had on the website.

Hint:

- Consider the RGB format for color values
 - Consider the Global DOM built-in properties and methods
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Advanced Exercises

Exercise 1 | Mouse Event Handling

Create a circle and center it on the page.

This circle will respond to different mouse events by displaying messages and changing the background color.

- **Hover:** Display a message below the circle that reads "You are in the circle" when the mouse is over it.

- **Mouse Leave:** Show a message that says "You are outside of the circle" when the mouse leaves the circle
 - **Click:** Change the webpage's background color to gray upon a single mouse click on the circle.
 - **Double-Click:** Change the webpage's background color to blue when you double-click on the circle.
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Challenge

Description:

Many people love games of chance and especially the thrill of "roll of the dice". For this exercise, create a page with a two-sided layout for two players based on the idea of "roll of the dice".

When the page loads, a prompt method should appear to receive a string (the name for each player), then display their names in the header of the page, for example, "Thomas vs. Martin".

In each half of the layout, place a button that calls a function. This function should create one random number. Next, display the number separately and visually appealing in each player's half, so that the player can see what they "rolled". Once both players have rolled, announce the winner based on the highest score! Do your best to create a rich game-design using CSS or Bootstrap.



Consider the following programming principles while solving the Challenge:

- Use of best practices in semantic elements, code indentation and comments
- Give your page a responsive layout with at least two breakpoints
- Correct use of attributes with functions
- Declaring variables as global or local, when appropriate
- Best practices in naming variables
- Manipulating the DOM with methods like `.getElementById()` and properties like `.innerHTML`