JavaScript getElementsByTagName() Method

Summary: in this tutorial, you will learn how to use the JavaScript `getElementsByTagName()` to select elements with a given tag name.

Introduction to JavaScript getElementsByTagName() method

The `getElementsByTagName()` is a method of the `document` object or a specific DOM element.

Here's the syntax of the `getElementsByTagName()` method:

```
let elements = document.getElementsByTagName(tagName);
```

The `getElementsByTagName()` method accepts a tag name such as `h1`, `a`, and `img` and returns a live `HTMLCollection` of elements with the matching tag name.

The `HTMLCollection` is live means that it is automatically updated when the DOM tree in the document changes.

Note that the `HTMLCollection` is an array-like object.

To create an array of elements from a `HTMLCollection`, you use the Array.of() method like this:

```
const items = Array.of(...htmlCollection);
```

In this syntax, the spread operator (`...`) spreads out the items from the `htmlCollection` and the `Array.of()` method creates an array of the items.

JavaScript getElementsByTagName() examples

The following example shows how to use the `getElementsByTagName()` method to get the number of `h2` tags in the document.

When you click the **Count H2** button, it shows the number of H2 tags:

```html
<!DOCTYPE html>
<html>
<head>
    <title>JavaScript getElementsByTagName() Demo</title>
</head>
<body>
    <h1>JavaScript getElementsByTagName() Demo</h1>
    <h2>First heading</h2>
    <p>This is the first paragraph.</p>
    <h2>Second heading</h2>
    <p>This is the second paragraph.</p>
    <h2>Third heading</h2>
    <p>This is the third paragraph.</p>

    <button id="btnCount">Count h2</button>

    <script>
        let btn = document.getElementById('btnCount');
        btn.addEventListener('click', () => {
            let headings = document.getElementsByTagName('h2');
            alert(`The number of H2 tags: ${headings.length}`);
        });
    </script>
</body>

</html>
```

Output

JavaScript getElementsByTagName() Demo

First heading

This is the first paragraph.

Second heading

This is the second paragraph.

Third heading

This is the third paragraph.

Count H2

How it works:

First, select the button **Count H2** by using the `getElementById()` method:

```
let btn = document.getElementById('btnCount');
```

Second, register a click event handler:

```
btn.addEventListener('click', () => {
```

Third, select a list of h2 tags using `document.getElementsByTagName()` inside the event handler:

```
let headings = document.getElementsByTagName('h2');
```

Finally, display the number of `H2` tags using the `alert()` function:

```
alert(`The number of H2 tags: ${headings.length}`);
```

Summary

- The `getElementsByTagName()` is a method of the document or element object.

- The `getElementsByTagName()` accepts a tag name and returns a live `HTMLCollection` of elements with the matching tag name.

Quiz