

JavaScript DOM Methods

HTML Example with Boxes

Here's the structure of the HTML document we'll be manipulating using DOM methods:



HTML Code

```
<div class="container">
  <div class="box">1</div>
  <div class="box" id="temp">2</div>
  <div class="box">3</div>
  <div class="box">4</div>
  <div class="box">5</div>
</div>
```

JavaScript Code

Now, let's look at how JavaScript DOM methods can interact with these HTML elements.

1. `getElementsByClassName()`

Returns an array-like collection of all elements with a given class name:

```
let boxes = document.getElementsByClassName("box");
console.log(boxes);
```

Output: `HTMLCollection [div.box, div#temp.box, div.box, div.box, div.box]`

2. `getElementById()`

Returns the element with the specified ID:

```
let tempBox = document.getElementById("temp");
```

```
tempBox.style.backgroundColor = "red";
```

3. `querySelector()`

Selects the first element that matches a given CSS selector:

```
let firstBox = document.querySelector(".box");  
firstBox.style.backgroundColor = "purple";
```

4. `querySelectorAll()`

Returns all elements that match a given CSS selector:

```
let allBoxes = document.querySelectorAll(".box");  
allBoxes.forEach(box => {  
    box.style.backgroundColor = "yellow";  
});
```

5. `getElementsByName()`

Returns a collection of all elements with a given tag name:

```
let divs = document.getElementsByName("div");  
console.log(divs);
```

Output: `HTMLCollection [div.container, div.box, div#temp.box, div.box, div.box, div.box]`

Other DOM Methods

6. `matches()`

Checks if the selected element matches a given selector:

```
let isTemp = tempBox.matches("#temp");  
console.log(isTemp);
```

Output: `true`

7. `closest()`

Finds the closest ancestor that matches a given selector:

```
let closestTemp = tempBox.closest(".container");  
console.log(closestTemp);
```

Output: <div class="container">...</div>

8. contains()

Checks if one element contains another:

```
let containsBox = document.querySelector(".container").contains(tempBox)  
console.log(containsBox);
```

Output: true