

Selecting Elements via CSS Selectors

This lesson is about selection of elements through CSS selectors. Let's see how JavaScript selects the elements via CSS.

WE'LL COVER THE FOLLOWING



- Choosing a Selection Method

For more complex use cases, you can also use CSS selectors to access DOM elements. For example, let's say that you want to grab all the `` elements of wonders that are both ancient and still exist.

Output

JavaScript

HTML

```
// All "ancient" wonders that still exist
console.log(document.getElementById("ancient").getElementsByClassName("exists").length); // 1
```



Console

Clear

This syntax is a little clunky though. Let's learn two new methods that make finding elements easier. The first is `querySelectorAll()`, with which you can use CSS selectors to identify elements.

Output

JavaScript

HTML

```
// All paragraphs
console.log(document.querySelectorAll("p").length); // 3

// All paragraphs inside the "content" ID block
console.log(document.querySelectorAll("#content p").length); // 2

// All elements with the "exists" class
console.log(document.querySelectorAll(".exists").length); // 8

// All "ancient" wonders that still exist
console.log(document.querySelectorAll("#ancient > .exists").length); // 1
```



Console

Clear

Check the [Mozilla Developer Network](#) for a primer on the different CSS selectors available. The second method using CSS selectors is called `querySelector()`. It works the same way as `querySelectorAll()` but only returns the first matching element. It returns `null` if no associated element can be found.

Output

JavaScript

HTML

```
// Show the first paragraph
console.log(document.querySelector("p").innerHTML);
```



Console

Clear

Choosing a Selection Method

You just discovered several ways of selecting DOM elements. How do you choose the right one? Since they use CSS selectors, `querySelectorAll()` and `querySelector()` could cover all your needs, but they might perform slower than the others. Here are the general rules of thumb that you should follow:

Numbers of Items to Get	Selection Criterion	Methods to Use
Many	By tag	<code>getElementsByTagName()</code>
Many	By class	<code>getElementsByClassName()</code>
Many	Not by class or tag	<code>querySelectorAll()</code>
Only One	By ID	<code>getElementById()</code>
Only One (the first)	Not by ID	<code>querySelector()</code>