

The `Document` method **`querySelector()`** returns the first `Element` within the document that matches the specified selector, or group of selectors. If no matches are found, `null` is returned.

**Note:** The matching is done using depth-first pre-order traversal of the document's nodes starting with the first element in the document's markup and iterating through sequential nodes by order of the number of child nodes.

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## Syntax

```
element = document.querySelector(selectors);
```

### Parameters

#### ***selectors***

A `DOMString` containing one or more selectors to match. This string must be a valid CSS selector string; if it isn't, a `SYNTAX_ERR` exception is thrown. See [Locating DOM elements using selectors](#) for more about selectors and how to manage them.

**Note:** Characters that are not part of standard CSS syntax must be escaped using a backslash character. Since JavaScript also uses backslash escaping, be especially careful when writing string literals using these characters. See [Escaping special characters](#) for more information.

### Return value

An `HTMLElement` object representing the first element in the document that matches the specified set of CSS selectors, or `null` is returned if there are no matches.

If you need a list of all elements matching the specified selectors, you should use `querySelectorAll()` instead.

### Exceptions

#### **SYNTAX\_ERR**

The syntax of the specified *selectors* is invalid.

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## Usage notes

If the specified selector matches an ID that is incorrectly used more than once in the document, the first element with that ID is returned.

CSS pseudo-elements will never return any elements, as specified in the [Selectors API](#).

### Escaping special characters

To match against an ID or selectors that do not follow standard CSS syntax (by using a colon or space inappropriately, for example), you must escape the character with a backslash ("`\`"). As the backslash is also an escape character in JavaScript, if you are entering a literal string, you must escape it *twice* (once for the JavaScript string, and another time for `querySelector()`):

```
<div id="foo\bar"></div>
<div id="foo:bar"></div>

<script>
  console.log('#foo\bar');           // "#fooar" (\b is the backspa
  document.querySelector('#foo\bar'); // Does not match anything

  console.log('#foo\\bar');          // "#foo\bar"
  console.log('#foo\\\\bar');        // "#foo\\bar"
  document.querySelector('#foo\\\\bar'); // Match the first div

  document.querySelector('#foo:bar'); // Does not match anything
  document.querySelector('#foo\\:bar'); // Match the second div
</script>
```



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## Examples

Finding the first element matching a class

In this example, the first element in the document with the class "myclass" is returned:

```
var el = document.querySelector(".myclass");
```

## A more complex selector

Selectors can also be really powerful, as demonstrated in the following example. Here, the first `<input>` element with the name "login" (`<input name="login"/>`) located inside a `<div>` whose class is "user-panel main" (`<div class="user-panel main">`) in the document is returned:

```
var el = document.querySelector("div.user-panel.main input[name='login']");
```

## Negation

As all CSS selector strings are valid, you can also negate selectors:

```
var el = document.querySelector("div.user-panel:not(.main) input[name='login']");
```

This will select an input with a parent div with the `user-panel` class but not the `main` class.