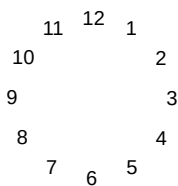




JavaScript Timing Events

[< Previous](#)[Next >](#)

JavaScript can be executed in time-intervals.

This is called timing events.

Timing Events

The **window** object allows execution of code at specified time intervals.

These time intervals are called timing events.

The two key methods to use with JavaScript are:

- **`setTimeout(function, milliseconds)`**
Executes a function, after waiting a specified number of milliseconds.
- **`setInterval(function, milliseconds)`**
Same as `setTimeout()`, but repeats the execution of the function continuously.

The **`setTimeout()`** and **`setInterval()`** are both methods of the HTML DOM Window object.



HTML

CSS

JAVASCRIPT



```
window.setTimeout(function, milliseconds);
```

The `window.setTimeout()` method can be written without the window prefix.

The first parameter is a function to be executed.

The second parameter indicates the number of milliseconds before execution.

Example

Click a button. Wait 3 seconds, and the page will alert "Hello":

```
<button onclick="setTimeout(myFunction, 3000)">Try it</button>

<script>
function myFunction() {
  alert('Hello');
}
</script>
```

Try it Yourself »

How to Stop the Execution?

The `clearTimeout()` method stops the execution of the function specified in `setTimeout()`.

```
window.clearTimeout(timeoutVariable)
```

The `window.clearTimeout()` method can be written without the window prefix.

The `clearTimeout()` method uses the variable returned from `setTimeout()` :

```
myVar = setTimeout(function, milliseconds);
```



HTML

CSS

JAVASCRIPT



If the function has not already been executed, you can stop the execution by calling the `clearTimeout()` method:

Example

Same example as above, but with an added "Stop" button:

```
<button onclick="myVar = setTimeout(myFunction, 3000)">Try  
it</button>  
  
<button onclick="clearTimeout(myVar)">Stop it</button>
```

[Try it Yourself »](#)

The setInterval() Method

The `setInterval()` method repeats a given function at every given time-interval.

```
window.setInterval(function, milliseconds);
```

The `window.setInterval()` method can be written without the window prefix.

The first parameter is the function to be executed.

The second parameter indicates the length of the time-interval between each execution.

This example executes a function called "myTimer" once every second (like a digital watch).

Example

Display the current time:

```
setInterval(myTimer, 1000);  
  
function myTimer() {
```



HTML

CSS

JAVASCRIPT



```
d.toLocaleTimeString();  
}
```

[Try it Yourself »](#)

There are 1000 milliseconds in one second.

How to Stop the Execution?

The `clearInterval()` method stops the executions of the function specified in the `setInterval()` method.

```
window.clearInterval(timerVariable)
```

The `window.clearInterval()` method can be written without the window prefix.

The `clearInterval()` method uses the variable returned from `setInterval()` :

```
let myVar = setInterval(function, milliseconds);  
clearInterval(myVar);
```

Example

Same example as above, but we have added a "Stop time" button:

```
<p id="demo"></p>  
  
<button onclick="clearInterval(myVar)">Stop time</button>  
  
<script>  
let myVar = setInterval(myTimer, 1000);  
function myTimer() {  
  const d = new Date();  
  document.getElementById("demo").innerHTML =
```



HTML

CSS

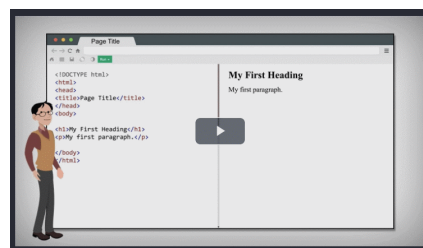
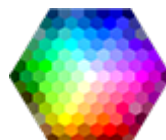
JAVASCRIPT

`</script>`[Try it Yourself »](#)

More Examples

[Another simple timing](#)[A clock created with a timing event](#)[◀ Previous](#)[Next ▶](#)**NEW**

We just launched
W3Schools videos

[Explore now](#)**COLOR PICKER**

[HTML](#)[CSS](#)[JAVASCRIPT](#)

Get certified
by completing
a course today!



Get started

CODE GAME



Play Game

[Report Error](#)[Forum](#)[About](#)[Shop](#)

[HTML](#)[CSS](#)[JAVASCRIPT](#)

- [HTML Tutorial](#)
- [CSS Tutorial](#)
- [JavaScript Tutorial](#)
- [How To Tutorial](#)
- [SQL Tutorial](#)
- [Python Tutorial](#)
- [W3.CSS Tutorial](#)
- [Bootstrap Tutorial](#)
- [PHP Tutorial](#)
- [Java Tutorial](#)
- [C++ Tutorial](#)
- [jQuery Tutorial](#)

Top Examples

- [HTML Examples](#)
- [CSS Examples](#)
- [JavaScript Examples](#)
- [How To Examples](#)
- [SQL Examples](#)
- [Python Examples](#)
- [W3.CSS Examples](#)
- [Bootstrap Examples](#)
- [PHP Examples](#)
- [Java Examples](#)
- [XML Examples](#)
- [jQuery Examples](#)

- [HTML Reference](#)
- [CSS Reference](#)
- [JavaScript Reference](#)
- [SQL Reference](#)
- [Python Reference](#)
- [W3.CSS Reference](#)
- [Bootstrap Reference](#)
- [PHP Reference](#)
- [HTML Colors](#)
- [Java Reference](#)
- [Angular Reference](#)
- [jQuery Reference](#)

Web Courses

- [HTML Course](#)
- [CSS Course](#)
- [JavaScript Course](#)
- [Front End Course](#)
- [SQL Course](#)
- [Python Course](#)
- [PHP Course](#)
- [jQuery Course](#)
- [Java Course](#)
- [C++ Course](#)
- [C# Course](#)
- [XML Course](#)

[Get Certified »](#)

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using W3Schools, you agree to have read and accepted our [terms of use](#), [cookie](#) and [privacy policy](#).

Copyright 1999-2022 by Refsnes Data. All Rights Reserved.

W3Schools is Powered by W3.CSS.

