

ADDING EVENTS USING JAVASCRIPT

IN THIS LESSON

`addEventListener()`

`removeEventListener()`

addEventListener()

Inline event handlers (such as the **onclick** attribute used in HTML) work well for basic demonstrations and getting to know how events work

We can also add event handlers with JavaScript with the built-in **addEventListener()** method

```
node.addEventListener('eventName', functionToRun)
```

The event name does **not** include the **'on'** prefix and must be in quotes; the functionToRun must be the function name only, no argument list **()**

addEventListener()

Inline event handlers (such as the **onclick** attribute used in HTML) work well for basic demonstrations and getting to know how events work

We can also add event handlers with JavaScript with the built-in **addEventListener()** method

```
node.addEventListener('click', functionToRun)
```

The event name does **not** include the '**on**' prefix and must be in quotes; the functionToRun must be the function name only, no argument list **()**

addEventListener()

Inline event handlers (such as the **onclick** attribute used in HTML) work well for basic demonstrations and getting to know how events work

We can also add event handlers with JavaScript with the built-in **addEventListener()** method

```
node.addEventListener('mouseover', functionToRun)
```

The event name does **not** include the '**on**' prefix and must be in quotes; the functionToRun must be the function name only, no argument list **()**

<> event-listener-demo1.html X

```
9      ....|....}
10     ....</style>
11     </head>
12     <body>
13     ....<div>Move your mouse over this text then off!</div>
14
15     ....<script>
16     ....|....const div = document.querySelector('div');
17     ....|....
18     ....|....div.addEventListener('mouseover', changeTextColor);
19     ....|....div.addEventListener('mouseout', revert);
20
21     ....|....function changeTextColor() {
22     ....|....|....div.style.color = 'orange';
23     ....|....}
24
25     ....|....function revert() {
26     ....|....|....div.style.color = 'black';
27     ....|....}
28     ....</script>
29     </body>
30     </html>
```

event-listener-demo1.html X

```
9      ....|....}
10     ....</style>
11    </head>
12    <body>
13     ....<div>Move your mouse over this text then off!</div>
14
15     ....<script>
16     ....|....const div = document.querySelector('div');
17     ....|....
18     ....|....div.addEventListener('mouseover', changeTextColor);
19     ....|....div.addEventListener('mouseout', revert);
20
21     ....|....function changeTextColor() {
22     ....|....|....div.style.color = 'orange';
23     ....|....}
24
25     ....|....function revert() {
26     ....|....|....div.style.color = 'black';
27     ....|....}
28     ....</script>
29    </body>
30    </html>
```

Event Listener Demo 1 X +




    127.0.0.1:5500/event-listener-demo1.html

Move your mouse over this text then off!

event-listener-demo1.html X

```
9      ....|....}
10     ....</style>
11    </head>
12    <body>
13     ....<div>Move your mouse over this text then off!</div>
14
15     ....<script>
16     ....|....const div = document.querySelector('div');
17     ....|....
18     ....|....div.addEventListener('mouseover', changeTextColor);
19     ....|....div.addEventListener('mouseout', revert);
20
21     ....|....function changeTextColor() {
22     ....|....|....div.style.color = 'orange';
23     ....|....}
24
25     ....|....function revert() {
26     ....|....|....div.style.color = 'black';
27     ....|....}
28     ....</script>
29    </body>
30    </html>
```

Event Listener Demo 1 X +

   ⓘ 127.0.0.1:5500/event-listener-demo1.html

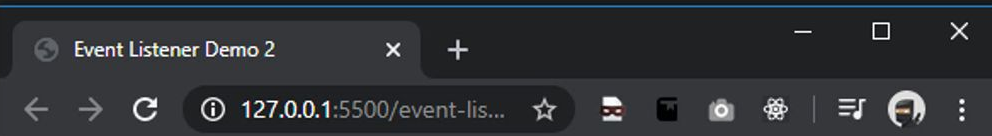
Move your mouse over this text then off!

`addEventListener()`

One advantage of `addEventListener()` over other ways of adding event handlers is that you can use it to add more than one handler function to the same event, on the same element

```
11 </head>
12 <body>
13 <div onmouseover="changeTextColor();" onmouseover="changeBackground();" onmouseout="revert();">Move your mouse over
    this text then off!</div>
14
15 <script>
16 .....// This demo does not show any actual event listeners
17 .....// It demonstrates how with more than one inline onmouseover event handler, only the first will work
18 .....const div = document.querySelector('div');
19
20 .....function changeTextColor() {
21 .....    div.style.color = 'orange';
22 .....}
23
24 .....function changeBackground() {
25 .....    div.style.background = 'purple';
26 .....}
27
28 .....function revert() {
29 .....    div.style.color = 'black';
30 .....    div.style.background = 'white';
31 .....}
32 </script>
33 </body>
34 </html>
```

```
11 </head>
12 <body>
13 <div onmouseover="changeTextColor();" onmouseover="changeBackground();" onmouseout="revert();">Move your mouse over
    this text then off!</div>
14
15 <script>
16 .....// This demo does not show any actual event listeners
17 .....// It demonstrates how with more than one inline onmouseover event handler, only the first will work
18 .....const div = document.querySelector('div');
19
20 .....function changeTextColor() {
21 .....    div.style.color = 'orange';
22 .....}
23
24 .....function changeBackground() {
25 .....    div.style.background = 'purple';
26 .....}
27
28 .....function revert() {
29 .....    div.style.color = 'black';
30 .....    div.style.background = 'white';
31 .....}
32 </script>
33 </body>
34 </html>
```



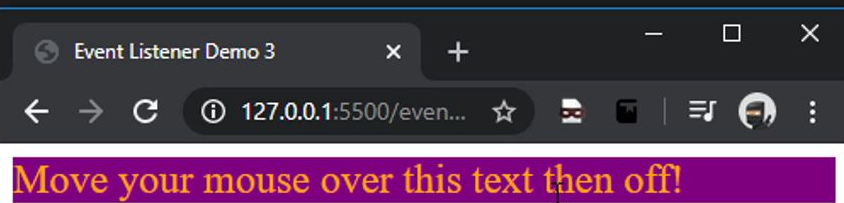
Move your mouse over this text then off!

event-listener-demo3.html X

```
11 </head>
12 <body>
13   ....<div>Move your mouse over this text then off!</div>
14
15   ....<script>
16     ....const div = document.querySelector('div');
17     ....div.addEventListener('mouseover', changeTextColor);
18     ....div.addEventListener('mouseover', changeBackground);
19     ....div.addEventListener('mouseout', revert);
20
21     ....function changeTextColor() {
22       ....div.style.color = 'orange';
23     }
24
25     ....function changeBackground() {
26       ....div.style.background = 'purple';
27     }
28
29     ....function revert() {
30       ....div.style.color = 'black';
31       ....div.style.background = 'white';
32     }
33   ....</script>
34 </body>
35 </html>
```

event-listener-demo3.html

```
11 </head>
12 <body>
13   <div>Move your mouse over this text then off!</div>
14
15   <script>
16     const div = document.querySelector('div');
17     div.addEventListener('mouseover', changeTextColor);
18     div.addEventListener('mouseover', changeBackground);
19     div.addEventListener('mouseout', revert);
20
21     function changeTextColor() {
22       div.style.color = 'orange';
23     }
24
25     function changeBackground() {
26       div.style.background = 'purple';
27     }
28
29     function revert() {
30       div.style.color = 'black';
31       div.style.background = 'white';
32     }
33   </script>
34 </body>
35 </html>
```



removeEventListener()

```
node.addEventListener('eventName', functionToRun)
```

```
node.removeEventListener('eventName', functionToRun)
```



```
11 </head>
12 <body>
13   <div>Move your mouse over this text then off!</div>
14
15   <script>
16     const div = document.querySelector('div');
17     div.addEventListener('mouseover', changeTextColor);
18     div.addEventListener('mouseover', changeBackground);
19     div.addEventListener('mouseout', revert);
20
21     function changeTextColor() {
22       div.style.color = 'orange';
23     }
24
25     function changeBackground() {
26       div.style.background = 'purple';
27       div.removeEventListener('mouseover', changeBackground);
28     }
29
30     function revert() {
31       div.style.color = 'black';
32       div.style.background = 'white';
33     }
34   </script>
35 </body>
36 </html>
```

```
11 </head>
12 <body>
13   <div>Move your mouse over this text then off!</div>
14
15   <script>
16     const div = document.querySelector('div');
17     div.addEventListener('mouseover', changeTextColor);
18     div.addEventListener('mouseover', changeBackground);
19     div.addEventListener('mouseout', revert);
20
21     function changeTextColor() {
22       div.style.color = 'orange';
23     }
24
25     function changeBackground() {
26       div.style.background = 'purple';
27       div.removeEventListener('mouseover', changeBackground);
28     }
29
30     function revert() {
31       div.style.color = 'black';
32       div.style.background = 'white';
33     }
34   </script>
35 </body>
36 </html>
```

Move your mouse over this text then off!


```
11 </head>
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27       div.removeEventListener('mouseover', changeBackground);
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30     function revert() {
31       div.style.color = 'black';
32       div.style.background = 'white';
33     }
34   </script>
35 </body>
36 </html>
```

Move your mouse over this text then off!