

Day 25



setInterval and setTimeout in JavaScript:

What is an event?

An event is something that happens in the browser.

Example events:

- A button is clicked
- A key is pressed
- A page finishes loading
- Mouse moves
- A form is submitted

Your JavaScript code can listen to these events and react to them.

What is an Event Listener?

An event listener is a function that waits for an event to happen and runs when the event occurs.

Syntax:

```
element.addEventListener("eventName", function);
```

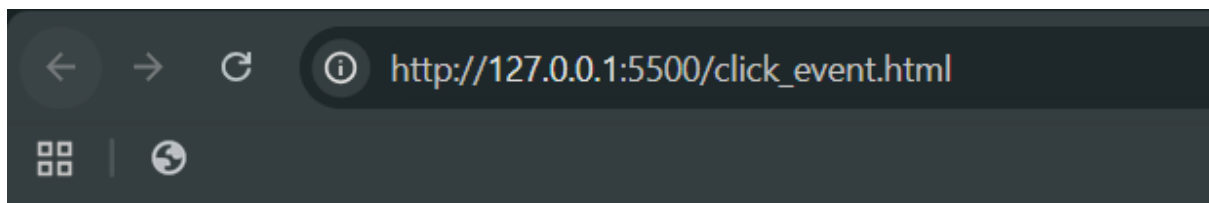
Common Browser Events

Event Name	When it happens
click	User clicks an element
dblclick	User double-clicks
mouseover	Mouse moves over element
keydown	Any key is pressed
keyup	Key is released
input	Text in input box changes
submit	Form is submitted
load	Page finishes loading

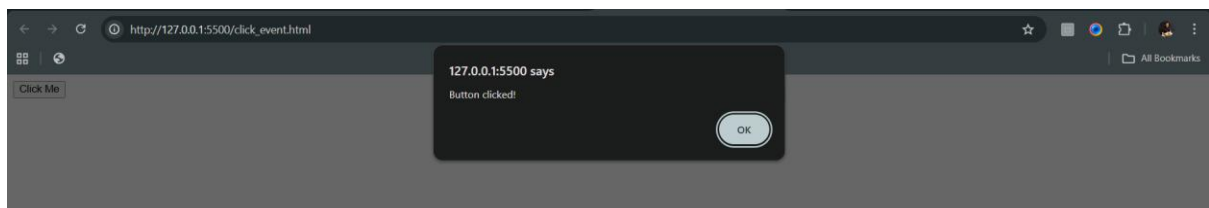
Example: click event

```
click_event.html > ...
1  <!DOCTYPE html>
2  <html>
3  <body>
4  <button id="btn">Click Me</button>
5  <script>
6  document.getElementById("btn").addEventListener("click", () => {
7  |   alert("Button clicked!");
8  | });
9  </script>
10 </body>
11 </html>
```

Output:



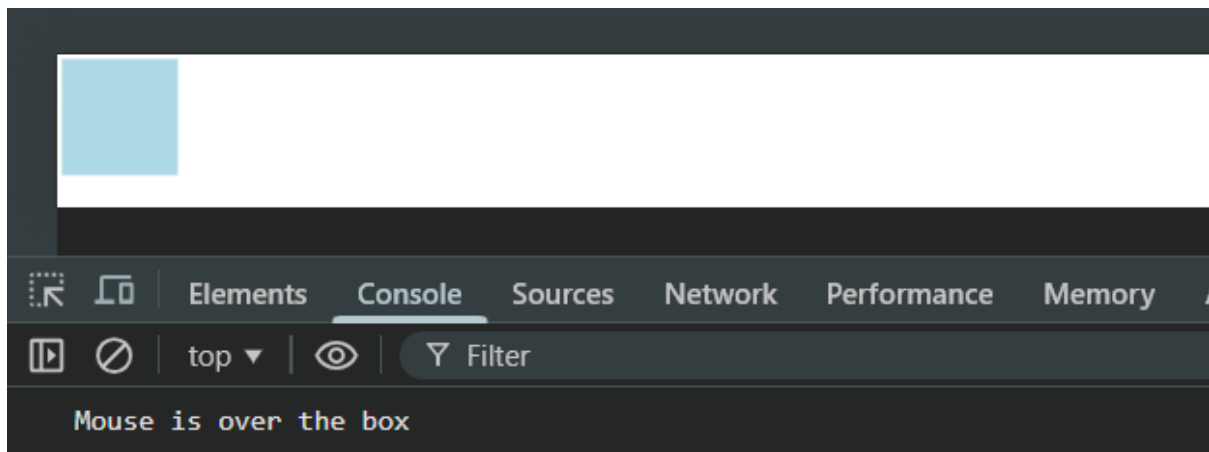
Click Me



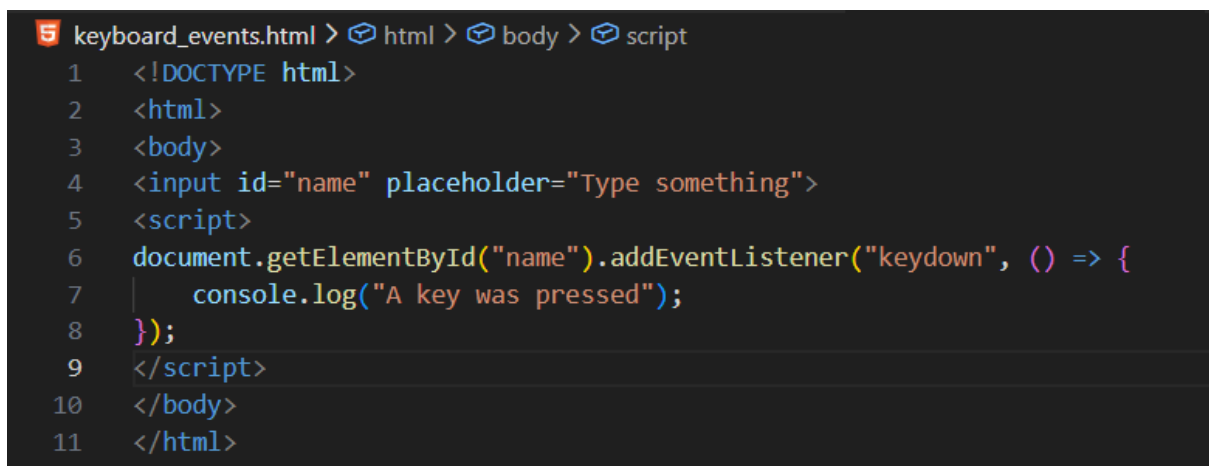
Example: mouse event

```
mouse_event.html > ...
1  <!DOCTYPE html>
2  <html>
3  <body>
4  <div id="box" style="width:200px;height:200px;background: lightblue;"></div>
5  <script>
6  document.getElementById("box").addEventListener("mouseover", () => {
7  |   console.log("Mouse is over the box");
8  | });
9  </script>
10 </body>
11 </html>
```

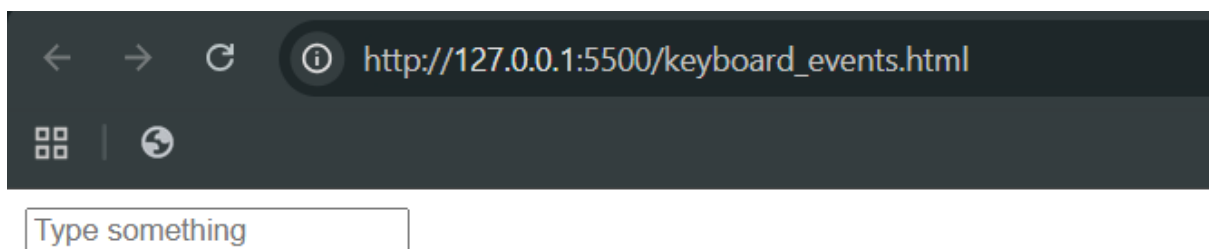
Output: when mouse came over the box



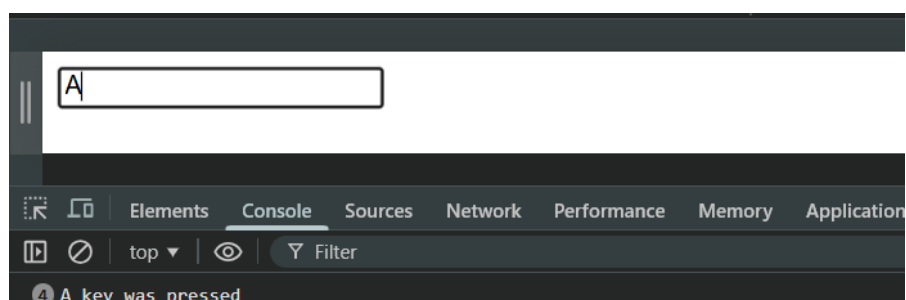
Example: keyboard events



Output:



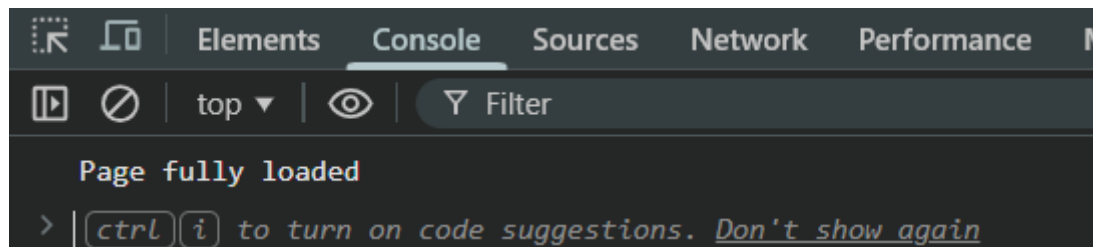
When something was types in the input field:



Example: page load event

```
page_load_event.html > html > body > script
1 <!DOCTYPE html>
2 <html>
3 <body>
4 <script>
5 window.addEventListener("load", () => {
6   console.log("Page fully loaded");
7 });
8 </script>
9 </body>
10 </html>
```

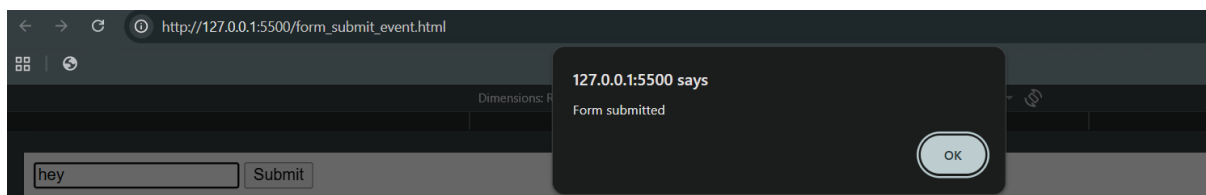
Output: console



Example: form submit event

```
form_submit_event.html > ...
1 <!DOCTYPE html>
2 <html>
3 <body>
4 <form id="myForm">
5   <input type="text">
6   <button type="submit">Submit</button>
7 </form>
8 <script>
9 document.getElementById("myForm").addEventListener("submit", (event) => {
10   event.preventDefault(); // stops page reload
11   alert("Form submitted");
12 });
13 </script>
14 </body>
15 </html>
```

Output:



--The End--