

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);
```

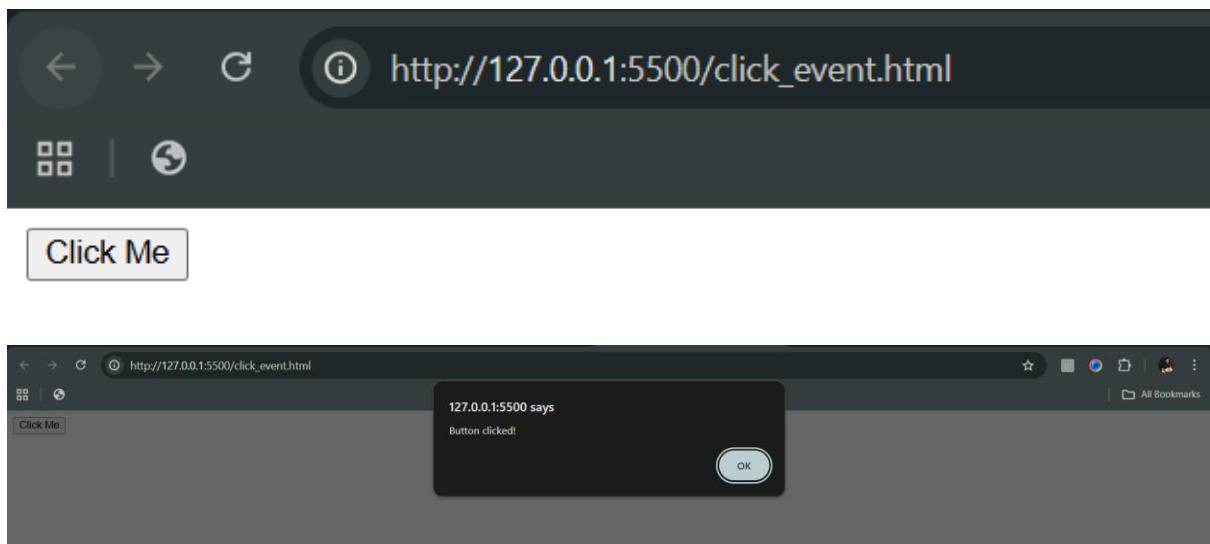
Common Browser Events

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

```
5 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>
```

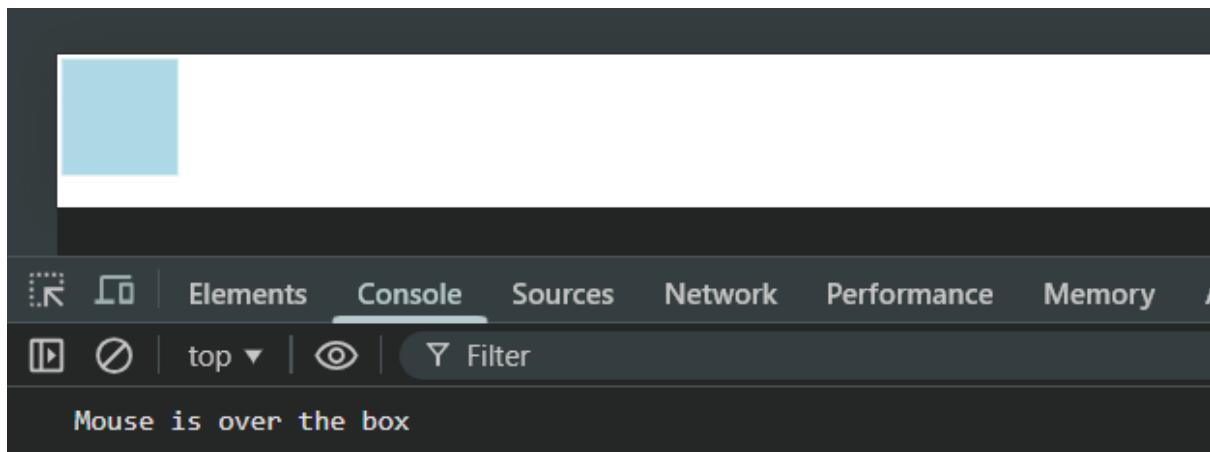
Output:



Example: mouse event

```
5 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>
```

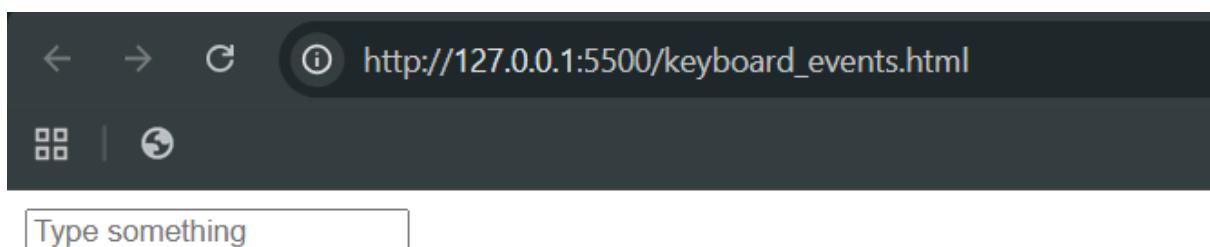
Output: when mouse came over the box



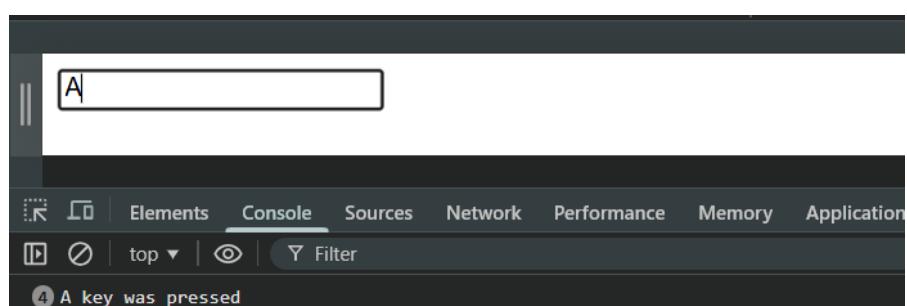
Example: keyboard events

```
5 keyboard_events.html > html > body > script
1   <!DOCTYPE html>
2   <html>
3   <body>
4   <input id="name" placeholder="Type something">
5   <script>
6   document.getElementById("name").addEventListener("keydown", () => {
7     |   console.log("A key was pressed");
8   });
9   </script>
10  </body>
11  </html>
```

Output:



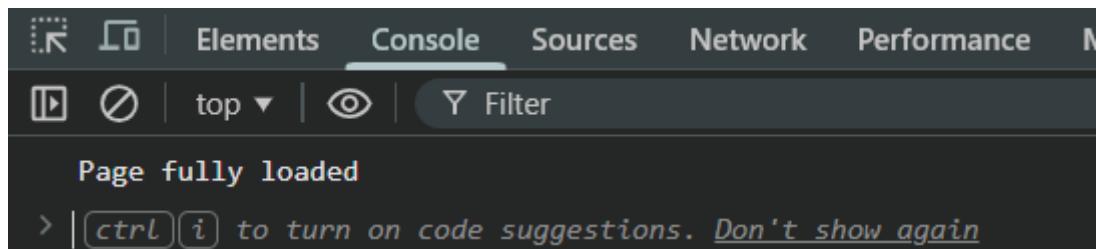
When something was typed in the input field:



Example: page load event

```
5 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>
```

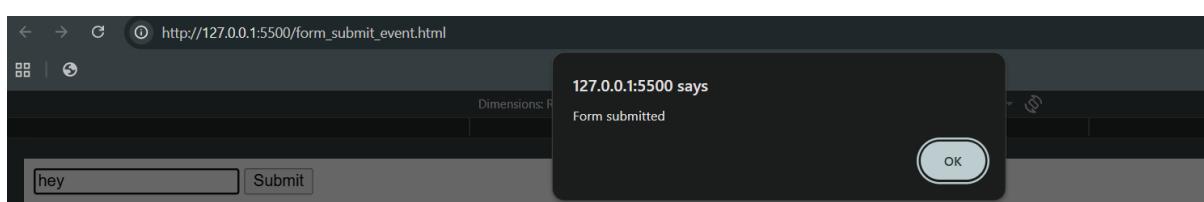
Output: console



Example: form submit event

```
5 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--