

Report Day: 5.1

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Task:

Introduction to JavaScript Events

In web development, **events** are actions or occurrences that happen in the browser and can be detected by JavaScript. These events include things like a user clicking a button, changing a value in a form, submitting a form, moving the mouse, etc.

JavaScript allows developers to **respond** to these events by attaching **event handlers** to HTML elements. This interactivity is a fundamental part of building dynamic web pages.

1. Onclick Event:

The onclick event triggers when a user clicks on an HTML element (like a button, link, or image).

```
<button onclick="myFunction()">Click me</button>
```

2. Onchange Event

The onchange event occurs when the value of an input field, select box, or textarea changes and the element loses focus.

```
<select onchange="myFunction()">
  <option value="1">Option 1</option>
  <option value="2">Option 2</option>
</select>
```

3. addEventListener() Method

addEventListener() is a modern and flexible method to **attach an event handler** to an element **without overwriting other event handlers**.

Use cases:

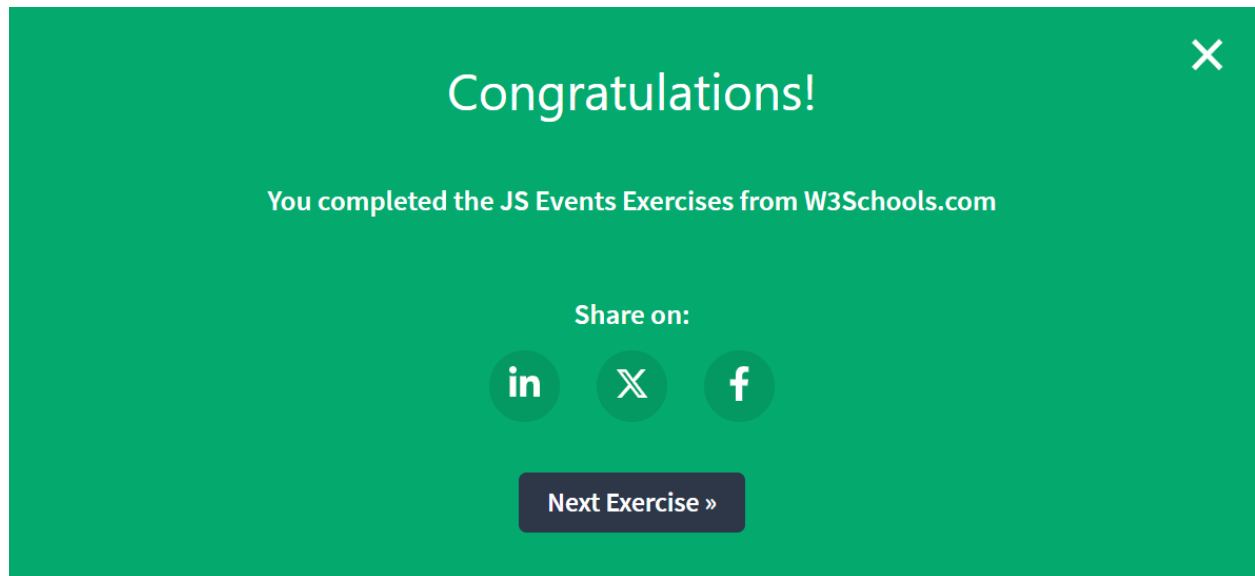
- Things that should be done every time a page loads
- Things that should be done when the page is closed
- Action that should be performed when a user clicks a button
- Content that should be verified when a user inputs data

```
<button id="btn">Click me</button>
<p id="result"></p>

<script>
  document.getElementById("btn").addEventListener("click", function () {
    document.getElementById("result").innerHTML = "Button was clicked!";
  });
```

Other Events:

onmouseover	The user moves the mouse over an HTML element
onmouseout	The user moves the mouse away from an HTML element
onkeydown	The user pushes a keyboard key
onload	The browser has finished loading the page

**Conclusion:**

JavaScript event handling is essential for creating interactive and user-friendly websites. While `onclick` and `onchange` are simple and suitable for quick implementations, `addEventListener()` provides more powerful and flexible control over event handling, especially in larger or modular applications.