

# JavaScript Day - 18

**Browser Default Actions**

# Browser Actions

Many events automatically lead to certain actions performed by the browser.

For instance:

- A click on a link – initiates navigation to its URL.
- A click on a form submit button – initiates its submission to the server.
- Pressing a mouse button over a text and moving it – selects the text.

If we handle an event in JavaScript, we may not want the corresponding browser action to happen, and want to implement another behavior instead.

# Preventing Browser Actions

There are two ways to tell the browser we don't want it to act:

- The main way is to use the event object. There's a method `event.preventDefault()`.
- If the handler is assigned using `on<event>` (not by `addEventListener`), then returning `false` also works the same.

# Preventing Browser Actions

In this HTML, a click on a link doesn't lead to navigation; the browser doesn't do anything:

```
1 <a href="/" onclick="return false">Click here</a>  
2 or  
3 <a href="/" onclick="event.preventDefault()">here</a>
```

# Preventing Browser Actions

Menu items are implemented as HTML-links `<a>`, not buttons `<button>`. There are several reasons to do so, for instance:

Many people like to use “right click” – “open in a new window”. If we use `<button>` or `<span>`, that doesn't work.

Search engines follow `<a href="...">` links while indexing.

So we use `<a>` in the markup. But normally we intend to handle clicks in JavaScript. So we should prevent the default browser action.

# Common Events

## Load Events:

- **onload:** This event fires when the entire page, including images and other resources, has finished loading. This is commonly used to execute code that relies on the complete page structure.

# Common Events

## User Input Events:

- **onclick:** This event triggers when the user clicks on an element, typically a button or an image. It's often used to submit forms, trigger animations, or navigate to different parts of the webpage.
- **onmouseover:** This event fires when the user moves the mouse cursor over an element. It's commonly used to display tooltips or change the appearance of the element on hover.
- **onmouseout:** This event is the opposite of onmouseover and triggers when the mouse cursor moves away from an element.
- **onfocus:** This event fires when an element gains focus, such as when a user clicks on an input field. It's often used to highlight the field or display instructional text.
- **onblur:** This event happens when an element loses focus, such as when a user tabs away from an input field. It can be used for validation purposes.
- **onchange:** This event triggers when the value of an element changes. It's commonly used for form elements like text fields and dropdown menus to perform actions based on user input.

# Common Events

## Form Events:

- **onsubmit:** This event fires when a form is submitted, typically when the user clicks a submit button. It's often used to validate form data before submission.



# Common Events

## Keyboard Events:

- **onkeydown:** This event triggers when a key is pressed down. It's useful for capturing keyboard shortcuts or implementing custom functionality based on key presses.
- **onkeyup:** This event fires when a key is released. It can be used in conjunction with onkeydown for more complex interactions.

# Common Events

## Mouse Events:

- onclick (covered earlier): We discussed this for user clicks, but it also applies to mouse clicks.
- ondblclick: This event triggers when the user double-clicks on an element.
- onmousedown: This event fires when the user presses the mouse button down on an element.
- onmouseup: This event happens when the user releases the mouse button over an element.