



EVENTS IN JAVASCRIPT



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INTRODUCTION

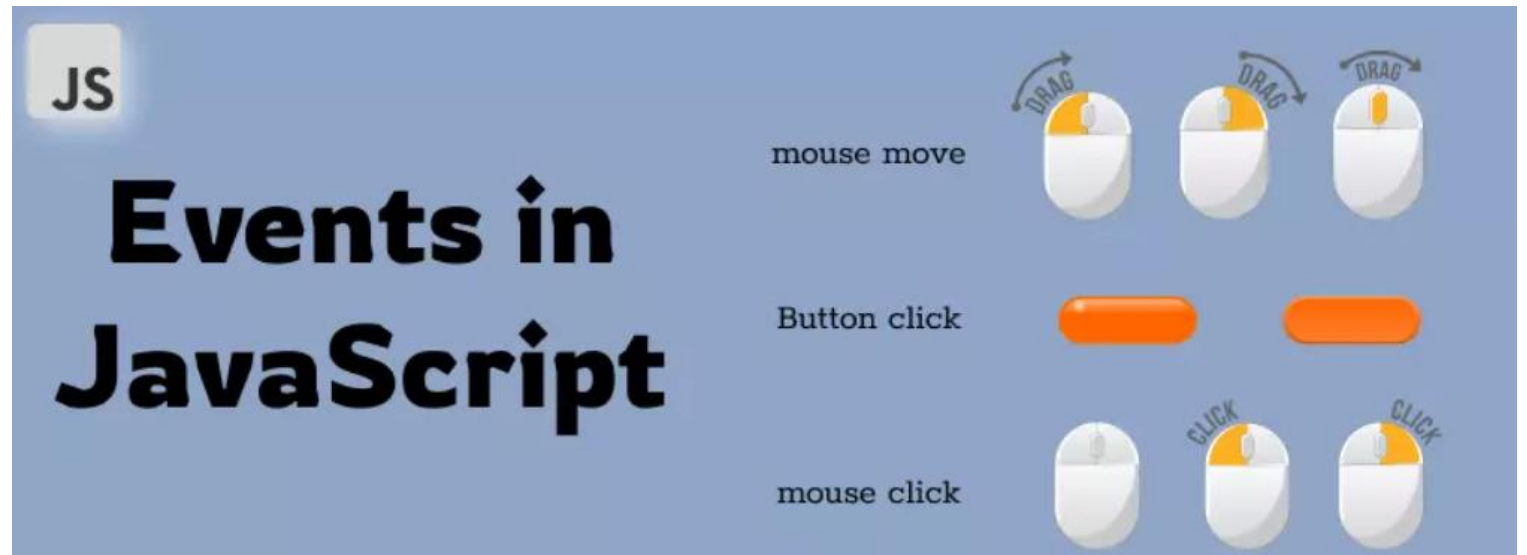
Events are the actions that occur in the browser. They are the actions that the user performs on the browser.

Events are also the actions performed on HTML elements by the user. For example, when the user clicks on a link, the browser sends an event to the server. The server can then take some action based on the event. For example, the server can send a message to the user.



Some of the simple examples of events are:

- Button click
- Mouse click
- Keyboard input
- Form submission
- Page load
- Window resize





Handling events in javascript

Each **event** in javascript has something that is constantly looking for that event to occur which is called event listener.

The event listener triggers a function execution whenever the event occurs



Add Event Listener

There are 2 ways to add an event listener to an element in javascript:

1. Using the **addEventListener()** method.
2. Using the **on** attribute. for example onclick, onmouseover, etc.



1. Using the `addEventListener()` method

The `addEventListener()` method is used to add an event listener to an element. The `addEventListener()` method takes 2 arguments:

- **event** - The event that is being listened for.
- **listener** - The function that is called when the event occurs.



2. Using The **On** Attribute

Using the **on** attribute method you can directly add an event listener to the HTML element.

Examples of attributes are onclick, onmouseover, etc.

event execute when button clicked

```
<button onclick="sendData()">Click Me!</button>
```

event attribute

event handler
(function)



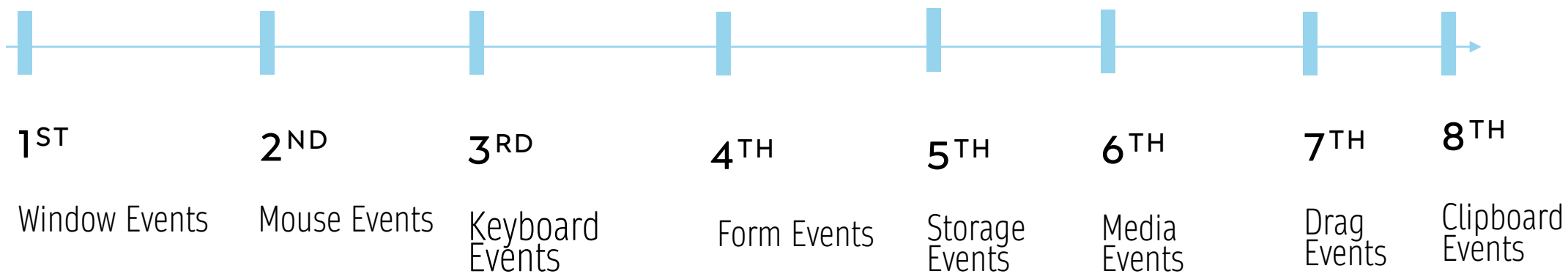
Remove Event Listener

To remove an event listener from an element, you can use the `removeEventListener()` method.

The `removeEventListener()` method takes 2 arguments, **event** and **listener**.

Types Of Events In Javascript





TIMELINE



1. Window events in javascript

The window object is the top-level object in the browser. It is the parent of all other objects in the browser. Below are a few events.

Event	Action	Description
<u>onload</u>	webpage loaded	The onload event is triggered when the page is loaded.
<u>onresize</u>	resizing browser tab	event is triggered when the browser window is resized.
<u>onscroll</u>	scrolling browser tab	event is triggered when the browser window is scrolled.
<u>onbeforeunload</u>	before closing browser tab	event is triggered when the browser window is about to be closed.
<u>onoffline</u>	when the browser is offline	event is triggered when the browser is offline.
<u>ononline</u>	when the browser is online	event is triggered when the browser is online.



2. Mouse events in javascript

Mouse events are those events that are triggered on some activity by the mouse, like clicking, hovering, dragging, etc.

Event	Action	Description
<u>click</u>	Mouse click	when the mouse is clicked over an element
<u>dblclick</u>	Mouse double click	Mouse double clickwhen the mouse is double-clicked over an element
<u>mouseover</u>	Mouse over	Triggered when the user moves the mouse over an element
<u>mouseout</u>	Mouse out	Triggered when the user moves the mouse out of an element
<u>mousedown</u>	Mouse button down	Triggered when the user presses the mouse button.
<u>mouseup</u>	Mouse button up	Triggered when the user releases the mouse button.
<u>mousemove</u>	Mouse move	Triggered when the user moves the mouse over an element
<u>mouseenter</u>	Mouse enter	Triggered when the user moves the mouse over an element
<u>mouseleave</u>	Mouse leave	Triggered when the user moves the mouse out of an element



3. Keyboard events in javascript

Keyboard events are those events that are triggered when you press a key on your keyboard.

There are many different types of keyboard events in javascript. Some of them are:

Event	Action	Description
<u>onkeydown</u>	Button Down	event is fired when any keyboard button is down
<u>onkeyup</u>	Button released	event is fired when any keyboard button is released
<u>onkeypress</u>	Button pressed	event is fired when any keyboard button is pressed



4. Form events in javascript

Forms in HTML have many different types of events that can be triggered at different action points.

The form events in javascript are:

Event	Action	Description
<u>submit</u>	onsubmit	event is fired when the form is submitted
<u>focus</u>	onfocus	event is fired when the cursor is focused on form
<u>blur</u>	Focus Removed	event is fired when the focus is removed from input section
<u>change</u>	onchange	event is fired when the value of the input is changed
<u>reset</u>	onreset	event is fired when the form is reset
<u>select</u>	onselect	event is fired when a selection is made



THANK YOU



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