

# HTML Event Attributes

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## Global Event Attributes

HTML has the ability to let events trigger actions in a browser, like starting a JavaScript when a user clicks on an element.

To learn more about programming events, please visit our [JavaScript tutorial](#).

Below are the global event attributes that can be added to HTML elements to define event actions.

## Window Event Attributes

Events triggered for the window object (applies to the <body> tag):

Attribute	Value	Description
<a href="#"><u>onafterprint</u></a>	<i>script</i>	Script to be run after the document is printed
<a href="#"><u>onbeforeprint</u></a>	<i>script</i>	Script to be run before the document is printed
<a href="#"><u>onbeforeunload</u></a>	<i>script</i>	Script to be run when the document is about to be unloaded
<a href="#"><u>onerror</u></a>	<i>script</i>	Script to be run when an error occurs
<a href="#"><u>onhashchange</u></a>	<i>script</i>	Script to be run when there has been changes to the anchor part of the a URL

<u>onload</u>	<i>script</i>	Fires after the page is finished loading
onmessage	<i>script</i>	Script to be run when the message is triggered
<u>onoffline</u>	<i>script</i>	Script to be run when the browser starts to work offline
<u>ononline</u>	<i>script</i>	Script to be run when the browser starts to work online
onpagehide	<i>script</i>	Script to be run when a user navigates away from a page
<u>onpageshow</u>	<i>script</i>	Script to be run when a user navigates to a page
onpopstate	<i>script</i>	Script to be run when the window's history changes
<u>onresize</u>	<i>script</i>	Fires when the browser window is resized
onstorage	<i>script</i>	Script to be run when a Web Storage area is updated
<u>onunload</u>	<i>script</i>	Fires once a page has unloaded (or the browser window has been closed)

## Form Events

Events triggered by actions inside a HTML form (applies to almost all HTML elements, but is most used in form elements):

Attribute	Value	Description
<u>onblur</u>	<i>script</i>	Fires the moment that the element loses focus
<u>onchange</u>	<i>script</i>	Fires the moment when the value of the element is changed
<u>oncontextmenu</u>	<i>script</i>	Script to be run when a context menu is triggered
<u>onfocus</u>	<i>script</i>	Fires the moment when the element gets focus
<u>oninput</u>	<i>script</i>	Script to be run when an element gets user input
<u>oninvalid</u>	<i>script</i>	Script to be run when an element is invalid

<u>onreset</u>	<i>script</i>	Fires when the Reset button in a form is clicked
<u>onsearch</u>	<i>script</i>	Fires when the user writes something in a search field (for <input="search">)
<u>onselect</u>	<i>script</i>	Fires after some text has been selected in an element
<u>onsubmit</u>	<i>script</i>	Fires when a form is submitted

## Keyboard Events

Attribute	Value	Description
<u>onkeydown</u>	<i>script</i>	Fires when a user is pressing a key
<u>onkeypress</u>	<i>script</i>	Fires when a user presses a key
<u>onkeyup</u>	<i>script</i>	Fires when a user releases a key

## Mouse Events

Attribute	Value	Description
<u>onclick</u>	<i>script</i>	Fires on a mouse click on the element
<u>ondblclick</u>	<i>script</i>	Fires on a mouse double-click on the element
<u>onmousedown</u>	<i>script</i>	Fires when a mouse button is pressed down on an element
<u>onmousemove</u>	<i>script</i>	Fires when the mouse pointer is moving while it is over an element
<u>onmouseout</u>	<i>script</i>	Fires when the mouse pointer moves out of an element
<u>onmouseover</u>	<i>script</i>	Fires when the mouse pointer moves over an element
<u>onmouseup</u>	<i>script</i>	Fires when a mouse button is released over an element

onmousewheel	script	<b>Deprecated.</b> Use the <u>onwheel</u> attribute instead
<u>onwheel</u>	script	Fires when the mouse wheel rolls up or down over an element

## Drag Events

Attribute	Value	Description
<u>ondrag</u>	script	Script to be run when an element is dragged
<u>ondragend</u>	script	Script to be run at the end of a drag operation
<u>ondragenter</u>	script	Script to be run when an element has been dragged to a valid drop target
<u>ondragleave</u>	script	Script to be run when an element leaves a valid drop target
<u>ondragover</u>	script	Script to be run when an element is being dragged over a valid drop target
<u>ondragstart</u>	script	Script to be run at the start of a drag operation
<u>ondrop</u>	script	Script to be run when dragged element is being dropped
<u>onscroll</u>	script	Script to be run when an element's scrollbar is being scrolled

## Clipboard Events

Attribute	Value	Description
<u>oncopy</u>	script	Fires when the user copies the content of an element
<u>oncut</u>	script	Fires when the user cuts the content of an element
<u>onpaste</u>	script	Fires when the user pastes some content in an element

# Media Events

Events triggered by medias like videos, images and audio (applies to all HTML elements, but is most common in media elements, like `<audio>`, `<embed>`, `<img>`, `<object>`, and `<video>`).

**Tip:** Look at our [HTML Audio and Video DOM Reference](#) for more information.

Attribute	Value	Description
onabort	<i>script</i>	Script to be run on abort
oncanplay	<i>script</i>	Script to be run when a file is ready to start playing (when it has buffered enough to begin)
oncanplaythrough	<i>script</i>	Script to be run when a file can be played all the way to the end without pausing for buffering
oncuechange	<i>script</i>	Script to be run when the cue changes in a <code>&lt;track&gt;</code> element
ondurationchange	<i>script</i>	Script to be run when the length of the media changes
onemptied	<i>script</i>	Script to be run when something bad happens and the file is suddenly unavailable (like unexpectedly disconnects)
onended	<i>script</i>	Script to be run when the media has reach the end (a useful event for messages like "thanks for listening")
onerror	<i>script</i>	Script to be run when an error occurs when the file is being loaded
onloadeddata	<i>script</i>	Script to be run when media data is loaded
onloadedmetadata	<i>script</i>	Script to be run when meta data (like dimensions and duration) are loaded
onloadstart	<i>script</i>	Script to be run just as the file begins to load before anything is actually loaded
onpause	<i>script</i>	Script to be run when the media is paused either

		by the user or programmatically
onplay	<i>script</i>	Script to be run when the media is ready to start playing
onplaying	<i>script</i>	Script to be run when the media actually has started playing
onprogress	<i>script</i>	Script to be run when the browser is in the process of getting the media data
onratechange	<i>script</i>	Script to be run each time the playback rate changes (like when a user switches to a slow motion or fast forward mode)
onseeked	<i>script</i>	Script to be run when the seeking attribute is set to false indicating that seeking has ended
onseeking	<i>script</i>	Script to be run when the seeking attribute is set to true indicating that seeking is active
onstalled	<i>script</i>	Script to be run when the browser is unable to fetch the media data for whatever reason
onsuspend	<i>script</i>	Script to be run when fetching the media data is stopped before it is completely loaded for whatever reason
ontimeupdate	<i>script</i>	Script to be run when the playing position has changed (like when the user fast forwards to a different point in the media)
onvolumechange	<i>script</i>	Script to be run each time the volume is changed which (includes setting the volume to "mute")
onwaiting	<i>script</i>	Script to be run when the media has paused but is expected to resume (like when the media pauses to buffer more data)

## Misc Events

Attribute	Value	Description
<u>ontoggle</u>	<i>script</i>	Fires when the user opens or closes the <details> element

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