**HTML DOM Events**

**DOM:** Indicates in which DOM Level the property was introduced.

**Mouse Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [onclick](http://www.w3schools.com/jsref/event_onclick.asp) | The event occurs when the user clicks on an element | 2 |
| [oncontextmenu](http://www.w3schools.com/jsref/event_oncontextmenu.asp) | The event occurs when the user right-clicks on an element to open a context menu | 3 |
| [ondblclick](http://www.w3schools.com/jsref/event_ondblclick.asp) | The event occurs when the user double-clicks on an element | 2 |
| [onmousedown](http://www.w3schools.com/jsref/event_onmousedown.asp) | The event occurs when the user presses a mouse button over an element | 2 |
| [onmouseenter](http://www.w3schools.com/jsref/event_onmouseenter.asp) | The event occurs when the pointer is moved onto an element | 2 |
| [onmouseleave](http://www.w3schools.com/jsref/event_onmouseleave.asp) | The event occurs when the pointer is moved out of an element | 2 |
| [onmousemove](http://www.w3schools.com/jsref/event_onmousemove.asp) | The event occurs when the pointer is moving while it is over an element | 2 |
| [onmouseover](http://www.w3schools.com/jsref/event_onmouseover.asp) | The event occurs when the pointer is moved onto an element, or onto one of its children | 2 |
| [onmouseout](http://www.w3schools.com/jsref/event_onmouseout.asp) | The event occurs when a user moves the mouse pointer out of an element, or out of one of its children | 2 |
| [onmouseup](http://www.w3schools.com/jsref/event_onmouseup.asp) | The event occurs when a user releases a mouse button over an element | 2 |

**Keyboard Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [onkeydown](http://www.w3schools.com/jsref/event_onkeydown.asp) | The event occurs when the user is pressing a key | 2 |
| [onkeypress](http://www.w3schools.com/jsref/event_onkeypress.asp) | The event occurs when the user presses a key | 2 |
| [onkeyup](http://www.w3schools.com/jsref/event_onkeyup.asp) | The event occurs when the user releases a key | 2 |

**Frame/Object Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [onabort](http://www.w3schools.com/jsref/event_onabort.asp) | The event occurs when the loading of a resource has been aborted | 2 |
| [onbeforeunload](http://www.w3schools.com/jsref/event_onbeforeunload.asp) | The event occurs before the document is about to be unloaded | 2 |
| [onerror](http://www.w3schools.com/jsref/event_onerror.asp) | The event occurs when an error occurs while loading an external file | 2 |
| [onhashchange](http://www.w3schools.com/jsref/event_onhashchange.asp) | The event occurs when there has been changes to the anchor part of a URL | 3 |
| [onload](http://www.w3schools.com/jsref/event_onload.asp) | The event occurs when an object has loaded | 2 |
| [onpageshow](http://www.w3schools.com/jsref/event_onpageshow.asp) | The event occurs when the user navigates to a webpage | 3 |
| [onpagehide](http://www.w3schools.com/jsref/event_onpagehide.asp) | The event occurs when the user navigates away from a webpage | 3 |
| [onresize](http://www.w3schools.com/jsref/event_onresize.asp) | The event occurs when the document view is resized | 2 |
| [onscroll](http://www.w3schools.com/jsref/event_onscroll.asp) | The event occurs when an element's scrollbar is being scrolled | 2 |
| [onunload](http://www.w3schools.com/jsref/event_onunload.asp) | The event occurs once a page has unloaded (for <body>) | 2 |

**Form Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [onblur](http://www.w3schools.com/jsref/event_onblur.asp) | The event occurs when an element loses focus | 2 |
| [onchange](http://www.w3schools.com/jsref/event_onchange.asp) | The event occurs when the content of a form element, the selection, or the checked state have changed (for <input>, <keygen>, <select>, and <textarea>) | 2 |
| [onfocus](http://www.w3schools.com/jsref/event_onfocus.asp) | The event occurs when an element gets focus | 2 |
| [onfocusin](http://www.w3schools.com/jsref/event_onfocusin.asp) | The event occurs when an element is about to get focus | 2 |
| [onfocusout](http://www.w3schools.com/jsref/event_onfocusout.asp) | The event occurs when an element is about to lose focus | 2 |
| [oninput](http://www.w3schools.com/jsref/event_oninput.asp) | The event occurs when an element gets user input | 3 |
| [oninvalid](http://www.w3schools.com/jsref/event_oninvalid.asp) | The event occurs when an element is invalid | 3 |
| [onreset](http://www.w3schools.com/jsref/event_onreset.asp) | The event occurs when a form is reset | 2 |
| [onsearch](http://www.w3schools.com/jsref/event_onsearch.asp) | The event occurs when the user writes something in a search field (for <input="search">) | 3 |
| [onselect](http://www.w3schools.com/jsref/event_onselect.asp) | The event occurs after the user selects some text (for <input> and <textarea>) | 2 |
| [onsubmit](http://www.w3schools.com/jsref/event_onsubmit.asp) | The event occurs when a form is submitted | 2 |

**Drag Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [ondrag](http://www.w3schools.com/jsref/event_ondrag.asp) | The event occurs when an element is being dragged | 3 |
| [ondragend](http://www.w3schools.com/jsref/event_ondragend.asp) | The event occurs when the user has finished dragging an element | 3 |
| [ondragenter](http://www.w3schools.com/jsref/event_ondragenter.asp) | The event occurs when the dragged element enters the drop target | 3 |
| [ondragleave](http://www.w3schools.com/jsref/event_ondragleave.asp) | The event occurs when the dragged element leaves the drop target | 3 |
| [ondragover](http://www.w3schools.com/jsref/event_ondragover.asp) | The event occurs when the dragged element is over the drop target | 3 |
| [ondragstart](http://www.w3schools.com/jsref/event_ondragstart.asp) | The event occurs when the user starts to drag an element | 3 |
| [ondrop](http://www.w3schools.com/jsref/event_ondrop.asp) | The event occurs when the dragged element is dropped on the drop target | 3 |

**Clipboard Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [oncopy](http://www.w3schools.com/jsref/event_oncopy.asp) | The event occurs when the user copies the content of an element |  |
| [oncut](http://www.w3schools.com/jsref/event_oncut.asp) | The event occurs when the user cuts the content of an element |  |
| [onpaste](http://www.w3schools.com/jsref/event_onpaste.asp) | The event occurs when the user pastes some content in an element |  |

**Print Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [onafterprint](http://www.w3schools.com/jsref/event_onafterprint.asp) | The event occurs when a page has started printing, or if the print dialogue box has been closed | 3 |
| [onbeforeprint](http://www.w3schools.com/jsref/event_onbeforeprint.asp) | The event occurs when a page is about to be printed | 3 |

**Media Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [onabort](http://www.w3schools.com/jsref/event_onabort_media.asp) | The event occurs when the loading of a media is aborted | 3 |
| [oncanplay](http://www.w3schools.com/jsref/event_oncanplay.asp) | The event occurs when the browser can start playing the media (when it has buffered enough to begin) | 3 |
| [oncanplaythrough](http://www.w3schools.com/jsref/event_oncanplaythrough.asp) | The event occurs when the browser can play through the media without stopping for buffering | 3 |
| [ondurationchange](http://www.w3schools.com/jsref/event_ondurationchange.asp) | The event occurs when the duration of the media is changed | 3 |
| onemptied | The event occurs when something bad happens and the media file is suddenly unavailable (like unexpectedly disconnects) | 3 |
| [onended](http://www.w3schools.com/jsref/event_onended.asp) | The event occurs when the media has reach the end (useful for messages like "thanks for listening") | 3 |
| [onerror](http://www.w3schools.com/jsref/event_onerror_media.asp) | The event occurs when an error occurred during the loading of a media file | 3 |
| [onloadeddata](http://www.w3schools.com/jsref/event_onloadeddata.asp) | The event occurs when media data is loaded | 3 |
| [onloadedmetadata](http://www.w3schools.com/jsref/event_onloadedmetadata.asp) | The event occurs when meta data (like dimensions and duration) are loaded | 3 |
| [onloadstart](http://www.w3schools.com/jsref/event_onloadstart.asp) | The event occurs when the browser starts looking for the specified media | 3 |
| [onpause](http://www.w3schools.com/jsref/event_onpause.asp) | The event occurs when the media is paused either by the user or programmatically | 3 |
| [onplay](http://www.w3schools.com/jsref/event_onplay.asp) | The event occurs when the media has been started or is no longer paused | 3 |
| [onplaying](http://www.w3schools.com/jsref/event_onplaying.asp) | The event occurs when the media is playing after having been paused or stopped for buffering | 3 |
| [onprogress](http://www.w3schools.com/jsref/event_onprogress.asp) | The event occurs when the browser is in the process of getting the media data (downloading the media) | 3 |
| [onratechange](http://www.w3schools.com/jsref/event_onratechange.asp) | The event occurs when the playing speed of the media is changed | 3 |
| [onseeked](http://www.w3schools.com/jsref/event_onseeked.asp) | The event occurs when the user is finished moving/skipping to a new position in the media | 3 |
| [onseeking](http://www.w3schools.com/jsref/event_onseeking.asp) | The event occurs when the user starts moving/skipping to a new position in the media | 3 |
| [onstalled](http://www.w3schools.com/jsref/event_onstalled.asp) | The event occurs when the browser is trying to get media data, but data is not available | 3 |
| [onsuspend](http://www.w3schools.com/jsref/event_onsuspend.asp) | The event occurs when the browser is intentionally not getting media data | 3 |
| [ontimeupdate](http://www.w3schools.com/jsref/event_ontimeupdate.asp) | The event occurs when the playing position has changed (like when the user fast forwards to a different point in the media) | 3 |
| [onvolumechange](http://www.w3schools.com/jsref/event_onvolumechange.asp) | The event occurs when the volume of the media has changed (includes setting the volume to "mute") | 3 |
| [onwaiting](http://www.w3schools.com/jsref/event_onwaiting.asp) | The event occurs when the media has paused but is expected to resume (like when the media pauses to buffer more data) | 3 |

**Animation Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [animationend](http://www.w3schools.com/jsref/event_animationend.asp) | The event occurs when a CSS animation has completed | 3 |
| [animationiteration](http://www.w3schools.com/jsref/event_animationiteration.asp) | The event occurs when a CSS animation is repeated | 3 |
| [animationstart](http://www.w3schools.com/jsref/event_animationstart.asp) | The event occurs when a CSS animation has started | 3 |

**Transition Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [transitionend](http://www.w3schools.com/jsref/event_transitionend.asp) | The event occurs when a CSS transition has completed | 3 |

**Server-Sent Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| [onerror](http://www.w3schools.com/jsref/event_onerror_sse.asp) | The event occurs when an error occurs with the event source |  |
| [onmessage](http://www.w3schools.com/jsref/event_onmessage_sse.asp) | The event occurs when a message is received through the event source |  |
| [onopen](http://www.w3schools.com/jsref/event_onopen_sse.asp) | The event occurs when a connection with the event source is opened |  |

**Misc Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| onmessage | The event occurs when a message is received through or from an object (WebSocket, Web Worker, Event Source or a child frame or a parent window) | 3 |
| onmousewheel | Deprecated. Use the [onwheel](http://www.w3schools.com/jsref/event_onwheel.asp) event instead |  |
| [ononline](http://www.w3schools.com/jsref/event_ononline.asp) | The event occurs when the browser starts to work online | 3 |
| [onoffline](http://www.w3schools.com/jsref/event_onoffline.asp) | The event occurs when the browser starts to work offline | 3 |
| onpopstate | The event occurs when the window's history changes | 3 |
| [onshow](http://www.w3schools.com/jsref/event_onshow.asp) | The event occurs when a <menu> element is shown as a context menu | 3 |
| onstorage | The event occurs when a Web Storage area is updated | 3 |
| [ontoggle](http://www.w3schools.com/jsref/event_ontoggle.asp) | The event occurs when the user opens or closes the <details> element | 3 |
| [onwheel](http://www.w3schools.com/jsref/event_onwheel.asp) | The event occurs when the mouse wheel rolls up or down over an element | 3 |

**Touch Events**

|  |  |  |
| --- | --- | --- |
| **Event** | **Description** | **DOM** |
| ontouchcancel | The event occurs when the touch is interrupted |  |
| ontouchend | The event occurs when a finger is removed from a touch screen |  |
| ontouchmove | The event occurs when a finger is dragged across the screen |  |
| ontouchstart | The event occurs when a finger is placed on a touch screen |  |

**Event Object**

**Constants**

|  |  |  |
| --- | --- | --- |
| **Constant** | **Description** | **DOM** |
| CAPTURING\_PHASE | The current event phase is the capture phase (1) | 1 |
| AT\_TARGET | The current event is in the target phase, i.e. it is being evaluated at the event target (2) | 2 |
| BUBBLING\_PHASE | The current event phase is the bubbling phase (3) | 3 |

**Properties**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| [bubbles](http://www.w3schools.com/jsref/event_bubbles.asp) | Returns whether or not a specific event is a bubbling event | 2 |
| [cancelable](http://www.w3schools.com/jsref/event_cancelable.asp) | Returns whether or not an event can have its default action prevented | 2 |
| [currentTarget](http://www.w3schools.com/jsref/event_currenttarget.asp) | Returns the element whose event listeners triggered the event | 2 |
| [defaultPrevented](http://www.w3schools.com/jsref/event_defaultprevented.asp) | Returns whether or not the preventDefault() method was called for the event | 3 |
| [eventPhase](http://www.w3schools.com/jsref/event_eventphase.asp) | Returns which phase of the event flow is currently being evaluated | 2 |
| [isTrusted](http://www.w3schools.com/jsref/event_istrusted.asp) | Returns whether or not an event is trusted | 3 |
| [target](http://www.w3schools.com/jsref/event_target.asp) | Returns the element that triggered the event | 2 |
| [timeStamp](http://www.w3schools.com/jsref/event_timestamp.asp) | Returns the time (in milliseconds relative to the epoch) at which the event was created | 2 |
| [type](http://www.w3schools.com/jsref/event_type.asp) | Returns the name of the event | 2 |
| [view](http://www.w3schools.com/jsref/event_view.asp) | Returns a reference to the Window object where the event occured | 2 |

**Methods**

|  |  |  |
| --- | --- | --- |
| **Method** | **Description** | **DOM** |
| [preventDefault()](http://www.w3schools.com/jsref/event_preventdefault.asp) | Cancels the event if it is cancelable, meaning that the default action that belongs to the event will not occur | 2 |
| [stopImmediatePropagation()](http://www.w3schools.com/jsref/event_stopimmediatepropagation.asp) | Prevents other listeners of the same event from being called | 3 |
| stopPropagation() | Prevents further propagation of an event during event flow | 2 |

**MouseEvent Object**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| [altKey](http://www.w3schools.com/jsref/event_altkey.asp) | Returns whether the "ALT" key was pressed when the mouse event was triggered | 2 |
| [button](http://www.w3schools.com/jsref/event_button.asp) | Returns which mouse button was pressed when the mouse event was triggered | 2 |
| [buttons](http://www.w3schools.com/jsref/event_buttons.asp) | Returns which mouse buttons were pressed when the mouse event was triggered | 3 |
| [clientX](http://www.w3schools.com/jsref/event_clientx.asp) | Returns the horizontal coordinate of the mouse pointer, relative to the current window, when the mouse event was triggered | 2 |
| [clientY](http://www.w3schools.com/jsref/event_clienty.asp) | Returns the vertical coordinate of the mouse pointer, relative to the current window, when the mouse event was triggered | 2 |
| [ctrlKey](http://www.w3schools.com/jsref/event_ctrlkey.asp) | Returns whether the "CTRL" key was pressed when the mouse event was triggered | 2 |
| [detail](http://www.w3schools.com/jsref/event_detail.asp) | Returns a number that indicates how many times the mouse was clicked | 2 |
| [metaKey](http://www.w3schools.com/jsref/event_metakey.asp) | Returns whether the "META" key was pressed when an event was triggered | 2 |
| [relatedTarget](http://www.w3schools.com/jsref/event_relatedtarget.asp) | Returns the element related to the element that triggered the mouse event | 2 |
| [screenX](http://www.w3schools.com/jsref/event_screenx.asp) | Returns the horizontal coordinate of the mouse pointer, relative to the screen, when an event was triggered | 2 |
| [screenY](http://www.w3schools.com/jsref/event_screeny.asp) | Returns the vertical coordinate of the mouse pointer, relative to the screen, when an event was triggered | 2 |
| [shiftKey](http://www.w3schools.com/jsref/event_shiftkey.asp) | Returns whether the "SHIFT" key was pressed when an event was triggered | 2 |
| [which](http://www.w3schools.com/jsref/event_which.asp) | Returns which mouse button was pressed when the mouse event was triggered | 2 |

**KeyboardEvent Object**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| [altKey](http://www.w3schools.com/jsref/event_key_altkey.asp) | Returns whether the "ALT" key was pressed when the key event was triggered | 2 |
| [ctrlKey](http://www.w3schools.com/jsref/event_key_ctrlkey.asp) | Returns whether the "CTRL" key was pressed when the key event was triggered | 2 |
| [charCode](http://www.w3schools.com/jsref/event_key_charcode.asp) | Returns the Unicode character code of the key that triggered the onkeypress event | 2 |
| [key](http://www.w3schools.com/jsref/event_key_key.asp) | Returns the key value of the key represented by the event | 3 |
| [keyCode](http://www.w3schools.com/jsref/event_key_keycode.asp) | Returns the Unicode character code of the key that triggered the onkeypress event, or the Unicode key code of the key that triggered the onkeydown or onkeyup event | 2 |
| [location](http://www.w3schools.com/jsref/event_key_location.asp) | Returns the location of a key on the keyboard or device | 3 |
| [metaKey](http://www.w3schools.com/jsref/event_key_metakey.asp) | Returns whether the "meta" key was pressed when the key event was triggered | 2 |
| [shiftKey](http://www.w3schools.com/jsref/event_key_shiftkey.asp) | Returns whether the "SHIFT" key was pressed when the key event was triggered | 2 |
| [which](http://www.w3schools.com/jsref/event_key_which.asp) | Returns the Unicode character code of the key that triggered the onkeypress event, or the Unicode key code of the key that triggered the onkeydown or onkeyup event | 2 |

**HashChangeEvent Object**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| [newURL](http://www.w3schools.com/jsref/event_hashchange_newurl.asp) | Returns the URL of the document, after the hash has been changed |  |
| [oldURL](http://www.w3schools.com/jsref/event_hashchange_oldurl.asp) | Returns the URL of the document, before the hash was changed |  |

**PageTransitionEvent Object**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| [persisted](http://www.w3schools.com/jsref/event_pagetransition_persisted.asp) | Returns whether the webpage was cached by the browser |  |

**FocusEvent Object**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| [relatedTarget](http://www.w3schools.com/jsref/event_focus_relatedtarget.asp) | Returns the element related to the element that triggered the event | 3 |

**AnimationEvent Object**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| [animationName](http://www.w3schools.com/jsref/event_animation_animationName.asp) | Returns the name of the animation |  |
| [elapsedTime](http://www.w3schools.com/jsref/event_animation_elapsedtime.asp) | Returns the number of seconds an animation has been running |  |

**TransitionEvent Object**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| [propertyName](http://www.w3schools.com/jsref/event_transition_propertyName.asp) | Returns the name of the CSS property associated with the transition |  |
| [elapsedTime](http://www.w3schools.com/jsref/event_transition_elapsedtime.asp) | Returns the number of seconds a transition has been running |  |

**WheelEvent Object**

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| deltaX | Returns the horizontal scroll amount of a mouse wheel (x-axis) | 3 |
| deltaY | Returns the vertical scroll amount of a mouse wheel (y-axis) | 3 |
| deltaZ | Returns the scroll amount of a mouse wheel for the z-axis | 3 |
| deltaMode | Returns a number that represents the unit of measurements for delta values (pixels, lines or pages) | 3 |