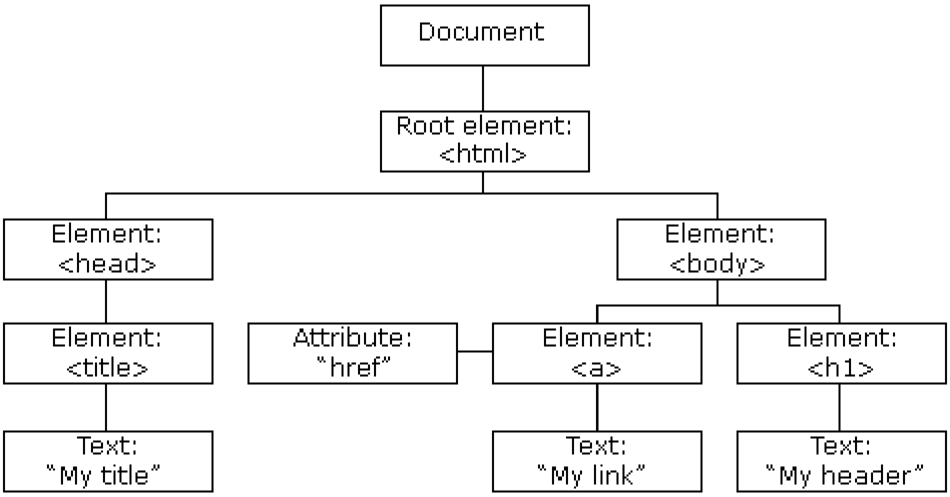
DOM HTML de JavaScript

Cuando se carga una página web, el navegador crea una D DOCUMENTO Object M odelo de la página.

El modelo HTML DOM se construye como un árbol de objetos :



¿Qué puede hacer JavaScript con los elementos del DOM?

- Cambiar todos los elementos HTML de la página.
- Cambiar todos los atributos HTML en la página
- Cambiar todos los estilos CSS de la página.
- Eliminar elementos y atributos HTML existentes
- Agregar nuevos elementos y atributos HTML
- Reaccionar a todos los eventos HTML existentes en la página.
- Crear nuevos eventos HTML en la página.

¿Qué es HTML DOM?

HTML DOM es un modelo de objetos estándar y una interfaz de programación para HTML. Se define:

- Los elementos HTML como objetos
- Las propiedades de todos los elementos HTML
- Los métodos para acceder a todos los elementos HTML
- Los eventos para todos los elementos HTML

En otras palabras: HTML DOM es un estándar sobre cómo obtener, cambiar, agregar o eliminar elementos HTML.

DOM Style

El Style object representa una declaración de estilo individual.

Propiedades del style object

La columna "CSS" indica en qué versión de CSS está definida la propiedad (CSS1, CSS2 o CSS3).

Property	Description	CSS
alignContent	Sets or returns the alignment between the lines inside a flexible container when the items do not use all available space	3
alignItems	Sets or returns the alignment for items inside a flexible container	3
alignSelf	Sets or returns the alignment for selected items inside a flexible container	3
animation	A shorthand property for all the animation properties below, except the animationPlayState property	3
animationDelay	Sets or returns when the animation will start	3
animationDirection	Sets or returns whether or not the animation should play in reverse on alternate cycles	3
animationDuration	Sets or returns how many seconds or milliseconds an animation takes to complete one cycle	3

animationFillMode	Sets or returns what values are applied by the animation outside the time it is executing	3
animationIterationCount	Sets or returns the number of times an animation should be played	3
animationName	Sets or returns a name for the @keyframes animation	3
animationTimingFunction	Sets or returns the speed curve of the animation	3
animationPlayState	Sets or returns whether the animation is running or paused	3
background	Sets or returns all the background properties in one declaration	1
backgroundAttachment	Sets or returns whether a background-image is fixed or scrolls with the page	1
backgroundColor	Sets or returns the background-color of an element	1
backgroundImage	Sets or returns the background-image for an element	1
backgroundPosition	Sets or returns the starting position of a background-image	1
backgroundRepeat	Sets or returns how to repeat (tile) a background-image	1
backgroundClip	Sets or returns the painting area of the background	3
backgroundOrigin	Sets or returns the positioning area of the background images	3

backgroundSize	Sets or returns the size of the background image	3
backfaceVisibility	Sets or returns whether or not an element should be visible when not facing the screen	3
border	Sets or returns borderWidth, borderStyle, and borderColor in one declaration	1
borderBottom	Sets or returns all the borderBottom properties in one declaration	1
borderBottomColor	Sets or returns the color of the bottom border	1
borderBottomLeftRadius	Sets or returns the shape of the border of the bottom-left corner	3
borderBottomRightRadius	Sets or returns the shape of the border of the bottom-right corner	3
borderBottomStyle	Sets or returns the style of the bottom border	1
borderBottomWidth	Sets or returns the width of the bottom border	1
borderCollapse	Sets or returns whether the table border should be collapsed into a single border, or not	2
borderColor	Sets or returns the color of an element's border (can have up to four values)	1
borderImage	A shorthand property for setting or returning all the borderImage properties	3

borderImageOutset	Sets or returns the amount by which the border image area extends beyond the border box	3
borderImageRepeat	Sets or returns whether the image-border should be repeated, rounded or stretched	3
borderImageSlice	Sets or returns the inward offsets of the image-border	3
borderImageSource	Sets or returns the image to be used as a border	3
borderImageWidth	Sets or returns the widths of the image-border	3
borderLeft	Sets or returns all the borderLeft properties in one declaration	1
borderLeftColor	Sets or returns the color of the left border	1
borderLeftStyle	Sets or returns the style of the left border	1
borderLeftWidth	Sets or returns the width of the left border	1
borderRadius	A shorthand property for setting or returning all the four borderRadius properties	3
borderRight	Sets or returns all the borderRight properties in one declaration	1
borderRightColor	Sets or returns the color of the right border	1
borderRightStyle	Sets or returns the style of the right border	1

borderRightWidth	Sets or returns the width of the right border	1
borderSpacing	Sets or returns the space between cells in a table	2
borderStyle	Sets or returns the style of an element's border (can have up to four values)	1
borderTop	Sets or returns all the borderTop properties in one declaration	1
borderTopColor	Sets or returns the color of the top border	1
borderTopLeftRadius	Sets or returns the shape of the border of the top-left corner	3
borderTopRightRadius	Sets or returns the shape of the border of the top-right corner	3
borderTopStyle	Sets or returns the style of the top border	1
borderTopWidth	Sets or returns the width of the top border	1
borderWidth	Sets or returns the width of an element's border (can have up to four values)	1
bottom	Sets or returns the bottom position of a positioned element	2
boxDecorationBreak	Sets or returns the behaviour of the background and border of an element at page-break, or, for in-line elements, at line-break.	3
boxShadow	Attaches one or more drop-shadows to the box	3

boxSizing	Allows you to define certain elements to fit an area in a certain way	3
captionSide	Sets or returns the position of the table caption	2
caretColor	Sets or returns the caret/cursor color of an element	3
clear	Sets or returns the position of the element relative to floating objects	1
clip	Sets or returns which part of a positioned element is visible	2
color	Sets or returns the color of the text	1
columnCount	Sets or returns the number of columns an element should be divided into	3
columnFill	Sets or returns how to fill columns	3
columnGap	Sets or returns the gap between the columns	3
columnRule	A shorthand property for setting or returning all the columnRule properties	3
columnRuleColor	Sets or returns the color of the rule between columns	3
columnRuleStyle	Sets or returns the style of the rule between columns	3
columnRuleWidth	Sets or returns the width of the rule between columns	3

columns	A shorthand property for setting or returning columnWidth and columnCount	3
columnSpan	Sets or returns how many columns an element should span across	3
columnWidth	Sets or returns the width of the columns	3
content	Used with the :before and :after pseudo-elements, to insert generated content	2
counterIncrement	Increments one or more counters	2
counterReset	Creates or resets one or more counters	2
cursor	Sets or returns the type of cursor to display for the mouse pointer	2
direction	Sets or returns the text direction	2
display	Sets or returns an element's display type	1
emptyCells	Sets or returns whether to show the border and background of empty cells, or not	2
filter	Sets or returns image filters (visual effects, like blur and saturation)	3
flex	Sets or returns the length of the item, relative to the rest	3
flexBasis	Sets or returns the initial length of a flexible item	3
flexDirection	Sets or returns the direction of the flexible items	3

flexFlow	A shorthand property for the flexDirection and the flexWrap properties	3
flexGrow	Sets or returns how much the item will grow relative to the rest	3
flexShrink	Sets or returns how the item will shrink relative to the rest	3
flexWrap	Sets or returns whether the flexible items should wrap or not	3
cssFloat	Sets or returns the horizontal alignment of an element	1
font	Sets or returns fontStyle, fontVariant, fontWeight, fontSize, lineHeight, and fontFamily in one declaration	1
fontFamily	Sets or returns the font family for text	1
fontSize	Sets or returns the font size of the text	1
fontStyle	Sets or returns whether the style of the font is normal, italic or oblique	1
fontVariant	Sets or returns whether the font should be displayed in small capital letters	1
fontWeight	Sets or returns the boldness of the font	1
fontSizeAdjust	Preserves the readability of text when font fallback occurs	3
fontStretch	Selects a normal, condensed, or expanded face from a font family	3

hangingPunctuation	Specifies whether a punctuation character may be placed outside the line box	3
height	Sets or returns the height of an element	1
hyphens	Sets how to split words to improve the layout of paragraphs	3
icon	Provides the author the ability to style an element with an iconic equivalent	3
imageOrientation	Specifies a rotation in the right or clockwise direction that a user agent applies to an image	3
isolation	Defines whether an element must create a new stacking content	3
justifyContent	Sets or returns the alignment between the items inside a flexible container when the items do not use all available space.	3
left	Sets or returns the left position of a positioned element	2
letterSpacing	Sets or returns the space between characters in a text	1
lineHeight	Sets or returns the distance between lines in a text	1
listStyle	Sets or returns listStyleImage, listStylePosition, and listStyleType in one declaration	1
listStyleImage	Sets or returns an image as the list-item marker	1

listStylePosition	Sets or returns the position of the list-item marker	1
listStyleType	Sets or returns the list-item marker type	1
margin	Sets or returns the margins of an element (can have up to four values)	1
marginBottom	Sets or returns the bottom margin of an element	1
marginLeft	Sets or returns the left margin of an element	1
marginRight	Sets or returns the right margin of an element	1
marginTop	Sets or returns the top margin of an element	1
maxHeight	Sets or returns the maximum height of an element	2
maxWidth	Sets or returns the maximum width of an element	2
minHeight	Sets or returns the minimum height of an element	2
minWidth	Sets or returns the minimum width of an element	2
navDown	Sets or returns where to navigate when using the arrow-down navigation key	3
navIndex	Sets or returns the tabbing order for an element	3

navLeft	Sets or returns where to navigate when using the arrow-left navigation key	3
navRight	Sets or returns where to navigate when using the arrow-right navigation key	3
navUp	Sets or returns where to navigate when using the arrow-up navigation key	3
objectFit	Specifies how the contents of a replaced element should be fitted to the box established by its used height and width	3
objectPosition	Specifies the alignment of the replaced element inside its box	3
opacity	Sets or returns the opacity level for an element	3
order	Sets or returns the order of the flexible item, relative to the rest	3
orphans	Sets or returns the minimum number of lines for an element that must be left at the bottom of a page when a page break occurs inside an element	2
outline	Sets or returns all the outline properties in one declaration	2
outlineColor	Sets or returns the color of the outline around a element	2
outlineOffset	Offsets an outline, and draws it beyond the border edge	3
outlineStyle	Sets or returns the style of the outline around an element	2

outlineWidth	Sets or returns the width of the outline around an element	2
overflow	Sets or returns what to do with content that renders outside the element box	2
overflowX	Specifies what to do with the left/right edges of the content, if it overflows the element's content area	3
overflowY	Specifies what to do with the top/bottom edges of the content, if it overflows the element's content area	3
padding	Sets or returns the padding of an element (can have up to four values)	1
paddingBottom	Sets or returns the bottom padding of an element	1
paddingLeft	Sets or returns the left padding of an element	1
paddingRight	Sets or returns the right padding of an element	1
paddingTop	Sets or returns the top padding of an element	1
pageBreakAfter	Sets or returns the page-break behavior after an element	2
pageBreakBefore	Sets or returns the page-break behavior before an element	2
pageBreakInside	Sets or returns the page-break behavior inside an element	2

perspective	Sets or returns the perspective on how 3D elements are viewed	3
perspectiveOrigin	Sets or returns the bottom position of 3D elements	3
position	Sets or returns the type of positioning method used for an element (static, relative, absolute or fixed)	2
quotes	Sets or returns the type of quotation marks for embedded quotations	2
resize	Sets or returns whether or not an element is resizable by the user	3
right	Sets or returns the right position of a positioned element	2
scrollBehavior	Specifies whether to smoothly animate the scroll position, instead of a straight jump, when the user clicks on a link within a scrollable boxt	
tableLayout	Sets or returns the way to lay out table cells, rows, and columns	2
tabSize	Sets or returns the length of the tab-character	3
textAlign	Sets or returns the horizontal alignment of text	1
textAlignLast	Sets or returns how the last line of a block or a line right before a forced line break is aligned when text-align is "justify"	3
textDecoration	Sets or returns the decoration of a text	1

textDecorationColor	Sets or returns the color of the text-decoration	3
textDecorationLine	Sets or returns the type of line in a text-decoration	3
textDecorationStyle	Sets or returns the style of the line in a text decoration	3
textIndent	Sets or returns the indentation of the first line of text	1
textJustify	Sets or returns the justification method used when text-align is "justify"	3
textOverflow	Sets or returns what should happen when text overflows the containing element	3
textShadow	Sets or returns the shadow effect of a text	3
textTransform	Sets or returns the capitalization of a text	1
top	Sets or returns the top position of a positioned element	2
transform	Applies a 2D or 3D transformation to an element	3
transformOrigin	Sets or returns the position of transformed elements	3
transformStyle	Sets or returns how nested elements are rendered in 3D space	3
transition	A shorthand property for setting or returning the four transition properties	3

transitionProperty	Sets or returns the CSS property that the transition effect is for	3
transitionDuration	Sets or returns how many seconds or milliseconds a transition effect takes to complete	3
transitionTimingFunction	Sets or returns the speed curve of the transition effect	3
transitionDelay	Sets or returns when the transition effect will start	3
unicodeBidi	Sets or returns whether the text should be overridden to support multiple languages in the same document	2
userSelect	Sets or returns whether the text of an element can be selected or not	2
verticalAlign	Sets or returns the vertical alignment of the content in an element	1
visibility	Sets or returns whether an element should be visible	2
whiteSpace	Sets or returns how to handle tabs, line breaks and whitespace in a text	1
width	Sets or returns the width of an element	1
wordBreak	Sets or returns line breaking rules for non-CJK scripts	3
wordSpacing	Sets or returns the spacing between words in a text	1
wordWrap	Allows long, unbreakable words to be broken and wrap to the next line	3

widows	Sets or returns the minimum number of lines for an element that must be visible at the top of a page	2
zIndex	Sets or returns the stack order of a positioned element	2

Acceder a un Style object

Se puede acceder al objeto Estilo desde la sección del encabezado del documento o desde elementos HTML específicos.

Accediendo a los Style objects desde la sección del encabezado del documento:

Ejemplo

```
var x = document.getElementsByTagName("STYLE");
```

Accediendo al style object de un elemento especificado:

Ejemplo

```
var x = document.getElementById("myH1").style;
```

Crear un Style Object

Puede crear un elemento <style> utilizando el método document.createElement ():

Ejemplo

```
var x = document.createElement("STYLE");
```

También puede establecer las propiedades de estilo de un elemento existente:

Ejemplo

```
document.getElementById("myH1").style.color = "red";
```

DOM Element

El element object

En el DOM HTML, el Element object representa un elemento HTML, como P, DIV, A, TABLE o cualquier otro elemento HTML.

Propiedades y métodos

Las siguientes propiedades y métodos se pueden utilizar en todos los elementos HTML:

Property / Method	Description
accessKey	Sets or returns the accesskey attribute of an element
addEventListener()	Attaches an event handler to the specified element
appendChild()	Adds a new child node, to an element, as the last child node
attributes	Returns a NamedNodeMap of an element's attributes
blur()	Removes focus from an element
childElementCount	Returns the number of child elements an element has

childNodes	Returns a collection of an element's child nodes (including text and comment nodes)
children	Returns a collection of an element's child element (excluding text and comment nodes)
classList	Returns the class name(s) of an element
className	Sets or returns the value of the class attribute of an element
click()	Simulates a mouse-click on an element
clientHeight	Returns the height of an element, including padding
clientLeft	Returns the width of the left border of an element
clientTop	Returns the width of the top border of an element
clientWidth	Returns the width of an element, including padding

cloneNode()	Clones an element
closest()	Searches up the DOM tree for the closest element which matches a specified CSS selector
compareDocumentPosition()	Compares the document position of two elements
contains()	Returns true if a node is a descendant of a node, otherwise false
contentEditable	Sets or returns whether the content of an element is editable or not
dir	Sets or returns the value of the dir attribute of an element
exitFullscreen()	Cancels an element in fullscreen mode
firstChild	Returns the first child node of an element
firstElementChild	Returns the first child element of an element
focus()	Gives focus to an element

getAttribute()	Returns the specified attribute value of an element node
getAttributeNode()	Returns the specified attribute node
getBoundingClientRect()	Returns the size of an element and its position relative to the viewport
getElementsByClassName()	Returns a collection of all child elements with the specified class name
getElementsByTagName()	Returns a collection of all child elements with the specified tag name
hasAttribute()	Returns true if an element has the specified attribute, otherwise false
hasAttributes()	Returns true if an element has any attributes, otherwise false
hasChildNodes()	Returns true if an element has any child nodes, otherwise false
id	Sets or returns the value of the id attribute of an element

innerHTML	Sets or returns the content of an element
innerText	Sets or returns the text content of a node and its descendants
insertAdjacentElement()	Inserts a HTML element at the specified position relative to the current element
insertAdjacentHTML()	Inserts a HTML formatted text at the specified position relative to the current element
insertAdjacentText()	Inserts text into the specified position relative to the current element
insertBefore()	Inserts a new child node before a specified, existing, child node
isContentEditable	Returns true if the content of an element is editable, otherwise false
isDefaultNamespace()	Returns true if a specified namespaceURI is the default, otherwise false
isEqualNode()	Checks if two elements are equal

isSameNode()	Checks if two elements are the same node
isSupported()	Returns true if a specified feature is supported on the element
lang	Sets or returns the value of the lang attribute of an element
lastChild	Returns the last child node of an element
lastElementChild	Returns the last child element of an element
matches()	Returns a Boolean value indicating whether an element is matched by a specific CSS selector or not
namespaceURI	Returns the namespace URI of an element
nextSibling	Returns the next node at the same node tree level
nextElementSibling	Returns the next element at the same node tree level

nodeName	Returns the name of a node
nodeType	Returns the node type of a node
nodeValue	Sets or returns the value of a node
normalize()	Joins adjacent text nodes and removes empty text nodes in an element
offsetHeight	Returns the height of an element, including padding, border and scrollbar
offsetWidth	Returns the width of an element, including padding, border and scrollbar
offsetLeft	Returns the horizontal offset position of an element
offsetParent	Returns the offset container of an element
offsetTop	Returns the vertical offset position of an element
outerHTML	Sets or returns the content of an element (including the start tag and the end tag)

outerText	Sets or returns the outer text content of a node and its descendants
ownerDocument	Returns the root element (document object) for an element
parentNode	Returns the parent node of an element
parentElement	Returns the parent element node of an element
previousSibling	Returns the previous node at the same node tree level
previousElementSibling	Returns the previous element at the same node tree level
querySelector()	Returns the first child element that matches a specified CSS selector(s) of an element
querySelectorAll()	Returns all child elements that matches a specified CSS selector(s) of an element
remove()	Removes the element from the DOM

removeAttribute()	Removes a specified attribute from an element
removeAttributeNode()	Removes a specified attribute node, and returns the removed node
removeChild()	Removes a child node from an element
removeEventListener()	Removes an event handler that has been attached with the addEventListener() method
replaceChild()	Replaces a child node in an element
requestFullscreen()	Shows an element in fullscreen mode
scrollHeight	Returns the entire height of an element, including padding
scrollIntoView()	Scrolls the specified element into the visible area of the browser window
scrollLeft	Sets or returns the number of pixels an element's content is scrolled horizontally

scrollTop	Sets or returns the number of pixels an element's content is scrolled vertically
scrollWidth	Returns the entire width of an element, including padding
setAttribute()	Sets or changes the specified attribute, to the specified value
setAttributeNode()	Sets or changes the specified attribute node
style	Sets or returns the value of the style attribute of an element
tabIndex	Sets or returns the value of the tabindex attribute of an element
tagName	Returns the tag name of an element
textContent	Sets or returns the textual content of a node and its descendants
title	Sets or returns the value of the title attribute of an element
toString()	Converts an element to a string

DOM Document

El document object

Cuando un documento HTML se carga en un navegador web, se convierte en un objeto de documento .

El document object es el nodo raíz del documento HTML.

Propiedades y métodos del objeto de documento

Las siguientes propiedades y métodos se pueden utilizar en documentos HTML:

Property / Method	Description
activeElement	Returns the currently focused element in the document
addEventListener()	Attaches an event handler to the document
adoptNode()	Adopts a node from another document
anchors	Returns a collection of all <a> elements in the document that have a name attribute
applets	Returns a collection of all <applet> elements in the document

baseURI	Returns the absolute base URI of a document
body	Sets or returns the document's body (the <body> element)
close()	Closes the output stream previously opened with document.open()
cookie	Returns all name/value pairs of cookies in the document
charset	Deprecated. Use characterSet instead. Returns the character encoding for the document
characterSet	Returns the character encoding for the document
createAttribute()	Creates an attribute node
createComment()	Creates a Comment node with the specified text
createDocumentFragment()	Creates an empty DocumentFragment node

createElement()	Creates an Element node
createEvent()	Creates a new event
createTextNode()	Creates a Text node
defaultView	Returns the window object associated with a document, or null if none is available.
designMode	Controls whether the entire document should be editable or not.
doctype	Returns the Document Type Declaration associated with the document
documentElement	Returns the Document Element of the document (the <html> element)
documentMode	Returns the mode used by the browser to render the document
documentURI	Sets or returns the location of the document
domain	Returns the domain name of the server that loaded the document

domConfig	Obsolete. Returns the DOM configuration of the document
embeds	Returns a collection of all <embed> elements the document
execCommand()	Invokes the specified clipboard operation on the element currently having focus.
forms	Returns a collection of all <form> elements in the document
fullscreenElement	Returns the current element that is displayed in fullscreen mode
fullscreenEnabled()	Returns a Boolean value indicating whether the document can be viewed in fullscreen mode
getElementById()	Returns the element that has the ID attribute with the specified value
getElementsByClassName()	Returns a HTMLCollection containing all elements with the specified class name
getElementsByName()	Returns a HTMLCollection containing all elements with a specified name

getElementsByTagName()	Returns a HTMLCollection containing all elements with the specified tag name
hasFocus()	Returns a Boolean value indicating whether the document has focus
head	Returns the <head> element of the document
images	Returns a collection of all <img> elements in the document
implementation	Returns the DOMImplementation object that handles this document
importNode()	Imports a node from another document
inputEncoding	Returns the encoding, character set, used for the document
lastModified	Returns the date and time the document was last modified
links	Returns a collection of all <a> and <area> elements in the document that have a href attribute

normalize()	Removes empty Text nodes, and joins adjacent nodes
normalizeDocument()	Removes empty Text nodes, and joins adjacent nodes
open()	Opens an HTML output stream to collect output from document.write()
querySelector()	Returns the first element that matches a specified CSS selector(s) in the document
querySelectorAll()	Returns a static NodeList containing all elements that matches a specified CSS selector(s) in the document
readyState	Returns the (loading) status of the document
referrer	Returns the URL of the document that loaded the current document
removeEventListener()	Removes an event handler from the document (that has been attached with the addEventListener() method)
renameNode()	Renames the specified node

scripts	Returns a collection of <script> elements in the document
strictErrorChecking	Sets or returns whether error-checking is enforced or not
title	Sets or returns the title of the document
URL	Returns the full URL of the HTML document
write()	Writes HTML expressions or JavaScript code to a document
writeln()	Same as write(), but adds a newline character after each statement

DOM Events (Eventos del DOM)

HTML DOM permite que JavaScript reaccione a eventos HTML.

Reaccionar a los eventos

Un JavaScript se puede ejecutar cuando ocurre un evento, como cuando un usuario hace clic en un elemento HTML.

Para ejecutar código cuando un usuario hace clic en un elemento, agregue código JavaScript a un atributo de evento HTML:

onclick=JavaScript

Ejemplos de eventos HTML:

- Cuando un usuario hace clic con el mouse
- Cuando se ha cargado una página web
- Cuando se ha cargado una imagen
- Cuando el mouse se mueve sobre un elemento
- Cuando se cambia un campo de entrada
- Cuando se envía un formulario HTML
- Cuando un usuario pulsa una tecla

En este ejemplo, el contenido del <h1>elemento cambia cuando un usuario hace clic en él:

Ejemplo

```
<!DOCTYPE html>
<html>
<body>

<h1 onclick="this.innerHTML = 'Ooops!'">Click on this text!</h1>

</body>
</html>
```

En este ejemplo, se llama a una función desde el controlador de eventos:

Ejemplo

```
<!DOCTYPE html>
<html>
<body>

<h1 onclick="changeText(this)">Click on this text!</h1>

<script>
function changeText(id) {
  id.innerHTML = "Ooops!";
}
</script>

</body>
</html>
```

Atributos de eventos HTML

Para asignar eventos a elementos HTML, puede utilizar atributos de evento.

Ejemplo

Asignar un evento onclick a un elemento de botón:

```
<button onclick="displayDate()">Try it</button>
```

En el ejemplo anterior, una función nombrada displayDatese ejecutará cuando se haga clic en el botón.

Asignar eventos usando el DOM HTML

El DOM HTML le permite asignar eventos a elementos HTML usando JavaScript:

Ejemplo

Asignar un evento onclick a un elemento de botón:

```
<script>
document.getElementById("myBtn").onclick = displayDate;
</script>
```

En el ejemplo anterior, una función nombrada displayDatese asigna a un elemento HTML con id="myBtn".

La función se ejecutará cuando se haga clic en el botón.

Los eventos onload y onunload

Los eventos onloady onunloadse activan cuando el usuario entra o sale de la página.

El onloadevento se puede utilizar para verificar el tipo de navegador del visitante y la versión del navegador, y cargar la versión adecuada de la página web según la información.

Los eventos onloady onunloadse pueden utilizar para tratar las cookies.

Ejemplo

```
<body onload="checkCookies()">
```

El evento onchange

El onchangeevento se usa a menudo en combinación con la validación de los campos de entrada.

A continuación se muestra un ejemplo de cómo utilizar onchange. La upperCase() función se llamará cuando un usuario cambie el contenido de un campo de entrada.

Ejemplo

```
<input type="text" id="fname" onchange="upperCase()">
```

Los eventos onmouseover y onmouseout

Los eventos onmouseovery onmouseoutse pueden utilizar para activar una función cuando el usuario pasa el ratón por encima o fuera de un elemento HTML.

Los eventos onmousedown, onmouseup y onclick

Las onmousedown, onmouseupy onclicklos acontecimientos son todos partes de un clic del ratón. Primero, cuando se hace clic en un botón del mouse, se activa el evento onmousedown, luego, cuando se suelta el botón del mouse, se activa el evento onmouseup, finalmente, cuando se completa el clic del mouse, se activa el evento onclick.

Más ejemplos

onmousedown y onmouseup
Cambia una imagen cuando un usuario mantiene presionado el botón del mouse.

onload
Muestra un cuadro de alerta cuando la página ha terminado de cargarse.

onfocus
Cambia el color de fondo de un campo de entrada cuando se enfoca.

Eventos del mouse
Cambia el color de un elemento cuando el cursor se mueve sobre él.

Eventos DOM HTML

Los eventos HTML DOM permiten que JavaScript registre diferentes controladores de eventos en elementos de un documento HTML.

Los eventos se usan normalmente en combinación con funciones, y la función no se ejecutará antes de que ocurra el evento (como cuando un usuario hace clic en un botón).

Event	Description	Belongs To

abort	The event occurs when the loading of a media is aborted	UiEvent, Event
afterprint	The event occurs when a page has started printing, or if the print dialogue box has been closed	Event
animationend	The event occurs when a CSS animation has completed	AnimationEvent
animationiteration	The event occurs when a CSS animation is repeated	AnimationEvent
animationstart	The event occurs when a CSS animation has started	AnimationEvent
beforeprint	The event occurs when a page is about to be printed	Event

beforeunload	The event occurs before the document is about to be unloaded	UiEvent, Event
blur	The event occurs when an element loses focus	FocusEvent
canplay	The event occurs when the browser can start playing the media (when it has buffered enough to begin)	Event
canplaythrough	The event occurs when the browser can play through the media without stopping for buffering	Event
change	The event occurs when the content of a form element, the selection, or the checked state have changed (for <input>, <select>, and <textarea>)	Event
click	The event occurs when the user	MouseEvent

	clicks on an element	
contextmenu	The event occurs when the user right-clicks on an element to open a context menu	MouseEvent
copy	The event occurs when the user copies the content of an element	ClipboardEvent
cut	The event occurs when the user cuts the content of an element	ClipboardEvent
dblclick	The event occurs when the user double-clicks on an element	MouseEvent
drag	The event occurs when an element is being dragged	DragEvent
dragend	The event occurs when the user has finished dragging an element	DragEvent

dragenter	The event occurs when the dragged element enters the drop target	DragEvent
dragleave	The event occurs when the dragged element leaves the drop target	DragEvent
dragover	The event occurs when the dragged element is over the drop target	DragEvent
dragstart	The event occurs when the user starts to drag an element	DragEvent
drop	The event occurs when the dragged element is dropped on the drop target	DragEvent
durationchange	The event occurs when the duration of the media is changed	Event
ended	The event occurs when the media	Event

	has reach the end (useful for messages like "thanks for listening")	
error	The event occurs when an error occurs while loading an external file	ProgressEvent, UiEvent, Event
focus	The event occurs when an element gets focus	FocusEvent
focusin	The event occurs when an element is about to get focus	FocusEvent
focusout	The event occurs when an element is about to lose focus	FocusEvent
fullscreenchange	The event occurs when an element is displayed in fullscreen mode	Event
fullscreenerror	The event occurs when an element can not be	Event

	displayed in fullscreen mode	
hashchange	The event occurs when there has been changes to the anchor part of a URL	HashChangeEvent
input	The event occurs when an element gets user input	InputEvent, Event
invalid	The event occurs when an element is invalid	Event
keydown	The event occurs when the user is pressing a key	KeyboardEvent
keypress	The event occurs when the user presses a key	KeyboardEvent
keyup	The event occurs when the user releases a key	KeyboardEvent
load	The event occurs when an object has loaded	UiEvent, Event

loadeddata	The event occurs when media data is loaded	Event
loadedmetadata	The event occurs when meta data (like dimensions and duration) are loaded	Event
loadstart	The event occurs when the browser starts looking for the specified media	ProgressEvent
message	The event occurs when a message is received through the event source	Event
mousedown	The event occurs when the user presses a mouse button over an element	MouseEvent
mouseenter	The event occurs when the pointer is moved onto an element	MouseEvent

mouseleave	The event occurs when the pointer is moved out of an element	MouseEvent
mousemove	The event occurs when the pointer is moving while it is over an element	MouseEvent
mouseover	The event occurs when the pointer is moved onto an element, or onto one of its children	MouseEvent
mouseout	The event occurs when a user moves the mouse pointer out of an element, or out of one of its children	MouseEvent
mouseup	The event occurs when a user releases a mouse button over an element	MouseEvent
mousewheel	Deprecated. Use the wheel event instead	WheelEvent

offline	The event occurs when the browser starts to work offline	Event
online	The event occurs when the browser starts to work online	Event
open	The event occurs when a connection with the event source is opened	Event
pagehide	The event occurs when the user navigates away from a webpage	PageTransitionEvent
pageshow	The event occurs when the user navigates to a webpage	PageTransitionEvent
paste	The event occurs when the user pastes some content in an element	ClipboardEvent
pause	The event occurs when the media is	Event

	paused either by the user or programmatically	
play	The event occurs when the media has been started or is no longer paused	Event
playing	The event occurs when the media is playing after having been paused or stopped for buffering	Event
popstate	The event occurs when the window's history changes	PopStateEvent
progress	The event occurs when the browser is in the process of getting the media data (downloading the media)	Event
ratechange	The event occurs when the playing speed of the media is changed	Event

resize	The event occurs when the document view is resized	UiEvent, Event
reset	The event occurs when a form is reset	Event
scroll	The event occurs when an element's scrollbar is being scrolled	UiEvent, Event
search	The event occurs when the user writes something in a search field (for <input="search">)	Event
seeked	The event occurs when the user is finished moving/skipping to a new position in the media	Event
seeking	The event occurs when the user starts moving/skipping	Event

	to a new position in the media	
select	The event occurs after the user selects some text (for <input> and <textarea>)	UiEvent, Event
show	The event occurs when a <menu> element is shown as a context menu	Event
stalled	The event occurs when the browser is trying to get media data, but data is not available	Event
storage	The event occurs when a Web Storage area is updated	StorageEvent
submit	The event occurs when a form is submitted	Event
suspend	The event occurs when the browser is intentionally not	Event

	getting media data	
timeupdate	The event occurs when the playing position has changed (like when the user fast forwards to a different point in the media)	Event
toggle	The event occurs when the user opens or closes the <details> element	Event
touchcancel	The event occurs when the touch is interrupted	TouchEvent
touchend	The event occurs when a finger is removed from a touch screen	TouchEvent
touchmove	The event occurs when a finger is dragged across the screen	TouchEvent
touchstart	The event occurs when a finger is	TouchEvent

	placed on a touch screen	
transitionend	The event occurs when a CSS transition has completed	TransitionEvent
unload	The event occurs once a page has unloaded (for <body>)	UiEvent, Event
volumechange	The event occurs when the volume of the media has changed (includes setting the volume to "mute")	Event
waiting	The event occurs when the media has paused but is expected to resume (like when the media pauses to buffer more data)	Event
wheel	The event occurs when the mouse wheel rolls up or down over an element	WheelEvent

Propiedades y métodos de eventos DOM de HTML

Property/Method	Description	Belongs To
altKey	Returns whether the "ALT" key was pressed when the mouse event was triggered	MouseEvent
altKey	Returns whether the "ALT" key was pressed when the key event was triggered	KeyboardEvent, TouchEvent
animationName	Returns the name of the animation	AnimationEvent
bubbles	Returns whether or not a specific event is a bubbling event	Event
button	Returns which mouse button was pressed when the	MouseEvent

	mouse event was triggered	
buttons	Returns which mouse buttons were pressed when the mouse event was triggered	MouseEvent
cancelable	Returns whether or not an event can have its default action prevented	Event
charCode	Returns the Unicode character code of the key that triggered the onkeypress event	KeyboardEvent
changeTouches	Returns a list of all the touch objects whose state changed between the previous touch and this touch	TouchEvent
clientX	Returns the horizontal	MouseEvent, TouchEvent

	coordinate of the mouse pointer, relative to the current window, when the mouse event was triggered	
clientY	Returns the vertical coordinate of the mouse pointer, relative to the current window, when the mouse event was triggered	MouseEvent, TouchEvent
clipboardData	Returns an object containing the data affected by the clipboard operation	ClipboardData
code	Returns the code of the key that triggered the event	KeyboardEvent
composed	Returns whether the	Event

	event is composed or not	
createEvent()	Creates a new event	Event
ctrlKey	Returns whether the "CTRL" key was pressed when the mouse event was triggered	MouseEvent
ctrlKey	Returns whether the "CTRL" key was pressed when the key event was triggered	KeyboardEvent, TouchEvent
currentTarget	Returns the element whose event listeners triggered the event	Event
data	Returns the inserted characters	InputEvent

dataTransfer	Returns an object containing the data being dragged/dropped, or inserted/deleted	DragEvent, InputEvent
defaultPrevented	Returns whether or not the preventDefault() method was called for the event	Event
deltaX	Returns the horizontal scroll amount of a mouse wheel (x-axis)	WheelEvent
deltaY	Returns the vertical scroll amount of a mouse wheel (y-axis)	WheelEvent
deltaZ	Returns the scroll amount of a mouse wheel for the z-axis	WheelEvent

deltaMode	Returns a number that represents the unit of measurements for delta values (pixels, lines or pages)	WheelEvent
detail	Returns a number that indicates how many times the mouse was clicked	UiEvent
elapsedTime	Returns the number of seconds an animation has been running	AnimationEvent
elapsedTime	Returns the number of seconds a transition has been running	
eventPhase	Returns which phase of the event flow is currently being evaluated	Event

getTargetRanges()	Returns an array containing target ranges that will be affected by the insertion/deletion	InputEvent
getModifierState()	Returns an array containing target ranges that will be affected by the insertion/deletion	MouseEvent
inputType	Returns the type of the change (i.e "inserting" or "deleting")	InputEvent
isComposing	Returns whether the state of the event is composing or not	InputEvent, KeyboardEvent
isTrusted	Returns whether or not	Event

	an event is trusted	
key	Returns the key value of the key represented by the event	KeyboardEvent
key	Returns the key of the changed storage item	StorageEvent
keyCode	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	KeyboardEvent
location	Returns the location of a key on the keyboard or device	KeyboardEvent
lengthComputable	Returns whether the	ProgressEvent

	length of the progress can be computable or not	
loaded	Returns how much work has been loaded	ProgressEvent
metaKey	Returns whether the "META" key was pressed when an event was triggered	MouseEvent
metaKey	Returns whether the "meta" key was pressed when the key event was triggered	KeyboardEvent, TouchEvent
MovementX	Returns the horizontal coordinate of the mouse pointer relative to the position of the last mousemove event	MouseEvent

MovementY	Returns the vertical coordinate of the mouse pointer relative to the position of the last mousemove event	MouseEvent
newValue	Returns the new value of the changed storage item	StorageEvent
newURL	Returns the URL of the document, after the hash has been changed	HasChangeEvent
offsetX	Returns the horizontal coordinate of the mouse pointer relative to the position of the edge of the target element	MouseEvent
offsetY	Returns the vertical coordinate of the mouse	MouseEvent

	pointer relative to the position of the edge of the target element	
oldValue	Returns the old value of the changed storage item	StorageEvent
oldURL	Returns the URL of the document, before the hash was changed	HasChangeEvent
onemptied	The event occurs when something bad happens and the media file is suddenly unavailable (like unexpectedly disconnects)	
pageX	Returns the horizontal coordinate of the mouse pointer, relative to the document, when the	MouseEvent

	mouse event was triggered	
pageY	Returns the vertical coordinate of the mouse pointer, relative to the document, when the mouse event was triggered	MouseEvent
persisted	Returns whether the webpage was cached by the browser	PageTransitionEvent
preventDefault()	Cancels the event if it is cancelable, meaning that the default action that belongs to the event will not occur	Event
propertyName	Returns the name of the CSS property associated with the animation or transition	AnimationEvent, TransitionEvent

pseudoElement	Returns the name of the pseudo-element of the animation or transition	AnimationEvent, TransitionEvent
region		MouseEvent
relatedTarget	Returns the element related to the element that triggered the mouse event	MouseEvent
relatedTarget	Returns the element related to the element that triggered the event	FocusEvent
repeat	Returns whether a key is being hold down repeatedly, or not	KeyboardEvent
screenX	Returns the horizontal coordinate of the mouse pointer,	MouseEvent

	relative to the screen, when an event was triggered	
screenY	Returns the vertical coordinate of the mouse pointer, relative to the screen, when an event was triggered	MouseEvent
shiftKey	Returns whether the "SHIFT" key was pressed when an event was triggered	MouseEvent
shiftKey	Returns whether the "SHIFT" key was pressed when the key event was triggered	KeyboardEvent, TouchEvent
state	Returns an object containing a copy of the history entries	PopStateEvent

stopImmediatePropagation()	Prevents other listeners of the same event from being called	Event
stopPropagation()	Prevents further propagation of an event during event flow	Event
storageArea	Returns an object representing the affected storage object	StorageEvent
target	Returns the element that triggered the event	Event
targetTouches	Returns a list of all the touch objects that are in contact with the surface and where the touchstart event occured on the same target element	TouchEvent

	as the current target element	
timeStamp	Returns the time (in milliseconds relative to the epoch) at which the event was created	Event
total	Returns the total amount of work that will be loaded	ProgressEvent
touches	Returns a list of all the touch objects that are currently in contact with the surface	TouchEvent
transitionend	The event occurs when a CSS transition has completed	TransitionEvent
type	Returns the name of the event	Event

url	Returns the URL of the changed item's document	StorageEvent
which	Returns which mouse button was pressed when the mouse event was triggered	MouseEvent
which	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	KeyboardEvent
view	Returns a reference to the Window object where the event occurred	UiEvent