**Window**

The JavaScript **window object** sits at the top of the JavaScript Object hierarchy and represents the browser window. The window object is supported by all browsers. All global **JavaScript objects** , functions, and variables automatically become members of the window object. The window is the first thing that gets loaded into the **browser** . This window object has the majority of the properties like length, innerWidth, innerHeight, name, if it has been closed, its parents, and more.

The window object represents the current **browsing context** . It holds things like window.location, window.history, window.screen, window.status, or the **window.document** . Each browser tab has its own top-level window object. Each of these windows gets its own separate global object. window.window always refers to window, but **window.parent** and window.top might refer to enclosing windows, giving access to other execution contexts. Moreover, the window property of a window object points to the window object itself. So the following statements all return the same window object:

## Properties:

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| **Property** | **Description** |
| Property | Returns a Boolean value indicating whether  a window has been closed or not |
| closed | Returns a reference to the Console object,  which provides methods for logging information  to the browser's console |
| Returns a Boolean value indicating whether | Sets or returns the default text in the status bar of a window |
| a window has been closed or not | Returns the Document object  for the window |
| console | Returns the <iframe> element in which the  current window is inserted |
| Returns a reference to the Console object, | Returns all <iframe> elements in the current window |
| which provides methods for logging information | Returns the History object for the window |
| to the browser's console (See Console object) | Returns the height of the window's  content area (viewport) including scrollbars |
| Default Status | Returns the width of a window's content area  (viewport) including scrollbars |
| Sets or returns the default text in the status bar of a window | Returns the number of <iframe> elements  in the current window |
| Document | Allows to save key/value pairs in a web browser.  Stores the data with no expiration date |
| Returns the Document object | Returns the Location object for the  window |
| for the window (See Document object) | Sets or returns the name of a window |
| frameElement | Returns the Navigator object for the  Window |
| Returns the <iframe> element in which the | Returns a reference to the window  that created the window |
| current window is inserted | Returns the height of the browser window,  including toolbars/scrollbars |
| frames | Returns the width of the browser window,  including toolbars/scrollbars |
| Returns all <iframe> elements in the current window | Returns the pixels the current document has been  scrolled (horizontally) from the  upper left corner of the window |
| history | Returns the pixels the current document  has been scrolled (vertically) from  the upper left corner of the window |
| Returns the History object for the window (See History object) | Returns the parent window of the current window |
| innerHeight | Returns the Screen object for the window |
| Returns the height of the window's | Returns the horizontal coordinate of the window  relative to the screen |
| content area (viewport) including scrollbars | Returns the vertical coordinate of the window  relative to the screen |
| innerWidth | Returns the horizontal coordinate of the window  relative to the screen |
| Returns the width of a window's content area | Returns the vertical coordinate of the window  relative to the screen |
| (viewport) including scrollbars | Allows to save key/value pairs in a web browser.  Stores the data for one session |
| length | An alias of pageXOffset |
| Returns the number of <iframe> elements | An alias of [pageYOffset](https://www.w3schools.com/jsref/prop_win_pagexoffset.asp) |
| in the current window | Returns the current window |
| Local Storage | Sets or returns the text in the status bar of a window |
| Allows to save key/value pairs in a web browser. | Returns the topmost browser window |

## Methods

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| **Method** | **Description** |
| [alert()](https://www.w3schools.com/jsref/met_win_alert.asp) | Displays an alert box with a message and an  OK button |
| [atob()](https://www.w3schools.com/jsref/met_win_atob.asp) | Decodes a base-64 encoded string |
| [blur()](https://www.w3schools.com/jsref/met_win_blur.asp) | Removes focus from the current window |
| [btoa()](https://www.w3schools.com/jsref/met_win_btoa.asp) | Encodes a string in base-64 |
| [clearInterval()](https://www.w3schools.com/jsref/met_win_clearinterval.asp) | Clears a timer set with setInterval() |
| [clearTimeout()](https://www.w3schools.com/jsref/met_win_cleartimeout.asp) | Clears a timer set with setTimeout() |
| [close()](https://www.w3schools.com/jsref/met_win_close.asp) | Closes the current window |
| [confirm()](https://www.w3schools.com/jsref/met_win_confirm.asp) | Displays a dialog box with a message and an  OK and a Cancel button |
| [focus()](https://www.w3schools.com/jsref/met_win_focus.asp) | Sets focus to the current window |
| [getComputedStyle()](https://www.w3schools.com/jsref/jsref_getcomputedstyle.asp) | Gets the current computed CSS styles applied to an  Element |
| getSelection() | Returns a Selection object representing  the range of text selected by the user |
| [matchMedia()](https://www.w3schools.com/jsref/met_win_matchmedia.asp) | Returns a MediaQueryList object representing  the specified CSS media query string |
| [moveBy()](https://www.w3schools.com/jsref/met_win_moveby.asp) | Moves a window relative to its current position |
| [moveTo()](https://www.w3schools.com/jsref/met_win_moveto.asp) | Moves a window to the specified position |
| [open()](https://www.w3schools.com/jsref/met_win_open.asp) | Opens a new browser window |
| [print()](https://www.w3schools.com/jsref/met_win_print.asp) | Prints the content of the current window |
| [prompt()](https://www.w3schools.com/jsref/met_win_prompt.asp) | Displays a dialog box that prompts the  visitor for input |
| requestAnimationFrame() | Requests the browser to call a function to  update an animation before the next repaint |
| [resizeBy()](https://www.w3schools.com/jsref/met_win_resizeby.asp) | Resizes the window by the specified pixels |
| [resizeTo()](https://www.w3schools.com/jsref/met_win_resizeto.asp) | Resizes the window to the specified  width and height |
| scroll() | Deprecated. This method has been replaced by  the [scrollTo()](https://www.w3schools.com/jsref/met_win_scrollto.asp) method. |
| [scrollBy()](https://www.w3schools.com/jsref/met_win_scrollby.asp) | Scrolls the document by the specified number  of pixels |
| [scrollTo()](https://www.w3schools.com/jsref/met_win_scrollto.asp) | Scrolls the document to the specified coordinates |
| [setInterval()](https://www.w3schools.com/jsref/met_win_setinterval.asp) | Calls a function or evaluates an expression  at specified intervals (in milliseconds) |
| [setTimeout()](https://www.w3schools.com/jsref/met_win_settimeout.asp) | Calls a function or evaluates an  expression after a specified number of milliseconds |
| [stop()](https://www.w3schools.com/jsref/met_win_stop.asp) | Stops the window from loading |

## Document

The **Document interface** represents any web page loaded in the browser and serves as an entry point into the web page's content, which is the DOM tree. When an HTML document is loaded into a **web browser** , it becomes a document object. It is the root node of the HTML document. The document actually gets loaded inside the window object and has properties available to it like title, URL, cookie, etc. HTML documents, served with the **"text/html"** content type, also implement the HTMLDocument interface, whereas XML and SVG documents implement the XMLDocument interface.

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| **Property / Method** | **Description** |
| Property | Returns the currently focused element  in the document |
| Closed | Attaches an event handler  to the document |
| Returns a Boolean value indicating whether | Adopts a node from another document |
| a window has been closed or not | Returns a collection of all <a> elements  in the document that  have a name attribute |
| console | Returns a collection of all <applet>  elements in the document |
| Returns a reference to the Console object, | Returns the absolute base URI  of a document |
| which provides methods for logging information | Sets or returns the document's  body (the <body> element) |
| to the browser's console (See Console object) | Closes the output  stream previously opened  with document.open() |
| defaultStatus | Returns all name/value pairs of cookies  in the document |
| Sets or returns the default text in the statusbar of a window | Deprecated. Use characterSet instead.  Returns the character  encoding for the document |
| Document | Returns the character  encoding for the document |
| Returns the Document object | Creates an attribute node |
| for the window (See Document object) | Creates a Comment node  with the specified text |
| frameElement | Creates an empty DocumentFragment node |
| Returns the <iframe> element in which the | Creates an Element node |
| current window is inserted | Creates a new event |
| frames | Creates a Text node |
| Returns all <iframe> elements in the current window | Returns the window object associated  with a document, or  null if none is available. |
| history | Controls whether the entire  document should be editable or not. |
| Returns the History object for the window (See History object) | Returns the Document  Type Declaration associated with the  Document |
| innerHeight | Returns the Document Element of  the document (the <html> element) |
| Returns the height of the window's | Returns the mode used by  the browser to render the document |
| content area (viewport) including scrollbars | Sets or returns the location of the  Document |
| innerWidth | Returns the domain name of  the server that loaded the document |
| Returns the width of a window's content area | Obsolete. Returns the DOM  configuration of the document |
| (viewport) including scrollbars | Returns a collection of all <embed>  elements the document |
| length | Invokes the specified clipboard  operation on the element  currently having focus. |
| Returns the number of <iframe> elements | Returns a collection of all <form>  elements in the document |
| in the current window | Returns the current element that  is displayed in fullscreen mode |
| localStorage | Returns a Boolean value indicating  whether the document  can be viewed in fullscreen mode |
| Allows to save key/value pairs in a web browser. | Returns the element that has the  ID attribute with the specified value |
| Stores the data with no expiration date | Returns a HTMLCollection  containing all elements with the  specified class name |
| location | Returns a HTMLCollection  containing all elements  with a specified name |
| Returns the Location object for the | Returns a HTMLCollection  containing all elements with  the specified tag name |
| window (See Location object) | Returns a Boolean  value indicating whether the  document has focus |
| name | Returns the <head> element  of the document |
| Sets or returns the name of a window | Returns a collection of all <img>  elements in the document |
| navigator | Returns the DOMImplementation  object that handles this document |
| Returns the Navigator object for the | Imports a node from another document |
| window (See Navigator object) | Returns the encoding, character set,  used for the document |
| opener | Returns the date and time the  document was last modified |
| Returns a reference to the window | Returns a collection of all  <a> and <area> elements in the  document that have a href attribute |
| that created the window | Removes empty Text nodes,  and joins adjacent nodes |
| outerHeight | Removes empty Text nodes,  and joins adjacent nodes |
| Returns the height of the browser window, | Opens an HTML output stream to  collect output from document.write() |
| including toolbars/scrollbars | Returns the first element that matches  a specified CSS selector(s) in the  document |
| outerWidth | Returns a static NodeList containing  all elements that matches a  specified CSS selector(s) in the document |
| Returns the width of the browser window, | Returns the (loading)  status of the document |
| including toolbars/scrollbars | Returns the URL of the document  that loaded the current document |
| pageXOffset | Removes an event handler from the  document (that has been attached with the [addEventListener()](https://www.w3schools.com/jsref/met_document_addeventlistener.asp) method) |
| Returns the pixels the current document has been | Renames the specified node |
| scrolled (horizontally) from the | Returns a collection of <script>  elements in the document |
| upper left corner of the window | Sets or returns whether error-checking  is enforced or not |
| pageYOffset | Sets or returns the title of the document |
| Returns the pixels the current document | Returns the full URL of the HTML document |
| has been scrolled (vertically) from | Writes HTML expressions or J  avaScript code to a document |
| the upper left corner of the window | Same as write(), but adds a newline  character after each statement |

## Screen

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| Properties: screen.width  screen.height  screen.availWidth  screen.availHeight  screen.colorDepth screen.pixelDepth |  |

Screen is a small information object about physical **screen dimensions** . It can be used to display screen width, height, colorDepth, pixelDepth etc. It is not mandatory to write **window prefix** with screen object. It can be written without window prefix.