Window Object

The window object represents an open window in a browser.

Navigator Object

The navigator object contains information about the browser.

Note**Note:** There is no public standard that applies to the navigator object, but all major browsers support it.

Navigator Object Properties

|  |  |
| --- | --- |
| **Property** | **Description** |
| [appCodeName](http://www.w3schools.com/jsref/prop_nav_appcodename.asp) | Returns the code name of the browser |
| [appName](http://www.w3schools.com/jsref/prop_nav_appname.asp) | Returns the name of the browser |
| [appVersion](http://www.w3schools.com/jsref/prop_nav_appversion.asp) | Returns the version information of the browser |
| [cookieEnabled](http://www.w3schools.com/jsref/prop_nav_cookieenabled.asp) | Determines whether cookies are enabled in the browser |
| [platform](http://www.w3schools.com/jsref/prop_nav_platform.asp) | Returns for which platform the browser is compiled |
| [userAgent](http://www.w3schools.com/jsref/prop_nav_useragent.asp) | Returns the user-agent header sent by the browser to the server |

Navigator Object Methods

|  |  |
| --- | --- |
| **Method** | **Description** |
| [javaEnabled()](http://www.w3schools.com/jsref/met_nav_javaenabled.asp) | Specifies whether or not the browser has Java enabled |
| [taintEnabled()](http://www.w3schools.com/jsref/met_nav_taintenabled.asp) | Specifies whether or not the browser has data tainting enabled |

Screen Object

The screen object contains information about the visitor's screen.

Note**Note:** There is no public standard that applies to the screen object, but all major browsers support it.

Screen Object Properties

|  |  |
| --- | --- |
| **Property** | **Description** |
| [availHeight](http://www.w3schools.com/jsref/prop_screen_availheight.asp) | Returns the height of the screen (excluding the Windows Taskbar) |
| [availWidth](http://www.w3schools.com/jsref/prop_screen_availwidth.asp) | Returns the width of the screen (excluding the Windows Taskbar) |
| [colorDepth](http://www.w3schools.com/jsref/prop_screen_colordepth.asp) | Returns the bit depth of the color palette for displaying images |
| [height](http://www.w3schools.com/jsref/prop_screen_height.asp) | Returns the total height of the screen |
| [pixelDepth](http://www.w3schools.com/jsref/prop_screen_pixeldepth.asp) | Returns the color resolution (in bits per pixel) of the screen |
| [width](http://www.w3schools.com/jsref/prop_screen_width.asp) | Returns the total width of the screen |

Location Object

The location object contains information about the current URL.

The location object is part of the window object and is accessed through the window.location property.

Note**Note:** There is no public standard that applies to the location object, but all major browsers support it.

Location Object Properties

|  |  |
| --- | --- |
| **Property** | **Description** |
| [hash](http://www.w3schools.com/jsref/prop_loc_hash.asp) | Returns the anchor portion of a URL |
| [host](http://www.w3schools.com/jsref/prop_loc_host.asp) | Returns the hostname and port of a URL |
| [hostname](http://www.w3schools.com/jsref/prop_loc_hostname.asp) | Returns the hostname of a URL |
| [href](http://www.w3schools.com/jsref/prop_loc_href.asp) | Returns the entire URL |
| [pathname](http://www.w3schools.com/jsref/prop_loc_pathname.asp) | Returns the path name of a URL |
| [port](http://www.w3schools.com/jsref/prop_loc_port.asp) | Returns the port number the server uses for a URL |
| [protocol](http://www.w3schools.com/jsref/prop_loc_protocol.asp) | Returns the protocol of a URL |
| [search](http://www.w3schools.com/jsref/prop_loc_search.asp) | Returns the query portion of a URL |

Location Object Methods

|  |  |
| --- | --- |
| **Method** | **Description** |
| [assign()](http://www.w3schools.com/jsref/met_loc_assign.asp) | Loads a new document |
| [reload()](http://www.w3schools.com/jsref/met_loc_reload.asp) | Reloads the current document |
| [replace()](http://www.w3schools.com/jsref/met_loc_replace.asp) | Replaces the current |

Events

By using JavaScript, we have the ability to create dynamic web pages. Events are actions that can be detected by JavaScript.

Every element on a web page has certain events which can trigger a JavaScript. For example, we can use the onClick event of a button element to indicate that a function will run when a user clicks on the button. We define the events in the HTML tags.

Examples of events:

* A mouse click
* A web page or an image loading
* Mousing over a hot spot on the web page
* Selecting an input field in an HTML form
* Submitting an HTML form
* A keystroke

**Note:** Events are normally used in combination

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [JS Operators](http://www.w3schools.com/js/js_operators.asp) [JS Comparisons](http://www.w3schools.com/js/js_comparisons.asp) [JS If...Else](http://www.w3schools.com/js/js_if_else.asp) [JS Switch](http://www.w3schools.com/js/js_switch.asp) [JS Popup Boxes](http://www.w3schools.com/js/js_popup.asp) [JS Functions](http://www.w3schools.com/js/js_functions.asp) [JS For Loop](http://www.w3schools.com/js/js_loop_for.asp) [JS While Loop](http://www.w3schools.com/js/js_loop_while.asp) [JS Break Loops](http://www.w3schools.com/js/js_break.asp) [JS For...In](http://www.w3schools.com/js/js_loop_for_in.asp) [JS Events](http://www.w3schools.com/js/js_events.asp) [JS Try...Catch](http://www.w3schools.com/js/js_try_catch.asp) [JS Throw](http://www.w3schools.com/js/js_throw.asp) [JS Special Text](http://www.w3schools.com/js/js_special_characters.asp) [JS Guidelines](http://www.w3schools.com/js/js_guidelines.asp) **JS Objects** [JS Objects Intro](http://www.w3schools.com/js/js_obj_intro.asp) [JS String](http://www.w3schools.com/js/js_obj_string.asp) [JS Date](http://www.w3schools.com/js/js_obj_date.asp) [JS Array](http://www.w3schools.com/js/js_obj_array.asp) [JS Boolean](http://www.w3schools.com/js/js_obj_boolean.asp) [JS Math](http://www.w3schools.com/js/js_obj_math.asp) [JS RegExp](http://www.w3schools.com/js/js_obj_regexp.asp) **JS Advanced** [JS Browser](http://www.w3schools.com/js/js_browser.asp) [JS Cookies](http://www.w3schools.com/js/js_cookies.asp) [**JS Validation**](http://www.w3schools.com/js/js_form_validation.asp) [JS Timing](http://www.w3schools.com/js/js_timing.asp) [JS Create Object](http://www.w3schools.com/js/js_objects.asp) [JS Summary](http://www.w3schools.com/js/js_summary.asp) **JS Examples** [JS Examples](http://www.w3schools.com/js/js_examples.asp) [JS Objects Examples](http://www.w3schools.com/js/js_ex_objects.asp) [JS Browser Examples](http://www.w3schools.com/js/js_ex_browser.asp) [JS DOM Examples](http://www.w3schools.com/js/js_ex_dom.asp) [JS Quiz](http://www.w3schools.com/js/js_quiz.asp) [JS Certificate](http://www.w3schools.com/js/js_exam.asp) **JS References** [JavaScript Objects](http://www.w3schools.com/jsref/default.asp) [HTML DOM Objects](http://www.w3schools.com/jsref/default.asp) | |  |  |  | | --- | --- | --- | | JavaScript Form Validation  |  |  | | --- | --- | | [« Previous](http://www.w3schools.com/js/js_cookies.asp) | [Next Chapter »](http://www.w3schools.com/js/js_timing.asp) |  JavaScript Form Validation JavaScript can be used to validate data in HTML forms before sending off the content to a server.  Form data that typically are checked by a JavaScript could be:   * has the user left required fields empty? * has the user entered a valid e-mail address? * has the user entered a valid date? * has the user entered text in a numeric field? | |