The Window Object

The window object is supported by all browsers. It represents the browser's window.

All global JavaScript objects, functions, and variables automatically become members of the window object.

Global variables are properties of the window object.

Global functions are methods of the window object.

Even the document object (of the HTML DOM) is a property of the window object:

window.document.getElementById("header");

is the same as:

document.getElementById("header");

Some other methods:

* window.open() - open a new window
* window.close() - close the current window
* window.moveTo() - move the current window
* window.resizeTo() - resize the current window
* window.innerHeight - the inner height of the browser window (in pixels)
* window.innerWidth - the inner width of the browser window (in pixels)

Window Screen

The window.screen object contains information about the user's screen.

The window.screen object can be written without the window prefix.

Properties:

* screen.width
* screen.height
* screen.availWidth
* screen.availHeight
* screen.colorDepth
* screen.pixelDepth

## HTML DOM Document Object

The HTML DOM document object is the owner of all other objects in your web page.

The document object represents your web page.

If you want to access any element in an HTML page, you always start with accessing the document object.

Below are some examples of how you can use the document object to access and manipulate HTML.

## Finding HTML Elements

|  |  |
| --- | --- |
| **Method** | **Description** |
| document.getElementById(id) | Find an element by element id |
| document.getElementsByTagName(name) | Find elements by tag name |
| document.getElementsByClassName(name) | Find elements by class name |

## Changing HTML Elements

|  |  |
| --- | --- |
| **Property** | **Description** |
| element.innerHTML =  new html content | Change the inner HTML of an element |
| element.attribute = new value | Change the attribute value of an HTML element |
| element.style.property = new style | Change the style of an HTML element |
| **Method** | **Description** |
| element.setAttribute(attribute, value) | Change the attribute value of an HTML element |

## Adding and Deleting Elements

|  |  |
| --- | --- |
| **Method** | **Description** |
| document.createElement(element) | Create an HTML element |
| document.removeChild(element) | Remove an HTML element |
| document.appendChild(element) | Add an HTML element |
| document.replaceChild(new, old) | Replace an HTML element |
| document.write(text) | Write into the HTML output stream |

## Adding Events Handlers

|  |  |
| --- | --- |
| **Method** | **Description** |
| document.getElementById(id).onclick = function(){code} | Adding event handler code to an onclick event |

## Finding HTML Objects

The first HTML DOM Level 1 (1998), defined 11 HTML objects, object collections, and properties. These are still valid in HTML5.

Later, in HTML DOM Level 3, more objects, collections, and properties were added.

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **DOM** |
| document.anchors | Returns all <a> elements that have a name attribute | 1 |
| document.applets | Returns all <applet> elements (Deprecated in HTML5) | 1 |
| document.baseURI | Returns the absolute base URI of the document | 3 |
| document.body | Returns the <body> element | 1 |
| document.cookie | Returns the document's cookie | 1 |
| document.doctype | Returns the document's doctype | 3 |
| document.documentElement | Returns the <html> element | 3 |
| document.documentMode | Returns the mode used by the browser | 3 |
| document.documentURI | Returns the URI of the document | 3 |
| document.domain | Returns the domain name of the document server | 1 |
| document.domConfig | Obsolete. Returns the DOM configuration | 3 |
| document.embeds | Returns all <embed> elements | 3 |
| document.forms | Returns all <form> elements | 1 |
| document.head | Returns the <head> element | 3 |
| document.images | Returns all <img> elements | 1 |
| document.implementation | Returns the DOM implementation | 3 |
| document.inputEncoding | Returns the document's encoding (character set) | 3 |
| document.lastModified | Returns the date and time the document was updated | 3 |
| document.links | Returns all <area> and <a> elements that have a href attribute | 1 |
| document.readyState | Returns the (loading) status of the document | 3 |
| document.referrer | Returns the URI of the referrer (the linking document) | 1 |
| document.scripts | Returns all <script> elements | 3 |
| document.strictErrorChecking | Returns if error checking is enforced | 3 |
| document.title | Returns the <title> element | 1 |
| document.URL | Returns the complete URL of the document | 1 |