Window Object

The window object represents an open window in a browser. If a document contain frames (<frame> or <iframe> tags), the browser creates one window object for the HTML document, and one additional window object for each frame. There is no public standard that applies to the Window object, but all major browsers support it.

## Window Object Properties :

* **closed** Returns a Boolean value indicating whether a window has been closed or not
* **document** Returns the Document object for the window (See Document object)
* **frames** Returns an array of all the frames (including iframes) in the current window
* **history** Returns the History object for the window (See History object)
* **length** Returns the number of frames (including iframes) in a window
* **location** Returns the Location object for the window (See Location object)
* **name** Sets or returns the name of a window
* **opener** Returns a reference to the window that created the window
* **parent** Returns the parent window of the current window
* **status** Sets the text in the statusbar of a window

# Window Object Methods

* **alert()** Displays an alert box with a message and an OK button
* **blur()** Removes focus from the current window
* **clearInterval()** Clears a timer set with setInterval()
* **clearTimeout()** Clears a timer set with setTimeout()
* **close()** Closes the current window
* **confirm()** Displays a dialog box with a message and an OK and a Cancel button
* **focus()** Sets focus to the current window
* **moveTo()** Moves a window to the specified position
* **open()** Opens a new browser window
* **print()** Prints the content of the current window
* **prompt()** Displays a dialog box that prompts the visitor for input
* **scroll()**
* **scrollBy()** Scrolls the content by the specified number of pixels
* **scrollTo()** Scrolls the content to the specified coordinates
* **setInterval()** Calls a function or evaluates an expression at specified intervals (in milliseconds)
* **setTimeout()** Calls a function or evaluates an expression after a specified number of milliseconds

# Open Method with Window Object

**Syntax** : window.open(URL,name,specs,replace)

**URL[Optional].** Specifies the URL of the page to open. If no URL is specified, a new window with about:blank is opened

**name[Optional].** Specifies the target attribute or the name of the window. The following values are supported:

* **\_blank - URL is loaded into a new window. This is default**
* **\_parent - URL is loaded into the parent frame**
* **\_self - URL replaces the current page**
* **\_top - URL replaces any framesets that may be loaded**
* **name - The name of the window**

**specs[Optional].** A comma-separated list of items. The following values are supported:

**channelmode=yes|no|1|0**

Whether or not to display the window in theater mode. Default is no. IE only

**directories=yes|no|1|0**

Whether or not to add directory buttons. Default is yes. IE only

**fullscreen=yes|no|1|0**

Whether or not to display the browser in full-screen mode. Default is no. A window in full-screen mode must also be in theater mode. IE only

**height=pixels**

The height of the window. Min. value is 100

**left=pixels**

The left position of the window

**location=yes|no|1|0**

Whether or not to display the address field. Default is yes

**menubar=yes|no|1|0**

Whether or not to display the menu bar. Default is yes

**resizable=yes|no|1|0**

Whether or not the window is resizable. Default is yes

**scrollbars=yes|no|1|0**

Whether or not to display scroll bars. Default is yes

**status=yes|no|1|0**

Whether or not to add a status bar. Default is yes

**titlebar=yes|no|1|0**

Whether or not to display the title bar. Ignored unless the calling application is an HTML Application or a trusted dialog box. Default is yes

**toolbar=yes|no|1|0**

Whether or not to display the browser toolbar. Default is yes

**top=pixels**

The top position of the window. IE only

**width=pixels**

 The width of the window. Min. value is 100

**replace[Optional].**Specifies whether the URL creates a new entry or replaces the current entry in the history list. The following values are supported:

* **true - URL replaces the current document in the history list**
* **false - URL creates a new entry in the history list**

**Example : 1**

***<script type="text/javascript">
myWindow=window.open('','','width=200,height=100')
myWindow.document.write("<p>This is 'myWindow'</p>")
myWindow.focus()
</script>***

**Example : 2**

***function open\_win() {
window.open("http://www.w3schools.com") }
</script>
<input type="button" value="Open Window" onclick="open\_win()" />***

# Close Method with Window Object

**Syntax *:*** window.close()

**Example for Closing the newly created window**

***<script type="text/javascript">***

***function openWin() {***

***myWindow=window.open("","","width=200,height=100");***

***myWindow.document.write("<p>This is 'myWindow'</p>"); }***

***function closeWin() {***

***myWindow.close(); }***

***</script> <body>***

***<input type="button" value="Open 'myWindow'" onclick="openWin()" />***

***<input type="button" value="Close 'myWindow'" onclick="closeWin()" />***

***</body>***

# ScrollTo Method with Window Object

**Remarks** :

1. The resizeTo() method resizes a window to the specified width and height.

2. The resizeTo() method is supported in all major browsers.

3. It replaces Scroll() Method - no longer active

**Syntax** : window.resizeTo(width,height)

**Description** :

* width Required. Sets the width of the window, in pixels
* height Required. Sets the height of the window, in pixels

**Example** : Create a window, and resize the width and height to 500px:

***var w=window.open('','', 'width=100,height=100');***

***w.resizeTo(500,500);***

# Focus Method with Window Object

**Syntax** : window.focus()

**Remark** : The focus() method is supported in all major browsers.

**Example** to Assure that the new window GETS focus (send the new window to the front):

***<html> <head> <script type="text/javascript">***

***function openWin() {***

***myWindow=window.open('','','width=200,height=100');***

***myWindow.document.write("<p>This is 'myWindow'</p>");***

***myWindow.focus(); }***

***</script> </head> <body>***

***<input type="button" value="Open window" onclick="openWin()" />***

***</body> </html>***

# Blur Method with Window Object

**Syntax** : window.blur()

**Remarks** : The blur() method is supported in all major browsers, except Opera and Chrome.

**Example** : Assure that the new window does NOT get focus (send the new window to the background):

***function openWin() {***

***myWindow=window.open('','','width=200,height=100');***

***myWindow.document.write("<p>The new window.</p>");***

***myWindow.blur(); }***

# resizeBy Method with Window

**Imporant :** The resizeBy() method resizes a window by the specified amount. This method moves the bottom right corner of the window by the specified number of pixels defined. The top left corner will not be moved (it stays in its original coordinates).

**Syntax** : resizeBy(width,height)

**Description :**

* **width** Required. A positive or a negative number that specifies how many pixels to resize the width by
* **height** Required. A positive or a negative number that specifies how many pixels to resize the height by

**Browser Support** : Internet Explorer Firefox Opera Google Chrome Safari , The resizeBy() method is supported in all major browsers, except Opera and Chrome.

**Example :** Resize the window with 100px each way:

function resizeWindow() { window.resizeBy(100,100) }

## Print Method with Window Object

**Remarks** : The print() method prints the contents of the current window.

**Syntax** : window.print()

**Example** : Print the current page:

***<html> <head> <script type="text/javascript">***

***function printpage() {***

 ***window.print() }***

***</script> </head> <body>***

***<input type="button" value="Print this page" onclick="printpage()" />***

***</body> </html>***

Window Object in Depth

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. So you may need to have overview on the following description to build solid codes around the passed-back reference (i.e window.location)

**Porperties :**

* hash Returns the anchor portion of a URL
* host Returns the hostname and port of a URL
* hostname Returns the hostname of a URL
* href Returns the entire URL
* pathname Returns the path name of a URL
* port Returns the port number the server uses for a URL
* protocol Returns the protocol of a URL
* search Returns the query portion of a URL

**Methods :**

* assign() Loads a new document
* reload() Reloads the current document
* replace() Replaces the current document with a new one

Writing to a document

You can create an HTML document 'on the fly' with JavaScript using the document.write() method. Normally, you must open a new document first. Then you may write to that document, and finally you must close the document so that the Browser can stop trying to load it. Here is an example:

***document.open(); document.write("Hello There"); document.close();***

When I create a new window, I am also opening a new document. So I can write to a new window with this series of commands.

***NewWindow = window.open("","","width=200,height=200")***

***NewWindow.document.write("Hello There")***

***NewWindow.document.close()***

The document.write() method can contain either text or a variable inside the perentheses. The following example creates a variable, then writes the variable to a new document.

***SampleText = "Hello there, " +***

***"It's nice to see you again."***

***NewWindow = window.open("","","width=200,height=200")***

***NewWindow.document.write(SampleText)***

***NewWindow.document.close()***

I can even include HTML tags in the document.write() statement. Like this:

***NewWindow = window.open("","","width=200,height=200")***

***NewWindow.document.write("<CENTER><H1>Hello there</H1></CENTER>")***

***NewWindow.document.close()***

**Homework : Create the following Page based on what you learned so far :**

