Differences between Document and Window Objects

**What is Window Object in Javascript?**

The Window object represents the window in the browser. The window object is automatically created from the browser. All browsers support the Window object. Global variables are the properties of the Window objects, and global functions are the methods of the Window object. The window object methods are used to retrieve the information from the browser window.

**Window object Methods**

**1. alert()**

The alert() method displays the alert box in the window with the OK button. This method is used when you want information the to come through the user.

Ex: alert("Hello...Most welcome");

**2. blur()**

The blur() method removes the focus on the window.

Ex: const myWind = window.open("", "", "width=250, height=200");  
myWind.blur();

**3. focus()**

The focus() method focuses on the window.

**4. setInterval()**

This method calls on a function with a specific interval.

setInterval(function, milliseconds, param1,.....)

The code will return that displayHi() function within 1 second.

**5. clearInterval()**

The clearInterval() method that clears the time set by the setInterval() method.

clearInterval(functon\_name);

The mynewStopFunction() stops the serInterval() method.

**6. setTimeout()**

The setTimeout() method calls a function after a number of milliseconds. This method calls the function only once.

setTimeout(function, milliseconds, param1, ...)

This mynewGreeting() method returns Happy Birthday after 5 seconds.

**7. clear Timeout()**

The clear Timeout() method that clears the time set by the set Timeout() method.

Clear Timeout(function\_name);

We have to clear the timer within the set Timeout() method.

**8. close ()**

The close () method closes the window

window.close()

**9. open ()**

The open () method opens the browser window.

Window .open()

**10. atob()**

Decodes a base 64 encoded string.

Window. atob(encoded);

**11. btoa()**

Encodes a string in base 64.

window.btoa(text);

**12. Confirm ()**

The confirm method displays a dialog box with a message, Ok button, and Cancel button.

Confirm ("Click Me!");

**13. Get ComputedStyle()**

This method gets the computed CSS properties and values of an HTML element. This method returns a CSSStyleDeclaration object.

window.getComputedStyle(element, pseudoElement)

**14. getSelection()**

Returns the Selection object representing the range of text selected by the user

**15. matchMedia()**

The matchMedia() method returns the MediaQueryList and it results in the query.

window.matchMedia(mediaQuery)

The media queries can be any of the media features of the CSS

**16. moveBy()**

This method moves a window to a number of pixels relative to its current position.

window.moveBy(x, y)

**17. moveTo()**

This method moves a window to the specified position.

window.moveTo(x, y)

We can access the document object using the objects. The properties of window objects are used to retrieve the information about the window that is currently opened, whereas its methods perform specific tasks like opening, minimizing the window, etc.

**JavaScript Document Object**

JavaScript Document object is an object that provides access to all HTML elements of a document. When an HTML document is loaded into a browser window, then it becomes a document object.

The document object stores the elements of an HTML document, such as HTML, HEAD, BODY, and other HTML tags as objects.

A document object is a child object of the [Window object](https://www.studytonight.com/javascript/javascript-window-object), which refers to the browser.

You can access a document object either using window.document property or using object directly.

**What we can do with Document Object:**

* Suppose you have created a FORM in an HTML document using the FORM element and added some text fields and Buttons on the Form. On Submitting the Form you want to validate the input or display input on another page. In this situation, you can use a document object which is a child object of the window object. Using the document object, you can access the elements of the form and validate the Input.
* The Document Object provides different collection elements, such as anchor and Links which helps you to count the number of specific elements on a form.
* The Document Object also provides various properties such as URL, bgcolor, etc. which will allow you to retrieve the details of a document and various methods such as open(), close(), write(), getElementById(), getElementByName(), etc. which allow you to perform various tasks like opening an HTML document to display output and writing a text on Web Page.
* The Document Object also allows you to [create cookies for a webpage](https://www.studytonight.com/javascript/cookies-in-javascript) by providing a property named cookie. A cookie stores information about the user's computer, which helps in accessing visited websites.

**JavaScript Document Object Properties**

As we know, a property of an object is the value associated with the object. The property is accessed by using the following notation:

ObjectName.propertyName

where **objectName** is the name of the object and **propertyName** is the name of its property.

Now we will show you the properties of document object in the table given below:

|  |  |
| --- | --- |
| **Properties** | **Description** |
| cookie | returns a report that contains all the visible and unexpired cookies associated with the document |
| domain | returns the domain name of the server from which the document has originated |
| lastModified | returns the date on which document was last modified |
| documentMode | returns the mode used by the browser to process the document |
| readyState | returns the loading status of the document. |
| referrer | returns the URL of the documents referred to in an HTML document |
| title | returns the name of the HTML document defined between the starting and ending tags of the TITLE element |
| URL | returns the full URL of the HTML document. |

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**JavaScript Document Object Methods**

JavaScript Document object also provides various methods to access HTML elements.Now we will show you some of the commonly used methods of the document object:

**Methods**

open() :opens an HTML document to display the output

**Syntax** document.open(mimetype, replace)

close(): closes an HTML document

**Syntax** document.close()

write(): Writes HTML expressions or JavaScript code into an HTML document

**Syntax** document.write(exp1, exp2, ...)

writeln(): write a new line character after each HTML expressions or JavaScript Code

**Syntax** document.writeln(exp1, exp2, ...)

getElementById(): returns the reference of first element of an HTML document with the

**Syntax** document.getElementById(id)

getElementByName(): returns the reference of an element with the specified name.

**Syntax** document.getElementsByName(name)

getElementsByTagName(): returns all elements with the specified tagname.

**Syntax** document.getElementsByTagName(tagname).