**Differences between Document and Window Objects**

**Document Object:**The document object represent a web page that is loaded in the browser**.** By accessing the document object, we can access the element in the HTML page**.** With the help of document objects, we can add dynamic content to our web page**.** The document object can be accessed with a **window.document**or just**document.**

**Syntax:**

**document.property\_name;**

The are some properties of document objects that are commonly used are listed in the below **:**

**Properties of document:**

* [**activeElement**](https://www.geeksforgeeks.org/html-dom-activeelement-property/)**:** It returns the currently active elements in the document**.**
* [**body**](https://www.geeksforgeeks.org/html-dom-body-property/)**:** It returns the contents of the body element**.**
* **anchors:** It returns all <a> elements that have a name attribute**.**
* [**baseURI**](https://www.geeksforgeeks.org/html-dom-baseuri-property/)**:** It returns a string value that represents the base URI of the document**.**
* [**cookie**](https://www.geeksforgeeks.org/html-dom-cookie-property/)**:** It returns the cookie of the current document**.**
* [**charSet**](https://www.geeksforgeeks.org/html-dom-script-charset-property/)**:** It returns a string, representing the document’s character encoding**.**
* [**defaultView**](https://www.geeksforgeeks.org/html-dom-defaultview-property/)**:** It returns the current Window Object**.**
* [**doctype**](https://www.geeksforgeeks.org/html-dom-doctype-property/)**:** It returns the document’s doctype**.**

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* [**URL**](https://www.geeksforgeeks.org/html-dom-url-property/)**:** It returns the complete URL of the document**.**
* **forms:** It returns all the elements of the form**.**
* [**title**](https://www.geeksforgeeks.org/html-dom-title-property/)**:** It returns the title element of the document**.**
* [**head**](https://www.geeksforgeeks.org/html-dom-head-property/)**:** It returns the head element of the document**.**

**Methods of Document**

**Syntax:**

**document.method\_name;**

The are some lists of most commonly used methods are listed below **:**

* [**addEventListener()**](https://www.geeksforgeeks.org/html-dom-addeventlistener-method/)**:** It is used to attach an event handler to the specified element**.**
* [**close()**](https://www.geeksforgeeks.org/html-dom-close-method/)**:** It is used to close the output stream**.**
* [**createAttribute()**](https://www.geeksforgeeks.org/html-dom-createattribute-method/)**:** It is used to create an attribute node with the specified name and returns the attribute object**.**
* [**createComment()**](https://www.geeksforgeeks.org/html-dom-createcomment-method/)**:** It is used to create a comment node with some text**.**
* [**createEvent()**](https://www.geeksforgeeks.org/html-dom-createevent-event-method/)**:** It is used to create a new events object**.**
* [**getElementById()**](https://www.geeksforgeeks.org/html-dom-getelementbyid-method/)**:** It returns the object of the given ID. If no object with that id exists then it returns null**.**
* [**getElementsByClassName()**](https://www.geeksforgeeks.org/html-dom-getelementsbyclassname-method/)**:** It returns an object containing all the elements with the specified class names in the document as objects**.**
* [**getElementsByName()**](https://www.geeksforgeeks.org/html-dom-getelementsbyname-method/)**:** It returns an object containing all the elements with the specified name in the document as objects**.**
* **open():** It is used to open the output stream to collect the output**.**
* [**querySelector()**](https://www.geeksforgeeks.org/html-dom-queryselector-method/)**:** It returns the first element that matches a specified CSS selector(s) in the document**.**
* [**querySelectorAll()**](https://www.geeksforgeeks.org/html-dom-queryselectorall-method/)**:** It returns a collection of an element’s child elements that matches a specified CSS selector(s) in the document**.**
* [**removeEventListener()**](https://www.geeksforgeeks.org/html-dom-removeeventlistener-method/)**:** It removes the event handler from an element that has an attached event**.**

**Example: This example describes the implementation of the document.object .**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<title>document's Properties</title>**

**<style>**

**h1 {**

**color: green;**

**}**

**</style>**

**</head>**

**<body>**

**<h1> Document Object</h1>**

**<button onclick="myFunction()">CLICK ME</button>**

**<p id="demo"></p>**

**<script>**

**function myFunction() {**

**var title = document.title;**

**var domain = document.domain;**

**var body = document.body;**

**document.getElementById("demo").innerHTML =**

**"the title of the document is : "**

**+ title**

**+ "<br>"**

**+ "domain:"**

**+ domain**

**+ "<br>"**

**+ "body:"**

**+ body;**

**}**

**</script>**

**</body>**

**</html>**

**Window Object:** The window object is the top most object of the DOM hierarchy**.** It represents a browser window or frame that displays the contents of the webpage**.** Whenever a window appears on the screen to display the contents of the document, the window object is created**.**

**Syntax:**

**window.property\_name;**

The are some properties of Window objects that are commonly used are listed in the below **:**

**Properties of the window:**

* [**Closed**](https://www.geeksforgeeks.org/javascript-window-close-method/)**:** It holds a Boolean value that represents whether the window is closed or not**.**
* **console:** It returns a reference to the console object which provides access to the browser’s debugging console**.**
* **defaultStatus:** It is used to define the default message that will be displayed in the status bar when no activity is carried on by the browser**.**
* [**crypto**](https://www.geeksforgeeks.org/html-dom-window-crypto-property/)**:** It returns the browser crypto object**.**
* [**Document**](https://www.geeksforgeeks.org/html-dom-window-document-property/)**:** It returns a reference to the document object of that window**.**
* [**frames[]**](https://www.geeksforgeeks.org/html-dom-window-frames-properties/)**:** It represents an array that contains all the frames of a given window**.**
* [**Length**](https://www.geeksforgeeks.org/html-window-length-property/)**:** It represents the number of frames in the current window**.**
* [**innerHeight**](https://www.geeksforgeeks.org/html-window-innerheight-property/)**:** It is used to get the height of the content area of the browser window**.**
* [**innerWidth**](https://www.geeksforgeeks.org/html-window-innerwidth-property/)**:** It is used to get the width of the content area of the browser window**.**
* [**Navigator**](https://www.geeksforgeeks.org/html-dom-window-navigator-property/)**:** It returns a reference to the navigator object**.**
* [**outerHeight**](https://www.geeksforgeeks.org/html-window-outerheight-property/)**:** It will get the height of the outside of the browser window**.**
* [**outerWidth**](https://www.geeksforgeeks.org/html-window-outerwidth-property/)**:** It will get the width of the outside of the browser window**.**

**Methods of Window:**

**Syntax:**

**window.method\_name;**

The are some methods of Window objects that are commonly used are listed in the below **:**

* [**alert()**](https://www.geeksforgeeks.org/html-window-alert-method/)**:** It is used to display an alert box. It displays a specified message along with an OK button and is generally used to make sure that the information comes through the user**.**
* [**blur()**](https://www.geeksforgeeks.org/javascript-window-blur-and-window-focus-method/)**:** It is used to remove focus from the current window**.**
* [**clearInterval()**](https://www.geeksforgeeks.org/javascript-cleartimeout-clearinterval-method/)**:** It clears the interval which has been set by the setInterval() function before that**.**
* [**clearTimeout()**](https://www.geeksforgeeks.org/javascript-cleartimeout-clearinterval-method/)**:**It clears the timeout which has been set by the setTimeout() function before that**.**
* [**close()**](https://www.geeksforgeeks.org/javascript-window-close-method/)**:**It is used for closing a certain window or tab of the browser which was previously opened**.**
* [**confirm()**](https://www.geeksforgeeks.org/javascript-window-confirm-method/)**:**It is used to display a modal dialog with an optional message and two buttons i.e**.** OK and Cancel. It returns true if the user clicks “OK”, and false otherwise**.**
* **getSelection():** It returns a Selection object representing the range of text selected by the user**.**
* [**prompt()**](https://www.geeksforgeeks.org/javascript-window-prompt-method/)**:** It is used to display a dialog with an optional message prompting the user to input some text**.**
* [**resizeBy()**](https://www.geeksforgeeks.org/html-window-resizeby-method/)**:** It is used to resize a window by the specified amount**.**
* [**setInterval()**](https://www.geeksforgeeks.org/java-script-settimeout-setinterval-method/)**:** It repeats a given function at every given time interval**.**
* [**setTimeout()**](https://www.geeksforgeeks.org/java-script-settimeout-setinterval-method/)**:** It executes a function, after waiting a specified number of milliseconds**.**

**Example: This example describes the implementation of the window.object.**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<title> Window's Properties</title>**

**<style>**

**h1 {**

**color: green;**

**}**

**</style>**

**</head>**

**<body>**

**<h1>Window Object</h1>**

**<button onclick="show()">Check</button>**

**<p id="prop"></p>**

**<script>**

**function show() {**

**var h = window.innerHeight;**

**var w = window.innerWidth;**

**var l = window.location;**

**var c = window.closed;**

**document.getElementById("prop").innerHTML =**

**"Frame's Height:"**

**+ h + "<br>"**

**+ "Frame's Width:"**

**+ w + "<br>"**

**+ "Window location:"**

**+ l + "<br>"**

**+ "Window Closed:"**

**+ c;**

**}**

**</script>**

**</body>**

**</html>**

**Difference between document and window:**

| ****Document**** | ****window**** |
| --- | --- |
| * It represents any HTML document or web page that is loaded in the browser**.** | * It represents a browser window or frame that displays the contents of the webpage**.** |
| * It is loaded inside the window**.** | * It is the very first object that is loaded in the browser**.** |
| * It is the object of window property**.** | * It is the object of the browser**.** |
| * All the tags, elements with attributes in HTML are part of the document**.** | * Global objects, functions, and variables of JavaScript are members of the window object**.** |
| * We can access the document from a window using the window. document**.** | * We can access the window from the window only. i.e. window.window**.** |
|  |  |
| * Properties of document objects such as title, body, cookies, etc can also be accessed by a window like this window.document.title**.** | * Properties of the window object cannot be accessed by the document object**.** |
| * **syntax:**   **document.property\_name;** | * **syntax:**   **window.property\_name;** |
| * **example:**   **document.title :**  will return thetitle of the document**.** | * **example:**   **window.innerHeight :** willreturn the height of the content area of the browser**.** |