

Write a blog on the Difference between document and window objects

When working with JavaScript to manipulate the web page, you'll frequently encounter two crucial objects: document and window. These objects are central to web development and play distinct roles.

The Window Object

The window object is the top-level object in the browser's object model and represents the browser window itself. You can access it from anywhere in your JavaScript code.

Key Characteristics of the Window Object:

Global Scope: The window object is always in the global scope, which means you can access it without any special references.

Navigation and Location: The window object provides properties like `window.location` and methods like `window.open()` and `window.close()` for navigation control.

Window Methods: It includes methods like `alert()`, `confirm()`, and `prompt()` for displaying dialog boxes.

Timing Functions: The window object offers methods like `setTimeout()` and `setInterval()` for handling time-based events.

Global Variables: Global variables declared in JavaScript become properties of the window object.

The Document Object

The document object represents the web page's content, allowing you to manipulate the HTML and CSS of the current page. It's a property of the window object and provides access to the Document Object Model (DOM), which represents the structured content of a web page.

Key Characteristics of the Document Object:

HTML Content: The document object is primarily concerned with the HTML structure and content of a web page. You can access and modify HTML elements, attributes, and content through the DOM.

Element Selection: It offers methods like `document.getElementById()`, `document.querySelector()`, and `document.getElementsByTagName()` to select and interact with HTML elements.

DOM Manipulation: You can manipulate the DOM using methods like `createElement()`, `appendChild()`, and `removeChild()` to dynamically create, modify, or delete elements.

Event Handling: The document object facilitates event handling and delegation. You can use methods like `addEventListener()` to attach event listeners to elements.

Style Manipulation: It provides access to CSS properties and styles via `element.style` or `getComputedStyle()`.

Relationship Between window and document

The document object is a property of the window object. You can access the document object using `window.document` or simply `document`. The window object acts as a container for the document object, the global scope, and other browser-related functionality.

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
The document is part of BOM (browser object model) and dom (Document object model)	The window is part of BOM, not DOM.

document	window
<p>Properties of document objects such as title, body, cookies, etc can also be accessed by a window like this window. document.title</p> <p>syntax: document.propertyname;</p> <p>example: document.title : will return the title of the document</p>	<p>Properties of the window object cannot be accessed by the document object.</p> <p>syntax: window.propertyname;</p> <p>example: window.innerHeight : will return the height of the content area of the browser</p>