# 1. The Window Object

* The window object represents an open window in a browser.
* 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");

* The browser window (the browser viewport) is NOT including toolbars and scrollbars.

# Few Window Object Properties :

* closed - Returns a boolean true if a window is closed.
* console - Returns the Console Object for the window.
* document - Returns the Document object for the window.
* frameElement - Returns the frame in which the window runs.
* frames - Returns all window objects running in the window.
* history - Returns the History object for the window.
* innerHeight - Returns the height of the window's content area (viewport). including scrollbars
* innerWidth - Returns the width of a window's content area (viewport) including scrollbars
* length - Returns the number of <iframe> elements in the current window
* localStorage - Allows to save key/value pairs in a web browser. Stores the data with no expiration date
* location- Returns the Location object for the window.

# Few Window Object Methods

* addEventListener() - Attaches an event handler to the window
* alert() - Displays an alert box with a message and an OK button
* atob() - Decodes a base-64 encoded string
* blur() - Removes focus from the current window
* btoa() - Encodes a string in base-64
* 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
* getSelection() - Returns a Selection object representing the range of text selected by the user
* moveBy() - Moves a window relative to its current position
* moveTo() - Moves a window to the specified position
* open() - Opens a new browser window

# The Document Object

* When an HTML document is loaded into a web browser, it becomes a document object.
* The document object is the root node of the HTML document.
* The document object is a property of the window object.
* The document object is accessed with: window.document or just document

# 1. Document Object Properties and Methods

* activeElement - Returns the currently focused element in the document
* addEventListener() - Attaches an event handler to the document
* adoptNode() - Adopts a node from another document
* baseURI - Returns the absolute base URI of a document
* body - Sets or returns the document's body (the <body> element)
* characterSet - Returns the character encoding for the document
* close() - Closes the output stream previously opened with document.open()
* cookie - Returns all name/value pairs of cookies in the document
* createAttribute() - Creates an attribute node
* createComment() - Creates a Comment node with the specified text
* createElement() - Creates an Element node
* createEvent() - Creates a new event
* createTextNode() - Creates a Text node
* defaultView - Returns the window object associated with a document, or null if none is available.
* designMode - Controls whether the entire document should be editable or not.
* doctype - Returns the Document Type Declaration associated with the document
* documentElement - Returns the Document Element of the document (the

<html> element)

* documentURI - Sets or returns the location of the document
* domain - Returns the domain name of the server that loaded the document
* getElementById() - Returns the element that has the ID attribute with the specified value
* getElementsByClassName()- Returns an HTMLCollection containing all elements with the specified class name
* getElementsByName() - Returns an live NodeList containing all elements with the specified name
* getElementsByTagName() - Returns an HTMLCollection containing all elements with the specified tag name

# 1. Difference between Document and Window Object

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| **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. |
| 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.propertyname; | syntax: window.propertyname; |

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| **Document** | **Window** |
| example:  document.title : will return the title of the document | example:  window.innerHeight : will return the height of the content area of the browser |