**Window Object:**

The window object is the top most object and outermost element of the object hierarchy. The window object representing the window or tab or an iframe sometimes. Window object has properties like browser history, location and the device’s screen etc. In case of multi tab browser, a window object represents a single tab, but some of its properties like innerHeight, innerWidth and methods like resizeTo() will affect the whole browser window.

Whenever a window appears on the screen to display the contents of the document, the window object is created.

The properties and methods of the window will be access by the below syntax,

Syntax: window.propertyName / window.methodName

The commonly used properties of the window are listed below,

* Closed: 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.
* devicePixelRatio: It returns the ratio between physical pixels and device-independent pixels in the current display.
* Document: It returns a reference to the document object of that window.
* Length: It represents the number of frames in the current window.
* fullScreen: This property indicates whether the window is displayed on full screen or not.
* Location: It contains the URL of the current window.
* innerHeight: It is used to get the height of the content area of the browser window.
* innerWidth: It is used to get the width of the content area of the browser window
* outerHeight: It will get the height of the outside of the browser window.
* outerWidth: It will get the width of the outside of the browser window.
* Toolbar: It will result in the toolbar object, whose visibility can be toggled in the window.

The commonly used methods of the window are listed below.

* alert(): 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(): It is used to remove focus from the current window.
* clearInterval(): It clears the interval which has been set by the setInterval() function before that.
* clearTimeout(): It clears the timeout which has been set by the setTimeout()function before that.
* close(): It is used for closing a certain window or tab of the browser which was previously opened.
* confirm(): 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.
* focus(): It is used to give focus to an element in the current window.

**Document Object:**

When a web page is loaded, the browser creates a Document Object Model of the page. The document object represents the whole html document as a tree of Objects (HTML, HEAD, BODY, and other HTML tags). It is the root element that represents the html document. Each HTML document that gets loaded into a window becomes a document object. Using document object, JavaScript can modify, add and delete the HTML elements, attributes CSS styles in the page. 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.

The properties and methods of the document object can be accessed with the below syntax:

Syntax: document.propertyName / document.methodName

The commonly used properties are:

* cookie: It returns the cookie of the current document.
* charSet: It returns a string, representing the document’s character encoding.
* defaultView: It returns the current Window Object.
* designMode: It is used to set documents as editable or read-only.
* domain: It returns the domain name of the document server.
* doctype: It returns the document’s doctype.
* embeds: It returns the collection of all embedded elements.
* URL: It returns the complete URL of the document.
* forms: It returns all the elements of the form.
* fullScreenElement: It returns the element that is currently present in full-screen mode.
* title: It returns the title element of the document.
* head: It returns the head element of the document.

The commonly used methods are:

* addEventListener(): It is used to attach an event handler to the specified element.
* createComment(): It is used to create a comment node with some text.
* createDocumentFragment(): It is used to create the document fragment to change the content of the document.
* createElement(): It is used to create HTML element .
* createEvent(): It is used to create a new events object.
* createTextNode(): It is used to create a textnode.
* execCommand(): It is used to execute a command specified by the user on the editable selected section. It returns a Boolean value.
* fullscreenEnabled(): It is used to check whether the document can be viewed in fullscreen mode or not. It returns a boolean value.
* getElementById(): It returns the object of the given ID. If no object with that id exists then it returns null.
* getElementsByClassName(): It returns an object containing all the elements with the specified class names in the document as objects.
* getElementsByName(): It returns an object containing all the elements with the specified name in the document as objects.