The Document Object Model (**DOM**) is an ***application*** ***programming interface (API)*** for **HTML (HyperText Markup Language)** and **XML** (Extensible markup language) documents.

It defines the **logical structure (Tree)** of documents and the way a document is accessed and manipulated.

Using DOM, the JavaScript gets access to HTML as well as CSS of the web page and can also add behavior to the HTML elements.

**Why is DOM required?**

* HTML is used to **structure**the web pages and JavaScript is used to add **behavior**to our web pages.
* When an HTML file is loaded into the browser, the JavaScript cannot understand the HTML document directly.
* So, a corresponding document is created (DOM) by browser.
* **DOM is basically the representation of the same HTML document but in a different format with the use of objects**.
* JavaScript interprets DOM easily i.e. JavaScript cannot understand the tags(<h1>H</h1>) in HTML document but can understand object h1 in DOM.
* Now, JavaScript can access each of the objects (h1, p, etc) by using different functions.

Lightbox

[**Window Object**](https://www.geeksforgeeks.org/properties-of-window-object/#:~:text=It%20represents%20an%20array%20that,frames%20of%20a%20given%20window.&text=It%20returns%20a%20reference%20to%20a%20DOMPoint%20object%2C%20which%20represents,point%20in%20a%20coordinate%20system.&text=It%20provides%20information%20of%20the%20URLs%20visited%20in%20the%20current%20window.&text=It%20represents%20the%20number%20of%20frames%20in%20the%20current%20window.)**:** Window Object is **object of the browser** which is always at **top of the hierarchy**.  It is like an API that is used to **set and access all the properties and methods of the browser**. It is **automatically created** by the browser.

**Document object:** When an **HTML document is loaded into a window**, it becomes a document object. The ‘document’ object has various properties that refer to other objects which allow access to and modification of the content of the web page. If there is a need to access any element in an HTML page, we always start with accessing the ‘document’ object. **Document object is property of window object.**