The Document Object Model (**DOM**) is a ***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.

**DOM is an API that represents and interacts with HTML or XML documents.**

**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.