**Day - 2**

**Document Object and Window Object**

**Definition of Document:**

The document object represents your web page. If you want to access any element in an HTML page, you always start with accessing the document object.

**Definition of Window:**

A global variable, window , representing the window in which the script is running, is exposed to JavaScript code. The Window interface is home to a variety of functions, namespaces, objects, and constructors which are not necessarily directly associated with the concept of a user interface window.

**Different Between Document and Window :**

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

**Activity – 2**

**1. Write a blog on the difference between document and window objects.**

**What is the document object?**

The Document Object Model (DOM) is a programming interface for web documents. It represents the page so that programs can change the document structure, style, and content. The DOM represents the document as nodes and objects; that way, programming languages can interact with the page.

**What is the window object?**

* 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.

**Document Object vs Window Object:**

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| **Document Object** | **Window Object** |
| Represents the HTML document loaded in the browser. | Represents the browser window or tab. |
| Focuses on the content and structure of the document. | Encompasses the entire browsing context, including multiple documents. |
| Used for accessing and manipulating elements within the document. | Contains global variables and functions. |
| Methods like ‘getElementById’, ‘querySelector’, and properties like innerHTML belong to the ‘document’ object. | Properties like ‘innerWidth’, ‘innerHeight’, and methods like ‘setTimeout’ are part of the window object. |
| Manages events within the document, such as clicks or key presses. | Controls browser features such as opening and closing windows. |
| Event listeners are attached to elements in the document to respond to user interactions. | Manages browser history through the ‘history’ object. |