**TASK-2**

Write a blog on Differences between Document and Window Objects?

The "Document Object" is a structure for a webpage that is added to the DOM tree system. When the content is compiled, it is shown on the website. When people get access to the document object, they can see both the HTML page text and the building blocks of the page. On the other hand, the "Window Object" at the top of the DOM structure shows a frame or window browser.

**What is the Document Object Model?**

The Document Object Model is what the whole page is built on; it has HTML parts that are arranged in a structure tree. When it is put together, changes the shape of the part into a webpage. This is how you write the syntax of the Document object:

“document.property\_name”;

Where the "propertyName" is the name of the DOM property whose data is being obtained. Let's take a look at the Document Object's features and methods.

Properties of Document Object:

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| --- | --- |
| **Properties** | **Description** |
| activeElement | It retrieves the currently used or active HTML element in the document. |
| body | Retrieves the content residing inside the “**<body>**” tag. |
| anchors | Retrieve all <a> anchor elements |
| baseURI | Retrieves a string value that identifies the base URI |
| cookie | Retrieves the currently executing document’s cookie information. |
| charSet | Retrieves a string that represents the character encoding scheme. |
| defaultView | Retrieves the current window object. |
| designMode | It sets the currently selected document to editable or non-editable by providing it a value of “**on**” and “**off**” respectively. |
| domain | Retrieves the domain name for the current document server. |
| embeds | Display the collection of all embedded components. |
| fullScreenElement | It retrieves the current element information which is in the full-screen mode. |
| lastModified | Retrieves the current document date and time that was last updated. |
| readyState | Retrieves the document loading status. |
| scripts | Retrieve script elements that are utilized in the current document. |
| strictErrorChecking | It sets or retrieves the information about the enforcement of strict error checking. |

Methods of Document Object:

Syntax: document.method\_name;

There are several methods that can be utilized to get information or perform specific tasks. These methods are presented below in tabular form:

|  |  |
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| **Methods** | **Description** |
| addEventListener() | It is utilized to call or invoke a function or method when the user performs some specified action like clicking a button. |
| adoptNode() | This method gets a node or object from another document and provides a node or parent object that represents the adopted node. |
| createAttribute() | It creates a specified attribute and returns the corresponding object. |
| execCommand() | It executes a command specified by the programmer on the editable section of the document. |
| fullscreenEnabled() | It checks if the current document can be shown in full-screen mode or not. |
| getElementByID() | Retrieves the reference of the HTML element by using its id. |
| getElementByClassName() | Retrieves the reference of the HTML element by using class attribute value. |
| getElementByTagName() | It retrieves an object of all HTML elements that contain a specified tag name. |
| normalize() | Removes the empty nodes and combines the adjacent text nodes along the parent or first node. |
| open() | Utilize to open the output stream to receive or create a collection for the output. |
| querySelector() | Returns the element that matches the specified CSS selector. |
| write() | This method inserts the content or JavaScript code into the document. |
| removeEventListener() | It removes the attached event handler from an element. |
| writeln() | It inserts document data at a new line after the compilation of each statement. |

**What is the Windows Object Model?**

It's called "WOM" and it's a framework that Microsoft Windows operating systems use to describe and interact with different system parts, such as Windows, controls, menus, and other GUI elements. It is based on a binary interface standard that Windows uses to let processes talk to each other and let components talk to each other.

Syntax: window.property\_name;

Properties of Windows Object:

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| **Properties** | **Description** |
| Closed | It represents whether the window is closed or not. |
| Document | Returns a document object reference. |
| controllers | Retrieve the XUL controller objects. |
| defaultStatus | Elaborates the default message to be shown in the status bar. |
| console | Retrieves an object containing the reference to the console that offers access to browsers. |
| DOMMartrix | Retrieves the DOMMatrix object representing 4×4 matrices. |
| History | Provides information on the visited URLs. |
| DOMPoint | Refers to a DOMPoint that represents a 2D or 3D point coordination |
| DOMRect | Returns a DOMRect object reference. |
| Length | Represents the number of frames |

Methods of Windows Object:

Syntax: window.method\_name;

The methods that come with the Windows Object Model are inserted below

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| --- | --- |
| **Methods** | **Explanation** |
| alert() | It displays an alert box to show the message or warning along with the “ok” and “Cancel” buttons. |
| blur() | Diverges the focus from the current window |
| clearInterval() | Clears the interval set by the function “setInterval(). |
| getSelection() | Retrieves an object that identifies the range of selected text. |
| matchMedia() | Returns a MediaQueryList object that shows the outcome of a specific CSS query string. |
| moveTo() | It is utilized to perform the movement for the window from the left to the top position. |
| resizeTo() | Resizes a window to specific width or height |
| scrollBy() | Scroll the document by providing pixels. |
| scrollTo() | Scrolls to particular coordinates residing inside the document. |
| setInterval() | Repeats a function after every provided or specified interval of time |
| stop() | Stops the window from loading the resources in the browsing context. |