The Document Object

The Document Object is a representation of the HTML document that is being displayed in the browser window. It provides a structured representation of the page, with a hierarchical tree-like structure that reflects the structure of the HTML markup. The Document Object is created automatically when the web page loads, and it can be accessed via the global "document" variable.

One of the most important features of the Document Object is its ability to manipulate the content of the page in real-time. Developers can use JavaScript to modify the HTML markup, add or remove elements from the page, and update the text content of existing elements. This makes it possible to create dynamic web pages that can respond to user interactions and update their content in real-time.

Another key feature of the Document Object is its ability to interact with other objects in the web page, such as forms, images, and links. By accessing these objects through the Document Object, developers can create powerful web applications that can handle user input, display multimedia content, and navigate to other pages on the web.

The Window Object

The Window Object represents the browser window itself, and it provides developers with a powerful set of tools for controlling the behavior of the browser. The Window Object is created automatically when the browser window is opened, and it can be accessed via the global "window" variable.

One of the most important features of the Window Object is its ability to manipulate the browser's behavior, such as opening new windows, resizing the current window, and navigating to other pages on the web. By accessing the Window Object through JavaScript, developers can create sophisticated web applications that can interact with the user in a variety of ways.

Another key feature of the Window Object is its ability to handle events, such as mouse clicks, keyboard input, and page load events. By registering event handlers with the Window Object, developers can create web applications that respond to user input in real-time, updating the page content and behavior as needed.

| **document** | **window** |
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| 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. i.e. window.window |
| 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 |