**write a blog on difference between document and window objects?**

In JavaScript, the Document Object Model (DOM) represents the structure of web pages, allowing developers to manipulate elements, content, and styles dynamically.

Two fundamental objects within the DOM are the **document** and **window** objects. While they are closely related and often used interchangeably, they serve distinct purposes and possess unique functionalities.

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| Document Object | Window Object |
| Represents the HTML document within a browser. | Represents the browser window or tab instance |
| Child of the Window object. | Top-level object in the browser's JavaScript hierarchy. |
| Provides access to elements within the HTML document. | Does not directly access document elements. |
| Offers methods like getElementById(), querySelector(), etc. | Contains methods for interacting with the browser, like setTimeout(), alert(), etc. |
| Contains properties related to the document structure and content, e.g., title, body, URL, etc.. | Holds properties related to the browser window, such as location, history, innerWidth, etc. |
| Limited to the content within the HTML document.. | Controls the entire browser window or frame. |
| Used to modify, create, or remove HTML elements and content within the document. | Doesn't directly manipulate the document but can control aspects like window size, location, etc. |
| Captures events related to document interactions, such as click, submit, etc. | Captures events triggered by the browser window, like resize, scroll, etc. |
| document.getElementById('elementID') retrieves an element from the document. | window.open() creates a new browser window or tab. |
| Represents the content and structure of an HTML page | Provides an interface for the HTML content to interact with the browser. |