Difference between **Documents and Window Objects**

Both "documents" and "window" objects are fundamental components in web development, particularly in the context of the Document Object Model (DOM), which represents the structure and content of a web page as objects that can be manipulated using programming.

1. **Document Object**:

The `document` object represents the entire HTML document in the web browser. It's a property of the `window` object and provides access to various properties and methods that allow you to interact with and manipulate the content of the web page. The `document` object provides methods to retrieve and manipulate elements, update content, modify styles, and handle events on the page.

For example, you can use the `getElementById()` method to retrieve an element by its ID, or the `createElement()` method to create a new HTML element dynamically.

2. **Window Object**:

The `window` object represents the web browser window or tab that is displaying the web page. It's the global object in the browser's JavaScript environment and provides a wide range of properties and methods that are used to control and interact with the browser environment.

The `window` object encompasses the entire browsing context and includes properties like `location` (which contains information about the current URL), `history` (for managing browser history), and `localStorage` (for storing data locally). It also provides methods for opening new windows or tabs, setting timeouts/intervals, and handling events related to the window or tab.

In summary, the main difference is that the `document` object represents the content of the web page (DOM), while the `window` object represents the browser window or tab in which the page is being displayed. They are closely related and often used together to create dynamic and interactive web experiences.