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

In JavaScript, the **document and window objects** are two of the most important objects in the browser environment. Both objects provide a way to interact with the browser and its content, but they have different roles and functions. In this blog post, explore the differences between the document and window objects and when to use each one.

**The Document Object**

The document object is a property of the window object and represents the current web page that is being displayed in the browser window. The document object provides a way to access and manipulate the **HTML and CSS** content of the web page.

1. **Properties of Document:**

**Syntax for properties:**

* **document.property\_name**;

**Some common properties of the document object include:**

* document.activeElement: It returns the currently active elements in the document.
* document.body: It returns the contents of the body element.
* document.anchors: It returns all <a> elements that have a name attribute.
* document.baseURI: It returns a string value that represents the base URI of the document.
* document.cookie: It returns the cookie of the current document.
* document.charSet: It returns a string, representing the document’s character encoding.
* document.defaultView: It returns the current Window Object.
* document.designMode: It is used to set documents as editable or read-only.
* document.domain: It returns the domain name of the document server.

**2. Methods of Document:**

**Syntax for method:**

* **document.method\_name;**

**Some common methods of the document object include:**

* document.getElementById(): Returns the HTML element with the specified ID.
* document.getElementsByClassName(): Returns an array of all HTML elements with the specified class name.
* document.getElementsByTagName(): Returns an array of all HTML elements with the specified tag name.
* document.createElement(): Creates a new HTML element.
* document.write(): Writes text or HTML to the document

**The Window Object**

The window object is the **global object** in the **browser environment**. It represents the **browser window** or tab that is currently open and provides a way to interact with the browser itself. The window object has many properties and methods that allow you to control the behaviour and appearance of the browser window.

1. **Properties of document:**

**Syntax for property:**

* window.property\_name;

**Some common properties of the window object include:**

* window.innerHeight: It is used to get the height of the content area of the browser window.
* window.innerWidth: It is used to get the width of the content area of the browser window.
* window.Name: It contains the name of the referenced window.
* window.Closed: It holds a Boolean value that represents whether the window is closed or not.
* window.console: It returns a reference to the console object which provides access to the browser’s debugging console.
* window.fullScreen: This property indicates whether the window is displayed on full screen or not.
* window.Location: It contains the URL of the current window.
* window.controllers: It returns the XUL controller objects for the current Chrome window.
* customElements: It returns a reference to the CustomElementRegistry object, which can be used to register new custom elements and also get information about already registered custom elements.
* window.crypto: It returns the browser crypto object.
* window.devicePixelRatio: It returns the ratio between physical pixels and device-independent pixels in the current display.
* window.Document: It returns a reference to the document object of that window.

**2. Methods of Window:**

**Syntax for method:**

* window.method\_name;

**Some common methods of the document object include:**

* window.alert(): It is used to display an alert box. It displays a specified message along with an OK button and is generally used to make sure that the information comes through the user.
* window.blur(): It is used to remove focus from the current window.
* window.clearInterval(): It clears the interval which has been set by the setInterval() function before that.
* window.clearTimeout(): It clears the timeout which has been set by the setTimeout()function before that.
* window.close(): It is used for closing a certain window or tab of the browser which was previously opened.
* window.confirm(): It is used to display a modal dialog with an optional message and two buttons i.e. OK and Cancel. It returns true if the user clicks “OK”, and false otherwise.
* window.focus(): It is used to give focus to an element in the current window.

Conclusion

In summary, the window object is the global object in the browser environment and provides a way to interact with the browser itself, while the document object is a property of the window object and represents the current web page that is being displayed in the browser window. The window object is often used to control the behaviour and appearance of the browser window, while the document object is often used to manipulate the content and structure of the web page. Understanding the differences between these two objects can help you write more efficient and effective JavaScript code when working with the browser environment.

**Difference between document and window:**

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| **S**.**No** | **Document** | **Window** |
| 1. | It represents the document loaded **inside the window** or **browse**r. | It represents the browser window in which you are seeing the content. |
| 2. | The properties related to it are stored in the document object. | The properties related to it are stored in the window object. |
| 3. | It is loaded after the loading window because the window contains a document. | It is loaded before the document because window container document. |
| 4. | It is the root element of the document object model. | The window is the global element for all objects, functions, etc. |
| 5. | It is an object of window. | It is an object of the browser. |
| 6. | We can not access windows objects properties inside the document. | We can access document object properties inside the window. |
| 7. | logically:  document:{ properties} | logically:  window:{  document:{properties}  } |
| 8. | Example: document.title will return the title of the document | Example: window.document.title will return the title of the document. |