**Difference between Document and window object:**

**1. Document object:**

* The document object is a core part of the Document Object Model (DOM) in web development. It represents the web page itself and provides a structured representation of the page's content, allowing you to interact with and manipulate the content using JavaScript.
* The document object is a crucial part of client-side web development, as it enables you to dynamically update and modify the content and behavior of web pages using JavaScript.

**Accessing Elements:**

**document.getElementById(id):** Returns a reference to an element with the specified id attribute.

document.getElementsByClassName(className): Returns a collection of elements with the specified class name.

**document.getElementsByTagName(tagName):** Returns a collection of elements with the specified HTML tag name.

**document.querySelector(selector):** Returns the first element that matches the specified CSS selector.

**document.querySelectorAll(selector):** Returns a NodeList of all elements that match the specified CSS selector.

**Modifying Content:**

**document.createElement(tagName) :** Creates a new HTML element with the specified tag name.

**document.createTextNode(text):** Creates a new text node with the specified text content.

**element.appendChild(child):** Appends a child node to the end of a parent element.

**element.innerHTML:** Gets or sets the HTML content of an element.

**element.innerText and element.textContent:** Get or set the text content of an element.

**Manipulating Styles:**

**element.style:** Allows you to get or set CSS styles for an element.

**getComputedStyle(element):** Returns an object representing the computed styles of an element.

**Events**:

**element.addEventListener(event, function):** Attaches an event listener to an element.

**element.removeEventListener(event, function):** Removes an event listener from an element.

**document.createEvent(eventType):** Creates a new event object for custom event handling.

**Form Handling:**

**document.forms:** Returns a collection of all form elements on the page.

**form.submit():** Submits a form.

**form.reset():** Resets the values of form elements to their initial values.

**Document Properties:**

**document.title:** Gets or sets the title of the webpage displayed in the browser's title bar.

**document.URL:** Gets the URL of the current page.

**document.domain:** Gets or sets the domain of the current page.

**document.cookie:** Gets or sets the cookies associated with the current page.

**2. Window object:**

* The window object is a fundamental part of the Document Object Model (DOM) in web development, and it represents the global window in a web browser. It is the top-level object that contains various properties and methods that allow you to interact with and control the browser window or tab.
* The window object is automatically created when a web page is loaded, and you can access its properties and methods in your JavaScript code without having to explicitly reference it as window.

**Properties:**

**window.document:** This property points to the current webpage's DOM document. You can use it to manipulate the content of the page.

**window.location:** Represents the current URL of the browser.

**window.innerWidth and window.innerHeight:** These properties give you the width and height of the browser window's content area.

**window.localStorage and window.sessionStorage:** These properties allow you to store data locally on the user's device.

**window.console:** Provides access to the browser's console for logging messages and debugging.

**Methods:**

**window.alert():** Displays a dialog box with a message and an OK button.

**window.confirm():** Displays a dialog box with a message, OK, and Cancel buttons.

**window.prompt():** Displays a dialog box with a message, an input field, and OK and Cancel buttons.

**window.open():** Opens a new browser window or tab.

**window.close():** Closes the current browser window or tab.

**window.setTimeout():** Executes a function or code snippet after a specified time delay.

**window.setInterval():** Repeatedly executes a function or code snippet at specified intervals.