| **Method/Property** | **Description** | **Example** | **Usage** |
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| document.querySelector() | Selects the **first** HTML element that matches a CSS selector. | document.querySelector('.class-name') | Used to select specific elements like classes, IDs, or tags. |
| document.querySelectorAll() | Selects **all** elements matching a CSS selector. | document.querySelectorAll('div') | Returns a NodeList (like an array) of matching elements. |
| document.getElementById() | Selects an element by its **ID**. | document.getElementById('unique-id') | Fast and direct way to select an element. |
| document.getElementsByClassName() | Selects all elements with a specified class name. | document.getElementsByClassName('class-name') | Returns an HTMLCollection (live list of elements). |
| document.getElementsByTagName() | Selects all elements with a specified tag name. | document.getElementsByTagName('p') | Useful to get all <p> or <div> tags. |
| document.createElement() | Creates a new HTML element in the DOM. | document.createElement('div') | Used for dynamically creating elements like div, button. |
| document.createTextNode() | Creates a new text node. | document.createTextNode('Hello World') | Adds textual content to the DOM. |
| .appendChild() | Appends a node (element or text) as a child to an existing element. | parent.appendChild(childElement) | Adds elements dynamically to the DOM. |
| .innerHTML | Gets or sets the HTML content inside an element. | element.innerHTML = '<h1>Hello</h1>'; | Fast way to update multiple inner elements but can overwrite existing content. |
| .innerText | Gets or sets the **visible text** inside an element. | element.innerText = 'Visible Text'; | Updates only the text inside the element without rendering HTML. |
| .textContent | Similar to innerText, but includes hidden text. | element.textContent = 'Hidden Text'; | Accesses text content, including hidden elements. |
| .style | Modifies the CSS style of an element. | element.style.color = 'red'; | Dynamically updates styles without external CSS. |
| .classList.add() | Adds a CSS class to an element. | element.classList.add('new-class'); | Easily add classes dynamically. |
| .classList.remove() | Removes a CSS class from an element. | element.classList.remove('old-class'); | Easily remove classes dynamically. |
| .classList.toggle() | Toggles a CSS class on or off. | element.classList.toggle('active'); | Adds a class if it's not present, removes it if it is. |
| .getAttribute() | Gets the value of an attribute from an element. | element.getAttribute('src'); | Retrieve attribute values like src, href. |
| .setAttribute() | Sets or updates the value of an attribute. | element.setAttribute('alt', 'Image Description'); | Dynamically updates or adds attributes to elements. |
| .removeAttribute() | Removes an attribute from an element. | element.removeAttribute('disabled'); | Useful for enabling or disabling form fields. |
| .remove() | Removes an element from the DOM. | element.remove(); | Deletes elements dynamically. |
| .insertBefore() | Inserts a new node before a specified child node. | parent.insertBefore(newElement, referenceChild); | Adds elements in specific positions relative to existing elements. |
| parentNode | Refers to the parent node of an element. | element.parentNode; | Navigate up the DOM tree. |
| childNodes | Returns all child nodes of an element (including text nodes). | parent.childNodes; | Access child elements, including text nodes. |
| children | Returns only element child nodes (no text nodes). | parent.children; | Used for manipulating only elements, ignoring text nodes. |
| .replaceChild() | Replaces one child node with another. | parent.replaceChild(newChild, oldChild); | Replace elements dynamically in the DOM. |
| addEventListener() | Attaches an event listener to an element. | button.addEventListener('click', () => console.log('Clicked!')); | Reacts to user actions or events like clicks, hover, or scroll. |
| .removeEventListener() | Removes an event listener from an element. | button.removeEventListener('click', eventHandlerFunction); | Useful for cleaning up event listeners. |
| scrollIntoView() | Scrolls an element into the visible area of the browser window. | element.scrollIntoView(); | Automatically scroll to specific elements. |