

# DOM Functions in JavaScript

## 1. Selecting Elements

### **document.getElementById(id)**

Description: Selects element by ID

Example: document.getElementById('title')

### **document.getElementsByClassName(className)**

Description: Selects all elements with class

Example: document.getElementsByClassName('btn')

### **document.getElementsByTagName(tagName)**

Description: Selects all elements with tag name

Example: document.getElementsByTagName('div')

### **document.querySelector(selector)**

Description: Selects first element matching CSS selector

Example: document.querySelector('.menu')

### **document.querySelectorAll(selector)**

Description: Selects all elements matching CSS selector

Example: document.querySelectorAll('li.active')

## 2. Modifying Content

### **element.innerHTML**

Description: Gets or sets HTML inside element

Example: div.innerHTML = "<b>Hello</b>"

### **element.innerText**

Description: Gets or sets text content

Example: div.innerText = "Hello"

### **element.textContent**

Description: Gets or sets all text (ignores styling)

Example: div.textContent = "Hello"

## 3. Modifying Attributes

### **element.setAttribute(name, value)**

Description: Sets an attribute

Example: img.setAttribute('src', 'logo.png')

### **element.getAttribute(name)**

Description: Gets value of attribute

Example: link.getAttribute('href')

### **element.removeAttribute(name)**

Description: Removes an attribute

Example: input.removeAttribute('disabled')

### **element.hasAttribute(name)**

Description: Checks if attribute exists

Example: btn.hasAttribute('disabled')

## 4. Modifying Styles

### **element.style.property**

Description: Sets inline style

# DOM Functions in JavaScript

Example: `div.style.color = "red"`

## **element.classList.add(class)**

Description: Adds a class

Example: `btn.classList.add('active')`

## **element.classList.remove(class)**

Description: Removes a class

Example: `btn.classList.remove('disabled')`

## **element.classList.toggle(class)**

Description: Toggles a class

Example: `menu.classList.toggle('open')`

## **element.classList.contains(class)**

Description: Checks if class exists

Example: `btn.classList.contains('active')`

## 5. DOM Traversal

### **element.parentNode**

Description: Gets parent element

Example: `child.parentNode`

### **element.children**

Description: Gets all child elements

Example: `list.children`

### **element.firstChild / firstElementChild**

Description: Gets first child

Example: `ul.firstElementChild`

### **element.lastChild / lastElementChild**

Description: Gets last child

Example: `ul.lastElementChild`

### **element.nextSibling / nextElementSibling**

Description: Gets next sibling

Example: `li.nextElementSibling`

### **element.previousSibling / previousElementSibling**

Description: Gets previous sibling

Example: `li.previousElementSibling`

## 6. Creating and Adding Elements

### **document.createElement(tag)**

Description: Creates new HTML element

Example: `let p = document.createElement('p')`

### **document.createTextNode(text)**

Description: Creates new text node

Example: `let text = document.createTextNode('Hello')`

### **parent.appendChild(child)**

Description: Appends child to parent

Example: `div.appendChild(p)`

### **parent.insertBefore(newNode, referenceNode)**

# DOM Functions in JavaScript

Description: Inserts before a node

Example: `ul.insertBefore(newLi, oldLi)`

## **element.remove()**

Description: Removes element

Example: `btn.remove()`

## **parent.removeChild(child)**

Description: Removes child from parent

Example: `ul.removeChild(li)`

## **element.replaceChild(newChild, oldChild)**

Description: Replaces child

Example: `ul.replaceChild(newLi, oldLi)`

## 7. Event Handling

### **element.addEventListener(event, function)**

Description: Adds event listener

Example: `btn.addEventListener('click', showMsg)`

### **element.removeEventListener(event, function)**

Description: Removes event listener

Example: `btn.removeEventListener('click', showMsg)`

### **event.preventDefault()**

Description: Prevents default action

Example: `e.preventDefault()`

### **event.stopPropagation()**

Description: Stops bubbling

Example: `e.stopPropagation()`

## 8. Form-related DOM

### **form.elements**

Description: All form controls

Example: `form.elements['email']`

### **input.value**

Description: Gets or sets input value

Example: `nameInput.value = 'Fuad'`

### **input.checked**

Description: Checks if checkbox/radio is checked

Example: `checkbox.checked`

### **select.options**

Description: Access all options

Example: `select.options[0].text`

### **select.selectedIndex**

Description: Gets selected index

Example: `select.selectedIndex`

## 9. Dimensions & Scrolling

### **element.clientHeight**

Description: Height including padding

# DOM Functions in JavaScript

Example: `div.clientHeight`

## **element.offsetHeight**

Description: Includes borders

Example: `div.offsetHeight`

## **element.scrollHeight**

Description: Entire scrollable height

Example: `div.scrollHeight`

## **element.scrollTop**

Description: Pixels scrolled vertically

Example: `div.scrollTop = 100`