



**TOPIC:** DOCUMENT OBJECT MODEL

**WEEK:** 7

**COURSE INSTRUCTOR:** ABDULLAH MAHMOOD

## DOM ELEMENT

Feature	Method
Select by ID	<code>getElementById("id")</code>
Select by Class	<code>getElementsByClassName("class")</code>
Select by Tag	<code>getElementsByTagName("tag")</code>
Modify Content	<code>innerText</code> , <code>innerHTML</code>
Modify CSS	<code>element.style.property = "value"</code>
Event Handling	<code>addEventListener("event", function)</code>
Create Element	<code>document.createElement("tag")</code>
Append Element	<code>parent.appendChild(child)</code>
Remove Element	<code>parent.removeChild(child)</code>

### 1. Accessing Elements in the DOM

Before modifying any elements, we need to **select them**. JavaScript provides different methods to do this:

#### 1. Using `getelementbyid`:



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```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>DOM Select by ID</title>
</head>
<body>

  <h1 id="title">Hello, World!</h1>
  <button onclick="changeText()">Click Me</button>

  <script>
    function changeText() {
      document.getElementById("title").innerText = "Hello, JavaScript!";
    }
  </script>

</body>
</html>
```



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## Using `getelementbyClassName`:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>DOM Select by Class</title>
</head>
<body>

  <p class="message">Welcome!</p>
  <p class="message">Enjoy your stay.</p>
  <button onclick="changeText()">Change Messages</button>

  <script>
    function changeText() {
      let messages = document.getElementsByClassName("message");
      messages[0].innerText = "Hello!";
      messages[1].innerText = "Have a great day!";
    }
  </script>

</body>
</html>
```



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## Using `getelementbyTagName`:

```
<html lang="en">
</head>
<body>

  <h2>Item 1</h2>
  <h2>Item 2</h2>
  <button onclick="updateHeadings()">Update Headings</button>

  <script>
    function updateHeadings() {
      let headings = document.getElementsByTagName("h2");
      for (let i = 0; i < headings.length; i++) {
        headings[i].innerText = `Updated Item ${i + 1}`;
      }
    }
  </script>

</body>
</html>
```



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## Using addEventListener:

```
2 <html lang="en">
5 </head>
5 <body>
7
8   <button id="myButton">Click Me</button>
9
9   <script>
1      document.getElementById("myButton").addEventListener("click", () =>
2         {
3             alert("Button Clicked!");
4         });
5   </script>
7 </body>
8 </html>
```



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## APPEND CHILD

```
<h2>Append & Remove Child Example</h2>

<ul id="itemList">
  <li>Item 1</li>
  <li>Item 2</li>
</ul>

<button onclick="addItem()">Add Item</button>
<button onclick="removeItem()">Remove Last Item</button>

<script>
  function addItem()
  {
    // Select the list
    const list = document.getElementById("itemList");

    // Create a new <li> element
    const newItem = document.createElement("li");

    // Add text to the new item
    newItem.textContent = "New Item";

    // Append the new item to the list
    list.appendChild(newItem);
  }

  function removeItem()
  {
    // Select the list
    const list = document.getElementById("itemList");

    // Check if the list has items before removing
    if (list.children.length > 0) {
      list.removeChild(list.lastElementChild);
    } else {
      alert("No more items to remove!");
    }
  }
</script>
```