

Company: ProSensia

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Topic Covered: DOM Manipulation – getElementById, querySelector, innerHTML

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Topics Learned

1. getElementById()

- This method is used to select a single element by its **ID**.
- Returns the first element with the matching ID.
- Example:

javascript

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```
const title = document.getElementById("main-heading");  
title.style.color = "blue";
```

2. querySelector()

- More powerful and flexible than getElementById().
- Can use **CSS selectors** (#id, .class, tag, etc.)
- Returns the **first** matching element.
- Example:

javascript

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```
const paragraph = document.querySelector(".intro");  
paragraph.textContent = "Updated using querySelector!";
```

3. innerHTML

- Used to **get or set** the HTML content inside an element.
- Can inject entire HTML structures (not just text).

- Example:

javascript

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```
document.getElementById("container").innerHTML = "<p>New Content</p>";
```

Practical Learning

- Implemented dynamic updates to webpage content using DOM methods.
 - Understood the difference between innerHTML and textContent.
 - Practiced selecting and modifying HTML elements using both ID and CSS selectors.
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Key Takeaways

- DOM manipulation is essential for creating interactive web pages.
- getElementById is faster, but querySelector is more versatile.
- innerHTML allows inserting complex HTML, but must be used carefully due to security (XSS) risks.