



# JavaScript insertAdjacentHTML() Method

**Summary:** in this tutorial, you'll learn how to use the `insertAdjacentHTML()` method to insert HTML into the document.

## Introduction to JavaScript insertAdjacentHTML() method

The `insertAdjacentHTML()` is a method of the `Element` interface so that you can invoke it from any element.

The `insertAdjacentHTML()` method parses a piece of HTML text and inserts the resulting nodes into the DOM tree at a specified position:

```
element.insertAdjacentHTML(positionName, text);
```

The `insertAdjacentHTML()` method has two parameters:

### 1) position

The `positionName` is a string that represents the position relative to the element. The `positionName` accepts one of the following four values:

- `'beforebegin'` : before the element
- `'afterbegin'` : before its first child of the element.
- `'beforeend'` : after the last child of the element
- `'afterend'` : after the element

Note that the `'beforebegin'` and `'afterend'` are only relevant if the element is in the DOM tree and has a parent element.

The `insertAdjacentHTML()` method has no return value, or `undefined` by default.

The following visualization illustrates the position name:



## 2) text

The `text` parameter is a string that the `insertAdjacentHTML()` method parses as HTML or XML. It cannot be `Node` objects.

## Security consideration

Like the `innerHTML`, if you use the user input to pass into the `insertAdjacentHTML()` method, you should always escape it to avoid security risks.

## JavaScript insertAdjacentHTML() method example

The following JavaScript example uses the `insertAdjacentHTML()` method to insert various elements into the page with the positions relative to the `ul` element:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>insertAdjacentHTML() Demo</title>
</head>
<body>
  <ul id="list">
    <li>CSS</li>
  </ul>
```

```
<script>
    let list = document.querySelector('#list');

    list.insertAdjacentHTML('beforebegin', '<h2>Web Technology</h2>');
    list.insertAdjacentHTML('afterbegin', '<li>HTML</li>');
    list.insertAdjacentHTML('beforeend', '<li>JavaScript</li>');
    list.insertAdjacentHTML('afterend', '<p>For frontend developers</p>');
</script>
</body>
</html>
```

Output

## Web Technology

- HTML
- CSS
- JavaScript

For frontend developers

How it works:

- First, select the `ul` element by its id `list` using the `querySelector()` method.
- Next, use the `insertAdjacentHTML()` method to insert a heading 2 element before the `ul` element. The position is `'beforebegin'`.
- Then, use the `insertAdjacentHTML()` method to insert a new list item element before the first child of the `ul` element. The position is `'afterbegin'`.
- After that, use the `insertAdjacentHTML()` method to insert a new list item element after the last child of the `ul` element with the position `'beforeend'`.
- Finally, insert use the `insertAdjacentHTML()` method to insert a new paragraph element after the `ul` element with the position `'afterend'`.

## Summary

- Use the `insertAdjacentHTML()` method to insert a text as Nodes into the DOM tree at a specified position.
- Always escape the user input text that you pass into the `insertAdjacentHTML()` method to avoid security risks.

## Quiz