

HTML class Attribute

The `class` attribute in HTML is used to define one or more class names for an HTML element. These class names can be referenced by CSS and JavaScript to apply styles or perform certain actions on elements with the specified class.

Syntax

```
<element class="class1 class2 class3">Content</element>
```

Usage

1. Styling with CSS:

By assigning a class to an HTML element, you can apply CSS styles to that element.

```
```html
<style>
.red-text {
 color: red;
}
.bold-text {
 font-weight: bold;
}
</style>

<p class="red-text bold-text">This is a styled paragraph.</p>
```
```

2. JavaScript Manipulation:

You can use JavaScript to manipulate elements with a certain class.

```
```html
<script>
function highlightElements() {
 var elements = document.getElementsByClassName('highlight');
 for (var i = 0; i < elements.length; i++) {
 elements[i].style.backgroundColor = 'yellow';
 }
}
</script>

<p class="highlight">This paragraph will be highlighted.</p>
<p class="highlight">This one too!</p>
```
```

```
<button onclick="highlightElements()">Highlight Paragraphs</button>
```
```

### 3. Multiple Classes:

You can assign multiple classes to an element by separating them with spaces.

```
```html
<div class="container main-content"></div>
```
```

### Advantages

- **Reusability:** Classes allow you to reuse styles across multiple elements.
- **Maintainability:** It is easier to manage styles by changing class definitions in one place.
- **JavaScript Integration:** Classes can be used as hooks for JavaScript to manipulate the DOM.

### Best Practices

- Use meaningful class names that describe the purpose or content of the element.
- Avoid overly specific class names that tie the name to a particular style or presentation.
- Use classes for styling and IDs for unique elements that need to be specifically targeted.

The `class` attribute is a powerful tool for web developers to create flexible and maintainable web pages by separating content from presentation and behavior.