

Day 10

"Web Development + Security"

Inline and Block Elements:

What are Inline elements in HTML?

- Inline elements do not start on a new line.
- They only take up as much width as needed for their content.
- They are typically used inside text or within block elements.

Examples: ``, `<a>`, ``, ``, ``.

What are block elements in HTML?

- Block elements start on a new line by default.
- They take up the full width available (unless styled otherwise).
- Usually used to create structure/layout of a page.

Examples: `<div>`, `<p>`, `<h1>`–`<h6>`, `<section>`, ``, `<table>`.

Example:

```
<body>
  <!-- Block element (takes full width) -->
  <h2 style="background-color: #aqua;">This is a heading tag (Block)</h2>

  <!-- Inline element (takes only needed space) -->
  <a href="#" style="background-color: #red; color: #white;">This is a link tag (Inline)</a>
</body>
```

Output:



This is a heading tag (Block)

[This is a link tag \(Inline\)](#)

Block Elements (Most Commonly Used First)

`<div>`: A generic container for flow content.

`<p>`: Paragraph.

`<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`: Headings.

``: Unordered list.

``: Ordered list.

``: List item.

<form>: A section containing form controls.

<table>: Table.

<section>: A standalone section of a document.

<header>: A container for introductory content or a set of navigational links.

<footer>: Footer of a section or page.

<nav>: A section of a page that contains navigation links.

<article>: A self-contained composition in a document.

<aside>: A section of a page that contains information indirectly related to the main content.

<main>: The main content of a document.

<fieldset>: A set of form controls grouped under a common name.

<blockquote>: A block of text that is a quotation from another source.

<pre>: Preformatted text.

<canvas>: A container used to draw graphics via JavaScript.

<dl>: Description list.

<dt>: Term in a description list.

<dd>: Description in a description list.

<figure>: Any content that is referenced from the main content.

<figcaption>: A caption for a <figure> element.

<address>: Contact information for the author or owner of the document.

<hr>: A thematic break or a horizontal rule.

<tfoot>: Footer of a table.

Inline Elements (Most Commonly Used First)

<a>: Anchor or hyperlink.

: Image.

: Generic inline container.

<input>: Input field.

<label>: Label for a form element.

: Strong emphasis.

: Emphasized text.

: Line break.

<code>: Code snippet.

: Bold text.

<i>: Italic text.

<u>: Underlined text.

<small>: Smaller text.

<sub>: Subscript.

<sup>: Superscript.

<mark>: Marked or highlighted text.

<q>: Short inline quotation.

<cite>: Citation.

<kbd>: Keyboard input.

<samp>: Sample output.

<var>: Variable in a mathematical expression or programming context.

<time>: Time.

<abbr>: Abbreviation.

<data>: Machine-readable translation of content.

<acronym>: Acronym (Not supported in HTML5).

Id & Classes in HTML:

What is an ID in HTML?

- An ID is a unique identifier for an element.
- You can only use one ID per page for one element.
- Useful for targeting a single element with CSS or JavaScript, add # before it.

Example: Syntax for id creation

The screenshot shows a code editor on the left and a browser window on the right. The browser URL is <http://127.0.0.1:3000/index.html?serverWindowId=8>. The browser displays two elements: a heading with the text "This is a heading with id" in blue, and a paragraph with the text "This is a paragraph with id" in green.

```
index.html
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <style>
5       #heading1 {
6         color: blue;
7       }
8     </style>
9   </head>
10  <body>
11    <!-- Id in HTML -->
12    <h1 id="heading1">This is a heading with id</h1>
13    <p id="para1">This is a paragraph with id</p>
14
15
16
17
```

Example: If we redefine the id of an element then the last one will be assigned to the element

The screenshot shows a code editor on the left and a browser window on the right. The browser URL is <http://127.0.0.1:3000/index.html?serverWindowId=8>. The browser displays two elements: a heading with the text "This is a heading with id" in greenyellow, and a paragraph with the text "This is a paragraph with id" in greenyellow.

```
index.html
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <style>
5       #heading1 {
6         color: blue;
7       }
8       #heading1 {
9         color: greenyellow;
10      }
11     </style>
12   </head>
13   <body>
14     <!-- Id in HTML -->
15     <h1 id="heading1">This is a heading with id</h1>
16     <p id="para1">This is a paragraph with id</p>
17
18
19
20
```

Example: we have given the same id name to different element, then also same properties will be applied to both

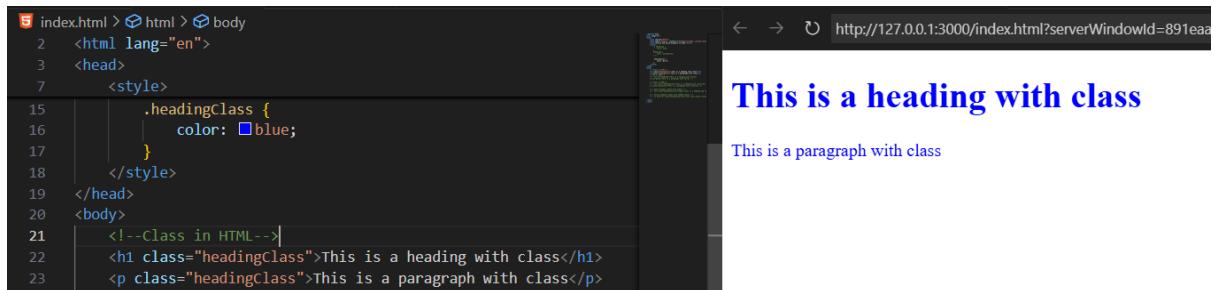
The screenshot shows a code editor on the left and a browser window on the right. The browser URL is <http://127.0.0.1:3000/index.html?serverWindowId=8>. The browser displays two elements: a heading with the text "This is a heading with id" in greenyellow, and a paragraph with the text "This is a paragraph with id" in greenyellow.

```
index.html
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <style>
5       #heading1 {
6         color: greenyellow;
7       }
8     </style>
9   </head>
10  <body>
11    <!-- Id in HTML -->
12    <h1 id="heading1">This is a heading with id</h1>
13    <p id="heading1">This is a paragraph with id</p>
14
15
16
17
```

What is a Class in HTML?

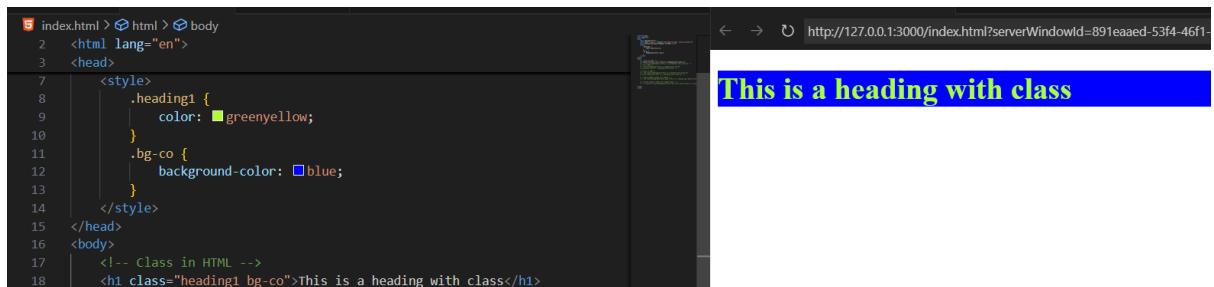
- A class can be used for multiple elements.
- You can apply the same class to many elements.
- We can give more than one class to an element too, just separate the classes by space.
- Useful for styling groups of elements, just add . before it.

Example: simple use of class, we had given the same class to the different elements, but as they are of same class they got the same property.



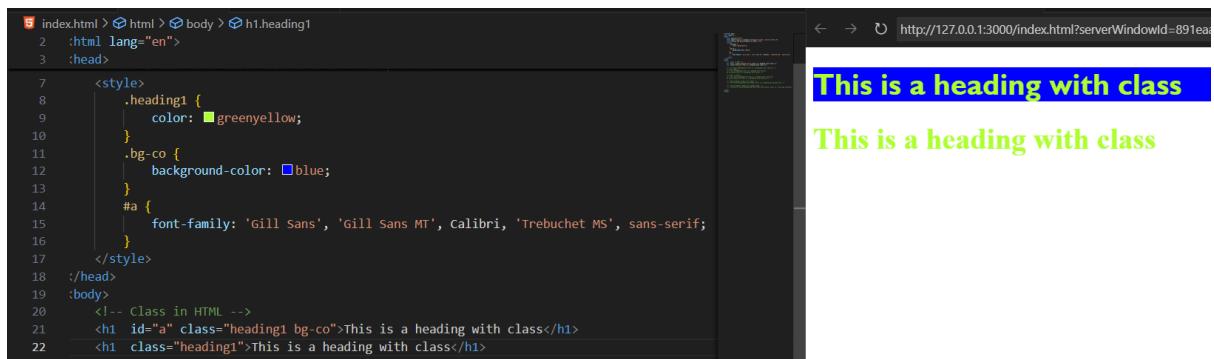
The screenshot shows a code editor on the left and a browser window on the right. The code editor contains the following HTML and CSS:index.html > html > body
2 <html lang="en">
3 <head>
7 <style>
15 .headingClass {
16 | color: blue;
17 }
18 </style>
19 </head>
20 <body>
21 <!-- Class in HTML -->
22 <h1 class="headingClass">This is a heading with class</h1>
23 <p class="headingClass">This is a paragraph with class</p>The browser window displays the output: "This is a heading with class" in blue text and "This is a paragraph with class" in blue text, both sharing the same blue color due to the shared class.

Example: giving two classes to an element, both properties will be applied.



The screenshot shows a code editor on the left and a browser window on the right. The code editor contains the following HTML and CSS:index.html > html > body
2 <html lang="en">
3 <head>
7 <style>
8 .heading1 {
9 | color: greenyellow;
10 }
11 .bg-co {
12 | background-color: blue;
13 }
14 </style>
15 </head>
16 <body>
17 <!-- Class in HTML -->
18 <h1 class="heading1 bg-co">This is a heading with class</h1>The browser window displays the output: "This is a heading with class" in greenyellow text with a blue background.

Example: assigning both id and class to an element, both properties will be applied.



The screenshot shows a code editor on the left and a browser window on the right. The code editor contains the following HTML and CSS:index.html > html > body > h1.heading1
2 <html lang="en">
3 <head>
7 <style>
8 .heading1 {
9 | color: greenyellow;
10 }
11 .bg-co {
12 | background-color: blue;
13 }
14 #a {
15 | font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
16 }
17 </style>
18 </head>
19 <body>
20 <!-- Class in HTML -->
21 <h1 id="a" class="heading1 bg-co">This is a heading with class</h1>
22 <h1 class="heading1">This is a heading with class</h1>The browser window displays the output: "This is a heading with class" in greenyellow text with a blue background, and "This is a heading with class" in greenyellow text with a blue background, both sharing the same greenyellow color and blue background due to the shared class.

--The End--