<Semester IV>

<//Web Development for Designers//>

Week 2

<Article> Tag

The <article> tag specifies independent, self-contained content.

An article should make sense on its own and it should be possible to distribute it independently from the rest of the site.

Potential sources for the <article> element:

- ❑ Forum post
- ❑ Blog post
- ❑ News story

<Header> Tag

The <header> element represents a container for introductory content or a set of navigational links. A <header> element typically contains:

- ❑ one or more heading elements
- ❑ logo or icon
- ❑ authorship information

You can have several <header> elements in one HTML document. However, <header> cannot be placed within a <footer>, <address> or another <header> element. It’s better to add role=banner to ensure better support for screen readers

<Nav> Tag

The <nav> tag creates a section of a page with the purpose of providing navigation links, either within the current document or to other documents. Common examples of navigation sections are menus, tables of contents, and indexes.

Try using ordered or unordered links inside a nav bar. It’s recommended to not repeat the same <nav> element with the same links on a webpage inside like a footer. With <Nav>, Screen readers can easily navigate to a section of a page, and skip over sections of a page that they do not need.

<Aside> Tag

The <aside> HTML element represents a portion of a document whose content is only indirectly related to the document's main content. Asides are frequently presented as sidebars or call-out boxes.

The <aside> tag defines some content aside from the content it is placed in.

Note: The <aside> element by itself does not render as anything special in a browser. However, you can use CSS to style the <aside> element .

Accessibility Matters

Homework:

Compulsory Reading:

Accessibility Matters - Introduction to HTML5 Elements

And apply what you learnt from this to your code.

Cascading Style Sheets

CSS (Cascading Style Sheets) is used to style and layout web pages — for example, to alter the font, color, size, and spacing of your content, split it into multiple columns, or add animations and other decorative features. CSS is a rule-based language — you define rules by specifying groups of styles that should be applied to particular elements or groups of elements on your web page.

CSS is not case sensitive, just like HTML

Types of CSS

The word cascading means that a style applied to a parent element will also apply to all children elements within the parent. So, if you set the background color of the text to "pink", all headings, paragraphs, and other text elements within the body will also have same background color, unless you specify something else. CSS can be added to HTML documents in 3 ways:

Inline

Done by using the style attribute inside HTML elements

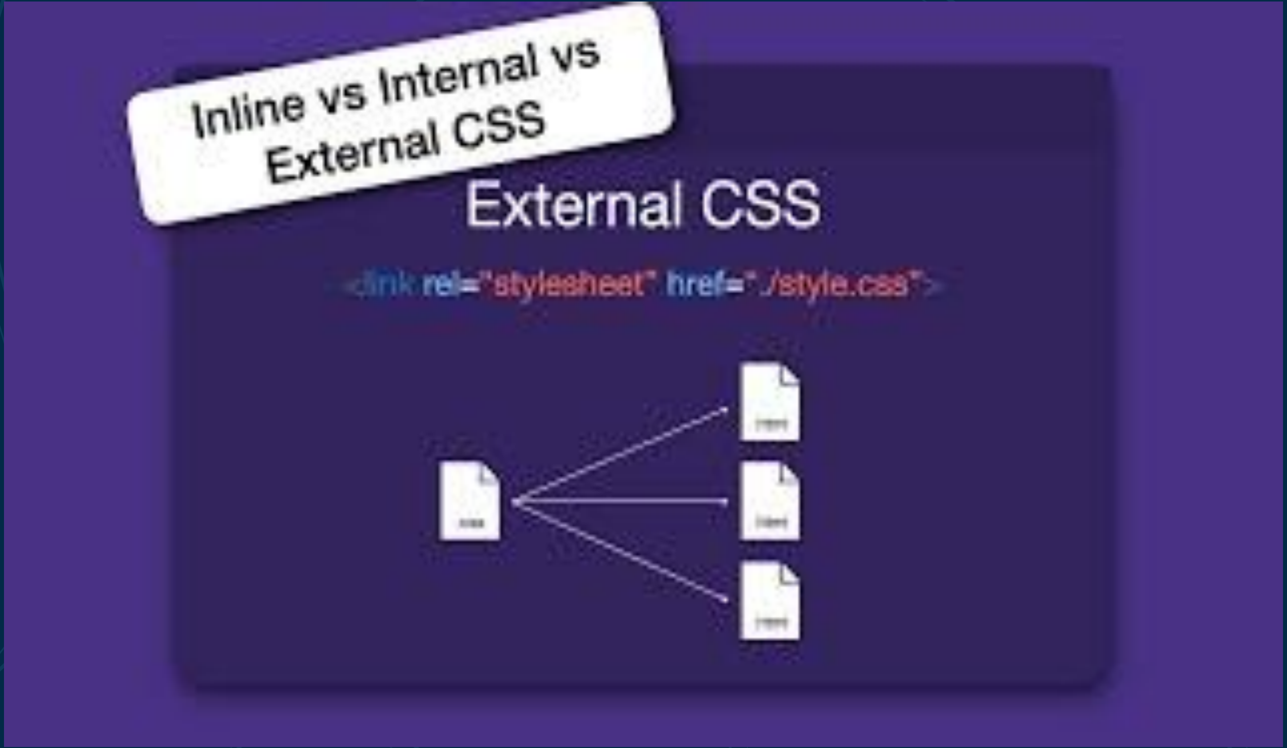
Internal

Internal - by using a <style> element in the <head> section

External

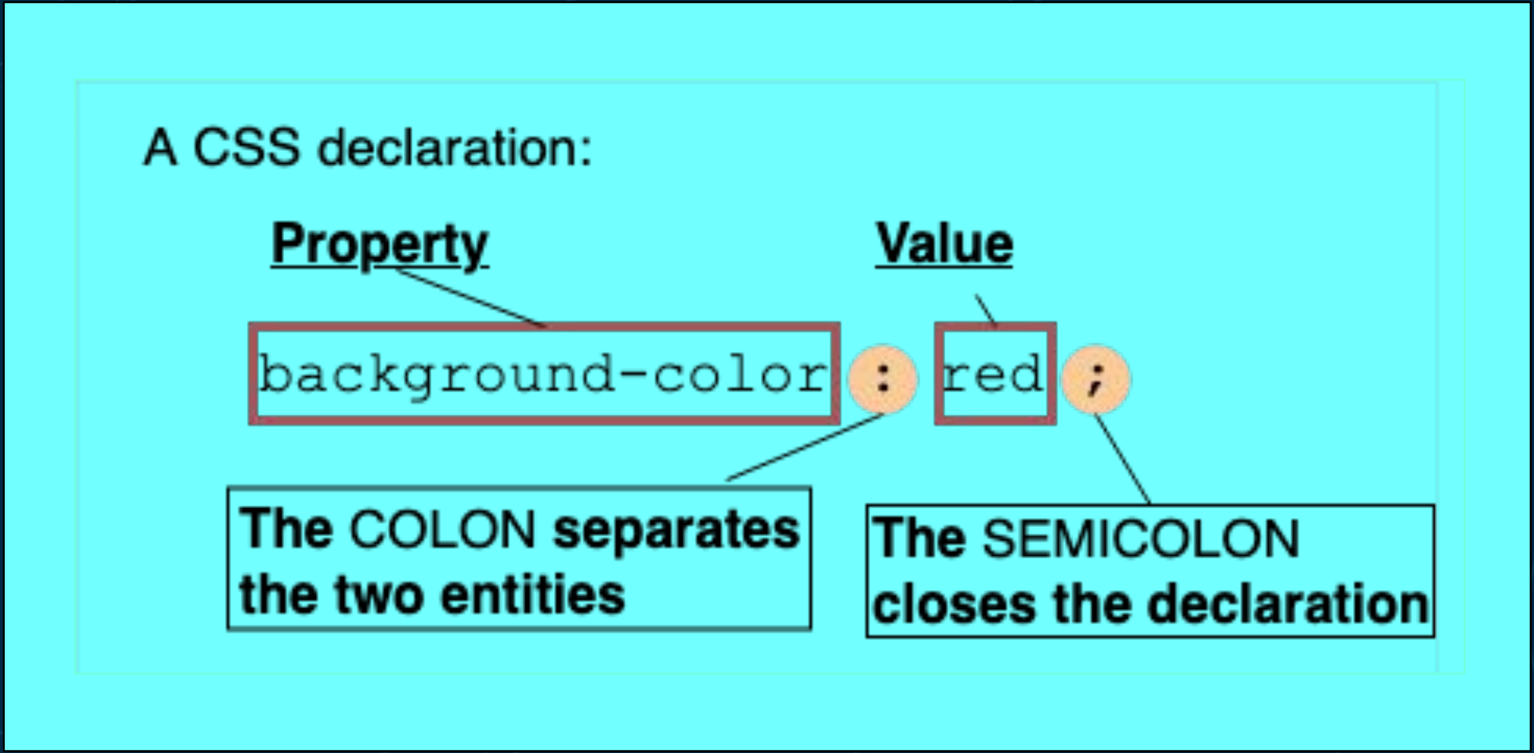
External - by using a <link> element to link to an external CSS file

Types of CSS


Inline vs Internal vs External CSS
External CSS
css
html
html
html

```
<link rel="stylesheet" href="./style.css">
```

CSS Syntax



A CSS declaration:

Property

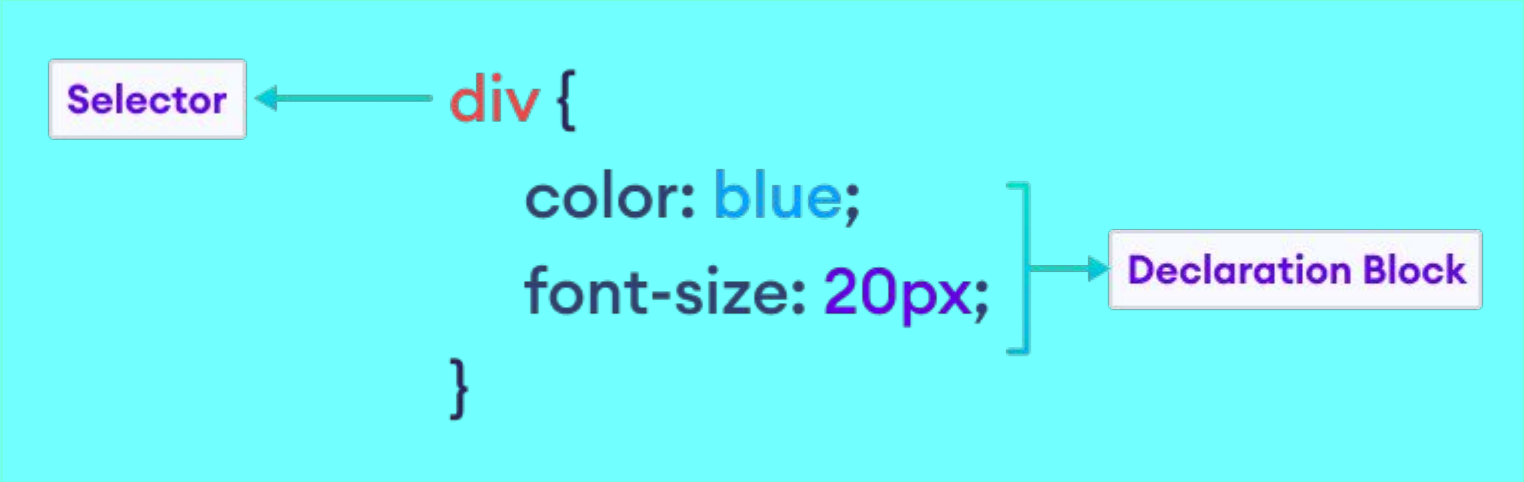
Value

background-color : red ;

The COLON separates the two entities

The SEMICOLON closes the declaration

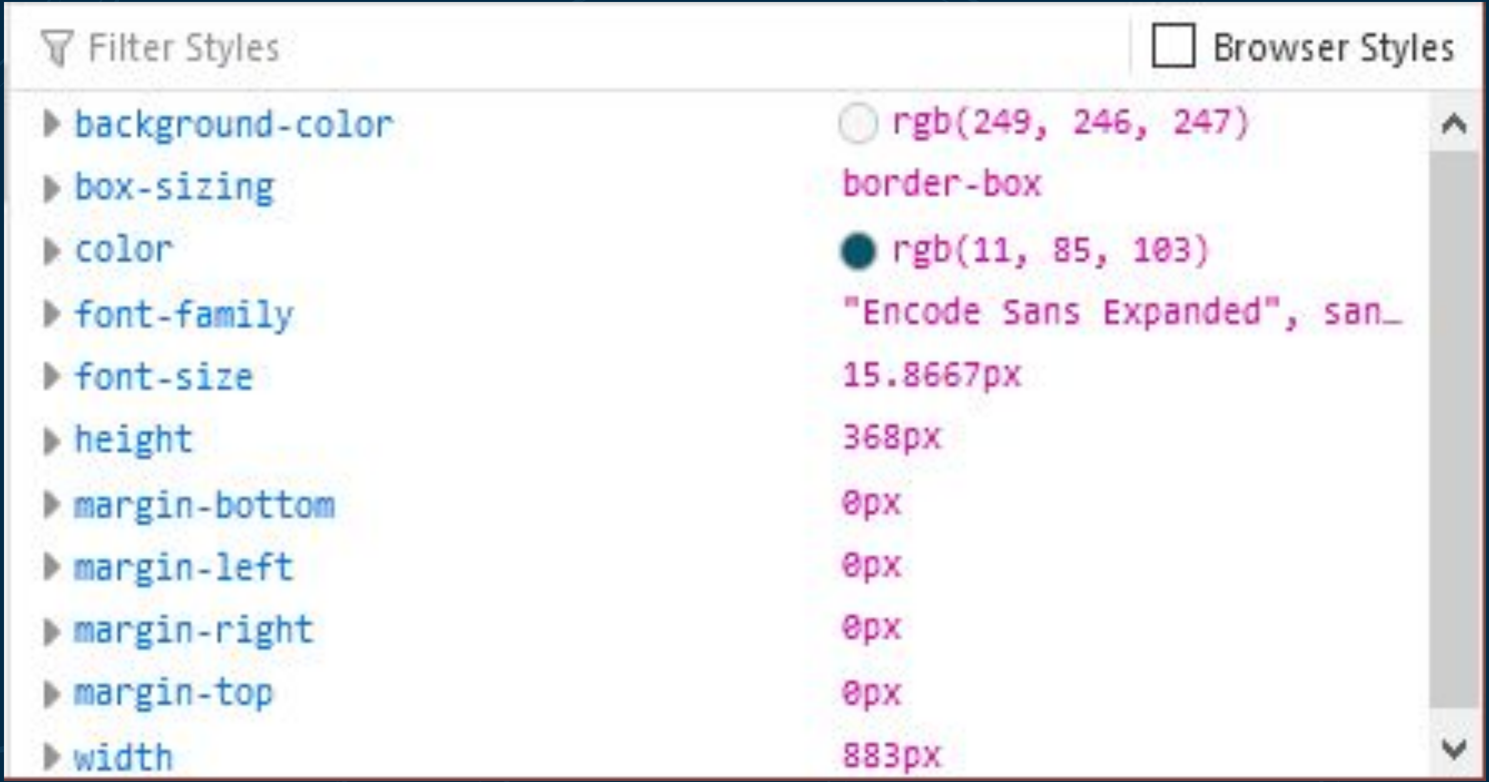
CSS Syntax



```
div {
    color: blue;
    font-size: 20px;
}
```

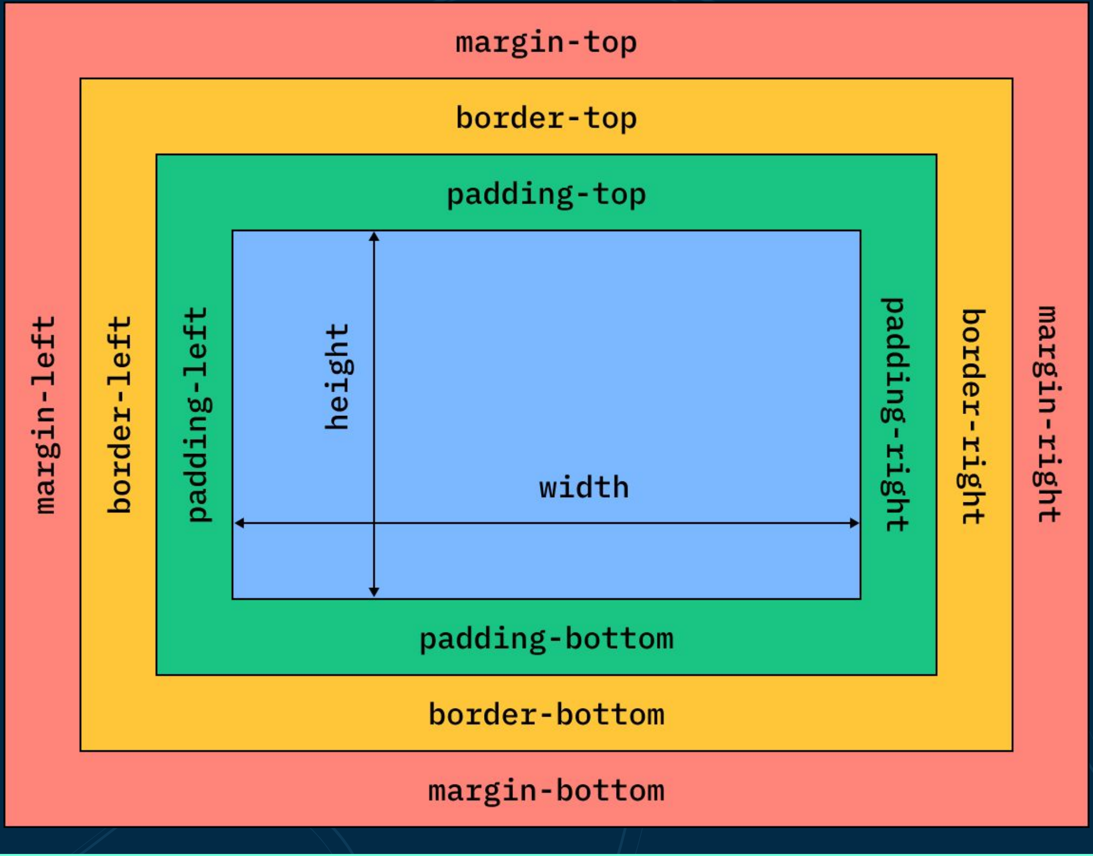
CSS Syntax

CSS Properties

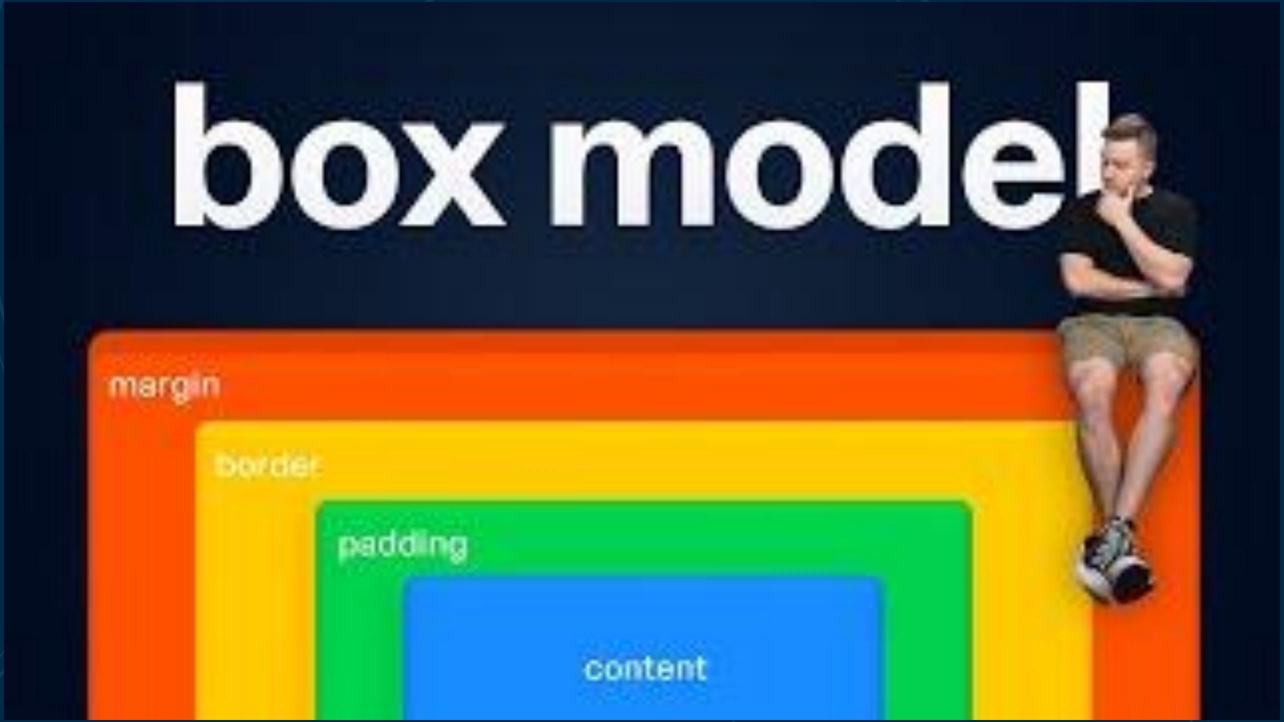


background-color	○ rgb(249, 246, 247)
box-sizing	border-box
color	● rgb(11, 85, 103)
font-family	"Encode Sans Expanded", san…
font-size	15.8667px
height	368px
margin-bottom	0px
margin-left	0px
margin-right	0px
margin-top	0px
width	883px

CSS Box Model



CSS Box Model



Global HTML Attributes

Global attributes are attributes common to all HTML elements (tags); they can be used on all elements, though they may have no effect on some elements.

Global attributes may be specified on all HTML elements.

List of global attributes in HTML: HTML Global attributes by W3Schools. Important global attributes:

Commonly used global attributes:

- ❏ class
- ❏ id (used in <input> tag for forms)
- ❏ style
- ❏ title

title attribute

❑ The title attribute is used to specify extra information about the element. When the mouse moves over the element then it shows the information.

❑ Supported Tags: It supports all HTML elements.

❑ Syntax: <element title = "text">

❑ Example:

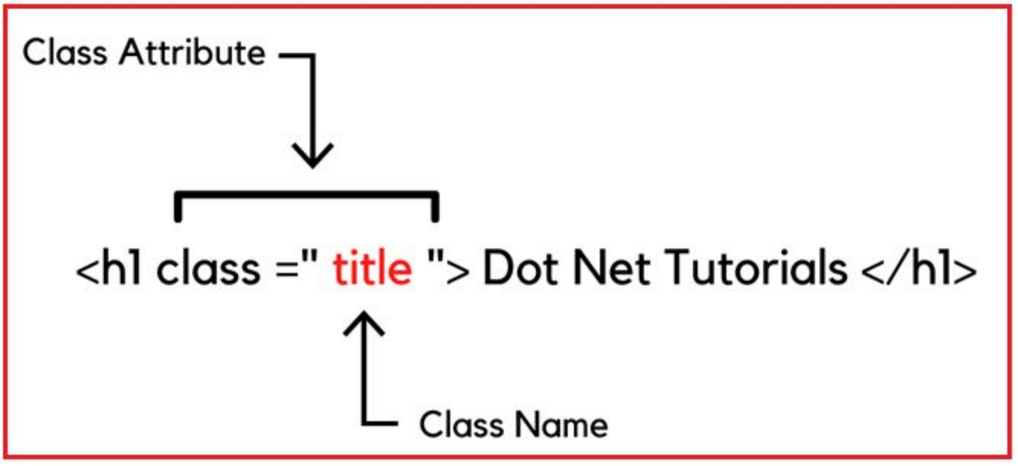
<p title ="Pasta Recipe”> You will need the following ingredients for this recipe: tomato sauce, basil, pasta, olives, and mushrooms</p>

❑ The information is most often shown as a tooltip text when the mouse moves over the element.

class attribute

class attribute

- The class attribute is often used to point to a class name in a style sheet. It can also be used by a JavaScript program to access and manipulate elements with the specific class name.
- Example: HTML Classes - The Class Attribute
- By using classes, you can group elements together and apply consistent styles across them, streamlining both design and functionality.



```
<h1 class =" title "> Dot Net Tutorials </h1>
```

id attribute in <form>

```
<form id="vehicle-form" action="/tutorial/action.html">
  <fieldset>
    <legend>Vehicle Details</legend>
            <label for="fname">first name:</label>
            <input type="text" id="fname" name="fname"required>
    <input type="text" placeholder="Age" name="age"><br /><br />
    <button type="submit">Submit</button>
  </fieldset> </form>
```

❑ The id attribute assigns an identifier to the <form> element.

❑ The id allows JavaScript to easily access the <form> element.

id attribute

HTML & CSS Tutorial

How to add CSS using **id** attribute

id attribute

❑ The id global attribute defines an identifier (ID) which must be unique in the whole document.

❑ The id attribute is used to point to a specific style declaration in a style sheet. It is also used by JavaScript to access and manipulate the element with the specific id.

❑ The syntax for id is: write a hash character (#), followed by an id name. Then, define the CSS properties within curly braces {}

❑ **The id name is case sensitive** and must contain at least one character, cannot start with a number, and must not contain whitespaces (spaces, tabs, etc.)

id attribute

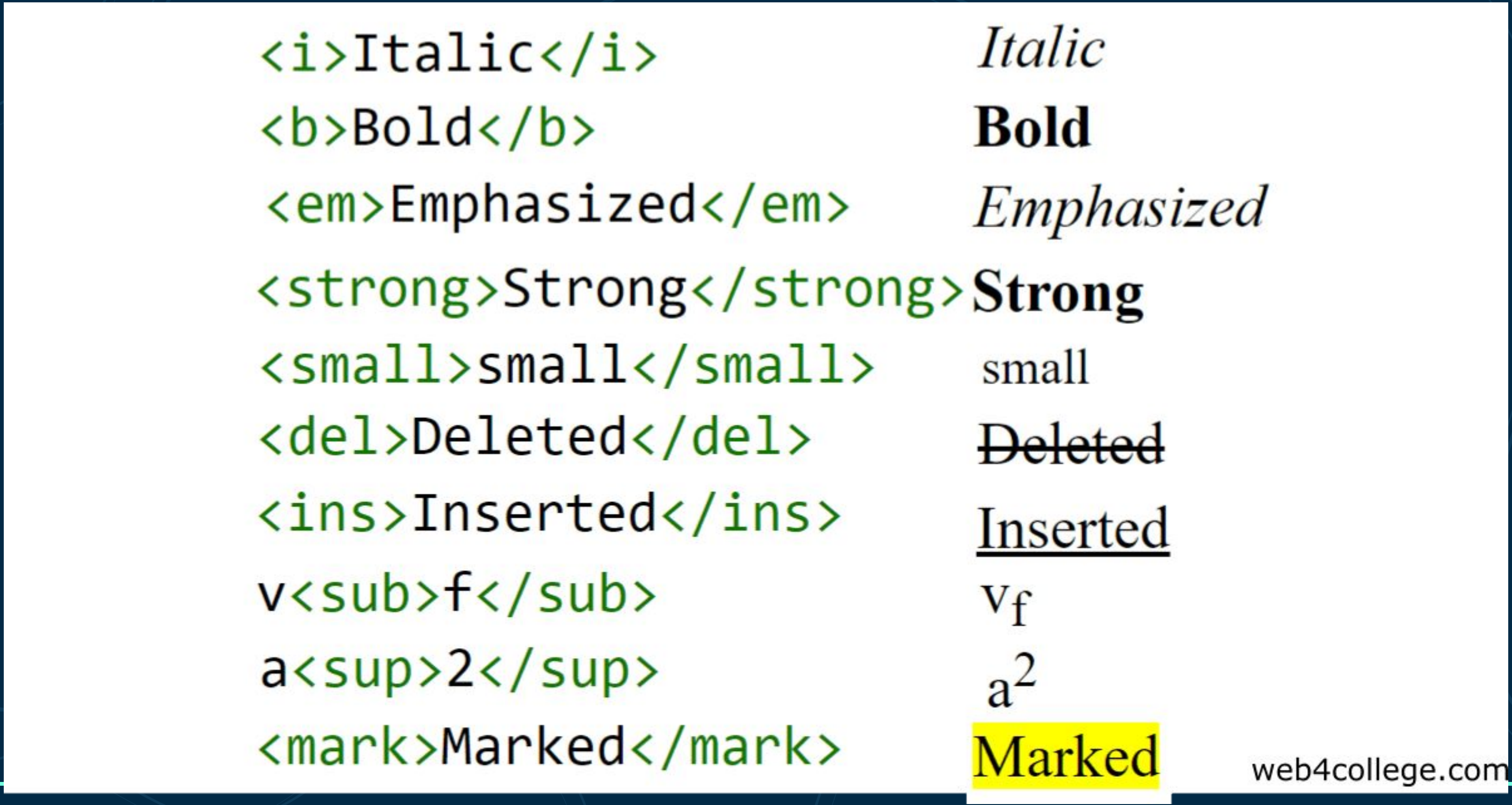
- ❑ Syntax:

```
#my-id:{
    margin-left: 15px;}
```

- ❑ A class name can be used by multiple HTML elements whereas an id name must only be used by one HTML element within the page.
- ❑ HTML bookmarks are used to allow readers to jump to specific parts of a webpage.
- ❑ Bookmarks can be useful if your page is very long.
- ❑ Syntax: `<h2 id="C4">Chapter 4</h2>`

```
<a href="#C4">Jump to Chapter 4</a> OR
<a href="html_demo.html#C4">Jump to Chapter 4</a>
```

HTML Text Formatting



`<i>Italic</i>`	*Italic*
`<b>Bold</b>`	**Bold**
`<em>Emphasized</em>`	*Emphasized*
`<strong>Strong</strong>`	**Strong**
`<small>small</small>`	small
`<del>Deleted</del>`	~~Deleted~~
`<ins>Inserted</ins>`	Inserted
`v<sub>f</sub>`	v_f
`a<sup>2</sup>`	a^2
`<mark>Marked</mark>`	Marked

HTML Link External File

The <link> HTML element specifies relationships between the current document and an external resource. This element is most commonly used to link to stylesheets, but is also used to establish site icons (both "favicon" style icons and icons for the home screen and apps on mobile devices) among other things.

The rel stands for "relationship", and is one of the key features of the <link> element – the value denotes how the item being linked to is related to the containing document.

Syntax for linking External CSS: <link href="main.css" rel="stylesheet">
Syntax for Adding a Favicon: <link rel="icon" href="favicon.png">

For linking another HTML file, use <a href = “second_page.html”>Click Here</a>

External CSS Format

❑ With an external style sheet, you can change the look of an entire website by changing just one file.

❑ Syntax for linking External CSS: <link href="main.css" rel="stylesheet">

❑ Create a new file and save it as name.css

❑ CSS Syntax:

```
 .class_name { style properties }
h1 {
     color: navy;
      margin-left: 20px;
}
```

Inline vs Block Elements in HTML

❑ Every HTML element has a default display value, depending on what type of element it is.

❑ **The two most common display values are block and inline.**

❑ A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element. A block-level element always takes up the full width available (stretches out to the left and right as far as it can).

❑ Two commonly used block elements are: <p> and <div>.

❑ An inline element does not start on a new line.

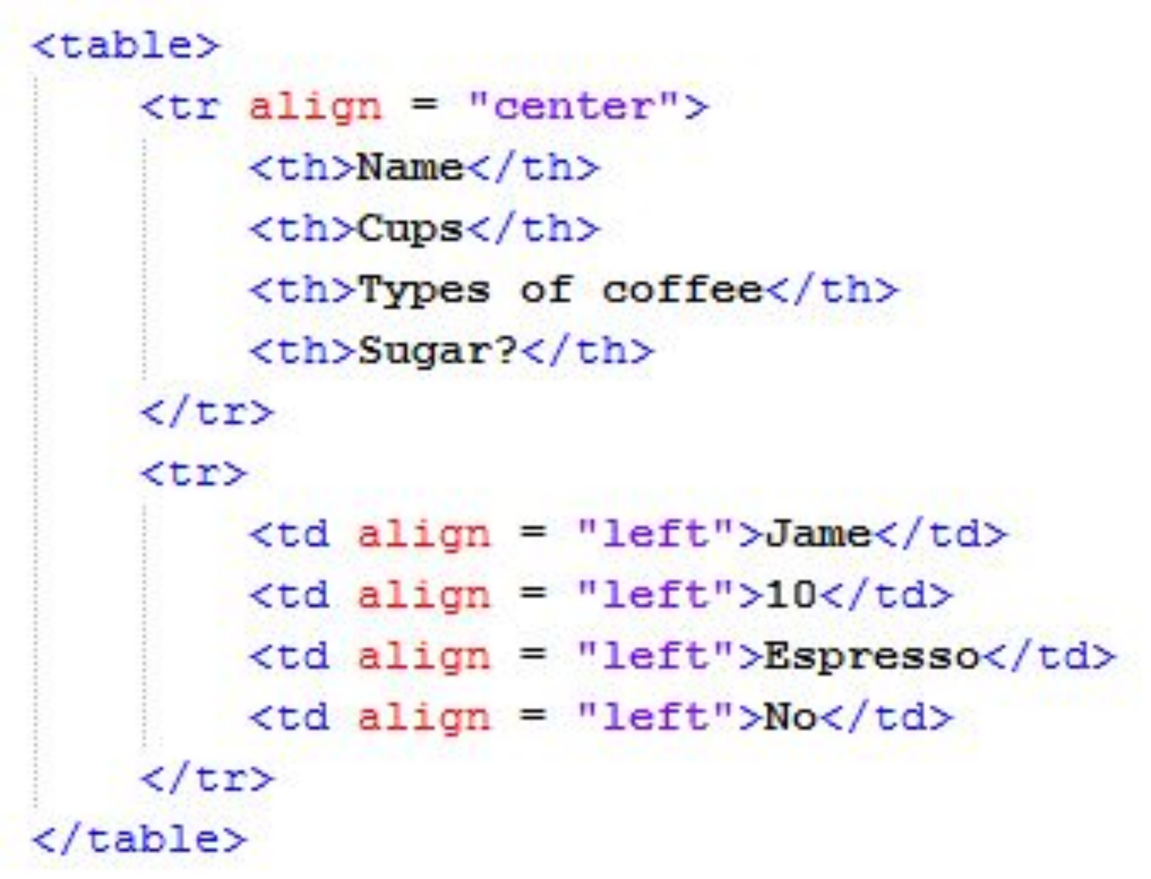
❑ An inline element only takes up as much width as necessary.

HTML Tags for Formatting

- The <br> tag inserts a single line break.
- The <br> tag is an empty tag which means that it has no end tag.
- The <pre> tag defines preformatted text.
- Text in a <pre> element is displayed in a fixed-width font, and the text preserves both spaces and line breaks. The text will be displayed exactly as written in the HTML source code.
- By default, <pre> is a block-level element, i.e. its default display value is block.
- It needs a closing </pre> tag

HTML Tables

- ❑ The <table> HTML element represents tabular data—that is, information presented in a two-dimensional table comprised of rows and columns of cells containing data.
- ❑ When implemented correctly, HTML tables are handled well by accessibility tools such as screen readers, so a successful HTML table should enhance the experience of sighted and visually impaired users alike.
- ❑ Each table row starts with a <tr> and ends with a </tr> tag.
- ❑ Sometimes you want your cells to be table header cells. In those cases use the <th> tag instead of the <td> tag:
- ❑ Each table cell is defined by a <td> and a </td> tag.



```
<table>
    <tr align = "center">
        <th>Name</th>
        <th>Cups</th>
        <th>Types of coffee</th>
        <th>Sugar?</th>
    </tr>
    <tr>
        <td align = "left">Jame</td>
        <td align = "left">10</td>
        <td align = "left">Espresso</td>
        <td align = "left">No</td>
    </tr>
</table>
```

Styling HTML Tables with CSS

Rank	Name	Points	Team
1	Domenic	88,110	dcode
2	Sally	72,400	Stud
3	Nick	52,300	dcod
4	Johnny	45,780	dco
5	Chris	42,700	Stu
6	Jade	41,350	Stu
7	K		dco

</// //>

Classwork: Try the <Nav>, <aside>, <article>, and <header> tags. Play around with margin, padding, and borders. Use class, id, and title attributes. Use Inline, Internal and External CSS in your HTML file. Create atleast 2 webpages (HTML documents) in your folder and link them. Try the HTML formatting tags for text. Create a table.

W3Schools HTML Tutorial

HTML: HyperText Markup Language | MDN

Homework: Complete the compulsory reading on accessibility and make changes to your webpage accordingly. Try the HTML Quotation and text formatting tags and explore the different attributes of the <a> tag. find out how the <fieldset> and <legend> tags work. Style your table. Complete all classwork as well.

W3Schools CSS Tutorial

CSS: Cascading Style Sheets | MDN

Reference

1. Article Element MDN Reference
2. Header Element MDN Reference
3. Aside Element MDN Reference
4. Nav Element MDN Reference
5. Types of CSS Geeks for Geeks
6. List of CSS Properties W3Schools
7. CSS Box Model W3Schools
8. HTML Global Attributes Geeks for Geeks
9. HTML Title Attribute W3Schools
10. HTML Class Attribute W3Schools

Reference

11. HTML Id Attribute W3Schools
12. HTML Text Formatting W3Schools
13. <Link> Element MDN Reference
14. Anchor Tag and its Attributes Ryte
15. HTML Block and Inline Element W3Schools
16. Break line tag HTML W3Schools
17. <Pre> Pre Formatting Element MDN Reference
18. HTML Tables and Tags W3Schools
19. CSS Table Styling Properties MDN Reference

Fonts & colors used

This presentation has been made using the following fonts:

Blinker
(https://fonts.google.com/specimen/Blinker)

Inconsolata
(https://fonts.google.com/specimen/Inconsolata)

#ffffff

#022a46

#72ffdd

#72ffff

#0d3a58