

Web Technology



CSS – Cascading Style Sheet

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Last Class Summary

- **Editing HTML files**
- **List of HTML Element**
- **!DOCTYPE HTML**
- **<html>, <head>, <title>, <body>, <p>, Comment Elements**
- **Text Formatting**
- **HTML Headers, and Hyperlinks**
- **HTML Images, Special Character, <hr>,
**
- **HTML Lists, Tables, iFrames**
- **Best practices**

CSS Introduction

- **CSS – Cascading Style Sheets**
- **CSS - Presentation**
- **Separate Design elements from Logic**
- **Cascade – Change one style to another**
- **Three ways**
 - **Inline - HTML tag attributes**
 - **Internal - HTML <style> element**
 - **External - CSS separate files.**

CSS Introduction

Every keystroke counts!

- Smaller files load more quickly
- Save disk space
- Example *some.html*
- **Original:** 27.2K
- **Embedded Style Sheet:** 26.2K
- **External Style Sheet:** 25.6K

Inline - CSS Tag Attributes

- Style attribute in tags
- Applied in start tag

A Blue Heading

A red paragraph.

Inline - CSS Tag Attributes

- Style attribute in tags
- Applied in start tag

```
<h1 style="color:blue;">A Blue Heading</h1>
```

```
<p style="color:red;">A red paragraph.</p>
```

A Blue Heading

A red paragraph.

Internal - CSS Style Element

- `<style>` element.
- Defined in `<head>` element

This is a heading

This is a paragraph.

Internal - CSS Style Element

```
<!DOCTYPE html>
<html>
<head>
<style>
body {background-color: powderblue;}
h1   {color: blue;}
p    {color: red;}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

- Whole - selector string
- body - selector
- background-color – property names
- background-color: powderblue; - declaration
- {} – declaration block

This is a heading

This is a paragraph.

Internal - CSS Style Element

- Language

	English	CSS	HTML
Alphabet	A-Z, a-z	A-Z, a-z	A-Z, a-z
Numbers	0-9	0-9, 0-F	0-9, 0-F
Words	Words	Tokens	Nodes
Sentences	Grammar + Words = Sentences	Syntax + Tokens = Selector String	Syntax + Nodes = Elements
Paragraph	Paragraph		
Chapter/Book	Chapter/Book		Web Page
Library	Library		Website

External - CSS Separate Files

- **Separate style file ending with .css**
- **Add using <link> element**
- **rel and href – mandatory attributes**
- **Other attributes – title and type**
- **Defined in <head> element**

External - CSS Separate Files

```
body {  
    background-color: powderblue;  
}  
h1 {  
    color: blue;  
}  
p {  
    color: red;  
}
```

External - CSS Separate Files

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="sample.css">
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

This is a heading

This is a paragraph.

Multiple Style Sheets

- **Inline, Internal, External Combination at different sequence**
 - **The latest style will be applied.**
- **Inline, Internal, External Combination on a same element**
 - **Inline**
 - **Internal and External (Whichever first)**
 - **Default**

Selector Strings

- **Single element type**

Syntax:

- `element_name{ property_name: value, ..}`

- **Multiple element type**

Syntax:

- `element_name1, element_name2, .. , element_name_n, { property_name: value, ..}`

- **All element type**

Syntax:

- `*{ property_name: value, ..}`

- **Elements by id**

Syntax:

- `#id_name{ property_name: value, ..}`

Selector Strings

- **Single element type**

Syntax:

- `.class_name{ property_name: value, ..}`

- **Multiple element type**

Syntax:

- `element_name.class_name{ property_name: value, ..}`

- **CSS Comments**

Syntax:

- `/* */`

CSS Property

- Total of more than 200 property names
- <https://www.dofactory.com/css/properties>
- **<div> element – division/ section in HTML**
- **Browser renders a new line before and after a <div> element**
- **Can style any content.**
- **<p> element – style text**

Best Practices

- 1. Use HTML tags with the same case (preferably lowercase).**
- 2. Filename to be based on functionality.**
- 3. When opening a tag, have a "tab space" for each line until you close the tag. It helps in the readability of your HTML document.**
- 4. Give a comment describing a web page as the first line of your HTML document.**
- 5. Keep HTML and CSS files separate**

Summary

- **CSS Introduction**
- **Inline style**
- **Internal Style**
- **External Style**
- **Multiple Style**
- **Selector Strings**
- **CSS Property**
- **Best practices**

References

1. **Paul J Deitel, Harvey M Deitel, and Abbey Deitel, "Internet and the world wide web: How to program," Pearson, Fifth Edition, 2012.**

THANK YOU

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