

CSS Fundamentals

Web Development Essentials - Session 5

Session Overview

- **Learning Goals for Today:**
 - Understand what CSS is and its role in web development
 - Learn different methods to include CSS in HTML
 - Explore CSS syntax, including selectors, properties, and values
 - Style text and backgrounds using CSS

What is CSS? (Cascading Style Sheets)

Definition: CSS (Cascading Style Sheets) is a language used to describe the presentation of an HTML document. It controls the visual appearance of the webpage.

- **Purpose:** Separates the **content** (HTML) from the **presentation** (CSS).

Why "Cascading"?:

- The term "cascading" refers to how styles are applied in order of precedence, allowing multiple stylesheets or rules to apply to a single element.

```
<style>
  p {
    color: blue;
    font-size: 18px;
  }
</style>
```

Adding CSS to HTML

Three Methods to Include CSS:

Inline CSS:

```
<h1 style="color: red;">Hello World</h1>
```

- Added directly within an HTML element using the `style` attribute.

Internal CSS:

- Included in the `<head>` section of an HTML document using the `<style>` tag.

```
<style>
  h1 {
    color: red;
  }
</style>
```

External CSS:

- Linked from an external file using the `<link>` tag, stored separately from the HTML.

```
<link rel="stylesheet" href="styles.css">
```

CSS Selectors, Properties, and Values

CSS Rule Structure:

- A CSS rule consists of a **selector**, a **property**, and a **value**.

```
h1 {  
  color: blue;  
  font-size: 24px;  
}
```

Selector: The HTML element to apply the style (`h1`).

Property: What aspect of the element to style (`color`, `font-size`).

Value: The value assigned to the property (`blue`, `24px`).

Common CSS Selectors

Types of Selectors:

1. Element Selector:

- Targets a specific HTML element.
- Example: `p { color: black; }`

2. Class Selector:

- Targets elements with a specific class name. Classes are reusable.
- Example: `.example-class { font-size: 18px; }`

3. ID Selector:

- Targets a single element with a specific ID. IDs are unique on a page.
- Example: `#unique-id { background-color: yellow; }`

Styling Text with CSS

Common Text Properties:

Font Family:

- Defines the font style for an element.

Font Size:

- Changes the size of the text.

Font Weight:

- Makes text bold or thin.

Text Color:

- Changes the color of the text.

```
p {  
  font-family: Arial, sans-serif;  
}  
  
h1 {  
  font-size: 36px;  
}  
  
h1 {  
  font-weight: bold;  
}  
  
p {  
  color: #333;  
}
```

Styling Backgrounds with CSS

Background Properties:

- **Background Color:**
 - Changes the background color of an element.

```
body {  
  background-color: #f0f0f0;  
}
```

- **Background Image:**
 - Adds an image as the background for an element.

```
div {  
  background-image: url('background.jpg');  
}
```

- **Background Position:**
 - Controls the positioning of the background image.

```
div {  
  background-position: center;  
}
```


Hands-On Activity

Goal: Apply different CSS styles to a simple webpage.

- Use an external stylesheet to change the text color, font family, and background color.

Instructions:

- Create an HTML file linked to an external CSS file.
- Style headings, paragraphs, and background colors.

Summary

What We Learned Today:

- What CSS is and why it's important
- Different ways to include CSS in HTML (inline, internal, external)
- CSS syntax with selectors, properties, and values
- How to style text and backgrounds using CSS

Questions?

Q&A Session

- Any questions before we wrap up?

Thank You & See You in the Next Class!