



ABSTRACT BACKGROUND

Styling the Web: An Introduction to CSS

Welcome to Week 2 of Web Development! This lecture will introduce you to Cascading Style Sheets (CSS), the language used to make your websites look beautiful.



CSS Fundamentals

What is CSS and how does it work?



External Style Sheets

Connecting CSS files to HTML.



Key CSS Properties

Controlling fonts and text.

What is CSS? Cascading Style Sheets

The Definition

CSS stands for **Cascading Style Sheets**. It is the language we use to style an HTML document. Think of HTML as the structure (the skeleton) and CSS as the presentation (the skin, clothes, and makeup).

- Controls layout, colors, fonts, and overall aesthetics.
- Separates content (HTML) from design (CSS) for better organization.
- It tells the browser *how* to display the HTML elements.

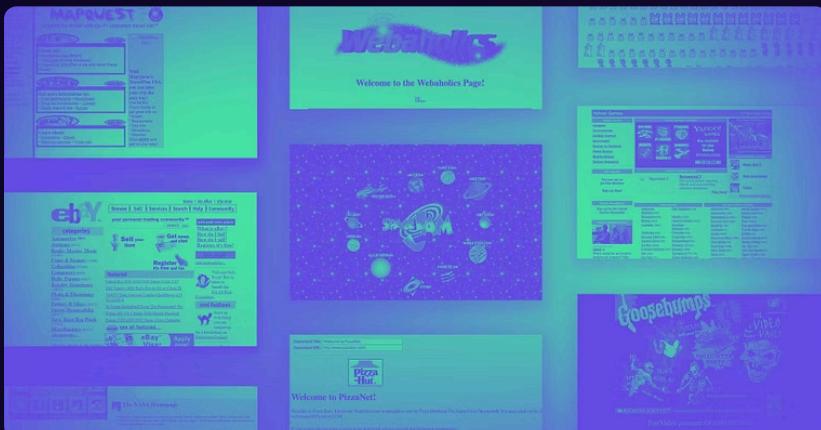


CSS is the magic that transforms plain text into engaging, visually rich websites.

The Power of Separation: Content vs. Style

Before CSS

In the early days of the web, all styling (like font color and size) was mixed directly into the HTML code. This made documents large, slow to load, and extremely difficult to manage.



With CSS

CSS allows us to move all design rules into separate files. This makes the HTML clean and semantic, and allows us to update the look of an entire 100-page website by changing just one file.



Including CSS: The Three Methods

There are three ways to link CSS to an HTML document. For modern, professional development, we strongly recommend using External CSS.



1. External Style Sheets (Best Practice)

CSS is written in a separate .css file and linked to the HTML.



2. Internal CSS

CSS is placed inside a `<style>` tag within the `<head>` section of the HTML document.



3. Inline CSS

CSS is applied directly to a single HTML element using the `style` attribute. Avoid using this method!

Deep Dive: External Style Sheets

External style sheets are the most efficient and scalable way to manage CSS. They keep your structure and style completely separate.

How to Link Your Files

You must link the external CSS file inside the `<head>` section of your HTML using the `<link>` tag.

```
<!-- index.html -->
<head>
  <link rel="stylesheet" href="styles.css">
</head>
```

The `href` attribute points to the CSS file path (e.g., `styles.css`).



Anatomy of a CSS Rule

Every CSS rule consists of three main parts: a Selector, a Property, and a Value.



Selector

The part that points to the HTML element you want to style. (e.g., `h1`, `.class`, `#id`).



Property

The specific attribute you want to change (e.g., `color`, `font-size`, `margin`).



Value

The setting for that property (e.g., `blue`, `24px`, `10px`).

Code Example

```
h1 {  
  color: #876cd4ff; /* Property: color, Value: purple hex code */  
  font-size: 48px; /* Property: font-size, Value: 48 pixels */  
}
```

Controlling Fonts: Essential CSS Properties

Fonts are key to establishing the mood and readability of your website.



font-family

Specifies the typeface (e.g., Arial, Georgia). Use a "stack" of fonts for fallbacks.

font-size

Defines the size of the text. Use units like px (pixels) or em (relative size).

font-weight

Sets the boldness of the text (e.g., bold, normal, or numerical values like 700).

Code Snippet

```
body {  
  font-family: 'Helvetica Neue', Arial, sans-serif;  
  font-size: 16px;  
}  
  
h2 {  
  font-weight: 900;  
}
```

: leading

half-leading



Cascadin

: text



Cascadin

: ex



Cascadin

Text Formatting: Polishing Your Content

Beyond fonts, these properties control the appearance and spacing of your text blocks.

color

Sets the foreground color of the text. Can use names (blue), hex codes (#14083A), or RGB values.

text-align

Horizontal alignment of text within its container: left, right, center, or justify.

line-height

The vertical spacing between lines of text. Crucial for readability; often set to 1.5 or 150%.

text-decoration

Adds or removes decorations, commonly used to remove the default underline from links (none).

Practical Example: Styling a Paragraph

Let's apply several properties to a single paragraph element to see the immediate effect.

The CSS Code (`styles.css`)

```
p {  
    color: #14083A;  
    font-size: 1.1em;  
    text-align: justify;  
    line-height: 1.6;  
    padding: 15px;  
    border-left: 5px solid #D783D8;  
}
```

What it Achieves

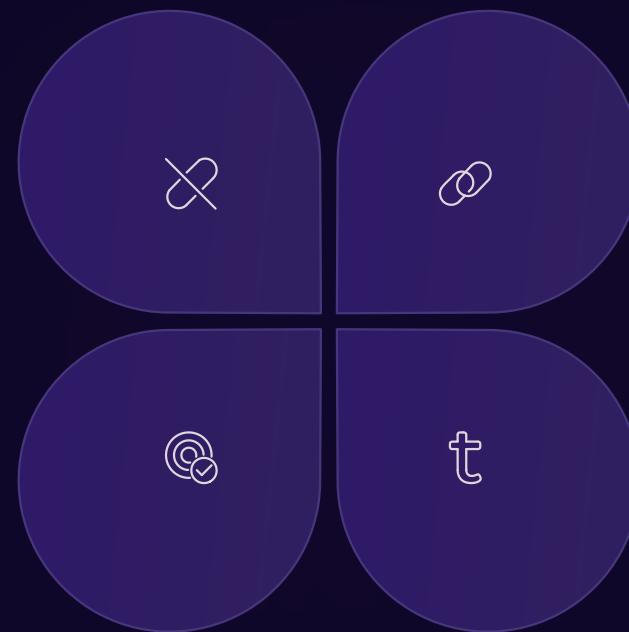
- Dark purple text color.
- Text size slightly larger than the base font.
- Text justified to fill the entire width.
- Increased vertical spacing between lines for readability.
- A thick purple border added on the left for visual emphasis.

This simple set of rules drastically improves the visual presentation and professionalism of the text.

Key Takeaways: Your First Steps in CSS

Separation

CSS and HTML should be separate files for clean code.



External Links

Use `<link rel="stylesheet" ...>` in the `<head>` section.

Structure

A CSS rule needs a **Selector**, a **Property**, and a **Value**.

Typography

Control the look of text using `font-family`, `font-size`, and `line-height`.

Practice applying these properties to your existing HTML to start building more visually appealing websites!