Introduction to Web Design & Computer Principles
CSCI-UA 4

CSS
Cascading Style Sheets
CSS
Cascading Style Sheets

Defines a Web page’s appearance

CSS separates style and content

Consists of a plain text file with rules for the display of HTML elements

Formatting includes fonts and colors as well as layout and position

Can be created outside of your HTML and applied to multiple Web pages

Well-formed HTML is important for your CSS to work properly
CSS

History

Prior to CSS, Web pages were commonly styled with HTML tags and structured with tables.

This was both tedious and inefficient.

Nine different style sheet languages were proposed, two were chosen as the foundation.

CSS Level 1 emerged as a W3C Recommendation in December 1996.

Browsers began to support CSS over the next few years.
CSS can be applied in three different ways to a Web page:

- In an external .css file
- In the <head> section of an HTML document
- Inline with HTML code
CSS
Rule Set

Selector: Indicates which HTML element will be formatted

Declaration block: Describes the formatting to apply

Property/value pair: Specifies format

Style rules are separated by a semicolon

```html
h1 {
  color: green;
  background: yellow;
}
```
The principle of the “cascade” is applied when style rules are in conflict. Three primary factors determine which style rule wins out:

- Inheritance
- Specificity
- Location
CSS

Display Mode

Elements in HTML are primarily “inline” or “block” elements.

• An inline element allows content to flow around its left and right sides.

• A block element fills the entire line and nothing is displayed on its left or right side.

The CSS display property allows you to specify the type of box used for an HTML element.
CSS

Box Model

In a web page, every element is rendered as a rectangular box.

This box includes the following, changeable properties:

- Content
- Padding
- Border
- Margin
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Units of Length

There are two types of length units in CSS, relative and absolute.

Relative units of length include:
• em (relative to font size)
• % (relative to the containing element)

Absolute units of length include:
• px (pixels)

Alternatively specifications:
• auto (browser calculates length)
• inherit (from the parent element)
CSS3

Latest standard for CSS

CSS2 is best supported

CSS3 is still evolving but offers new features for designers and developers

Modern browsers support many aspects of CSS3

Backwards compatible with CSS2
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