CSS
HTML: Looking Back

- HTML dictates order, structure, and function
- Does very little to specify layout or visual rendering
Let's Write Some Poetry!

You

CSS

Shakespeare

Longfellow
C
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S
The Purpose of CSS

- If HTML is the content and meaning
  - CSS helps to convey that meaning
- Allows developers to separate the content from layout and design
  - Content and design inherently different in nature
  - Change in content does not require change in design
CSS Zen Garden

- Site using consistent HTML content
- Differing external CSS files create dramatically different layout
- Support for multiple browsers

link: http://www.csszengarden.com

hint: change the styles on the page
An Example

Consider the **boldface** font in the following examples:

- **Chunky** bacon is delicious.
- **Today** I will go outside.
  **Monday** I will run 2 miles.

- Meaning is conveyed by the styling
- Remove the style and meaning is lost
- Attention is given to the information
- No additional meaning is lost when removed
A Bit of Reasoning

- Explicitly conveys meaning
- Typographical artifacts: any meaning is implied
In Detail

- Special attention is given to the date
- Assists the user in resolving, parsing the information
  ➡ Key goal of Design

Today I will go outside.
Monday I will run 2 miles.
CSS: How to Use It

1. Select the elements you want to modify
   ➡ Selectors

2. Indicate which aspect(s) of the element you want to modify
   ➡ Assign *values* to *properties*
CSS Anatomy

Selector          Property            Value
body          { background-color: #FFFFFF; }

This also works:

body        { background-color: #FFFFFF }

Example of hex color codes:
ColorSchemer Online Color Generator
Place each style block together to make a stylesheet!
Selectors

- Select an **element**
  
  ➡️ body {}  p {}  strong {}  div {}

- Select a **nested element**
  
  ➡️ p strong {}  div p {}  ul li ul li span {}

- Select **multiple elements**
  
  ➡️ p, div {}  strong, em {}  p, span {}
More Selectors

- Select an element with a **class**
  
  $\rightarrow$  
  p.indent {}  
  span.blue {}  
  div.page {}

- Select an element with an **id**
  
  $\rightarrow$  
  div#home {}  
  div p#tools {}

- Select an element with an **id and a class**
  
  $\rightarrow$  
  ul.square#top {}  
  div.page table.math#pset { }
About Properties

- Properties can be specific to a group of elements
  - ex: border-spacing is useless for <div> elements

- Some property values can be inherited by children
  - ex: font-size set on <body> will be inherited by a child <div> element

- Properties can have default values
  - ex: background-color’s default value is transparent
How do you know?

... Or find out?

- Luckily, the W3C produces a specification for CSS, too
  - Lists all properties, defaults, possible values
  - Also suggests how property values affect rendering
- Many commercial sites also provide similar references
  - ex: SitePoint, w3schools (both have HTML & CSS)
Key Properties

- background-color
- background-image
- color
- width
- height
- font-family
- font-size
- font-weight
- text-decoration
- text-align
Values & Units

- Values are typically keywords
  - ex: colors: red, blue
  - ex: text alignment: left, right, center
- Values, especially for layout
  - Pixels: 15px
  - Points: 12pt
  - Percentages- relative to size of parent: 50%
An Example

Consider the **boldface** font in the following examples:

- **Chunky** bacon is delicious.
- **Today** I will go outside. **Monday** I will run 2 miles.

- Use the `<strong>` tag
- use font-weight: bold;
Firebug: Your New Best Friend

- Firefox extension for “inspecting” page elements
  - Useful tool when “something doesn’t look right”
- Provides interactive view of HTML source
- Allows for real-time changes in HTML and CSS
- The Web is inherently Open Source!