

## CGT 141/CPT 141 Lecture 15 Wk 9

### A Closer Look at Cascading Stylesheets

#### Creating Internal Style Sections

- Although inline/local styles can be used, a more effective way to apply styles to an entire document is through the use of internal/embedded styles.
- In essence, you create a `<style>...</style>` section in the `<head>` of the document that “redefines” the formatting for the HTML tags.
- Example (using type selectors):

```
<head>
  <style type="text/css">
    h1 { font: normal 24pt "Arial"; color: green }
    p { font: "Arial" }
  </style>
</head>
```

- Once in the top of the document, the elements in the HTML file (`<h1>` and `<p>` would be rendered as defined by CSS).

#### Selectors

- The selector is the element to be defined
  - Type selector – modifies standard HTML tags
    - `h1 { font: "Arial" Normal 24pt; margin-left: 30px; color: #ff5567 }`
  - Contextual – combination of tags to create context-specific CSS
    - `h1 strong { font: "Impact" }`
  - Class – creation of conceptual groups to be modified
    - `mybold { font-type: bold }`
    - To apply it:
      - `<h1 class="mybold">Now bold.</h1>`
  - ID – creation of individual instance changes
    - `p#my0003 { color: #ff0000 }`
    - To apply it:
      - `<p id="my0003">Red Text</p>`
  - Pseudo-Selectors
    - Pseudo-elements
      - `p:first-line { letter-spacing: 6pt }`
      - `p:first-letter { font-size: 48pt; color: #336699 }`
      - Combining class with pseudo-selectors (will only apply where class and type selector exist):
        - `p.mybold:first-letter { font-size: 48pt; color: #336699 }`
    - Pseudo-classes
      - `a:link { color: #CC9933 }`
      - `a:visited { color: #333399 }`
      - `a:active { color: #FF3300 }`

Note: not applicable to named anchors, only href-based anchors.

### Creating External/Linked Style Sections

- In addition to creating internal/embedded style sections, you can also apply CSS documents to an entire set of pages (without entering the <style> section in each document).
- You do so by linking an external/linked stylesheet (.css file) to the documents using the <link> tag.
- Contents of external/linked CSS file (.css file):

```
/* This is a CSS comment */
/* No HTML Markup allowed here */

h1 { font: normal 24pt "Arial"; color: green }
p { font: "Arial" }
```

- Linking the .css file to an HTML document with <link>:

```
<head>
  <link href="mystyles.css" rel="stylesheet" type="text/css">
</head>
```

Note: multiple <link> tags may be used in the <head> section.

- An alternative method (not widely supported)

```
<head>
  <style type="text/css">
    @import url(mystyles.css)
  </style>
</head>
```

### Understanding the "Cascade" in CSS

- CSS can be applied at three different levels: inline/local, internal/embedded, or external/linked.
- Additionally, they can all three be defined simultaneously in a document.
- The question, then, is "if an element is a style defined for it at all three levels, which has precedence?"
  - When a style is defined for an element at all three levels, the lowest level has precedence
  - Remember the following:
    - Inline > Internal > External
      - Inline include class and id selectors

- That is, inline will override internal and external, and internal will override external.
- For example, if an <h1> element has an internal definition of the color “red” and then also has a local style, class or ID that defines the color as green, the <h1> will be rendered as green, because inline overrides internal.