Topic 8: Cascading Style Sheets

Introduction

Lecture Contents

- Purpose of CSS

- Linking and Importing

- Syntax

- Selectors

- Importing Other Style Sheets

Purpose of CSS

- HTML: Content
- **CSS: Style** (formatting)
- JavaScript: functionality

Three ways to include CSS in HTML

- *Inline* – incorporated into the html tag

  ```
  <h1 style="color: blue; background-color yellow;">
  ```

- *Internal* – a `style` tag within the head element of the html file

  ```
  <style type="text/css">
      body {
          background-color: white;
      }
  </style>
  ```

- *External* – reference to a separate file

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

Importing Style Sheets from Style Sheets

- Must be defined at the top of the stylesheet before style declarations and before any other @-rules except @charset and @layer
  - import from a file: `@import "path/to/stylesheet.css";`
  - import from a URL: `@import url("path/to/stylesheet.css");`

Annotating

- Comments are the same as multi-line JavaScript comments
  - `/* this is a CSS comment */`
- We can not use the JavaScript single-line comments
  - `// this is an error in CSS!`

Syntax

- Basic Syntax:

    `selector { property: value; }`

    - selector: which element to apply the style to (e.g.: `h1`)
    - property: which aspect of style (e.g.: `background-color`)
    - value: what to set the property to (e.g.: `blue`)
    - declaration: a property: value pair.

Syntax

- Multiple selectors and declarations:

```
h1, h2, h3 {
    color: red;
    background-color: yellow;
    text-align: center
}
```

- Note the alignment and indentation
- Selectors separated by a comma
- Declarations separated by a semicolon

Selectors

- Described in a later lecture:
  - HTML **elements** are just their tag text: `body`, `h1`, `div`, etc.
  - **IDs** are preceded by a hash symbol: `#username`, `#login`, etc.
  - **Classes** are preceded by a period: `.sidebar`, `.highlight`, etc.
  - **Attributes** enclosed in square brackets: `[target="_blank"]`
  - **Pseudo-classes** are preceded by a colon: `button:hover`
  - **Pseudo-elements** are preceded by two colons: `h1::first-letter`
  - **Descendants** separated by a space: `nav a`
  - **Children**: `form > p`
  - **Adjacent siblings** (first p after h1): `h1 + p`
  - **General Siblings** (all p after h1): `h1 ~ p`

Topic 8: Cascading Style Sheets

Introduction