

The background of the slide is a spiral-bound notebook with a light beige, textured cover. The metal spiral binding is visible along the left edge.

Introduction to CSS

CSE 264

Web Systems Programming

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Cascading Style Sheets

- ✓ *Language* specifying *properties* that define the *appearance* of a document.
- ✓ Help separate *style* from *structure*.
- ✓ 3 types/levels
 - inline - embedded - external
 - ---> more powerful, abstract --->
- ✓ Cascading - merge sheets to form style definitions for element(s) or document

Level 1 - Inline Styles

- ✓ Use the `style=` attribute of most tags
- ✓ Applies to only a single element
- ✓ + Quick/easy to change
- ✓ - Not much separation between structure and appearance
- ✓ - Painful to make global changes
- ✓ Example:
 - `<p style= "text-align : center; background : red">`

Level 2 – Embedded

- ✓ Use `<style>` tag to define sheet

- ✓ Example:

```
<style type="text/css">  
    p { font-size : 120% }  
</style>
```

- ✓ + Easy to change for entire page

- ✓ - Can't reuse on other pages

Level 3 - External

- ✓ Styles placed in separate file
- ✓ Use `<link>` tag to associate with document
- ✓ Ex: `<link rel="stylesheet" type="text/css" href="styles.css">`
- ✓ File contains only styles
 - + Easy to change style for entire site
 - + Encapsulation of styles
 - + Cached on client - performance

Selectors - Simple

- ✓ element name (`h1`, `p`, `a`, etc.)
- ✓ `.classname` (all elements where `class=classname`)
- ✓ `#idname` (the unique element with `id=idname`)
- ✓ `elementname.classname` (all `tagname` elements with `class=classname`)
- ✓ Lists/Ex: `h1, h2, h3 {color:red}`

Pseudo-classes

- ✓ `:link` - unvisited link
- ✓ `:visited` - visited link
- ✓ `:hover` - hovered element
- ✓ `:focus` - focused element
- ✓ `:active` - active element

Attribute Selectors

✓ `a[href]`

✓ `a[href="www.lehigh.edu"]`

Selectors - Contextual

- ✓ Associates style with nested elements/classes

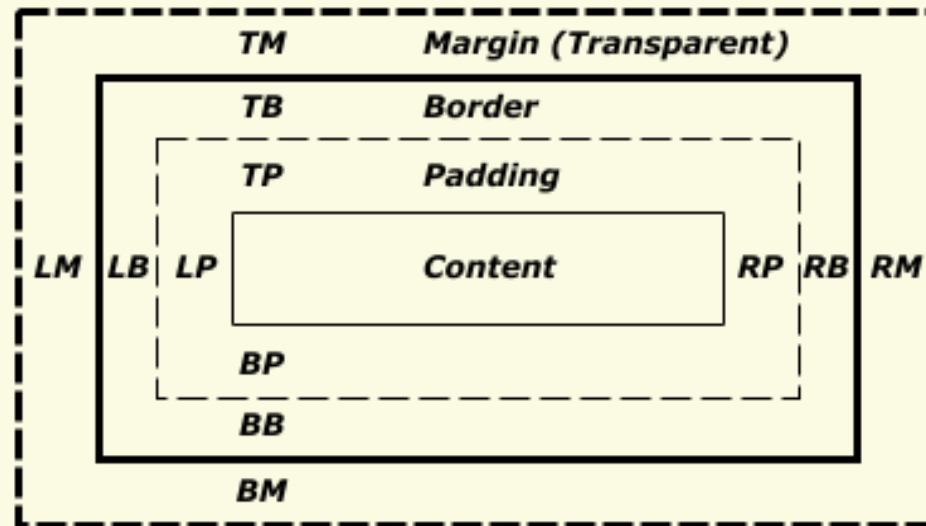
- ✓ Example:

 - `p ul { font-weight: bolder }`

Specificity

- ✓ How to decide what the final style set is for a particular element
- ✓ Contributors
 - Each element descriptor: 0,0,0,1
 - Each [pseudo] class or attribute descriptor: 0,0,1,0
 - Each ID descriptor: 0,1,0,0
 - Inline: 1,0,0,0
- ✓ When equal, last rule wins

Box Model



- Margin edge
- Border edge
- - - Padding edge
- Content edge