Web 2.0 應用技術-CSS, JavaScript 及 HTML

CM310.1-03-2013-C

Lesson 1

Who am I?

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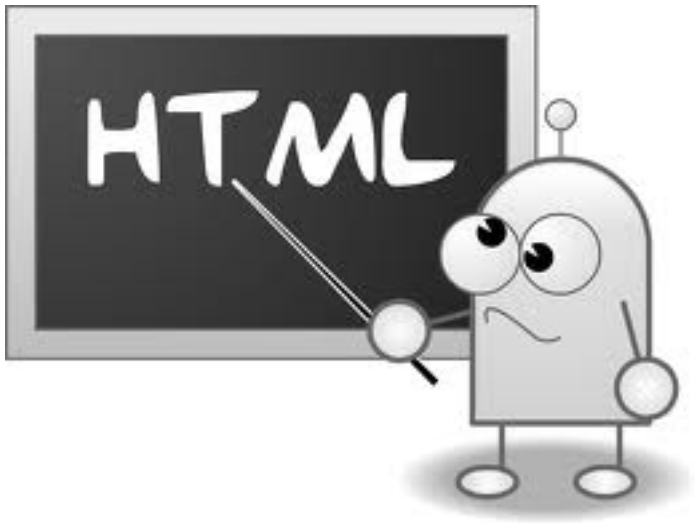


Linkedin/GitHub:

victorwkm

Course Administration

- Lectures (Monday 19:00-22:00)
- Labs (Thursday 19:00-20:30)

Assessments:

- 4 assignments (40%)
- 3 quizzes (10%)
- 1 exam (50%)

What I will learn in this course

- HTML
  - Syntax & Markup
- CSS
  - Syntax & Selector
- JavaScript
  - Syntax; Object; Array
- **jQuery**
  - Selector; Animation; Event Handling; Ajax; Plug-ins

Outline

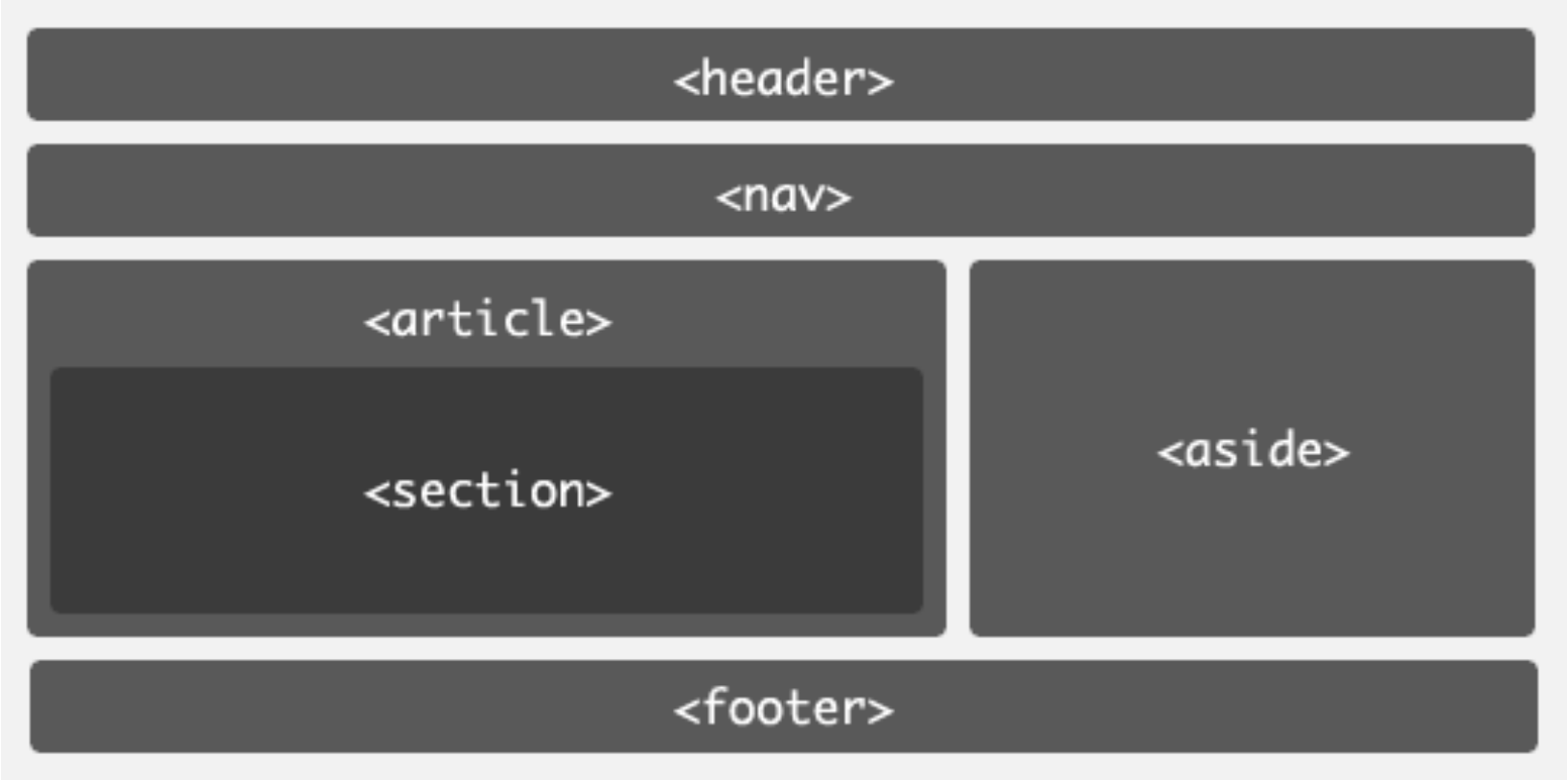
- Web
- HTML
- CSS
- Further Reading

Web 2.0
Aggregators
Folksonomy
Wikis
Blogs
User Centered
Joy of Use
Participation
Six Degrees
Usability
Pagerank
XFN
Widgets
Recommendation
Social Software
FOAF
Browser
Simplicity
Sharing
Collaboration
Perpetual Beta
Videocasting
Podcasting
AJAX
Design
Audio
IM
Video
Convergence
CSS
Pay Per Click
UMTS
Mobility
Atom
XHTML
SVG
Ruby on Rails
VC
Trust
Affiliation
OpenAPIs
RSS
Semantic
Web Standards
SEO
Economy
OpenID
Remixability
REST
Standardization
The Long Tail
DataDriven
Accessibility
XML
Microformats
Syndication
Modularity
SOAP

Front-end Web Technologies

HTML (HyperText Markup Language)

- HTML defines **content** and **structure**.



Web Development Process

- Discuss and determine the scope of works with clients
- Use Photoshop to design and confirm the layout of the website
- Slice the Photoshop creative into HTML
- Use CSS to style it
- Use JavaScript to make a website becomes interactive and dynamic

razorfi
WILL CODE
HTML For
FOOD
PLEASE
HELP

Development Tools

- Editor / IDE
  - Sublime Text (http://www.sublimetext.com/)
  - Eclipse (http://www.eclipse.org/)
  - Vim
- Development Tools
  - Firebug / Chrome Developer Tools
- Web Playground
  - CodePen (http://codepen.io/)

Getting Started

- Fire up your favorite editor
- Type Hello world
- Save it as an .html file instead of .txt
- Open it in the browser

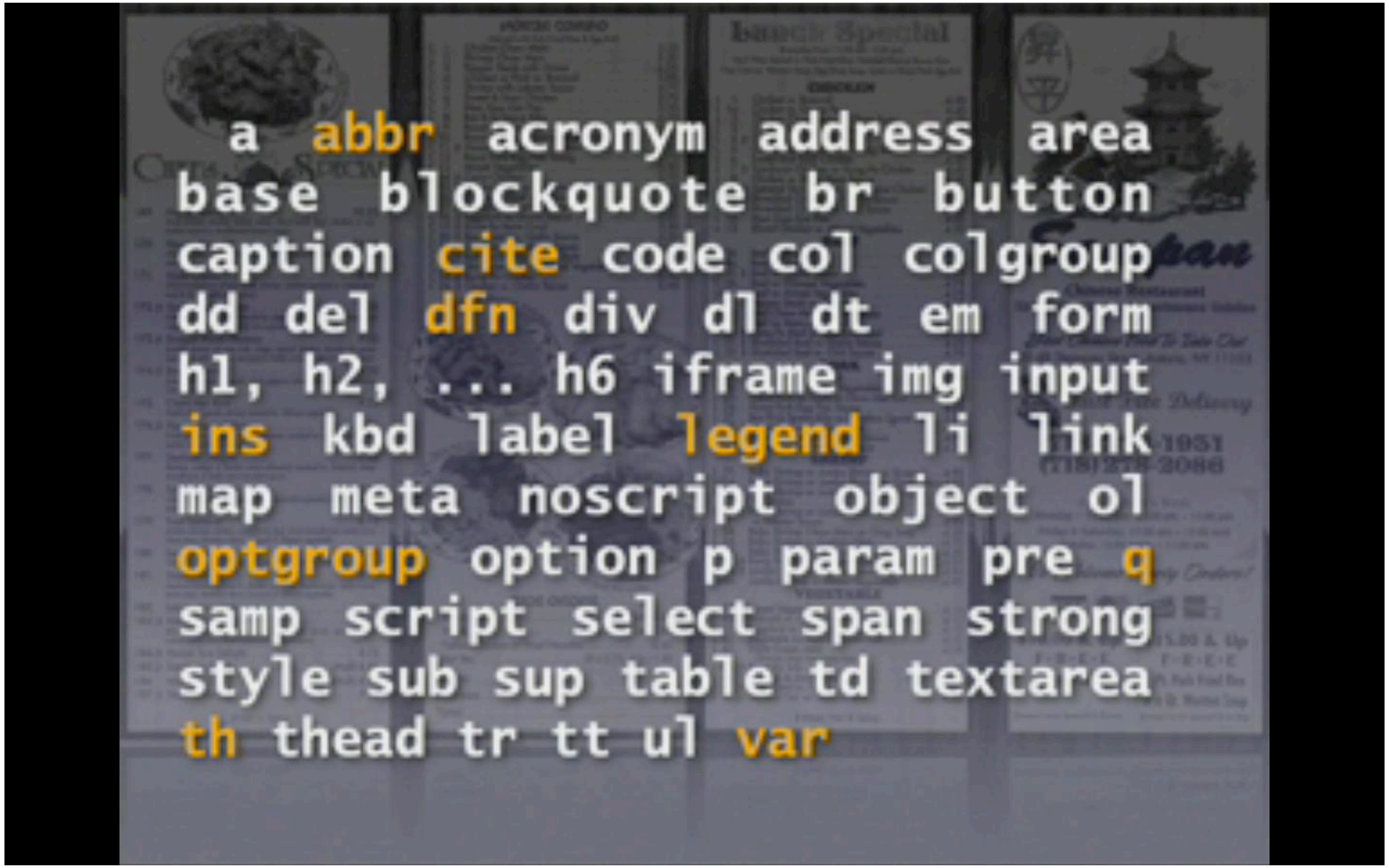
Change the title

```
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  Hello World
</body>
</html>
```

HTML

HTML Tags

- http://www.w3schools.com/tags/default.asp



Anatomy of an HTML tag

```
<tagname attribute="value">
  content
</tagname>

<p id="id_name" class="class_name">
  lorem ipsum
</p>
```

Headings

```
<h1>Header 1</h1>
<h2>Header 1</h2>
...
<h6>Header 6</h6>
```

- Headings are important in HTML documents.

Paragraphs

Lorem Ipsum is simply dummy text of the printing and typesetting industry.

- HTML documents are divided into paragraphs.

- Lorem Ipsum
- http://html-ipsum.com/

Unordered Lists

```
<ul>
  <li>Item 1</li>
  ...
  <li>Item n</li>
</ul>
```

Ordered Lists

```
<ol>
  <li>Item 1</li>
  ...
  <li>Item n</li>
</ol>
```

Links

<a href="url">text</a>

Absolute Path vs. Relative Path

<a href="http://cpttm.org.mo/">CPTTM</a>

<a href="/contact">contact</a>

Images

```
<img src="url" alt="alternative description" />
```

```
<img src="http://placehold.it/300x200"
alt=”placeholder" />
```

Emphasized text

Text

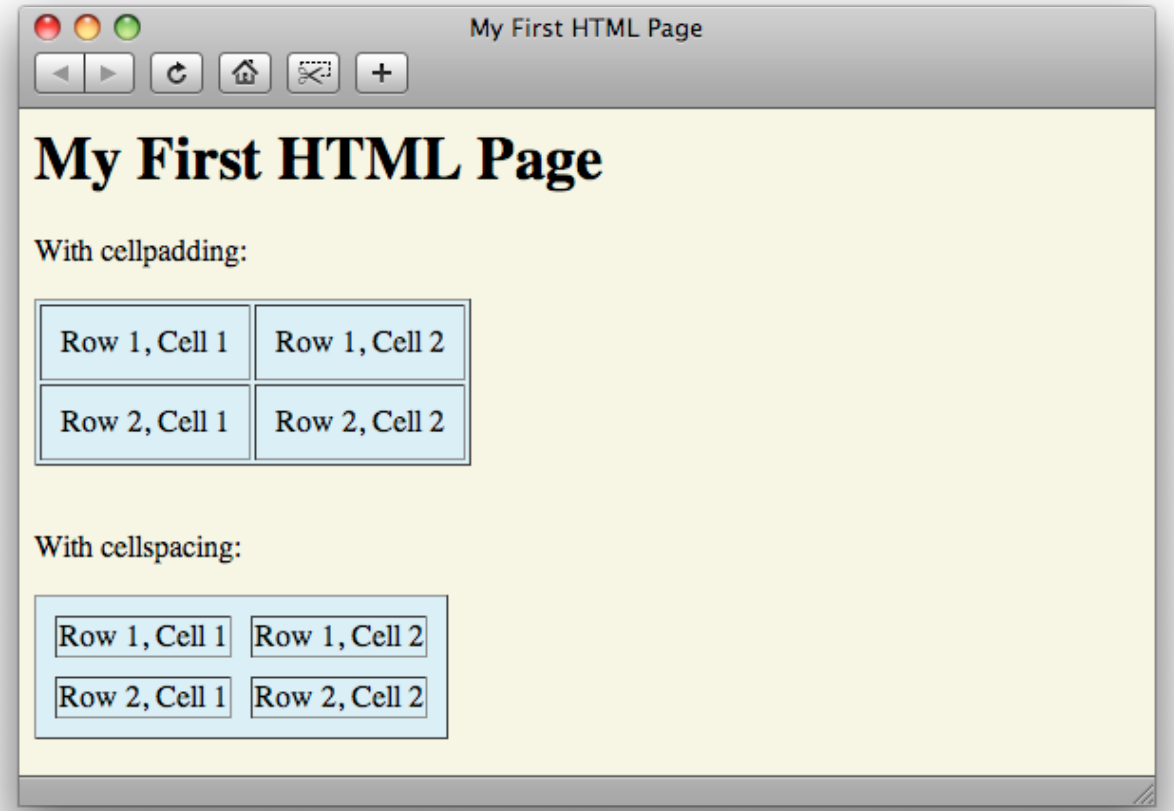
Semantic

 vs. <i>

 vs. <b>

table

```
<table>
 <tr>
  <th>Name</th>
  <th>Age</th>
 </tr>
 <tr>
  <td>Apple</td>
  <td>20</td>
 </tr>
 <tr>
  <td>Mac</td>
  <td>10</td>
 </tr>
</table>
```



form

```
<form>
   <label for="email">
   <input type="text" name="email" id="email" />

   <input type="password" name="email" id="email" />
   <input type="radio" name="gender" />M
   <input type="radio" name="gender" />F
   <input type="checkbox" name="box" checked="checked" />1
   <input type="checkbox" name="box" />2

   <input type="submit" />
</form>
```

http://www.w3schools.com/html/html_forms.asp

HTML Exercise

- Please download the source code from

  https://github.com/victorwkm/jquery-2013-03

CSS (Cascading Style Sheet)

text

color

size

position

How do I put CSS on my page?

3 options:

- Inline
- Embedded
- External

Inline CSS (Bad in most cases)

- <h1 style="color: red;">hello</h1>
- mixing the style with the structure

- Guide to CSS support in email | Campaign Monitor
- http://www.campaignmonitor.com/css/

Embedded CSS (OK)

```
<head>
<style>
p {
  color: red;
}
</style>
</head>
```

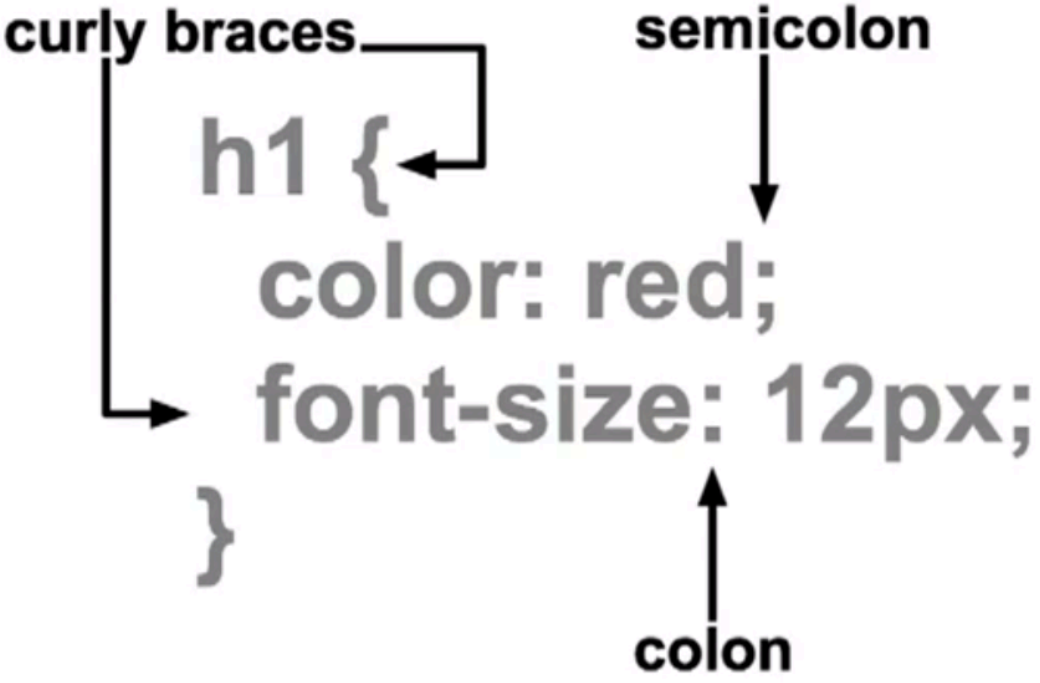
External CSS (Good)

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

how does css works?

3 parts:

- selector
- properties
- value



Part 1 CSS Syntax

- Selector
- Declaration
- Cascade

Selector

1. element
2. class
3. id
4. position in the document

Element, Class, ID, Nesting, Grouping

```
<div id="about">
  <h2>About</h2>
  <p class="help intro">Help Introduction</p>
  <p class="help">Help</p>
</div>
<p>Another paragraph</p>
```

```
p { }
.help { }
p.intro { }
#about { }
#about p { }
p, h2 { }
```

class vs. id

- a **class** attribute that **contains**
- an **id** attribute that **equals**

The Declaration

- A declaration is the combination of a **property** & **value**.
- You declare what you want to change.

Cascade

- The cascade determines which declaration apply to any given element

```
p { color: red; }
p { color: blue; }
```

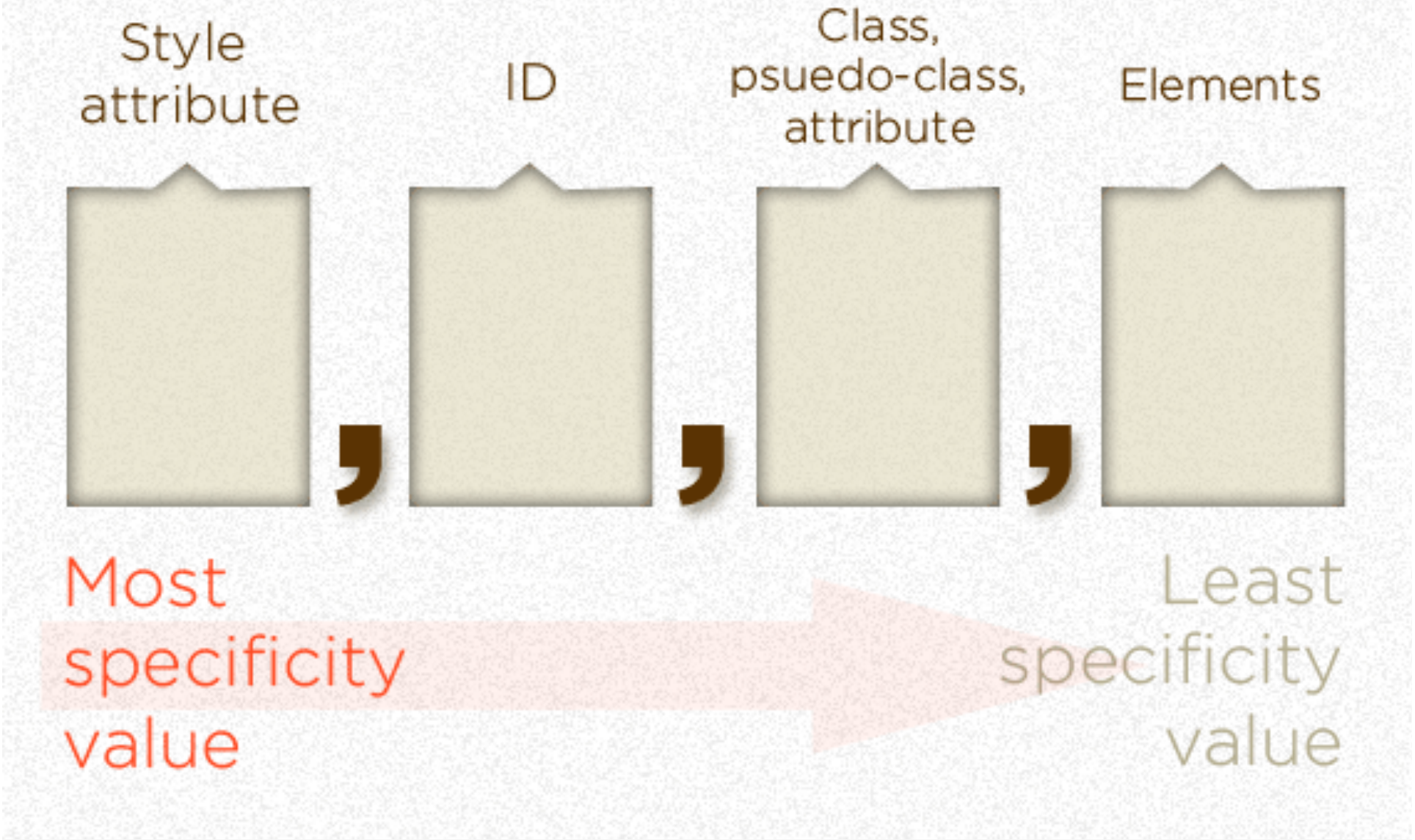
- Who wins?

```
<div id="a">
  <div id="b">
    <h1>hello</h1>
  </div>
</div>

#a #b h1 { color: red; }
#a h1 { color: blue; }
```

- Who wins?

CSS Specificity



CSS Specificity (cont.)

- Element 1 point
- Class 10 points
- ID100 points
- Style Attribute 1000 points

p a { } = 2 points

p.intro a { } = 12 points

#about p.intro a { } = 112 points

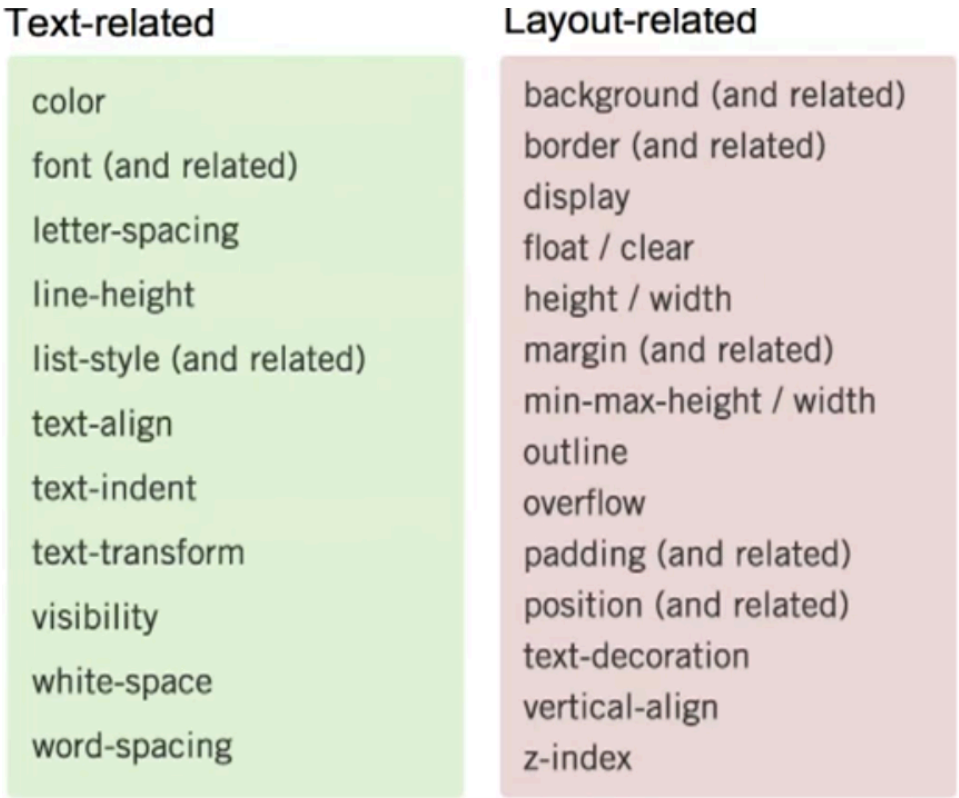
Inheritance

```
#blog { color: red; }
<div id="blog">
  <p>hello</p>
</div>
```

the descendant <p> element of ancestor #blog will have a color of red

Inheritance (cont.)

- text-related properties inherit
- layout-related properties don't



Further Reading

- W3Schools CSS Reference http://www.w3schools.com/cssref/default.asp
- Quirksmode http://www.quirksmode.org/
- CSS-Tricks http://css-tricks.com/