

Final Review

Spring Semester 2008

Format

- 20 multiple choice questions each each worth **2 points**
- 10 diagram questions covering CSS that require you to fill in the CSS property and the value to achieve a particular effect, e.g. make text bold, worth a total of 30 points or 3 points each.
- One diagram question covering the structure of an HTML document will be worth a total of **30 points** with 10 fill-in-the-blanks (opening and closing tags) worth 3 points each.

What will be covered

- Standards
- HTML
- CSS
- Graphics
- Audio/Video
- Web Statistics and Advertising

Standards

Acronyms

- What does CSS stand for?

Cascading Style Sheets

- What does HTML stand for?

Hypertext Markup Language

- What does HTTP stand for?

Hypertext Transport Protocol

Acronyms

- What does RSS stand for?

Really Simple Syndication

- What does w3c stand for?

World Wide Web Consortium

- What does URL stand for?

Uniform Resource Locator

Specifics

- Who is credited with being the father of the World Wide Web?

Tim Berners-Lee

- XHTML is the standard for the:

Structural Layer

- CSS is the standard for the:

Presentation Layer

HTML

hypertext markup language

XHTML

- Under XHTML standards, elements (p, div, span, a, etc.) and attributes (src, styles, href) must be lower case and attribute values must always be enclosed in quotes:

Home Page

- All elements must have closing tags:

**
Home Page**

HTML

- The title element is part of what section of an HTML page?

head

- What html element defines the name of a web browser window or tab?

title

- What part of an html page displays in a web browser?

body

HTML

- Two types of lists are:

Ordered Lists (ol) — Numbered or Lettered

Unordered Lists (ul) — bulleted lists

- Two html tags that make text bold:

b and **strong** (also headers, h1, h2, etc.)

- Two html tags that make text oblique or italic?

i and **em**

HTML

- Example block level html elements:
div, p and **h1, h2**, etc.
- Example inline level html elements:
span, em and **strong**, etc.
- Generally, inline elements do not cause a line feed in presentation while block level elements do. Also, the default behavior of header elements is to make text bold.

HTML

- **'A'** tags are **'anchor'** tags and serve two purposes

- links to other resources**

- `some place`

- links from other resources on the same page**

- `some place`

URL

uniform resource locator

- A URL is the full path to a resource on the internet, consisting of:

protocol — http

domain name — jb3623.com

path — /students/

file — index.html

- <http://jb3623.com/students/index.html>

Links

- **'Absolute'** links contain absolute full paths to items regardless of the current URL.

An absolute link to a file in the root:

- `some file`

- **'Relative'** links contain paths relative to the current document.

A relative link:

- `some file`

CSS

cascading style sheets

CSS

```
p { color: #000; }
```

- A CSS style rule consists of
 - a **selector** (tag, id, class or combination) and a **declaration** (attributes)
- The Declaration of a CSS style rule consists of
 - a **property** (font-family) and a **value** (times)

CSS

- Understand the **font-family**, **font-size** and **font-style** and **font-weight** CSS properties:

font-family sets the font face, e.g. *arial* or *times* or *serif* or *sans serif*

font-size sets the size the text displays (1em, 12px, 16pt)

font-style sets style (italic or oblique) while font-weight sets the boldness (bold) of text

CSS

- Understand the **line-height**, **letter-spacing** and **word-spacing** CSS properties:

line-height is the web equivalent in print of leading or the space between lines

letter-spacing and **word-spacing** are the equivalent in print of kerning for letters and words, respectively

CSS

- Understand the **text-align**, **text-decoration** and **text-transform** CSS properties:

text-align sets whether text is left, center, right or justified

text-decoration sets whether text is underlined or has an overline.

text-transform overrides whether text is all caps, lower or upper case

CSS

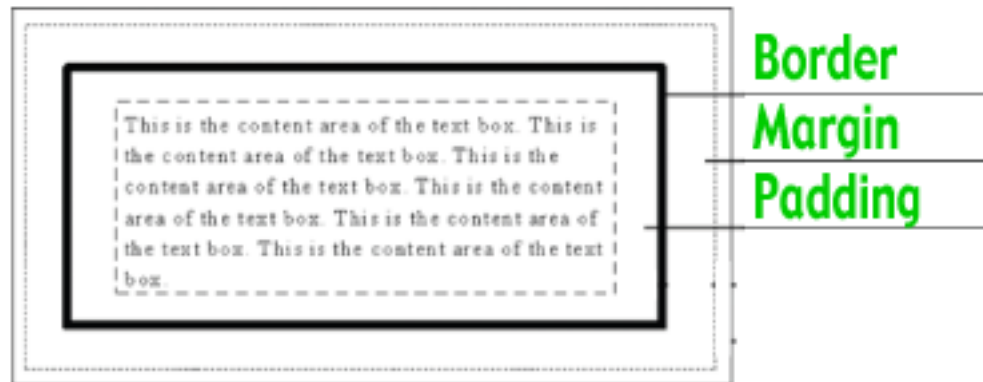
- Know the difference between the **color** and **background-color** CSS properties

The color of text is set by the color property, not a font or text property

- Understand basic **background** properties (color, URL, position, image, repeat-x, repeat-y, no-repeat, fixed)

CSS

- Understand the box model and what **border**, **margin** and **padding** CSS properties do:



- Border, margin and padding can each have separate settings for top, bottom, left, and right.

CSS

- Sans-Serif fonts (verdana, arial, helvetica) are generally easier to read on electronic screens than Serif fonts (times, palatino, georgia)
- Points, Picas and Inches are **absolute** CSS measurements while Pixels, Ems and Percentages are **relative** font sizes
- While you can specify much more using CSS than older browsers could using just HTML, ultimately the end-user has the most control over what they see because they can adjust the size of their fonts and layouts using custom style sheets and preferences.

The HTML Diagram Question

Structure of an HTML page

```
<?xml version="1.0" encoding="utf-8" ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd" >
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en" >
<head>
    <meta http-equiv="content-type" content="text/html; charset=utf-8" /
>
    <title>This Shows Up in the Window</title>
    <style type="text/css" media="screen">
        body { font-size: 100%; }
    </style>
</head>
<body>
<h1>This is a header</h1>
<p>This is a paragraph with some <strong>bold</strong> text</p>

<ul>
    <li>This is a list item</li>
    <li>This is another list item</li>
</ul>
</body>
</html>
```

```
<?xml version="1.0" encoding="utf-8" ?>
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<_____ xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"  
lang="en">
```

```
<_____>
```

```
<meta http-equiv="content-type" content="text/html; charset=utf-8" /  
>
```

```
<_____>This Shows Up in the Window</_____>
```

```
<_____ type="text/css" media="screen">
```

```
body { font-size: 100%; }
```

```
</_____>
```

```
</_____>
```

```
<_____>
```

```
<_____>This is a header</_____>
```

```
<_____>This is a paragraph with some <_____>bold</_____>  
text</_____>
```

```
<_____>
```

```
<_____>This is a list item</_____>
```

```
<_____>This is another list item</_____>
```

```
</_____>
```

```
</_____>
```

```
</_____>
```

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</ul>
</body>
</html>
```

CSS Diagram Example Questions

Setting Properties

Set the size of all text in
a document to 1 em:

```
_____ { _____ : _____ ; }
```

Set the size of all text in
a document to 1 em:

```
body { font-size : 1em; }
```

Set the color of all
paragraphs to blue:

```
_____ { _____ : _____ ; }
```

Set the color of all
paragraphs to blue:

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

Make an image appear
to the right of text:

_____ { _____ : _____ ; }

Make an image appear
to the right of text:

```
img { float : right; }
```

Make the sidebar class
background color black:

```
sidebar { _____ : _____; }
```

Make the sidebar class
background color black:

```
.sidebar { background-  
color : black; }
```

Make the sidebar class
background color black:

```
.sidebar { background-  
color : #000; }
```

Make all paragraphs
justified:

_____ { _____ : _____ ; }

Make all paragraphs
justified:

```
p { text-align : justify; }
```

Graphics

Graphics

- There are three major image formats you can use:

GIF — Graphic Interchange Format

JPEG — Joint Photographic Experts Group

PNG — Portable Network Graphics

- JPEG is best suited to photographs while GIF is better for line art graphics. GIFs can have one color specified as transparent while JPEGs can't.

Graphics

- **JPEG** is a lossy format, meaning that, when the image is compressed, some color information is discarded, resulting in a loss of quality from the original image. JPEG images are 24-bit RGB, meaning they can contain millions of colors, which is why they are great for photographic images.
- **GIF** is a lossless format, meaning that no color information is discarded when the image is compressed. GIF is an 8-bit image format, meaning that only a palette of no more than 256 colors are supported. GIFs can be animated, which is useful for some purposes.

Graphics

- Images should be sized to the actual size they will appear on a page rather than just putting them on the server and using HTML tags to determine the size they appear on the page.
- The **alt** attribute specifies alternate text that appears when an image doesn't load, such as when people on slow connections turn off image loading, or the image isn't seen such as when a vision-impaired person uses a screen reader.

Color

- Graphics for the web should be created using **RGB** color model rather than the **CMYK** module used for printed publications.
- RGB stands for *Red - Green - Blue* and is the color model for electronic devices such as computer monitors and cell phones.
- CMYK stands for Cyan (Blue) - Magenta (Pink) - Yellow - Black (K) and is the color model for 4-color printing.
- hexadecimal color notations for the web consist of 3 values, one each for red, green and blue, preceded by a number sign.

Color

- For example, the color white can be specified using this hex value: **#ffffff**
- For example, the color black can be specified using this hex value: **#000000**
- For example, the color gray can be specified using this hex value: **#cccccc**
- For example, the color OSU uses for its main orange can be specified using this hex value: **#ff6600**

Color

- The examples on the preceding slide are known as web safe colors, those which should appear roughly the same in all browsers on all platforms (Mac, PC, etc.).
- The 216 web-safe colors can be specified using a 3-digit hex notation instead of a 6-digit notation because each of the RGB values consists of a matching pair of letters or numbers.
- The white, black, gray and orange examples could be represented with these shortcuts: #fff, #000, #ccc, and #f60

Audio/Video

Audio/Video

- The bit rate or data rate is calculated by dividing the size of the file by the length in seconds.
- The most widely supported format for audio is MP3, which is supported natively by virtually every browser.
- The most widely supported video format is the Sorenson Spark co-dec used by Flash MX and above.
- Quicktime, Windows Media and Real are other widely deployed and used audio and video formats.

Web Statistics and Advertising

Web Logs

- When you visit a web site, the following information is always logged by default:

host, date/time, request method, protocol, URI, status result code and the number of bytes served

- Optionally, these parameters can also be logged and usually are:

Referrer (link from which you came, according to your browser) and **User Agent** (browser)

Web Logs

- “**Hits**” are not an accurate measurement since each graphic counts as a hit on each web page.
- “**Page views**” are considered more accurate since they count individual pages, rather than every file on a page.
- “**Unique visitors**” is one way to count how many people visited your site, but it is not fool proof. It represents requests from specific IP addresses. Multiple computers can use an IP address and multiple people can use each computer. Still, it is the best metric we have for measuring how many “people” have visited your site.

Google Analytics

- A free service from Google that collects statistical data about your visitors and summarizes it so you can make intelligent choices about your audience and your content.
- The raw data is mostly the same as you record in your log files.
- The summarized data is organized on a time line and offers multiple views on how users navigate your site.

Advertising

- Google **Adwords** are search keywords that advertisers purchase in search results and on other peoples pages.
- Google **Adsense** is a system where Adwords appear on other people's web sites who earn a commission when people click on the links.

What Else?

- Study previous quiz question and answers
- Study the midterm exam
- A good CSS reference on one page:

**[http://www.w3schools.com/css/
css_reference.asp](http://www.w3schools.com/css/css_reference.asp)**