1.264 Lecture 17

XHTML, CSS

Please start Visual Studio for Web. Download zip file with images.
Next class: ASP.NET book, chapter 4. Exercises due <u>after</u> class

Exercise 1: Hypertext markup language (XHTML)

1. **Create a Web site in VSW: File-> New Web Site**
2. **Create a Web page in VSW: File-> New File -> HTML page**
3. **Type the text below in Source view on the page you just created**
4. **Then create a simple MITRule.html page with some text.**
5. **View your page in a browser; test the hyperlink to the MITRule page**

```
!DOCTYPE … (details omitted)
<html>
<head>
<title> Welcome to the Distribution System </title>
</head>
<body>
<h1> Welcome to the Distribution System </h1>
<p>This system handles orders.  We handle many products. We comply
    with latest US regulations.</p>
<p>
The use of this system is subject to <a href= "MITRule.html"> MIT rules
    and regulations. </a> </p>
</body>
</html>
```

XHTML

- **Tags (e.g., <h1>) never display but direct the browser**
- **XHTML tag pairs (e.g., <h1> </h1>) delimit section**
- **Some tags have attributes( )**
- **XHTML document begins with <html>, ends with </html>**
  - **Two sections within document: head and body**
  - **Head has identifying information that is not displayed**
  - **Body information is displayed, with formatting, e.g.,:**
    - **Paragraph <p>**
    - **Header levels 1 through 6 <h1> through <h6>**
    - **Anchor <a>, placed around text or graphics; used for hyperlinks**
- **HTML and its formatting features will be replaced by XHTML and CSS (Cascading Style Sheets)**

XHTML

```
<!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">
<head>
<title> Test Web page </title>
</head>
<body>
<p> Sample text </p>
</body>
</html>
```

- **XHTML is a more structured form of HTML:**
  - **Defined as XML document**
  - **Rules stricter, e.g.,**
    - **All tags must be lower case**
    - **All tags must be closed**
  - **Quotation marks required for tag attributes**
- **Visual Studio (VSW) generates XHTML, which we use all term**

Exercise 2: Tag examples

- **Control appearance of page**
  - **Not as precise as MS Word or other editors**
  - **Intended for pages that can be viewed on devices with very different graphics capabilities. Tags discourage specific assumptions. Examples:**
    - **Paragraph format: <h2 align="center"> text </h2>**
    - **Horizontal lines: <hr width="80%" align= "left" />**
    - **Lists: can be multi-level, etc.**
      - **Ordered (numbered) **
      - **Unordered (bulleted) **
      - **Definition (indented) <dl>**
      - **Each list item defined as, e.g., <li> Air **
    - **Tables: <table>, <td> (data), <tr> (row), etc.**
    - **Preformatted text: <pre> (lines up columns exactly, etc.)**
    - **Special characters: > is >**

Exercise 2: Add some of these to your first html page
Use both Source and Design view; go back and forth to see code

Exercise 3: XHTML Filenames

- **How do you define an href to go to Web page not in the main Web site folder? Examples below give href=" …":**
- **Relative names**
  - **MITRule1.html**   **same folder (directory) as current doc**
  - **Laws/MITRule2.html**   **in subfolder (subdirectory) of current doc**
  - **../MITRule3.html**   **in folder above current doc**
- **Absolute names**
  - **/MITRule4.html**   **in root folder (Web root or local root)**
- **Document sections**
  - **MITRule1.html#sec1**   **points to target tag (sec1) in same doc**
    - **Sections defined by **
- **Documents on other sites**
  - **http://web.mit.edu/index.html**
  - **So the tag looks like: <a href="http://web.mit.edu/index.html">**

Exercise 3: Add one of these to your Example.htm page

Exercise 4: Images

\<h1\> Welcome to the Distribution System \</h1\>

\<a href="DSC00188.jpg"\>

\<img src="DSC00188_small.jpg" alt="Parts" /\>

\</a\>

\<p\>Welcome to the Distribution System\</p\>

- **This shows a small picture but allows the user to get the large picture by clicking on the small one**
- **The href could point to any document, not just an image**

Exercise 4: Use the two images from Lecture 17 images zip file. Download and unzip the images in a folder, and then drag and drop the images into the main folder of your Web site

Cascading Style Sheets (CSS)

- **CSS is a language used to describe the look and format of a document written in a markup language**
- **Formats XHTML more flexibly than XHTML tags**
  - **HTML format tags are being deprecated**
  - **CSS easier to apply across a Web site or part of a site**
- **Internal style sheets stored on Web page**
  - **Apply only to that page, appear in <head> of document**
- **External style sheets stored as separate files**
  - **Apply to all pages in site that reference it**
  - **Contain only CSS commands, no html or XHTML**
- **Two types of style:**
  - **Class styles: manually applied to entities such as 'Company'**
  - **Tag styles: automatically applied to tags such as <h1>**

CSS Exercise 5- Internal Style Sheet

- **In Visual Studio (VSW):**
  - **File-> New File -> HTML Page. Go to Design View.**
  - **Type your company name and a 1-sentence paragraph about it**
  - **Format -> New Style**
    - **Create .company CSS file in current page**
    - **Font= "Courier New", Courier, mono**
    - **Font size= 24 px**
    - **Set a light blue background color**
  - **Examine XHTML page:**

```
.company {
    font-family: "Courier New", Courier, monospace;
    font-size: 24px;
    background-color: #00FF00;
}
```

  - **View-> Apply Styles (not in Other Windows any more)**
  - **Select company name with mouse and apply (click on .company)**

```
<p class="company">My company name </p>  (May get <span>)
```

CSS Exercise 6- External Style Sheet

- **Format->New Style (in Design View)**
  - **Create .division in new style sheet**
  - **Font= Arial, Helvetica, sans serif**
  - **Font size= 16 px**
  - **Set a light yellow background color**
- **Select the paragraph from the Web page**
- **Apply Styles from tab**
- **Examine CSS page in Code view:**

```
.division{
    font-family: Arial, Helvetica, sans-serif;
    font-size: 16px;
    background-color: #FFFF66;
}
```

- **At top of HTML file:**

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

CSS Exercise 7- Tag Style

- Type another paragraph in the XHTML page with <h3> style
- Format-> New Style
  - Create <u>h3</u> style (with <u>no leading dot</u>), existing sheet
  - Font= Arial, Helvetica, sans serif
  - Font size= 24 px
  - Font color red, weight bold or bolder
- Now create another <h3> header on the page and see what it looks like
- Optionally do the chapter 3 examples in the book for more practice

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