LECTURE 2-September 23, 2015

**HTML**

* Hyper Text Markup Language: language for describing web pages.
* Markup language:

- Not a programming language

- Set of tags to describe web pages

**HTML Tags**

* HTML markup tags

- Keywords surrounded by angle brackets

- Example: <html>

**HTML documents**

* HTML documents = Web Pages

- describe web pages

- contain HTML tags and plain text

* Web browser

- Read HTML documents: display them as web pages

- Does not display the HTML tags: creates a readable page by interpreting the tags

* Example of an html document

<html>………………………………………………………webpage

<body>………………………………………………………body: visible page content

<h1> Heading 1 </h1>………………………………………heading

<p> Paragraph </p>………………………………………….paragraph

</body>

</html>

**HTML Elements**

* HTML elements

- start with a start tag

- end with an end tag

- include the content: tags and text in between

* Some HTML elements have no content: empty elements are closed in the start tag
* Most HTML elements can have attributes

**HTML Attributes**

* Attributes

- Provide additional information about the element

- Are specified in the start tag

* Attributes come in name/value pairs: name= “value”
* Example of an html document

<html>

<body style =”background-color:magenta”> (highlighted part is attribute)

<h1> Heading 1 </h1>

<p>Paragraph </p>

</body>

</html>

**HTML Nested Elements**

* HTML elements can be nested: can contain other HTML elements

- HTML documents consist basically of nested HTML elements.

* Example

<html>

<body>

<p> This is my <b> first </b> paragraph </p>

</body>

</html>

**HTML Headings**

* Headings

- <h1> and </h1> to

- <h6> and </h6> (the size of the font: h1>h2>h3>h4>h5>h6)

* Example

<h1> Heading 1 </h1>

<h2> Heading 2 </h2>

<h3> Heading 3 </h3>

**HTML Paragraphs**

* Paragraphs

- <p> and <p>

* Example

<p> This is a paragraph. </p>

<p> This is also a paragraph. </p>

**HTML Links**

* HTML links

- <a> and </a>

* Example of a remote link

<a href=http://www.cse. scu.edu/~sfigueiras> (highlighted part is attribute)

Dr. Figueira

</a>

Creates a clikable links

Dr. Figueira

* Example of a local link

<a href= “10/10.html”>

COEN 10

</a>

Creates a cliable link:

COEN 10

**HTML Images**

* HTML images

<img />………………(empty element)

* Example of a remote picture

<img src=”<http://www.cse.scu.edu/~sfigueira/Figueira.jpg>” ;

width=”200” ; height =”150” /> (highlighted part is attributes)

Shows the picture in file

<http://www.cse.scu.edu/~sfigueira/Figueira.jpg>

* Example of a local picture

<img src=”Figueira.jpg” ;

width=”200” ; height=”150” />

shows the picture in file Figueira. Jpg

**HTML Videos**

* HTML videos with controls

<video controls>

<embed>

<source src=”name of the file of URL” />

</embed>

</video>

**HTML Lines**

The <hr /> tag displays a horizontal lines

**HTML Comments**

* Comments

- Make the code readable and understandable.

- Ignored by the browser and not displayed

* Example

<!—comment -->

**HTML Breaks**

* To break a line without starting a new paragraph (which means there will not be space between two lines)

<br />

Empty tag, with no ending.

* Example

<p> This is <br /> an example <br /> for line break. </p>

**HTML Formatting Tags**

* For formatting output

<b> and </b> --- bold

<i> and </i> --- italic

<u> and </u> --- underline

<center> and </center> --- centered

<big> and </big> --- increase size

<small> and </small> --- decrease size

* Example

<html>

<body>

<h1><big>big</big></h1>

<h2><i>italic</i></h2>

<p><b>bold</b></p>

<p><small>small</small></p>

</body>

</html>

**HTML Styles**

* Added to HTML elements

- Style attributes

- Style sheets (CSS files)

* Example

Style=”blackground-color:red”

Style=”color:white”

Style=”font-family:helvetica”

Style=”text-align:center”

* Examples

- Background Color

<body style=”background-color:red ; color:white”>

- Header

<h1 style=”text-align:center”>

- Paragraph

<p style=”font-family:helvetica; color:blue ”>

**HTML Lists**

* Unordered Lists

- Bulleted list of items

- Tags

<ul> and </ul> enclose the list

<li> is used for each item

Example

<ul>

<li> item 1 </li>

<li> item 2 </li>

</ul>

* Ordered lists

- Numbered list of items

- Tags

<ol> and </ol> enclose the list

<li> is used for each item

Example

<ol>

<li> item 1 </li>

<li> item 2 </li>

</ol>

* Definition Lists

- List of items with a description of each item

- Tags

<dl> and /dl> for the list

<dt> and </dt> for each definition

<dd> and </dd> for each description

Example

<dl>

<dt> COEN 10 </dt>

<dd> Intro to Programming </dd>

<dt> COEN 11 </dt>

<dd> Advanced Programming </dd>

</dl>

**HTML Tables**

Enclosed by <table> and </table>

- Row

- enclosed by <tr> and </tr>

Data cells: enclosed by <td> and </td>

- A data cell can contain: text, images, lists, paragraphs, tables, etc.

Example

<table>

<tr>

<td>row A, cell 1 </td>

<td>row A, cell 2 </td>

</tr>

<tr>

<td>row B, cell 1 </td>

<td>row B, cell 2 </td>

</tr>

</table>