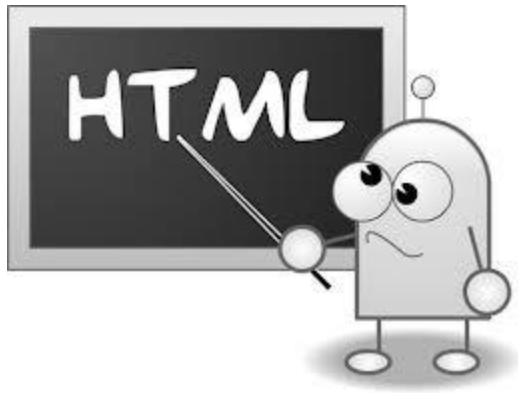# Writing Web Pages

Lecture 3

HTML Basics II

Nishanthi Dasanayaka

nishanthid@dcs.ruh.ac.lk

Topics

- Colors

- Links

- Images

- Tables

- Frames

HTML Colors

- Colors are defined using a hexadecimal notation for the combination of **Red**, **Green**, and **Blue** color values (RGB).

RGB (Red, Green, Blue)

- With HTML, RGB color values can be specified using this formula: **rgb(red, green, blue)**
- Each parameter (red, green, and blue) defines the intensity of the color between 0 and 255.
- For example, **rgb(255,0,0)** is displayed as red, because red is set to its highest value (255) and the others are set to 0.

RGB (Red, Green, Blue)

Color	RGB
	rgb(255,0,0)
	rgb(255,255,0)
	rgb(0,255,0)
	rgb(0,255,255)
	rgb(0,0,255)

RGB Colors :http://www.w3schools.com/html/html_colors.asp

Hexadecimal Colors

- RGB values can also be specified using hexadecimal color values in the form: #RRGGBB, where RR (red), GG (green) and BB (blue) are hexadecimal values between **00** and **FF** (same as decimal 0-255).

- For example, #FF0000 is displayed as red, because red is set to its highest value (FF) and the others are set to the lowest value (00).

#XXXXXX

RR   GG   BB

Intensity of Red,Green & Blue

Hexadecimal Colors

Color	Color HEX	Color RGB
	#000000	rgb(0,0,0)
	#FF0000	rgb(255,0,0)
	#00FF00	rgb(0,255,0)
	#0000FF	rgb(0,0,255)
	#FFFF00	rgb(255,255,0)
	#00FFFF	rgb(0,255,255)
	#FF00FF	rgb(255,0,255)
	#C0C0C0	rgb(192,192,192)
	#FFFFFF	rgb(255,255,255)

Hexadecimal Colors :http://www.w3schools.com/html/html_colors.asp

Adding colors to document

- Color attribute is used to add colors to background, heading, text or hyperlink.

Change background color of the web page

Syntax

<body bgcolor="color_name|hex_number|rgb_number">

Example

<body bgcolor="#E6E6FA">

view bodycolor.html

Adding colors to document

Change background color of the heading

Syntax

<h2 style="background-color:rgb(255,0,0)">heading</h2>

Change font color of the heading

** <h1> Heading 1<h1> **

view headingcolor.html

Find color codes from : http://html-color-codes.info/

HTML Links

- HTML links are hyperlinks.

- A hyperlink is a text or an image you can click on, and jump to another document.

- One main power of HTML is the ability to link text/multimedia sources.

HTML Links

- Link has to be started with **<a>** ,which stands for anchor.

- Then links are achieved through the Hyper reference tag (**href**).

- The **href** attribute specifies the destination address

  (http://www.w3schools.com/html/)

- The link text is the visible part (Ex.Visit our HTML tutorial).

- Clicking on the link text, will send you to the specified address.

- Anchor has to be closed at the end.****

Syntax :

Prompt Text

HTML Links

- Links can be expressed in relative or absolute terms,

<u>Relative reference</u>

- A local link (link to the same web site) is specified with a relative URL (without <u>http://www</u>....).

- Ex :   index.html

                 /graphics/image.png

                 /help/articles/how-do-i-set-up-a-webpage.html

Absolute reference

- Specify the full web address.

  - Ex: http://www.mysite.com

          http://www.mysite.com/graphics/image.png

          http://www.mysite.com/help/set-up-a-webpage.html

view links.html

HTML Links-Colors

- When you move the mouse over a link,

  - The mouse arrow will turn into a little hand

  - The color of the link element will change

- By default, a link will appear like this (in all browsers):

  - An <u>unvisited link</u> is underlined and blue

  - A <u>visited link</u> is underlined and purple

  - An <u>active link</u> is underlined and red

view linkcolors.html

HTML Links Attributes

mailto attribute

- Using mailto attribute we can link to an email address with a specified subject (will only work if you have installed mail client):

Syntax :

Send mail!

Adding several email addresses ,

Send mail!

Target attribute

- The target attribute specifies where to open the linked document.

Syntax :

    Visit

    W3Schools

Value	Description
_blank	Opens the linked document in a new window or tab
_self	Opens the linked document in the same frame as it was clicked (this is default)
_parent	Opens the linked document in the parent frame
_top	Opens the linked document in the full body of the window
framename	Opens the linked document in a named frame

view target.html

name attribute

- The **name** attribute specifies the name of an anchor

- Use to jump directly into a specific section on a different page or the same page.

Syntax :

Name the required section

        `<a `**`name`**`="C4">Chapter 4</a>`

Link to the section using name

        `<a href="#C4"> Go to Chapter 4</a>`

view linkname.html

Images

- Using **\<img\>** tag we can add images to the web page.

- Images can be added as **background image** or **foreground image**.

- There is **no closing tag** for \<img\> tag.

Image formats

- Need to specify the correct image format.

    GIF - Graphics Interchange Format

    JPEG - Joint Photographic Experts Group

    bmp

    png

    tiff

Image attributes

- Attributes of <img> tag,

  - **src** - src attribute to define the URL of the image

  - **width**
  - **height**   **width** and **height** attributes to define the size of the image

  - **align** (left , center or right) – align the image

  - **vspace –** keep space in vertically

  - **hspace** – horizontal space

  - **alt** - define an alternate text for an image, if it cannot be displayed

Image syntax

Image as a background

<body background="image_filename.ext">

view bgimage.html

Image as a forground

<img src="image_filename.ext">

view fgimage.html

Image as a link

Image can be added as a link

 <img src="image.jpg>

view linkimage.html

HTML tables

- It permits display data in tabular form

- It allows to accurate placing of text & images in a web page.

Principle tags in Tables

Tag	Description
<table>, </table>	Tables are defined with the <table> tag
<tr> ,</tr>	tables are divided into **table rows** with the <tr> tag
<th>,</th>	table row can also be divided into table headings with the <th> tag.
<td>, </td>	table rows are divided into table data with the <td> tag

HTML tables

Attributes of each tag

Table Element	Attributes
<table>	Border, Width, bgcolor, cellspacing,cellpadding Background, align
<tr>	Align=(left, center or right), Width,Valign=(top, middle or bottom)
<td>	Align=(left,center or right), Width, Valign=(top, middle or bottom), colspan, rowspan
<th>	Align=left (center or right) Width, Valign=top, middle or bottom, colspan, rowspan

Note : Attributes defined within <th>,<td> cells override the default alignment set in a <tr>

Cellpadding

- The cellpadding attribute specifies the space, in pixels, between the cell wall and the cell content
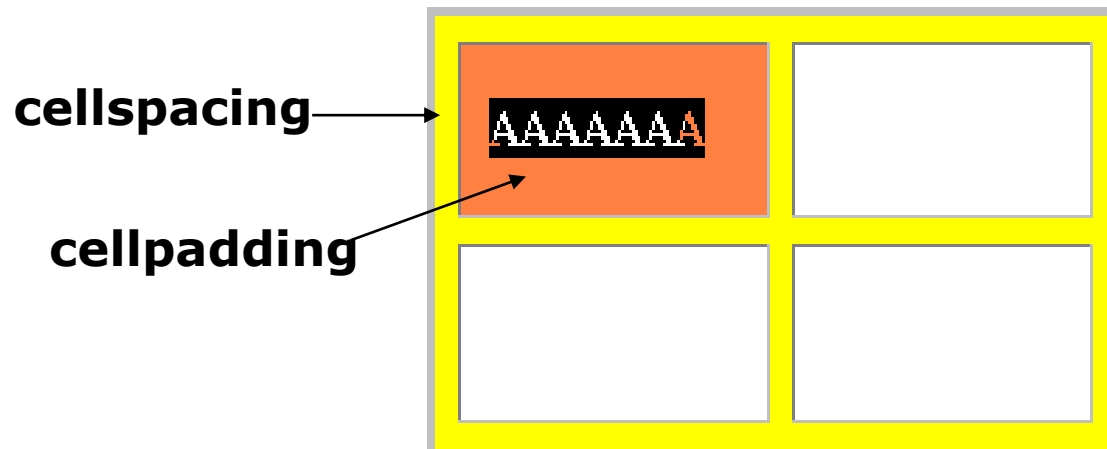
Syntax

<table cellpadding="pixels">

Cellspacing

- The cellspacing attribute specifies the space, in pixels, between cells.

Syntax

<table cellspacing="*pixels*">

Cellpadding & Cellspacing

cellspacing

cellpadding

view table1.html

Colspan

- To make a cell span more than one column, use the **colspan** attribute.

Syntax

<td colspan="no. of columns"> or <th colspan="no. of columns">

Rowspan

- To make a cell span more than one row, use the **rowspan** attribute

Syntax

<td rowspan="no. of rows"> or <th rowspan="no. of rows">

view table2.html

Caption

- To add a caption to a table, use the **\<caption\>** tag

view table3.html

Frames

- Frames are used to present different pages to the user simultaneously.

- (display more than one html page in same browser window)

- The most common use of frame is to separate navigation aids(menus) and page content.

- Each frame is named and has its own context

<frameset>

- The **<frameset>** tag defines a frameset.

- The <frameset> element holds one or more <frame> elements. Each <frame> element can hold a separate document.

- The <frameset> element specifies HOW MANY columns or rows there will be in the frameset, and HOW MUCH percentage/pixels of space will occupy each of them.

<frameset> Attributes

- **Framespacing**

  - Adds space(pixels) between frames.

- **Frameborder**

  - 0-no border, 1 -border

- **Rows**

  - Absolute or relative width of frames in the frame set. * means 'remaining available space'

- **Cols**

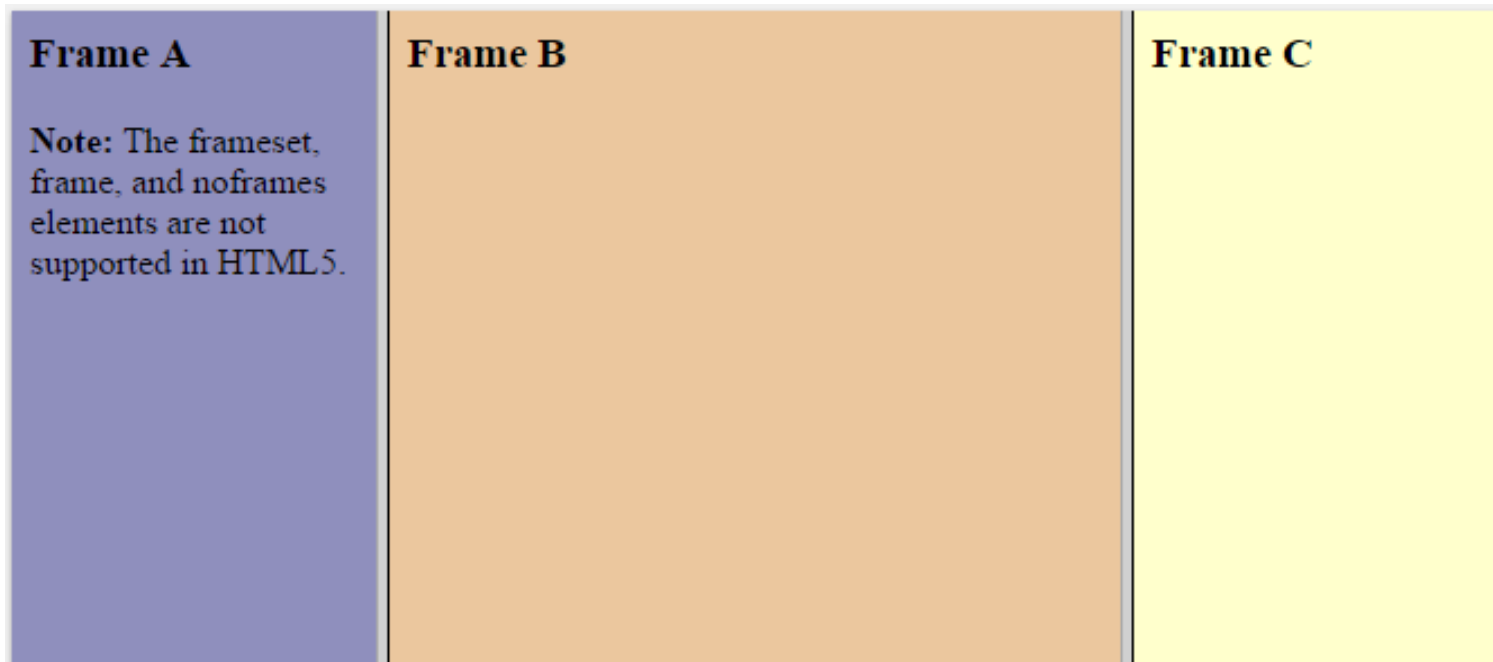 - Defines how many cols in the frameset

<frame>

- The <**frame**> tag defines one pane within the browser window.

<frame> Attributes

- **NORESIZE**

    ➢ Frame size may not be changed.

- **SCROLLING** ("YES","NO" and "Auto")

    ➢ If "Yes", insert scrollbars, if "No" eliminates else automatically

       set scrollbars if needed.

- **SRC**

    ➢ The URL of the source file for the frame.

- **NAME**

    ➢ Specifies a name for a current frame.

Frames

Example:

Frame A	Frame B	Frame C
Note: The frameset, frame, and noframes elements are not supported in HTML5.		

view Horizontalframes.html

view Verticalframes.html

Frames

- Frames can be used as navigation panels.

Link frames

- **Target** attribute of link element can be used to link each frames.

Example :

         < a href="a.html" target="framename">

<u>**view navigationframes.html**</u>

<noframes> Tag

- The **<noframes>** tag is a fallback tag for browsers that do not support frames.

- It can contain all the HTML elements that you can find inside the <body> element of a normal HTML page.

- The <noframes> element can be used to link to a non-frameset version of the web site or to display a message to users that frames are required.

- The <noframes> element goes inside the <frameset> element.

Example

<noframes>Sorry, browser does not handle frames!</noframes>

view noframes.html