HTML (Hypertext Markup Language)
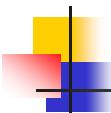
- Introduction to HTML
- Basic Tags
- Links
- Images
- Lists
- Tables
- Forms
- Frames
- CSS

Introduction

- HTML is not a programming language, it is a markup language .

- A markup language is a set of markup tags.

- HTML uses markup tags to describe web pages.

- HTML documents are text files made up of HTML elements.

- HTML elements are defined using HTML tags.

Introduction

- HTML is a language for describing web pages.
- HTML stands for Hyper Text Markup Language
- HTML is not a programming language, it is a markup language
- A markup language is a set of markup tags
- HTML uses markup tags to describe web pages

HTML Basics

HTML Tags

・ HTML tags are used to mark-up HTML elements

・ HTML tags are surrounded by the two characters

 < and >

・ The surrounding characters are called angle brackets

・ HTML tags normally come in pairs like and

・ The first tag in a pair is the start tag, the second tag is the end tag

・ The text between the start and end tags is the element content

・ HTML tags are not case sensitive, <b> means the same as <B>

HTML Basics

The HTML documents describe the web pages.

Let us consider a simple example. Type the program in a notepad/textpad and save the file with extension .html/.htm.

```
<html>
  <body>
      <h1> My First HTML Page </h1>
      <p> I am waiting to start programming with HTML </p>
  </body>
</html>
```

Important to note:

Tools needed to learn HTML.

1. An HTML editor/notepad (best suited for beginners)

2. For professional web developers editors like FrontPage, DreamWeaver.

3. You do not need a web server.

4. You do not need to have a web site

5. But definitely a browser Internet Explorer (IE) or Netscape Navigator(NN).

HTML Basic Tags

<html>

<head>

<title>Title of the document</title>

</head>

<body>

Wel Come to RCU

</body>

</html>

Example

<html>

<body>

.</p>

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

<body>

<html>

HTML Body

\<h1>This is a heading\</h1>

\<hr>

\<p>Document description \
 goes here.....\</p>

\<h6> document ends \<h6>

Basic Tags

Tag

<p>	Defines the Paragraph
 	Inserts a single line break
<h1> to <h6>:	Defines HTML headings
<hr>	Defines a horizontal lines
<!-->	Defines a comment
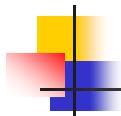
HTML Formatting Tags

<b> : Defines Bold Text

<i> : Defines a part of text in an alternate
                    voice or mood

<small> : Defines smaller text

<Strong>: Defines important text

<Sub>: Defines subscripted text

<Sup> : Defines superscripted text

  <mark>:   Defines marked/highlighted

HTML Links

- Link to an absolute URL:

  If you get spam, contact <A HREF="htttp:www.microsoft.com">Microsoft </A> to report the problem.

- Link to a relative URL:See these <A HREF="#references"> references </A> concerning our fine products.

HTML Links

- Link to a section within a URL:Amazon provided a <AHREF="www.amazon.com/#reference">

reference for our company. </A>

- HTML Images

• <img src="smiley.gif" alt="Smiley face">
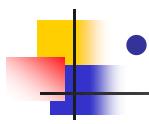
HTML Lists

- Ordered List
- 1. Coffee
- 2. Milk

```
<ul>
  <li>Coffee</li>
  <li>Milk</li>
  </ul>
```

HTML Lists

- Unordered LIst

• Coffee

• Milk

```
<ol>
  <li>Coffee</li>
  <li>Milk</li>
  </ol>
```

HTML Tables

- Header1: Row1, col1,   Row1, col2
- Header 2: Row2, col1,   Row2, Col2

```
<table border="1">
  <tr>
  <td>row 1, cell 1</td>
  <td>row 1, cell 2</td>
  </tr>
  <tr>
  <td>row 2, cell 1</td>
  <td>row 2, cell 2</td>
  </tr>
  </table>
```

HTML Forms

HTML Forms are required when you want to collect some data from the site visitor.

• For example registration information: name, email address, credit card, etc.

• A form will take input from the site visitor and then will post your back-end application such as CGI, ASP Script or PHP script etc.

<form action="back-end script" method="posting method">
  form elements like input, textarea etc.
</form>

FORMS

- HTML forms are used to pass data to a server.

- An HTML form can contain input elements like text fields, checkboxes, radio-buttons, submit buttons and more. A form can also contain select lists, textarea, fieldset, legend, and label elements.

- The <form> tag is used to create an HTML form:

- <form>

  .

  input elements

  .

  </form>

HTML Forms - The Input Element

- **HTML Forms - The Input Element**
- The most important form element is the <input> element.
- The <input> element is used to select user information.
- An <input> element can vary in many ways, depending on the type attribute. An <input> element can be of type text field, checkbox, password, radio button, submit button, and more.
- **Text Fields**
- <input type="text"> defines a one-line input field that a user can enter text into:
- <form>
  First name: <input type="text" name="firstname">
  Last name: <input type="text" name="lastname">
  </form>

HTML Forms

Password Field

- `<input type="password">` defines a password field:

`<form>`
`Password: <input type="password" name="pwd">`
`</form>`

- **Radio Buttons**

- `<input type="radio">` defines a radio button. Radio buttons let a user select ONLY ONE of a limited number of choices:

- `<form>`
`<input type="radio" name="sex" value="male">Male<br>`
`<input type="radio" name="sex" value="female">Female`
`</form>`

HTML FORMS

- **Checkboxes**
- <input type="checkbox"> defines a checkbox. Checkboxes let a user select ZERO or MORE options of a limited number of choices.

```
<form>
<input type="checkbox" name="vehicle" value="Bike">I have a bike<br>
<input type="checkbox" name="vehicle" value="Car">I have a car
</form>
```

HTML Forms

- **Submit Button**

`<input type="submit">` defines a submit button.

A submit button is used to send form data to a server. The data is sent to the page specified in the form's action attribute. The file defined in the action attribute usually does something with the received input:

```
<form name="input" action="demo_form_action.asp" method="get">
Username: <input type="text" name="user">
<input type="submit" value="Submit">
</form>
```

HTML Frames

- Frames, allow you to display more than one HTML document in the same browser window.

```
<frameset cols="25%,75%">
   <frame src="frame_a.htm" />
   <frame src="frame_b.htm" />
 </frameset>
```

Cascading Style Sheets

- CSS stands for Cascading Style Sheets
- Styles define how to display HTML elements
- Styles were added to HTML 4.0 to solve a problem
- External Style Sheets are stored in CSS files

HTML Style Example - Background Color

- <!DOCTYPE html>
  <html>

  <body style="background-color:yellow;">
  <h2 style="background-color:red;">This is a heading</h2>
  <p style="background-color:green;">This is a paragraph.</p>
  </body>

  </html>

HTML Style Example - Font, Color and Size

- ```html
  <!DOCTYPE html>
  <html>

  <body>
  <h1 style="font-family:verdana;">A heading</h1>
  <p style="font-family:arial;color:red;font-size:20px;">A paragraph.</p>
  </body>

  </html>
  ```

-

HTML Style Example - Text Alignment

- <!DOCTYPE html>
  <html>

  <body>
  <h1 style="text-align:center;">Center-aligned heading</h1>
  <p>This is a paragraph.</p>
  </body>

  </html>

CSS Syntax

Selector

CSS Syntax

Declaration

{

color:red;

text-align:center;

}

property value

Three Ways to Insert CSS

External style sheet

<head>

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

</head>

Internal style sheet

<head>

<style>

hr {color:cyan;}

body {background-image:url("images/back40.gif");}

</style>

</head>

Way to insert CSS

- Inline style

  <p style="color:sienna;margin-left:20px;">This is a paragraph.</p>

CSS Id and Class

Id selector

The id selector is used to specify a style for a single, unique element. The style rule below will be applied to the lement with

id="para1":

- #para1

{

text-align:center;

color:red;

}

CSS Id and Class

Class selector

The class selector is used to specify a style for a group of elements.

- all HTML elements with

  class="center" will be

  center-aligned:

- .center {text-align:center;}

- p.center {text-align:center;}

CSS Background

```
body
{
background-color:#b0c4de;
background-image:url('img_tree.png');
background-repeat:repeat-x;
}
```

CSS Background

- background-image: Sets image
- background-color: Sets background color
- Background-repeat: How a image will be repeated
- Background-position: Starting pos of image
- Background-attachment: Whether image is fixed or
  scrolls with rest of the page

CSS Text

Text Color

h1 {color:blue;}

Text Alignment

h1 {text-align:center;}

Text Decoration

h1 {text-decoration:overline;}

  h2 {text-decoration:line-through;}

Text Transformation

p.uppercase {text-transform:uppercase;}

p.lowercase {text-transform:lowercase;}

p.capitalize {text-transform:capitalize;}

CSS Font

Font Family

p{font-family:"Times New Roman", Times, serif;}

Font Style

p.italic {font-style:italic;}

Font Size

p {font-size:14px;}

p {font-size:0.875em;} /* 14px/16=0.875em */

body {font-size:100%;}

CSS Lists

The CSS list properties allow you to:

- Set different list item markers for ordered lists

- Set different list item markers for unordered lists

- Set an image as the list item marker

CSS Lists

ul.a {list-style-type: circle;}

ul.b {list-style-type: square;}

ol.c {list-style-type: upper-roman;}

ol.d {list-style-type: lower-alpha;}

CSS Tables

Table Borders

table, th, td

{

border: 1px solid black;

border-collapse:collapse;

width:100%;

}

Table Color

table, td, th

   {

  border:1px solid green;

CSS Tables

Table Color

```
table, td, th
   {
   border:1px solid green;
   }
   th
   {
   background-color:green;
   color:white;
   }
```

Questions & Answers

THANK YOU!