



GMT SOFTWARE

Learn to code, code to live.....

HTML Basics

Installation of Visual Studio Code with Snippets

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2. HTML in Details

- The `<body>` Section
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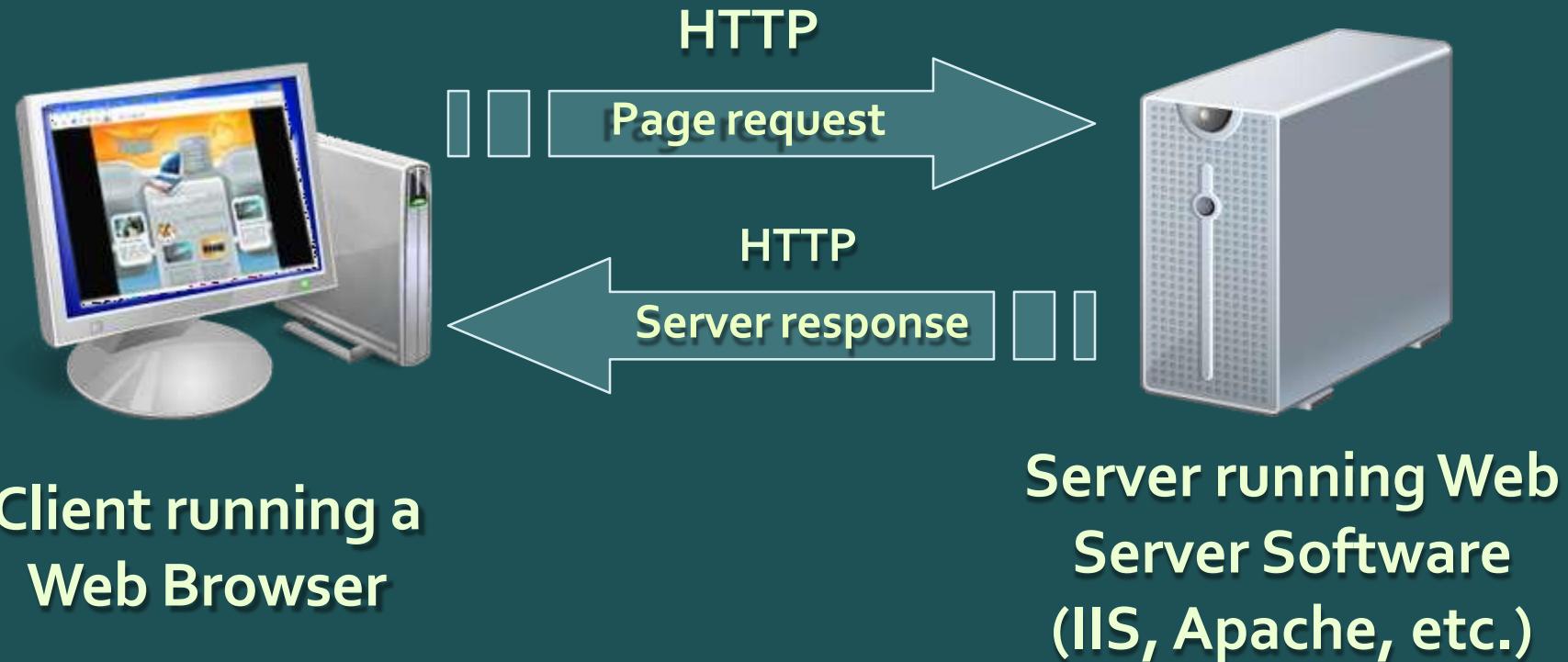
3. The `<div>` and `` elements

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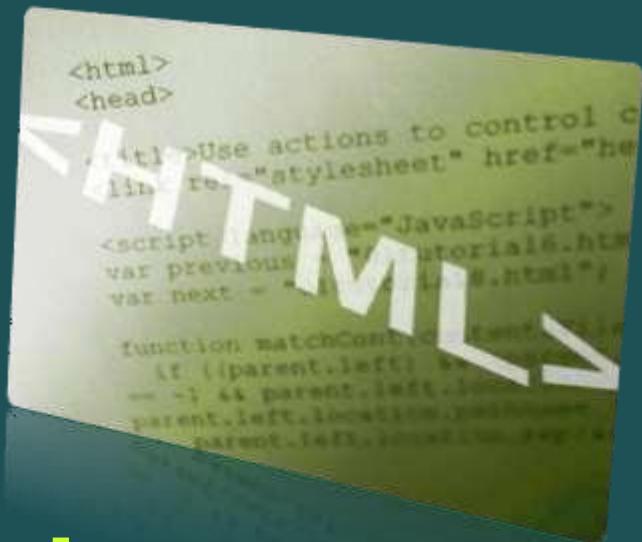
How the Web Works?

- WWW use classical client / server architecture
 - HTTP is text-based request-response protocol



What is a Web Page?

- Web pages are text files containing HTML
- HTML – Hyper Text Markup Language
 - ◆ A notation for describing
 - ◆ document structure (semantic markup)
 - ◆ formatting (presentation markup)
 - ◆ Looks (looked?) like:
 - ◆ A Microsoft Word document
- The markup tags provide information about the page content structure



HTML Basics

Text, Images, Tables, Forms



HTML Structure

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- ◆ HTML is comprised of “elements” and “tags”

- ◆ Begins with `<html>` and ends with `</html>`

- ◆ Elements (tags) are nested one inside another:

```
<html> <head></head> <body></body> </html>
```

- ◆ Tags have attributes:

```

```

- ◆ HTML describes structure using two main sections:
`<head>` and `<body>`

HTML Code Formatting

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- ◆ The HTML source code should be formatted to increase readability and facilitate debugging.
 - ◆ Every block element should start on a new line.
 - ◆ Every nested (block) element should be indented.
 - ◆ Browsers ignore multiple whitespaces in the page source, so formatting is harmless.
- ◆ For performance reasons, formatting can be sacrificed

First HTML Page

test.html

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>My First HTML Page</title>
  </head>
  <body>
    <p>This is some text...</p>
  </body>
</html>
```



First HTML Page

i2 Tags

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>My First HTML Page</title>
  </head>
  <body>
    <p>This is some text...</p>
  </body>
</html>
```

Opening tag

Closing tag

An HTML element consists of an opening tag, a closing tag and the content inside.

First HTML Page: 13

Header

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>My First HTML Page</title>
  </head>
  <body>
    <p>This is some text...</p>
  </body>
</html>
```

HTML header

First HTML Page :₁₄

Body

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>My First HTML Page</title>
  </head>
  <body>
    <p>This is some text...</p>
  </body>
</html>
```

HTML body

Some Simple Tags

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- ◆ **Hyperlink Tags**

```
<a href="http://www.telerik.com/"  
title="Telerik">Link to Telerik Web site</a>
```

- ◆ **Image Tags**

```

```

- ◆ **Text formatting tags**

This text is ***emphasized.***

new line

This one is ***strong>more emphasized.***

Some Simple Tags -

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some-tags.html example

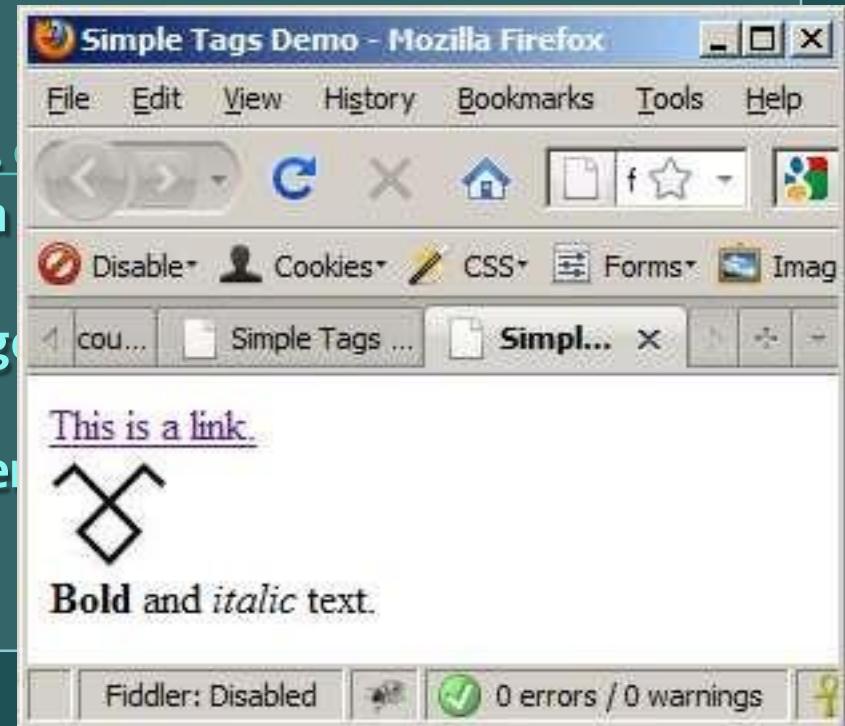
```
<!DOCTYPE HTML>
<html>
<head>
  <title>Simple Tags Demo</title>
</head>
<body>
<a href="http://www.telerik.com/" title=
  "Telerik site">This is a link.</a>
<br />

<br />
<strong>Bold</strong> and <em>italic</em> text.
</body>
</html>
```

Some Simple Tags - Example 7

some-tags.html (2)

```
<!DOCTYPE HTML>
<html>
<head>
    <title>Simple Tags Demo</title>
</head>
<body>
    <a href="http://www.telerik.com">Telerik site</a>
    <br />
    
    <br />
    <strong>Bold</strong> and <em>italic</em>
</body>
</html>
```



◆ Tags can have attributes

- ◆ Attributes specify properties and behavior
- ◆ Example:

Attribute alt with value "logo"

```

```

- ◆ Few attributes can apply to every element:

- ◆ id, style, class, title
- ◆ The id is unique in the document
- ◆ Content of title attribute is displayed as hint when the element is hovered with the mouse
- ◆ Some elements have obligatory attributes

Headings and Paragraphs

- ◆ **Heading Tags (h1 – h6)**

```
<h1>Heading 1</h1>
<h2>Sub heading 2</h2>
<h3>Sub heading 3</h3>
```

- ◆ **Paragraph Tags**

```
<p>This is my first paragraph</p>
<p>This is my second paragraph</p>
```

- ◆ **Sections: div and span**

```
<div style="background: skyblue;">
  This is a div</div>
```

headings.html

```
<!DOCTYPE HTML>
<html>
  <head><title>Headings and paragraphs</title></head>
  <body>
    <h1>Heading 1</h1>
    <h2>Sub heading 2</h2>
    <h3>Sub heading 3</h3>

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

    <div style="background:skyblue">
      This is a div</div>
  </body>
</html>
```

Headings and Paragraphs - Example

Example

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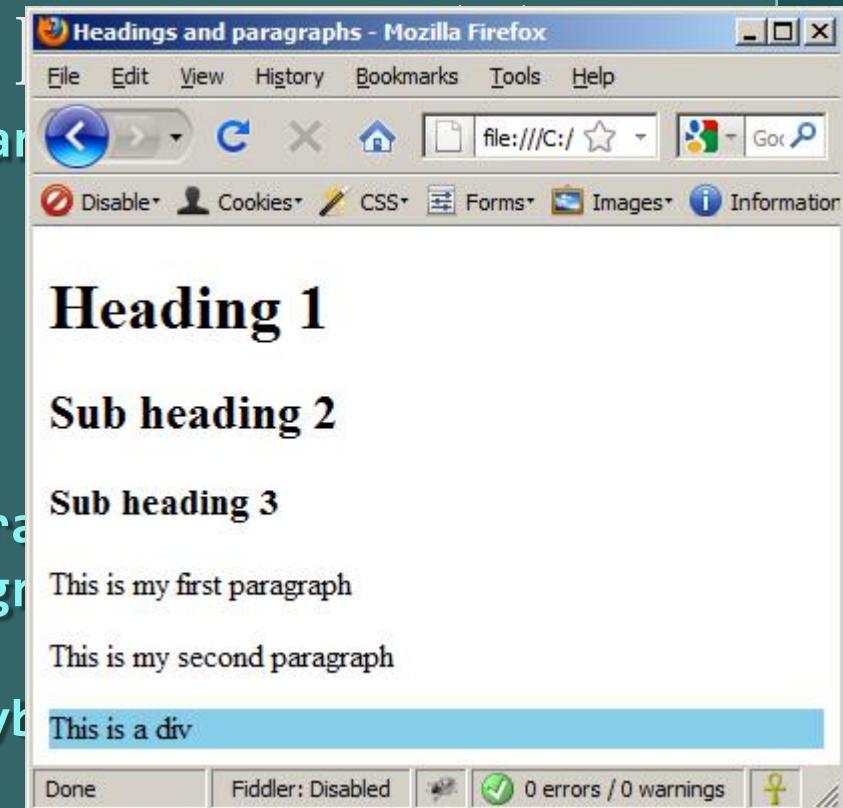
headings.html

```
<!DOCTYPE HTML>
<html>
<head><title>Headings and paragraphs</title>
<body>
<h1>Heading 1</h1>
<h2>Sub heading 2</h2>
<h3>Sub heading 3</h3>

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

<div style="background:skyblue">
    This is a div</div>
</body>
</html>
```

Headings and Paragraphs - Example (2)



Heading 1

Sub heading 2

Sub heading 3

This is my first paragraph

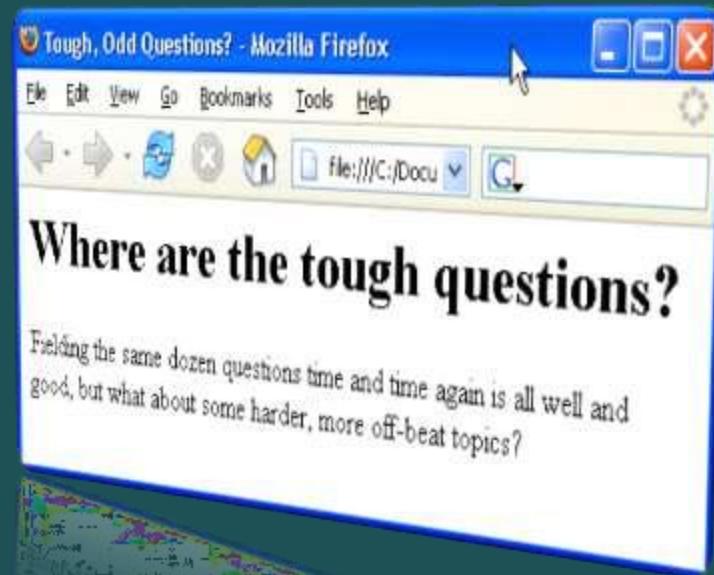
This is my second paragraph

This is a div

Introduction to HTML

HTML Document Structure in Depth

```
1 //DOCTYPE html PUBLIC "-//IETF//DTD HTML 1.0 Strict//EN"
2 //html xmlns="http://www.w3.org/1999/xhtml">
3 //head>
4 //title>TabView </title>
5
6 //script type="text/javascript">
7 //<script type="text/javascript">var script = document.
8 //<script type="text/javascript" src="http://www.w3.org/1999/xhtml">
9
10 //link href="tabview.css" rel="stylesheet" type="text/css"/>
11
12 //</head>
13 //body></body>
14
15 //ul class="tab-navigation">
16 //  li class="tab" title="Tab1">
17 //    <a href="http://www.static.racks.com/200215649_15a00000_0.htm">
18 //    </a>
19
20 //    <li class="tab" title="Tab2">
21 //      <a href="http://www.static.racks.com/200215649_15a00000_0.htm">
22 //    <li class="tab" title="Tab3">
23 //      <a href="http://www.static.racks.com/200215649_15a00000_0.htm">
24 //    </li>
25
26 //  li class="tab" title="Tab4">
27 //    <a href="http://www.static.racks.com/200215649_15a00000_0.htm">
28 //  </li>
29
30 //</ul>
31
32 //<script type="text/javascript">
33 //  TI.TabView.init('main', 1, 0, 0, 0, 0);
34 //</script>
35
36 //</body>
37 //</html>
```



- ◆ It is important to have the correct vision and attitude towards HTML
 - ◆ HTML is only about structure, not appearance
 - ◆ Browsers tolerate invalid HTML code and parse errors – you should not.

The <!DOCTYPE> Declaration

- ◆ HTML documents must start with a document type definition (DTD)
 - ◆ It tells web browsers what type is the served code
 - ◆ Possible versions: HTML 4.01, XHTML 1.0 (Transitional or Strict), XHTML 1.1, HTML 5
- ◆ Example:

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

- ◆ See <http://w3.org/QA/2002/04/valid-dtd-list.html> for a list of possible doctypes

The <head> Section

- ◆ Contains information that doesn't show directly on the viewable page
- ◆ Starts after the <!doctype> declaration
- ◆ Begins with <head> and ends with </head>
- ◆ Contains mandatory single <title> tag
- ◆ Can contain some other tags, e.g.
 - ◆ <meta>
 - ◆ <script>
 - ◆ <style>
 - ◆ <!-- comments -->

<head> Section:
<title> tag

- ◆ Title should be placed between <head> and </head> tags

```
<title>Telerik Academy - Winter Season 2009/2010  
</title>
```



- ◆ Used to specify a title in the window title bar
- ◆ Search engines and people rely on titles

<head> Section: <meta>

- ♦ **Meta tags additionally describe the content contained within the page**

```
<meta name="description" content="HTML  
tutorial" />
```

```
<meta name="keywords" content="html, web  
design, styles" />
```

```
<meta name="author" content="Chris Brewer" />
```

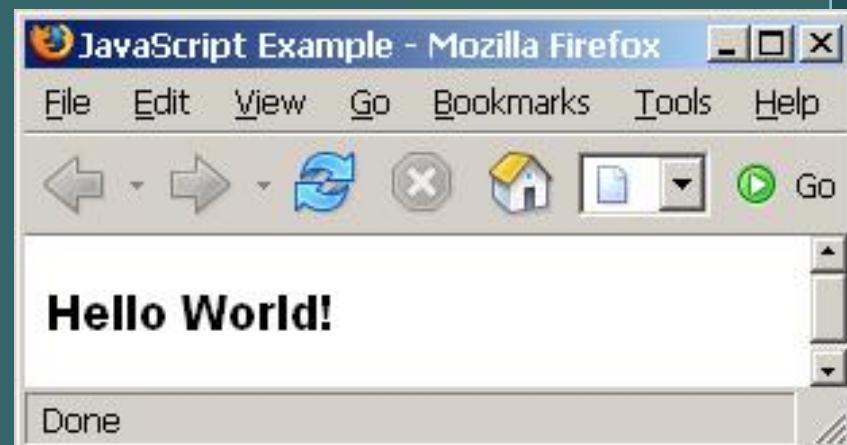
<head> Section: <script>

- ◆ The <script> element is used to embed scripts into an HTML document
 - ◆ Script are executed in the client's Web browser
 - ◆ Scripts can live in the <head> and in the <body> sections
- ◆ Supported client-side scripting languages:
 - ◆ JavaScript

The <script> Tag - Example

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>JavaScript Example</title>
    <script type="text/javascript">
      function sayHello() {
        document.write("<p>Hello World!</p>");
      }
    </script>
  </head>
  <body>
    <script type=
      "text/javascript">
      sayHello();
    </script>
  </body>
</html>
```

scripts-example.html

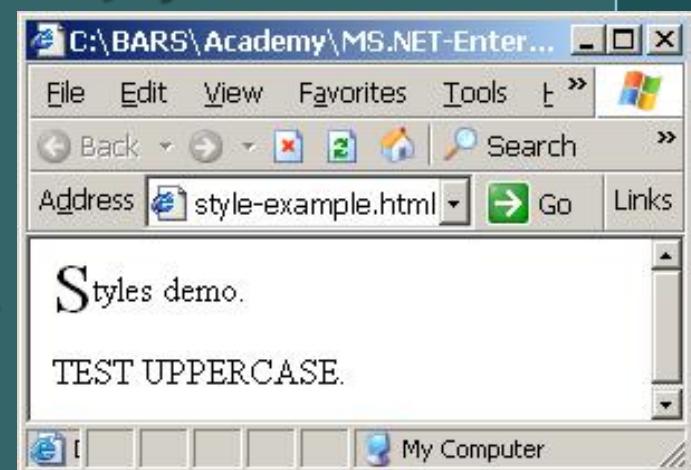


<head> Section: <style>

- ◆ The <style> element embeds formatting information (CSS styles) into an HTML page

```
<html>
  <head>
    <style type="text/css">
      p { font-size: 12pt; line-height: 12pt; }
      p:first-letter { font-size: 200%; }
      span { text-transform: uppercase; }
    </style>
  </head>
  <body>
    <p>Styles demo.<br />
       <span>Test uppercase</span>.
    </p>
  </body>
</html>
```

style-example.html



Comments: <!-- --> Tag

- ◆ Comments can exist anywhere between the <html></html> tags
- ◆ Comments start with <!-- and end with -->

```
<!-- Telerik Logo (a JPG file) -->

<!-- HyperLink to the web site -->
<a href="http://telerik.com/">Telerik</a>
<!-- Show the news table -->
<table class="newstable">
  ...
```

<body> Section: Introduction

- The <body> section describes the viewable portion of the page
- Starts after the <head> </head> section
- Begins with <body> and ends with </body>

```
<html>
  <head><title>Test page</title></head>
  <body>
    <!-- This is the Web page body -->
  </body>
</html>
```

Text Formatting

- ◆ Text formatting tags modify the text between the opening tag and the closing tag
 - ♦ Ex. **Hello** makes “Hello” bold

	bold
<i></i>	<i>italicized</i>
<u></u>	<u>underlined</u>
<sup></sup>	Sample ^{superscript}
<sub></sub>	Sample _{subscript}
	strong
	<i>emphasized</i>
<pre></pre>	Preformatted text
<blockquote></blockquote>	Quoted text block
	Deleted text – strike through

Text Formatting Example

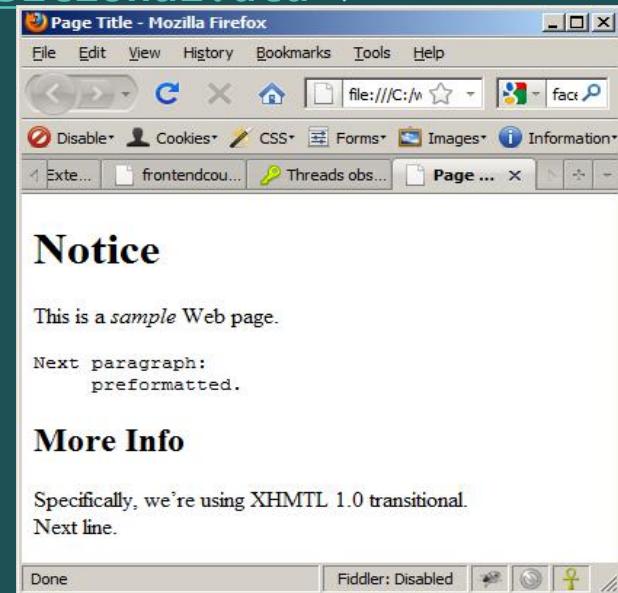
text-formatting.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <h1>Notice</h1>
    <p>This is a <em>sample</em> Web page.</p>
    <p><pre>Next paragraph:
      preformatted.</pre></p>
    <h2>More Info</h2>
    <p>Specifically, we're using XHTML 1.0 transitional.<br />
      Next line.</p>
  </body>
</html>
```

Text Formatting - Example (2)

text-formatting.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <h1>Notice</h1>
    <p>This is a <em>sample</em> Web page.</p>
    <p><pre>Next paragraph:
      preformatted.</pre></p>
    <h2>More Info</h2>
    <p>Specifically, we're using XHTML 1.0 transitional.<br />
      Next line.</p>
  </body>
</html>
```



Hyperlinks: <a> Tag

- ◆ Link to a document called **form.html** on the same server in the same directory:

```
<a href="form.html">Fill Our Form</a>
```

- ◆ Link to a document called **parent.html** on the same server in the parent directory:

```
<a href="../parent.html">Parent</a>
```

- ◆ Link to a document called **cat.html** on the same server in the subdirectory **stuff**:

```
<a href="stuff/cat.html">Catalog</a>
```

Hyperlinks: <a> Tag (2)

- ◆ **Link to an external Web site:**

```
<a href="http://www.devbg.org" target="_blank">BASD</a>
```

- ◆ **Always use a full URL, including "http://", not just "www.somesite.com"**
- ◆ **Using the `target="_blank"` attribute opens the link in a new window**
- ◆ **Link to an e-mail address:**

```
<a href="mailto:bugs@example.com?subject=Bug+Report">  
Please report bugs here (by e-mail only)</a>
```

Hyperlinks: <a> Tag (3)

- ◆ Link to a document called apply-now.html

- ◆ On the same server, in same directory
 - ◆ Using an image as a link button:

```
<a href="apply-now.html"></a>
```

- ◆ Link to a document called index.html

- ◆ On the same server, in the subdirectory english of the parent directory:

```
<a href="../english/index.html">Switch to  
English version</a>
```

Hyperlinks and Sections

- ◆ Link to another location in the same document:

```
<a href="#section1">Go to Introduction</a>
...
<h2 id="section1">Introduction</h2>
```

- ◆ Link to a specific location in another document:

```
<a href="chapter3.html#section3.1.1">Go to Section
3.1.1</a>

<!-- In chapter3.html -->
...
<div id="section3.1.1">
  <h3>3.1.1. Technical Background</h3>
</div>
```

Hyperlinks - Example

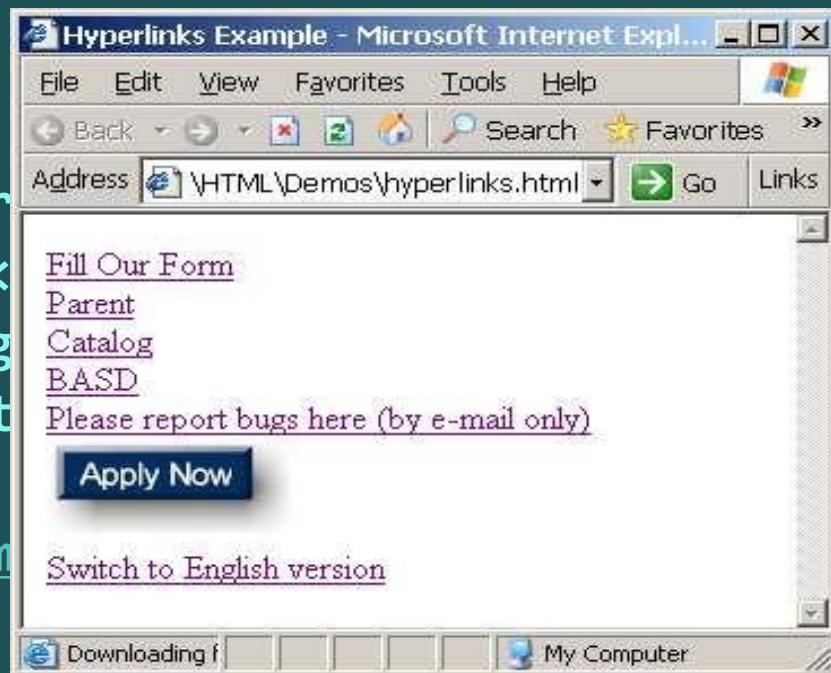
hyperlinks.html

```
<a href="form.html">Fill Our Form</a> <br />
<a href="../parent.html">Parent</a> <br />
<a href="stuff/cat.html">Catalog</a> <br />
<a href="http://www.devbg.org" target="_blank">BASD</a>
<br />
<a href="mailto:bugs@example.com?subject=Bug
Report">Please report bugs here (by e-mail only)</a>
<br />
<a href="apply-now.html"></a> <br />
<a href="../english/index.html">Switch to English
version</a> <br />
```

Hyperlinks - Example (2)

hyperlinks.html

```
<a href="form.html">Fill Our Form<br />
<a href="../parent.html">Parent<br />
<a href="stuff/cat.html">Catalog<br />
<a href="http://www.devbg.org" target="parent">BASD<br />
<br />
<a href="mailto:bugs@example.com">Please report bugs here<br />
<a href="apply-now.html"></a> <br />
<a href="../english/index.html">Switch to English version</a> <br />
```



Links to the Same Document –

links-to-same-document.html Example

```
<h1>Table of Contents</h1>

<p><a href="#section1">Introduction</a><br />
<a href="#section2">Some background</a><br />
<a href="#section2.1">Project History</a><br />
...the rest of the table of contents...

<!-- The document text follows here -->

<h2 id="section1">Introduction</h2>
... Section 1 follows here ...
<h2 id="section2">Some background</h2>
... Section 2 follows here ...
<h3 id="section2.1">Project History</h3>
... Section 2.1 follows here ...
```

Links to the Same Document - links-to-same-document.html

Example (2)

```
<h1>Table of Contents</h1>

<p><a href="#section1">Introduction</a><br />
<a href="#section2">Some background</A><br />
<a href="#section2.1">Project History</a><br />
...the rest of the table of contents...

<!-- The document text follows here -->

<h2 id="section1">Introduction</h2>
... Section 1 follows here ...
<h2 id="section2">Some background</h2>
... Section 2 follows here ...
<h3 id="section2.1">Project History</h3>
... Section 2.1 follows here ...
```



Images:

◆ Inserting an image with tag:

```

```

◆ Image attributes:

src	Location of image file (relative or absolute)
alt	Substitute text for display (e.g. in text mode)
height	Number of pixels of the height
width	Number of pixels of the width
border	Size of border, 0 for no border

◆ Example:

```

```

Miscellaneous Tags

- ◆ **<hr />**: Draws a horizontal rule (line):

```
<hr size="5" width="70%" />
```

- ◆ **<center></center>**: Deprecated!

```
<center>Hello World!</center>
```

Miscellaneous Tags Example

misc.html

```
<html>
  <head>
    <title>Miscellaneous Tag Example</title>
  </head>
  <body>
    <hr size="5" width="70%" />
    <center>Hello World!</center>
    <font size="3" color="blue">Font3</font>
    <font size="+4" color="blue">Font+4</font>
  </body>
</html>
```



Ordered Lists:

- ◆ Create an Ordered List using Tag ``:

```
<ol type="1">
  <li>Apple</li>
  <li>Orange</li>
  <li>Grapefruit</li>
</ol>
```

- ◆ Attribute values for type are 1, A, a, I, or i

1. Apple
2. Orange
3. Grapefruit

A. Apple
B. Orange
C. Grapefruit

a. Apple
b. Orange
c. Grapefruit

I. Apple
II. Orange
III. Grapefruit

i. Apple
ii. Orange
iii. Grapefruit

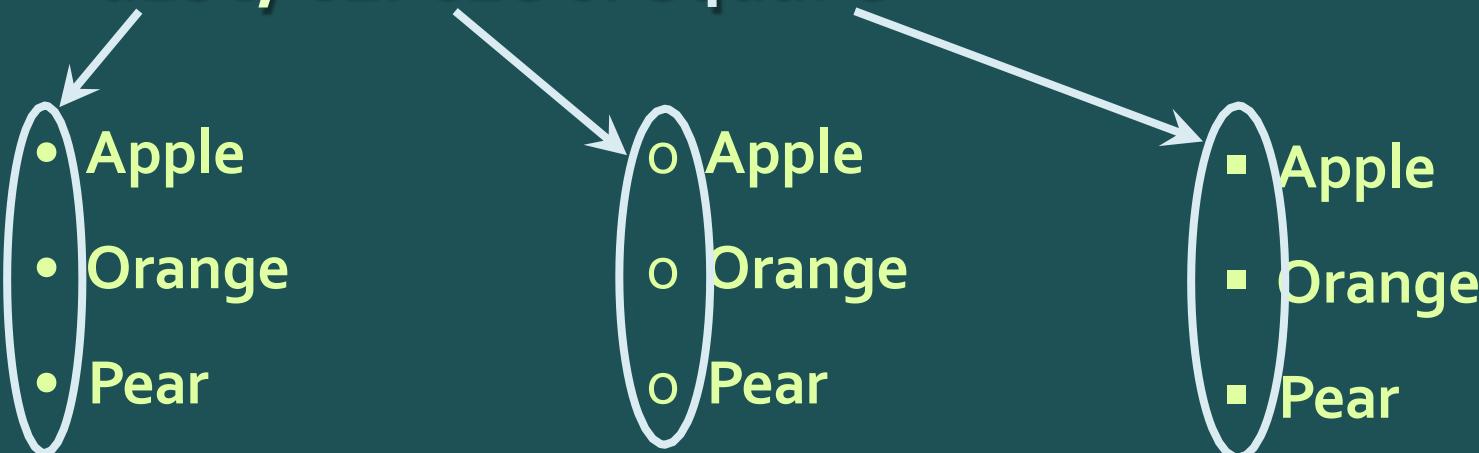
Unordered Lists:

- ♦ Create an Unordered List using :

```
<ul type="disk">
  <li>Apple</li>
  <li>Orange</li>
  <li>Grapefruit</li>
</ul>
```

- ♦ Attribute values for type are:

- ♦ disc, circle or square



Definition lists: <dl> tag

- ♦ Create definition lists using <dl>

- ♦ Pairs of text and associated definition; text is in <dt> tag, definition in <dd> tag

```
<dl>
  <dt>HTML</dt>
  <dd>A markup language ...</dd>
  <dt>CSS</dt>
  <dd>Language used to ...</dd>
</dl>
```

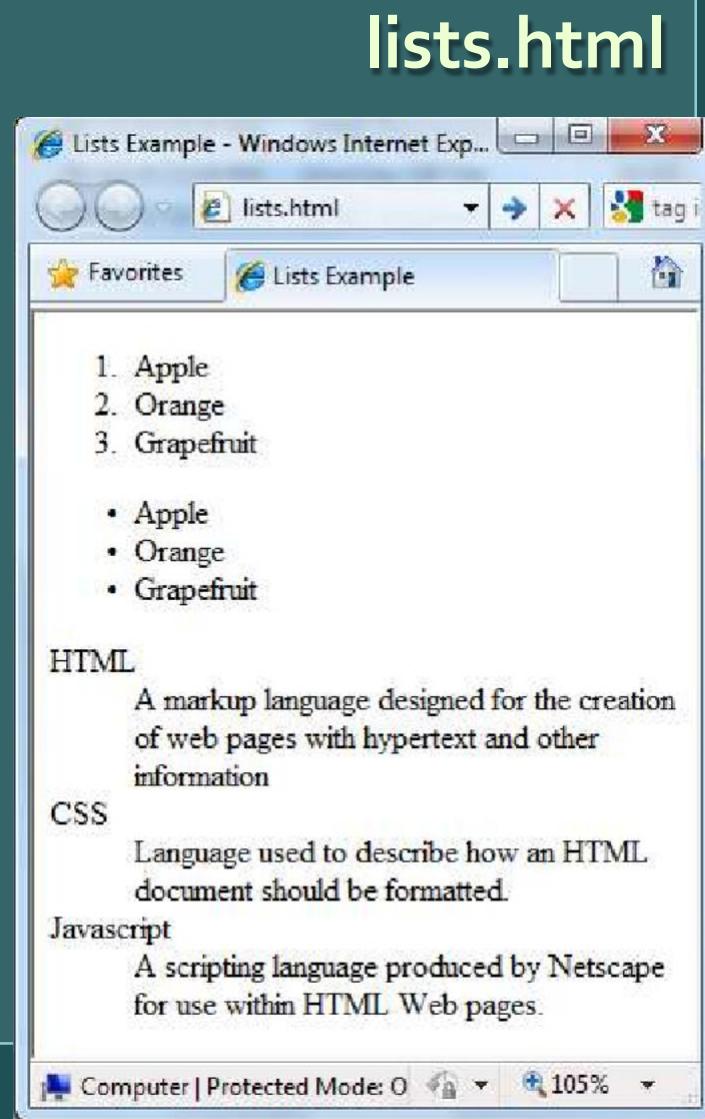
- ♦ Renders without bullets
- ♦ Definition is indented

Lists - Example

```
<ol type="1">
  <li>Apple</li>
  <li>Orange</li>
  <li>Grapefruit</li>
</ol>

<ul type="disc">
  <li>Apple</li>
  <li>Orange</li>
  <li>Grapefruit</li>
</ul>

<dl>
  <dt>HTML</dt>
  <dd>A markup lang...</dd>
</dl>
```



HTML Special Characters

Symbol Name	HTML Entity	Symbol
Copyright Sign	©	©
Registered Trademark Sign	®	®
Trademark Sign	™	™
Less Than	<	<
Greater Than	>	>
Ampersand	&	&
Non-breaking Space	 	
Em Dash	—	—
Quotation Mark	"	"
Euro	€	€
British Pound	£	£
Japanese Yen	¥	¥

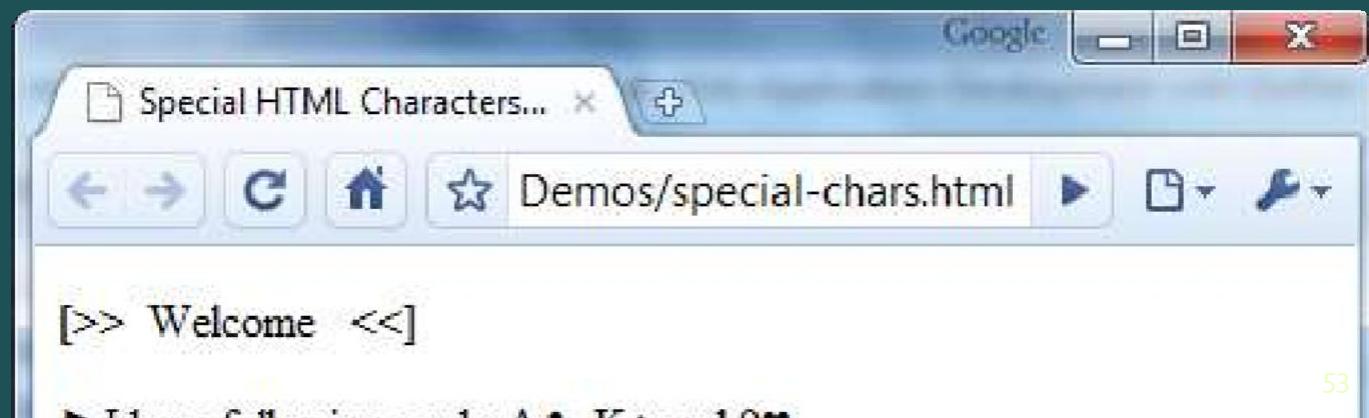
Special Characters – Example

Special Characters

```
<p>[&gt;&gt;&ampnbsp&ampnbspWelcome special-chars.html  
&ampnbsp&ampnbsp&nbsp;&lt;&lt;]</p>  
<p>&#9658;I have following cards:  
A&#9827;, K&#9830; and 9&#9829;. </p>  
<p>&#9658;I prefer hard rock &#9835;  
music &#9835;</p>  
<p>&copy; 2006 by Svetlin Nakov & his  
team</p>  
<p>Telerik Academy™</p>
```

Special Chars – Example (2)

```
<p>[&gt;&gt;&ampnbsp&ampnbspWelcome special-chars.html  
&ampnbsp&ampnbsp&lt;&lt;]</p>  
<p>&#9658;I have following cards:  
A&#9827;, K&#9830; and 9&#9829;. </p>  
<p>&#9658;I prefer hard rock &#9835;  
music &#9835;</p>  
<p>&copy; 2006 by Svetlin Nakov & his  
team</p>  
<p>Telerik Academy™</p>
```



```
4<head>
5<meta http-equiv="Content-Type"
6<title>Home</title>
7<link rel="stylesheet" href="st
8<style type="text/css">
9.style1 {
10    color: #FF0000;
11}
12</style>
13</head>

<span class="style1">You will have to
separate license to use the OpenCube

```



Using <DIV> and Block and Inline Elements

- ◆ **Block elements add a line break before and after them**

- ◆ **<div> is a block element**
 - ◆ **Other block elements are <table>, <hr>, headings, lists, <p> and etc.**

- ◆ **Inline elements don't break the text before and after them**

- ◆ ** is an inline element**
 - ◆ **Most HTML elements are inline, e.g. <a>**

The <div> Tag

- ◆ <div> creates logical divisions within a page
- ◆ Block style element
- ◆ Used with CSS
- ◆ Example:

div-and-span.html

```
<div style="font-size:24px; color:red">DIV  
example</div>  
  
<p>This one is <span style="color:red; font-  
weight:bold">only a test</span>.</p>
```



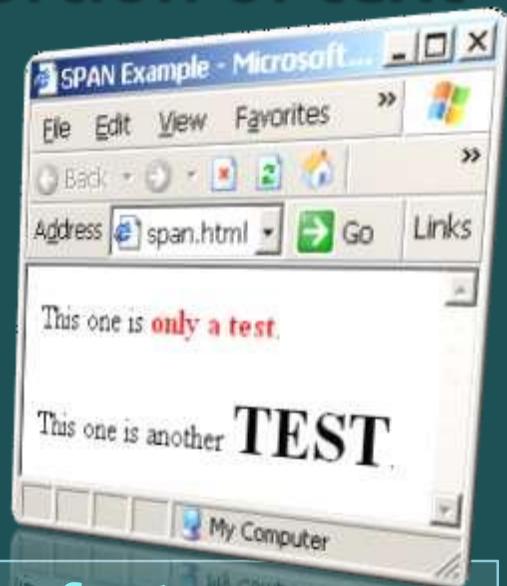
The Tag

- ◆ Inline style element
- ◆ Useful for modifying a specific portion of text
 - ◆ Don't create a separate area (paragraph) in the document
- ◆ Very useful with CSS

span.html

```
<p>This one is <span style="color:red; font-weight:bold">only a test</span>.</p>

<p>This one is another <span style="font-size:32px; font-weight:bold">TEST</span>.</p>
```





HTML Tables

Title	Title	Title	Title	Title	Title
Data	Data	Data	Data	Data	Data
Data	Data	Data	Data	Data	Data
Data	Data	Data	Data	Data	Data
Data	Data	Data	Data	Data	Data
Data	Data	Data	Data	Data	Data

Date	European date (D M Y) & time	Y-M-D date & time	Dollar	Chinese name	IP address	Name	Numbers
20-10-1967	01-09-28	YMB 4	98.356.39.80		26.32 E+03		
Fri Mar 22 21:48:49 UTC +0200 1997	1997-03-22 20:07:15 PM	YMB -01.38	142.117.253.34	dyc chik			
Fri Mar 22 2002 04:24:20 UTC	00:27.99.98-09:00 AM	YMB -104.43	122.295.10.6	bodha drish	-291.45E-05		
Sunday, Mar 30, 1997 6:17:31 PM	06:59.05.05:11:26 AM	YMB 33.16		dyc bale	-131.20E+01		
04-29-2000	24110.7987	5-28.77	YMB 312.42	18.392.151.209			
		97-26-13 00:01:33 AM	\$14.5	YMB -1.75	99.93.147.150	dyc dai tschek	-187.28E-05
		07-10-26	\$14.86	YMB 61.1K		char male	-125.39E-03
		74-10-20	\$20.47		121.189.225.22	dycs hana	138.11B+02
		2003-03-29	\$64.41	YMB 18.39	229.133.227.68	made love	195.34 E+03
			\$91.9	YMB 44.25	223.69.228.116	men site	-197
			under	ONE	add	add	add

HTML Tables

- ◆ **Tables represent tabular data**

- ◆ A table consists of one or several rows
- ◆ Each row has one or more columns

- ◆ **Tables comprised of several core tags:**

- <table></table>: begin / end the table

- <tr></tr>: create a table row

- <td></td>: create tabular data (cell)

- ◆ **Tables should not be used for layout. Use CSS floats and positioning styles instead**

HTML Tables (2) (2)

- ◆ Start and end of a table

```
<table> ... </table>
```

- ◆ Start and end of a row

```
<tr> ... </tr>
```

- ◆ Start and end of a cell in a row

```
<td> ... </td>
```

Simple HTML Tables - Example

```
<table cellspacing="0" cellpadding="5">
  <tr>
    <td></td>
    <td><a href="lecture1.ppt">Lecture 1</a></td>
  </tr>
  <tr>
    <td></td>
    <td><a href="lecture2.ppt">Lecture 2</a></td>
  </tr>
  <tr>
    <td></td>
    <td><a href="lecture2-demos.zip">
      Lecture 2 - Demos</a></td>
  </tr>
</table>
```

Complete HTML Tables

- ◆ Table rows split into three semantic sections: header, body and footer

- ◆ <thead> denotes table header and contains <th> elements, instead of <td> elements
- ◆ <tbody> denotes collection of table rows that contain the very data
- ◆ <tfoot> denotes table footer but comes BEFORE the <tbody> tag
- ◆ <colgroup> and <col> define columns (most often used to set column widths)

Complete HTML Table: Example

```
<table>
  <colgroup>
    <col style="width:100px" /><col />
  </colgroup>
  <thead>
    <tr><th>Column 1</th><th>Column 2</th></tr>
  </thead>
  <tfoot>
    <tr><td>Footer 1</td><td>Footer 2</td></tr>
  </tfoot>
  <tbody>
    <tr><td>Cell 1.1</td><td>Cell 1.2</td></tr>
    <tr><td>Cell 2.1</td><td>Cell 2.2</td></tr>
  </tbody>
</table>
```

columns

header

th

footer

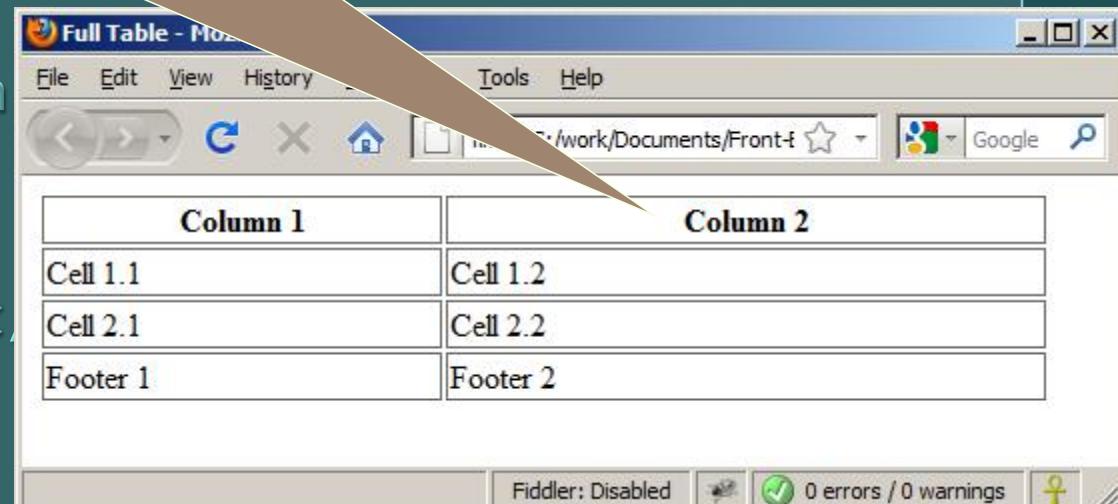
Last comes the body (data)

Complete HTML Table: Example (2)

By default, header text
is bold and centered.

```
<table>
  <colgroup>
    <col style="width: 150px;" />
  </colgroup>
  <thead>
    <tr><th>Column 1</th><th>Column 2</th></tr>
  </thead>
  <tfoot>
    <tr><td>Footer 1</td><td>Footer 2</td></tr>
  </tfoot>
  <tbody>
    <tr><td>Cell A1</td><td>Cell B1</td></tr>
    <tr><td>Cell A2</td><td>Cell B2</td></tr>
    <tr><td>Cell A3</td><td>Cell B3</td></tr>
  </tbody>
</table>
```

table-full.html



code, it is displayed last

Nested Tables

- ◆ Table data “cells” (`<td>`) can contain nested tables (tables within tables):

```
<table>
  <tr>
    <td>Contact:</td>
    <td>
      <table>
        <tr>
          <td>First Name</td>
          <td>Last Name</td>
        </tr>
      </table>
    </td>
  </tr>
</table>
```

nested-tables.html



Simple HTML Tables – Example (2)

```
<table cellspacing="0" cellpadding="5">
<tr>
  <td></td>
  <td><a href="lecture1.ppt">Lecture 1</a></td>
</tr>
<tr>
  <td></td>
  <td><a href="lecture2.ppt">Lecture 2</a></td>
</tr>
<tr>
  <td></td>
  <td><a href="lecture2-demos.zip">
    Lecture 2 - Demos</a></td>
</tr>
</table>
```





HTML Forms

Entering User Data from a Web Page

Registration Form - Mozilla Firefox

User name:

Password:

Gender: Male Female

Click to accept our terms:

Done

HTML

Find me an application now!

First Name:

Last Name:

Age: 1-12 yrs 13-17 yrs

I would like to learn to work with:
 18 yrs and over
 I would like to learn to work with:
 Microsoft Office
 software
 hardware

I am interested in our recent projects:

- ◆ Forms are the primary method for gathering data from site visitors
- ◆ Create a form block with

```
<form></form>
```

The "method" attribute tells how the form data should be sent – via GET or POST request

- ◆ Example:

```
<form name="myForm" method="post"  
action="path/to/some-script.php">  
  ...  
</form>
```

The "action" attribute tells where the form data should be sent

Form Fields

- ◆ Single-line text input fields:

```
<input type="text" name="FirstName" value="This  
is a text field" />
```

- ◆ Multi-line textarea fields:

```
<textarea name="Comments">This is a multi-line  
text field</textarea>
```

- ◆ Hidden fields contain data not shown to the user:

```
<input type="hidden" name="Account" value="This  
is a hidden text field" />
```

- ◆ Often used by JavaScript code

- ◆ Fieldsets are used to enclose a group of related form fields:

```
<form method="post" action="form.aspx">
  <fieldset>
    <legend>Client Details</legend>
    <input type="text" id="Name" />
    <input type="text" id="Phone" />
  </fieldset>
  <fieldset>
    <legend>Order Details</legend>
    <input type="text" id="Quantity" />
    <textarea cols="40" rows="10"
              id="Remarks"></textarea>
  </fieldset>
</form>
```

- ◆ The **<legend>** is the fieldset's title.

Form Input Controls

- ◆ **Checkboxes:**

```
<input type="checkbox" name="fruit"  
value="apple" />
```

- ◆ **Radio buttons:**

```
<input type="radio" name="title" value="Mr." />
```

- ◆ Radio buttons can be grouped, allowing only one to be selected from a group:

```
<input type="radio" name="city" value="Lom" />  
<input type="radio" name="city" value="Ruse" />
```

Other Form Controls

◆ Dropdown menus:

```
<select name="gender">
  <option value="Value 1"
    selected="selected">Male</option>
  <option value="Value 2">Female</option>
  <option value="Value 3">Other</option>
</select>
```

◆ Submit button:

```
<input type="submit" name="submitBtn"
value="Apply Now" />
```

Other Form Controls (2)

- ◆ Reset button – brings the form to its initial state

```
<input type="reset" name="resetBtn"  
value="Reset the form" />
```

- ◆ Image button – acts like submit but image is displayed and click coordinates are sent

```
<input type="image" src="submit.gif"  
name="submitBtn" alt="Submit" />
```

- ◆ Ordinary button – used for Javascript, no default action

```
<input type="button" value="click me" />
```

Other Form Controls (3)

- ◆ **Password input** – a **text field which masks the entered text with * signs**

```
<input type="password" name="pass" />
```

- ◆ **Multiple select field** – displays the list of items in multiple lines, instead of one

```
<select name="products" multiple="multiple">
  <option value="Value 1"
    selected="selected">keyboard</option>
  <option value="Value 2">mouse</option>
  <option value="Value 3">speakers</option>
</select>
```

Other Form Controls (4)

- ◆ File input – a field used for uploading files

```
<input type="file" name="photo" />
```

- ◆ When used, it requires the form element to have a specific attribute:

```
<form enctype="multipart/form-data">  
...  
  <input type="file" name="photo" />  
...  

```

- ◆ Form labels are used to associate an explanatory text to a form field using the field's ID.

```
<label for="fn">First Name</label>
<input type="text" id="fn" />
```

- ◆ Clicking on a label focuses its associated field (checkboxes are toggled, radio buttons are checked)
- ◆ Labels are both a usability and accessibility feature and are required in order to pass accessibility validation.

form.html

```
<form method="post" action="apply-now.php">
<input name="subject" type="hidden" value="Class" />
<fieldset><legend>Academic information</legend>
<label for="degree">Degree</label>
<select name="degree" id="degree">
<option value="BA">Bachelor of Art</option>
<option value="BS">Bachelor of Science</option>
<option value="MBA" selected="selected">Master of
Business Administration</option>
</select>
<br />
<label for="studentid">Student ID</label>
<input type="password" name="studentid" />
</fieldset>
<fieldset><legend>Personal Details</legend>

<fieldset><legend>Personal Details</legend>
```

```
<label for="fname">First Name</label>
<input type="text" name="fname" id="fname" />
<br />
<label for="lname">Last Name</label>
<input type="text" name="lname" id="lname" />
```

HTML Forms - Example (2)

form.html (continued)

```
<br />
    Gender:
    <input name="gender" type="radio" id="gm" value="m" />
    <label for="gm">Male</label>
    <input name="gender" type="radio" id="gf" value="f" />
    <label for="gf">Female</label>
<br />
    <label for="email">Email</label>
    <input type="text" name="email" id="email" />
</fieldset>
<p>
    <textarea name="terms" cols="30" rows="4"
        readonly="readonly">TERMS AND CONDITIONS...</textarea>
</p>
<p>
    <input type="submit" name="submit" value="Send Form" />
    <input type="reset" value="Clear Form" />
</p>
</form>
```

HTML Forms - Example (3)

form.htm (continued)

The screenshot shows a Mozilla Firefox browser window displaying an HTML form titled "HTML Forms Example". The form is divided into three main sections: "Academic information", "Personal Details", and "TERMS AND CONDITIONS...".

Academic information:

- Degree: Master of Business Administration
- Student ID: [empty input field]
- Classes attended:
 - Geography
 - Mathematics
 - English

Personal Details:

- First Name: [empty input field]
- Last Name: [empty input field]
- Gender:
 - Male
 - Female
- Email: [empty input field]

TERMS AND CONDITIONS...

Buttons:

- Send Form
- Clear Form

Status Bar:

- Done
- Fiddler: Disabled
- 0 errors / 0 warnings
- Green checkmark icon

Class Work

- Build a testimonial page using Html
- Build a Registration Form using Html