



UNIVERSITY OF SANTO TOMAS

HTML

Part 2

TOPICS

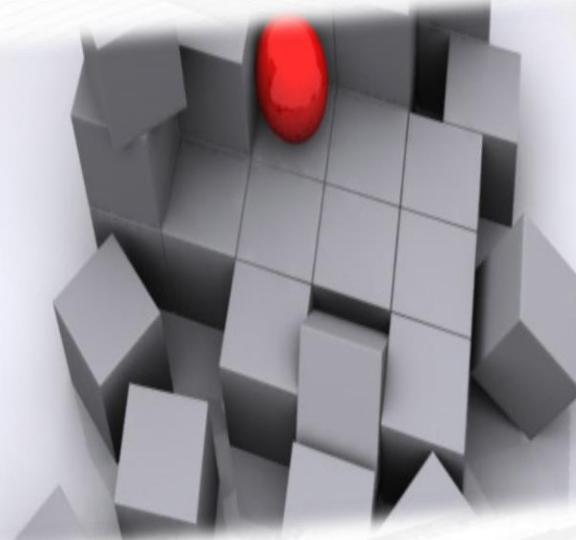
- Introduction to HTML
 - How the Web Works?
 - What is a Web Page?
 - My First HTML Page
 - Basic Tags: Hyperlinks, Images, Formatting
 - Headings and Paragraphs
- HTML in Details
 - The <!DOCTYPE> Declaration
 - The <head> Section: Title, Meta, Script, Style

TOPICS

- HTML in Details
 - The <body> Section
 - Text Styling and Formatting Tags
 - Hyperlinks: <a>, Hyperlinks and Sections
 - Images:
 - Lists: , and <dl>
- The <div> and elements
- HTML Tables
- HTML Forms

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

You will have to purchase a separate license to use the OpenCube mesh



Using <DIV> and Block and Inline Elements

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>
```



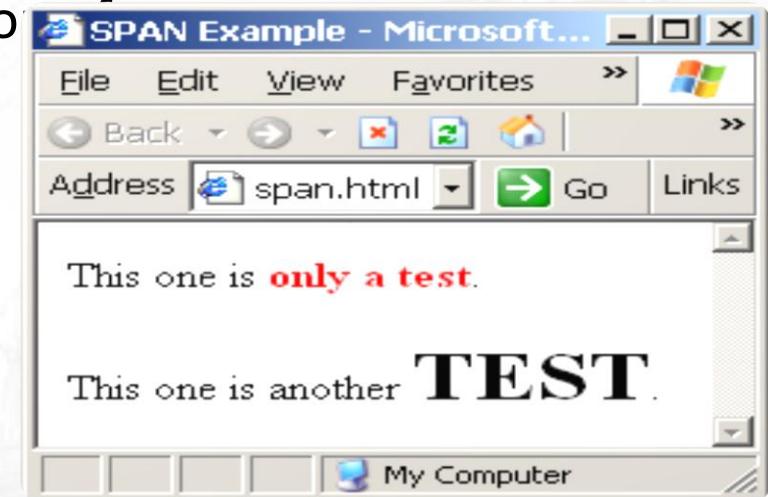
The Tag

- Inline style element
- Useful for modifying a specific portion
 - 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>
```



US time	European date (D/M/Y) & time	Y-M-D date & time	Dollar	Chinese money	IP addresses	Names	Numbers
29/10/1965	83-03-24	YMB 4	98.176.35.80	26.32 E +03			
Fri Mar 22 21:48:49 UTC+0200 1957	1967-08-22 06:07:16 PM	YMB -81.38	162.117.253.34	dyse chidi			
Thu, 14 Feb 2002 04:24:20 UTC	06/07/99 06:46:01 AM	81-02-04 09:09:54 AM	YMB -108.83	122.205.50.6	bochai dychai	-191.45E-05	
Monday, May 30, 1994 4:47:31 PM	06/09/05 05:11:16 AM		YMB 33.16		dydy balle	-131.20E+01	
09/28/2000	24/11/1957		\$-38.77	YMB 112.42	15.192.151.209		
		97-08-13 00:01:33 AM	\$14.5	YMB -1.75	99.93.147.150	dychai tonchai	-187.28E-05
Mon, 29 Oct 1979 00:44:03 UTC		87-10-16	\$14.66	YMB 61.14		chite malie	- 125.19 E -03
Sat, 9 Jan 1982 05:45:06 UTC	04/06/68	74-10-20	\$20.47		121.169.225.22	dyma bama	138.11E+02
04/05/75		2000-03-20	\$68.84	YMB 88.19	239.133.227.68	made liete	195.44 E +03
Monday, July 15, 2002 10:05:02 AM	01/02/1961 09:40:16 AM		\$97.9	YMB 44.28	223.66.228.116	mava sete	-107
this is footer	row	number	ONE!	adsf	adsf	adsf	adsf

```
htmltable1 - Notepad
File Edit Format View Help
<html>
<head>
<title>How To Create HTML Tables</title>
</head>
<body>
<table border=1 cellspacing=0 cellpadding=0>
<tr>
<td width=110 valign=top>
<br><upper left corner>
<td width=110 valign=top>
<br><upper right corner>
</td>
</tr>
<tr>
<td width=110 valign=top>
<br><left center cell>
<td width=110 valign=top>
<br><right center cell>
</td>
</tr>
<tr>
<td width=110 valign=top>
<br><lower left corner>
<td width=110 valign=top>
<br><lower right corner>
</td>
</tr>
</table>
</body>
</html>
```

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

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)

- 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

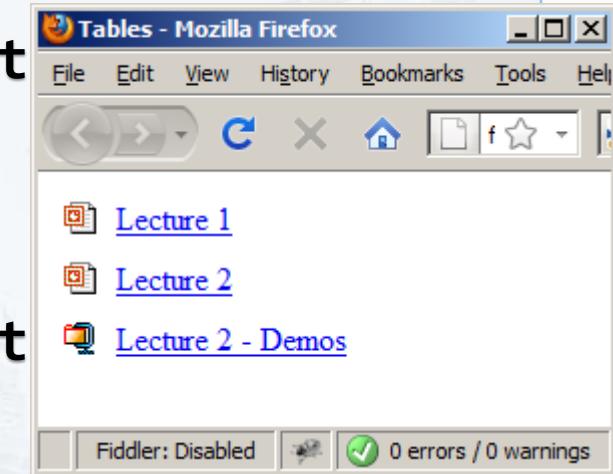
```
<td> ... </td>
```

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>
```

Simple HTML Tables – Example (2)

```
<table cellspacing="0" cellpadding="5">
  <tr>
    <td></td>
    <td><a href="lecture1.ppt">Lect
  </tr>
  <tr>
    <td></td>
    <td><a href="lecture2.ppt">Lect
  </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

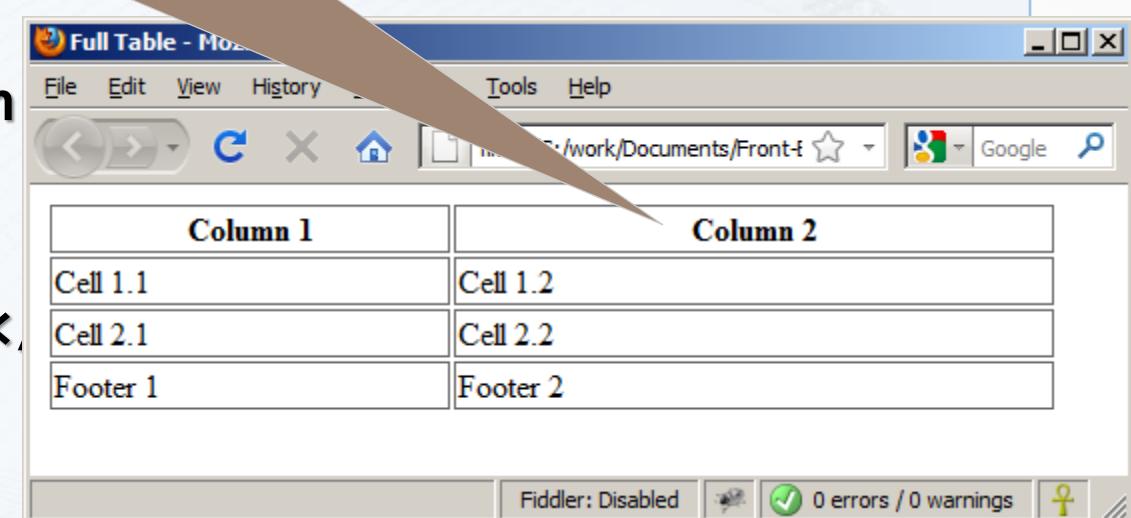
```
<table>
  <colgroup>                                columns
    <col style="width:100px" /><col />
  </colgroup>
  <thead>                                    header
    <tr><th>Column 1</th><th>Column 2</th></tr>
  </thead>
  <tfoot>                                   footer
    <tr><td>Footer 1</td><td>Footer 2</td></tr>
  </tfoot>
  <tbody>                                    Last comes the body (data)
    <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>
```

ble:

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 1.1</td><td>Cell 1.2</td></tr>
  <tr><td>Cell 2.1</td><td>Cell 2.2</td></tr>
  <tr><td>Footer 1</td><td>Footer 2</td></tr>
</tbody>
</table>
```

table-full.html



Column 1	Column 2
Cell 1.1	Cell 1.2
Cell 2.1	Cell 2.2
Footer 1	Footer 2

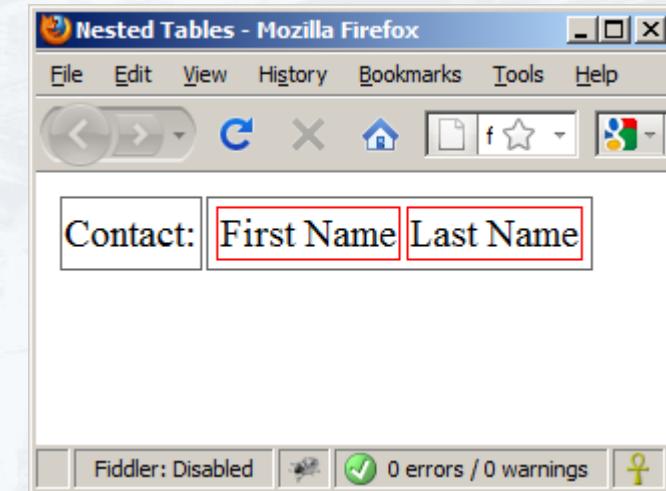
Although the footer is before the data in the code, it is displayed last

Nested Tables

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

nested-tables.html

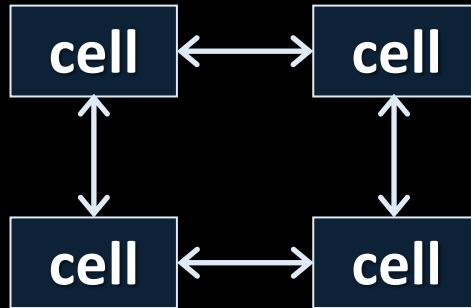
```
<table>
  <tr>
    <td>Contact:</td>
    <td>
      <table>
        <tr>
          <td>First Name</td>
          <td>Last Name</td>
        </tr>
      </table>
    </td>
  </tr>
</table>
```



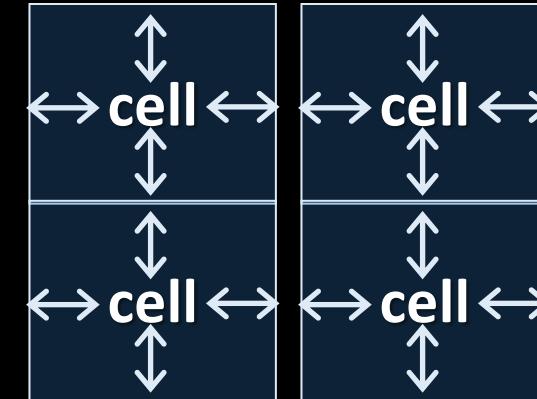
Cell Spacing and Padding

- Tables have two important attributes:

- ◆ **cellspacing**



- ◆ **cellpadding**



- ◆ **Defines the empty space between cells**

- ◆ **Defines the empty space around the cell content**

Cell Spacing and Padding – Example

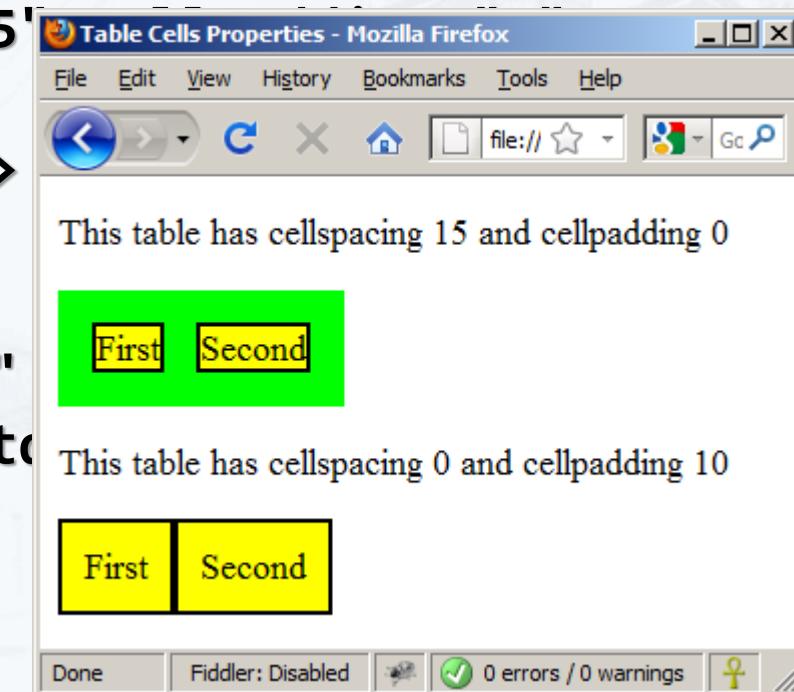
table-cells.html

```
<html>
  <head><title>Table Cells</title></head>
  <body>
    <table cellspacing="15" cellpadding="0"
border=5>
      <tr><td>First</td>
      <td>Second</td></tr>
    </table>
    <br/>
    <table cellspacing="0" cellpadding="10">
      <tr><td>First</td><td>Second</td></tr>
    </table>
  </body>
</html>
```

Cell Spacing and Padding – Example (2)

table-cells.html

```
<html>
  <head><title>Table Cells</title></head>
  <body>
    <table cellspacing="15">
      <tr><td>First</td>
      <td>Second</td></tr>
    </table>
    <br/>
    <table cellspacing="0">
      <tr><td>First</td><td>Second</td></tr>
    </table>
  </body>
</html>
```



Column and Row Span

- Table cells have two important attributes:
 - ◆ **colspan**
 - ◆ **rowspan**

colspan="1"

colspan="1"

cell[1,1]

cell[1,2]

cell[2,1]

colspan="2"

rowspan="2"

rowspan="1"

cell[1,1]

cell[1,2]

cell[2,1]

rowspan="1"

- ◆ **Defines how many columns the cell occupies**

- ◆ **Defines how many rows the cell occupies**

Column and Row Span – Example

table-colspan-rowspan.html

```
<table cellspacing="0">
  <tr class="1"><td>Cell[1,1]</td>
    <td colspan="2">Cell[2,1]</td></tr>
  <tr class="2"><td>Cell[1,2]</td>
    <td rowspan="2">Cell[2,2]</td>
    <td>Cell[3,2]</td></tr>
  <tr class="3"><td>Cell[1,3]</td>
    <td>Cell[2,3]</td></tr>
</table>
```

Column and Row Span –Example (2)

table-colspan-rowspan.html

```
<table cellspacing="0">
  <tr class="1"><td>Cell[1,1]</td>
    <td colspan="2">Cell[2,1]</td></tr>
  <tr class="2"><td>Cell[1,2]</td>
    <td rowspan="2">Cell[2,2]</td>
    <td>Cell[3,2]</td>
  <tr class="3">
    <td>Cell[1,3]</td>
    <td>Cell[2,3]</td>
</table>
```

Cell[1,1]	Cell[2,1]	
Cell[1,2]	Cell[2,2]	Cell[3,2]
Cell[1,3]		Cell[2,3]



HTML Forms

Entering User Data from a Web Page



A screenshot of Microsoft Internet Explorer version 6.0 displaying an HTML form titled "Art School Form - Microsoft Internet Explorer". The form includes fields for First Name, Last Name, Age (with options for 1-17 yrs and over 18 yrs), and a question about what the user would like to learn to work with (watercolors, acrylics, or pastels). A note at the bottom left says "Send me an application now!" and a note at the bottom right says "I am interested in art lessons because: [text area]".



A screenshot of Mozilla Firefox version 3.5 displaying a "Registration Form" page. The form has fields for User name, Password, Gender (Male or Female), and a checkbox for accepting terms. It also features "Register" and "Reset" buttons.



HTML Forms

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

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

- Example:

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

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

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

- 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

- 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.

HTML Forms – Example

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>
        <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.html (continued)

HTML Forms Example - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Academic information

Degree Master of Business Administration

Student ID

Geography
Mathematics

Classes attended English

Personal Details

First Name

Last Name

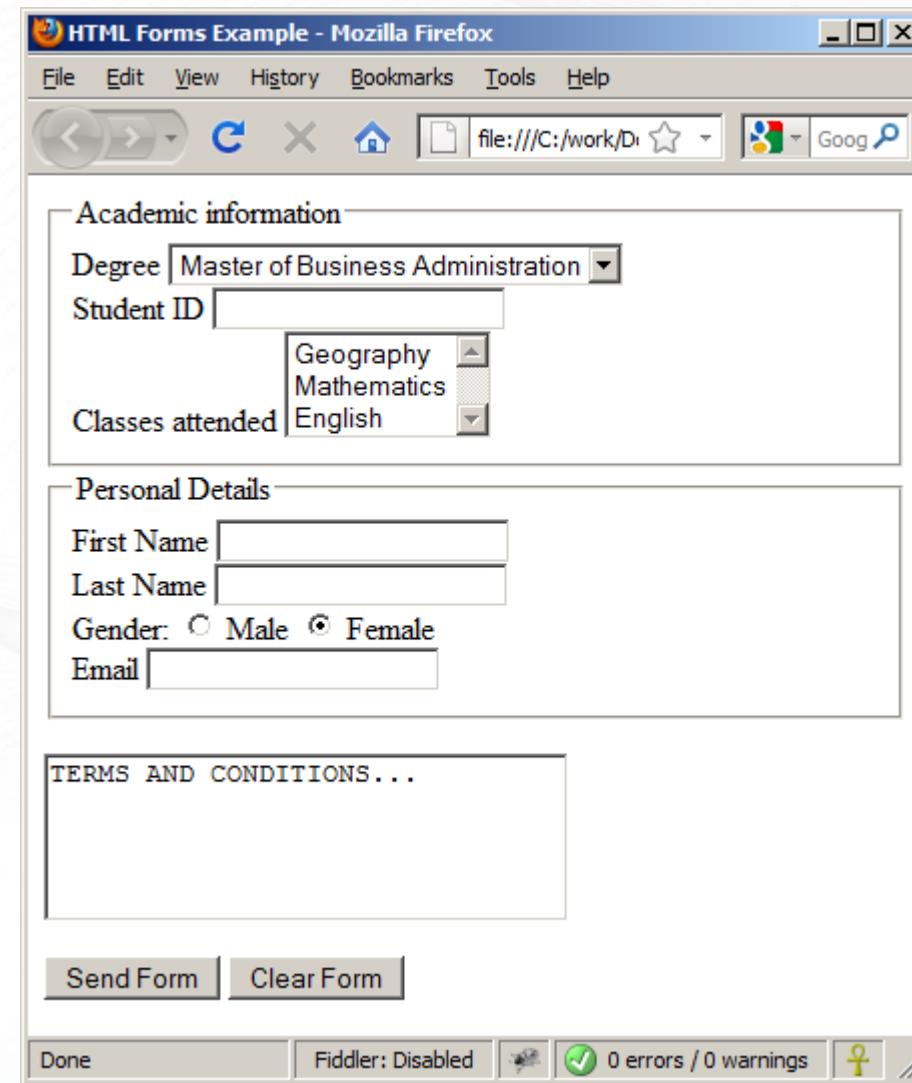
Gender: Male Female

Email

TERMS AND CONDITIONS...

Send Form Clear Form

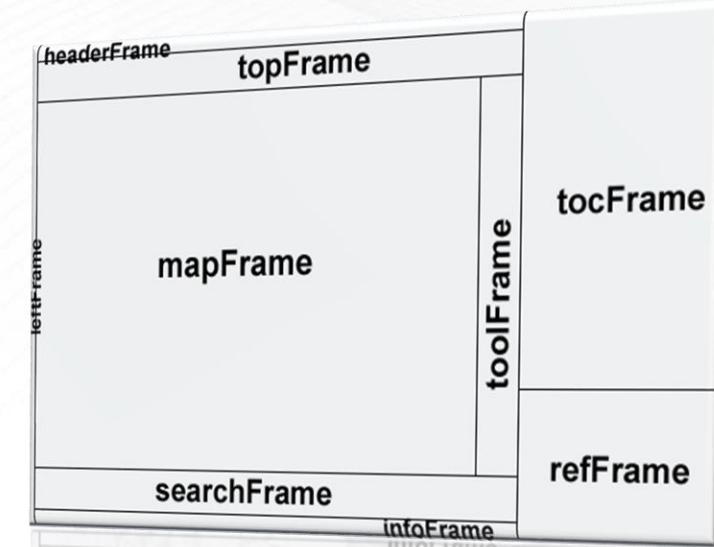
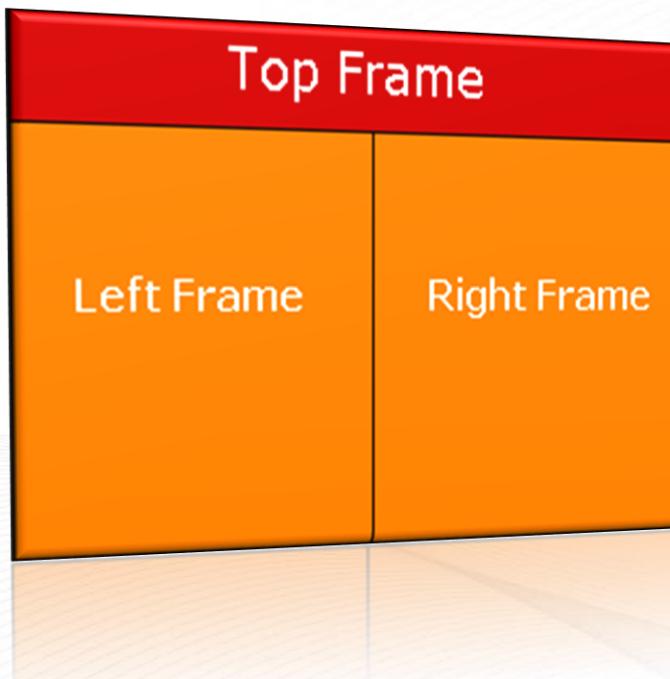
Done Fiddler: Disabled 0 errors / 0 warnings



TabIndex

- The tabindex HTML attribute controls the order in which form fields and hyperlinks are focused when repeatedly pressing the TAB key
 - tabindex="0" (zero) - "natural" order
 - If X > Y, then elements with tabindex="X" are iterated before elements with tabindex="Y"
 - Elements with negative tabindex are skipped, however, this is not defined in the standard

```
<input type="text" tabindex="10" />
```



HTML Frames

<frameset>, <frame> and <iframe>

HTML Frames

- Frames provide a way to show multiple HTML documents in a single Web page
- The page can be split into separate views (frames) horizontally and vertically
- Frames were popular in the early ages of HTML development, but now their usage is rejected
- Frames are not supported by all user agents (browsers, search engines, etc.)
 - A <noframes> element is used to provide content for non-compatible agents.

HTML Frames – Demo

frames.html

```
<html>

<head><title>Frames Example</title></head>

<frameset cols="180px, *, 150px">
  <frame src="left.html" />
  <frame src="middle.html" />
  <frame src="right.html" />
</frameset>

</html>
```

- ◆ Note the target attribute applied to the **<a>** elements in the left frame.

Inline Frames: <iframe>

- Inline frames provide a way to show one website inside another website:

iframe-demo.html

```
<iframe name="iframeGoogle" width="600" height="400"  
src="http://www.google.com" frameborder="yes"  
scrolling="yes"></iframe>
```