02 Introduction to HTML II

Introduction to HTML II

- All About Links
- Tables
- Forms
- Frames
- Workshop

All About Links

Creating Links

- The Links Tag <a>
  - Linking in the same folder or directory
  - For example

File to load when link is selected

Text that will be highlighted

```
<a href="menu.html">Go Back to Main Menu</a>
```

Opening Tag

Closing Tag

Note **href: hypertext reference**

All About Links

Linking Local Pages Using Relative and Absolute Links

- Relative Pathnames
  - Relative pathnames point to file based on their locations relative to the current file
  - Simplest form is to have pages in the same folder
  - Directory or folder names are separated by forward slashes (/)
  - Using two dots (..) to refer to the directory or folder above the current one

Pathname	Means
href="file.html"	file.html is located in the current directory.
href="files/file.html"	file.html is located in the directory called ***files*** (and the file directory is located in the current directory).
href="files/morefiles/file.html"	file.html is located in the ***morefiles*** directory, which is located in the ***files*** directory, which is located in the current directory.
href="../file.html"	file.html is located in the directory one level up from the current directory.

All About Links

Linking Local Pages Using Relative and Absolute Links

- Absolute Pathnames
  - Absolute pathnames point to file based on their absolute locations on the file system
  - Pointing to the pages by starting at the top level of your directory hierarchy
  - Always begin with a slash (/)

Pathname	Means
href="/d|/files/html/file.html"	file.html is located on the D: disk in the directory ***files/html*** (DOS systems).
href="/Hard Disk 1/HTML Files/file.html"	file.html is located on the disk ***Hard Disk 1***, in the folder ***HTML Files*** (typically a Macintosh).

All About Links

Linking to Other Document on the Web

- Linking to a remote pages
  - Remote pages are pages contained somewhere on the Web
  - For example

URL of Remote File

```
<a href="http://www.yahoo.com">Yahoo Website</a>
```

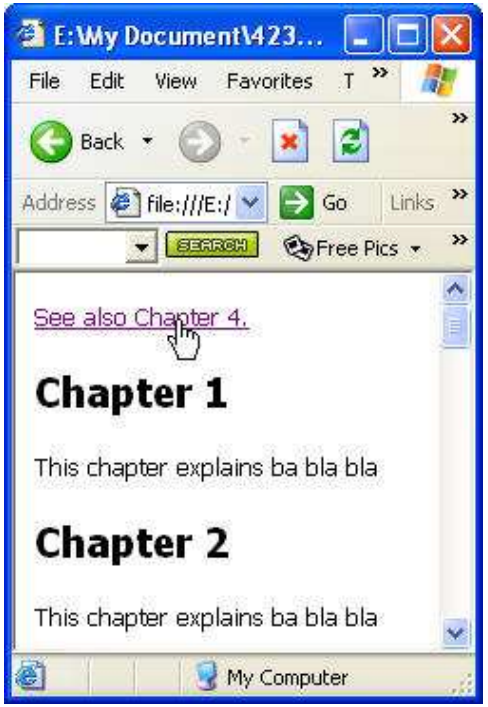
Opening Tag — Closing Tag

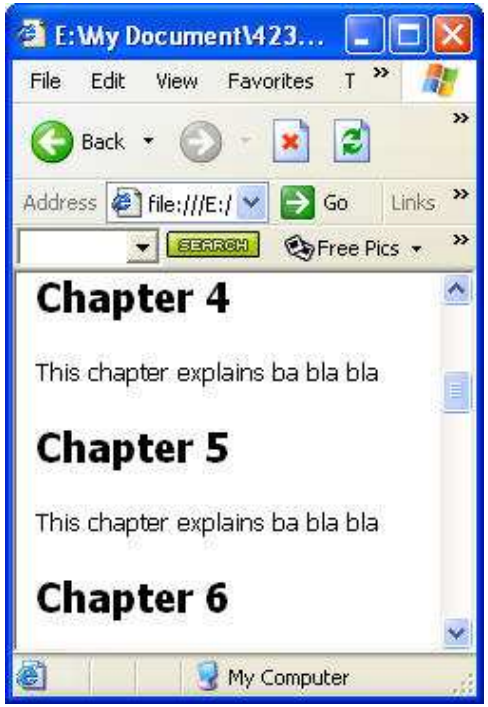
All About Links

Linking to Specific Place Within Documents

- Using the <a> with an attribute called *name*
  - For example

```
<html>
<body>
<p><a href="#C4">See also Chapter4.</a></p>
<p><h2>Chapter 1</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 2</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 3</h2>
<p>This chapter explains ba bla bla</p>
<a name="C4"><h2>Chapter 4</h2></a>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 5</h2>
<p>This chapter explains ba bla bla</p>
…
```



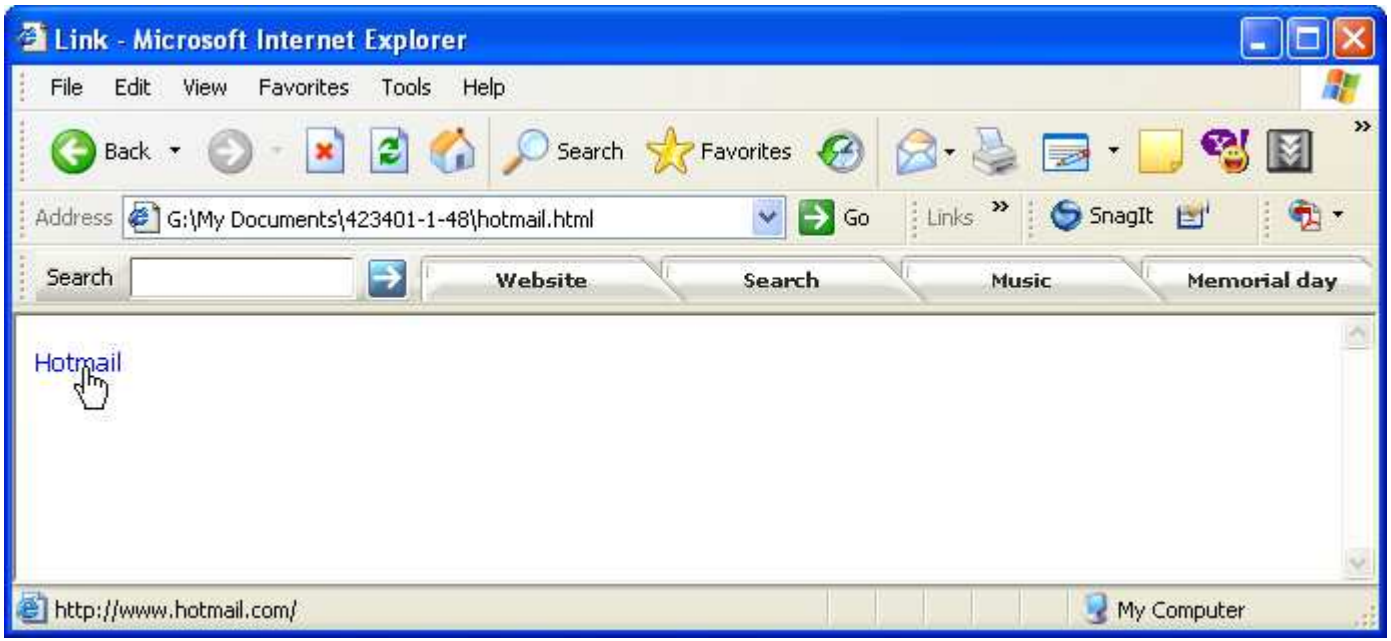


All About Links

Links That Are Not Underlined

- To remove the underlines from all links, put this code in the **<head>** section of the document

```
<STYLE TYPE="text/css">
<!-- A {text-decoration:none} -->
</STYLE>
```



TABLEs Introduction

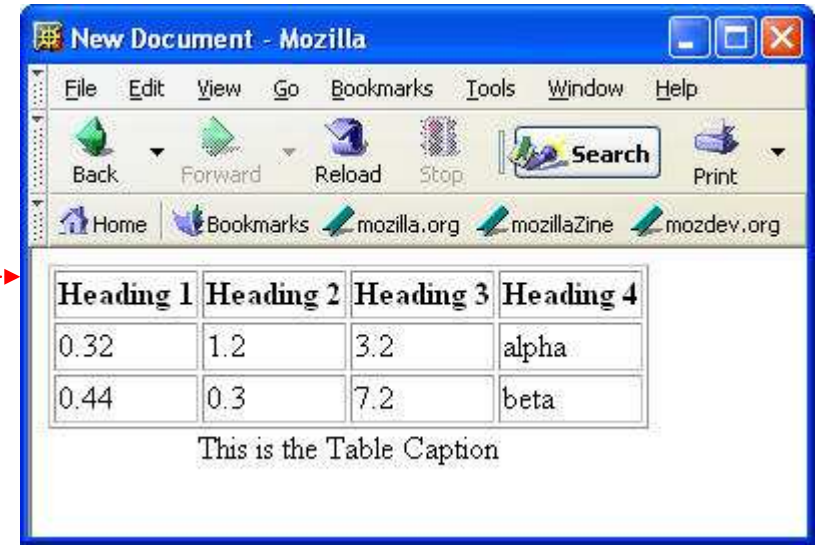
- Table Element
  - HTML Tables are contained within a TABLE element
  - Using attribute to define properties of it
  - **TR** defines a “Table Row” ,**TD** defines a “Table Data”, and **TH** defines a “Table Head”.
  - The number of TR elements defines the number of rows
  - The number of TD or TH elements in a given row defines the number of columns in the table.
  - TR, TD, and TH should always have end tags
  - A default TABLE has no borders
  - By default, a table is flush with the left margin

Tables

TABLEs Introduction (cont.)

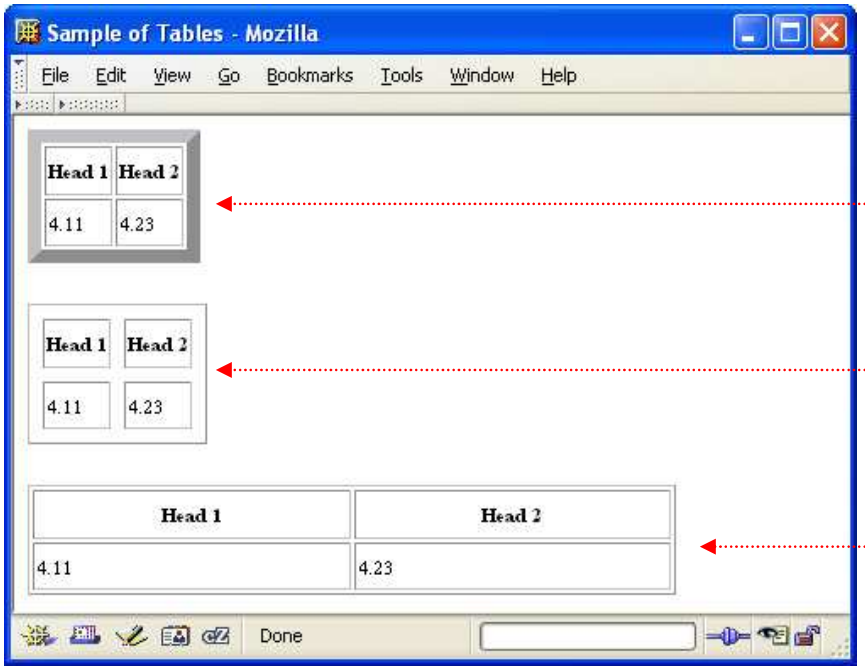
- For example

```
<table border="1">
  <caption align="bottom">This is the Table Caption</caption>
  <tr> <th>Heading 1</th><th>Heading 2</th><th>Heading 3</th><th>Heading 4</th></tr>
  <tr> <td> 0.32 </td> <td> 1.2 </td> <td> 3.2 </td> <td> alpha </td> </tr>
  <tr> <td> 0.44 </td> <td> 0.3 </td> <td> 7.2 </td> <td> beta </td> </tr>
</table>
```



Mozilla TABLE Element Attributes

- Table Attribute Extensions
  - Here are some simple tables, showing how the WIDTH, CELLSPACING, CELLPADDING and BORDER attributes work:




```
<table border="8">
<tr><th>Head 1</th><th>Head 2</th></tr>
<tr><td>4.11</td><td>4.23</td></tr>
</table>
```

```
<table border="1" cellspacing="8">
<tr><th>Head 1</th><th>Head 2</th></tr>
<tr><td>4.11</td><td>4.23</td></tr>
</table>
```

```
<table border="1" width="80%">
<tr><th>Head 1</th><th>Head 2</th></tr>
<tr><td>4.11</td><td>4.23</td></tr>
</table>
```

```
CELLSPACING: controls the space between table cells (pixel).
CELLPADDING: sets the amount of space between the contents of the cell and the cell wall.
             The default is 1 (pixel).
```

TR - Table Rows and Cell Alignment

- The TR Element and Its Attributes
  - The TR Element defines a single table row
  - The TR element can take the attributes ALIGN and VALIGN
    - ALIGN, which defines the **horizontal** alignment properties, can take the values "left", "center" and "right“
    - VALIGN, which defines the **vertical** alignment properties of the cells, can take the possible values "top", "middle", "bottom".
  - The default values are **ALIGN="left"**, and **VALIGN="middle“**

Tables

TR - Table Rows and Cell Alignment

- For example:

```
<table border="1" width="80%">
  <tr>                 <th>head 1<br>bloop</th><th>head 2</th></tr>
  <tr align="left">    <th>head 1<br>bloop</th><th>head 2</th></tr>
  <tr valign="bottom"><th>head 1<br>bloop</th><th>head 2</th></tr>
  <tr>                 <th>head 1<br>bloop</th><th>head 2</th></tr>
  <tr align="center"> <td>4.11<br>aaaa</td><td>4.23</td></tr>
  <tr align="right">  <td>4.11<br>aaaa</td><td>4.23</td></tr>
  <tr valign="top">   <td>4.11<br>aaaa</td><td>4.23</td></tr>
  <tr valign="bottom"><td>4.11<br>aaaa</td><td>4.23</td></tr>
</table>
```

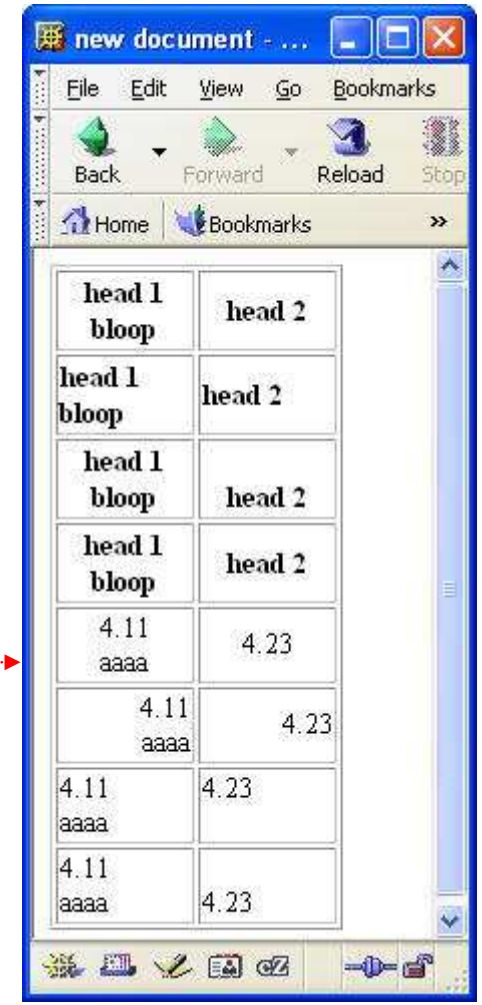


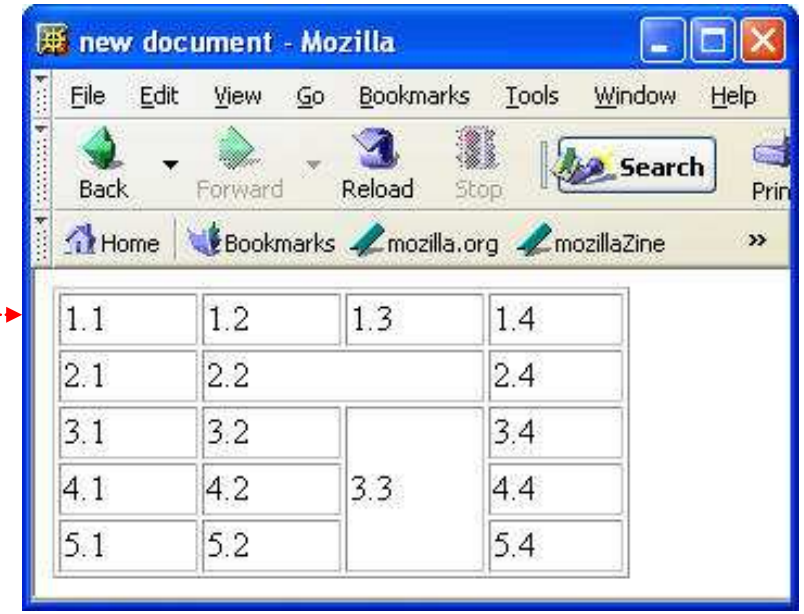
Table Cell COLSPAN and ROWSPAN Attributes

- The COLSPAN and ROWSPAN Attributes to TD and TH
  - COLSPAN indicates how many columns (counting to the right) are occupied by the cell.
  - ROWSPAN indicated how many rows (hanging down) the cell "spans".

Table Cell COLSPAN and ROWSPAN Attributes

- For example:

```
<table border=1 width=80%>
  <tr> <td>1.1</td><td>1.2</td><td>1.3</td><td>1.4</td></tr>
  <tr> <td>2.1</td><td colspan=2>2.2</td><td>2.4</td></tr>
  <tr> <td>3.1</td><td>3.2</td><td rowspan=3>3.3</td><td>3.4</td></tr>
  <tr> <td>4.1</td><td>4.2</td><td>4.4</td></tr>
  <tr> <td>5.1</td><td>5.2</td><td>5.4</td></tr>
</table>
```



Tables

TABLEs within TABLEs

- TABLES can contain TABLES
  - More precise structuring of table layout, and of table borders

```
<table  width=80%>
  <tr><td colspan=3 align="center"><h2>This is an overall title</h2></td></tr>
  <tr><td align="center" valign="center">
        <table border=4 cellspacing=8>
           <tr><td colspan=2 align="center">subheading one</td></tr>
           <tr><td>item 1</td><td>item 2</td></tr>
        </table>
      </td>
      <td width=20%></td>
      <td align="center" valign="center">
        <table border=4 cellspacing=8>
           <tr><td colspan=2 align="center">subheading two</td></tr>
           <tr><td>item 3</td><td>item 4</td></tr>
        </table>
      </td>
  </tr>
</table>
```

Tables

TABLEs within TABLEs

- TABLES can contain TABLES
  - An output from previous slide

Forms

Beginning/Ending Form Tags

- Each form must have a beginning and ending tag.
- Forms may not be nested, however each HTML document may have multiple forms in it.
- For example:

```
<form method=post
action="http://www.2kweb.net/cgibin/formmail.cgi">
</form>
```

- The METHOD Parameter determines how the data will be sent to the cgi program that will process the form.
- The possible methods are GET or POST.

Text Entry Fields

- Allow the user to enter non formatted, and/or non validated text.
- For instance, if you we're doing a survey, and you wanted to give the Web Surfer the option of entering his or her name, you could use a text entry field.
- For example:

```
<form method=post
  action="http://www.2kweb.net/cgi-bin/formmail.cgi">
  <input type="text" name="persons-name" size="40" maxlength="40">
  <input type="password" name="password" size="10" maxlength="10">
</form>
```

- The tag is the “input” tag.
- The “type” parameter identifies the type of input field.

Forms

Text Area Fields

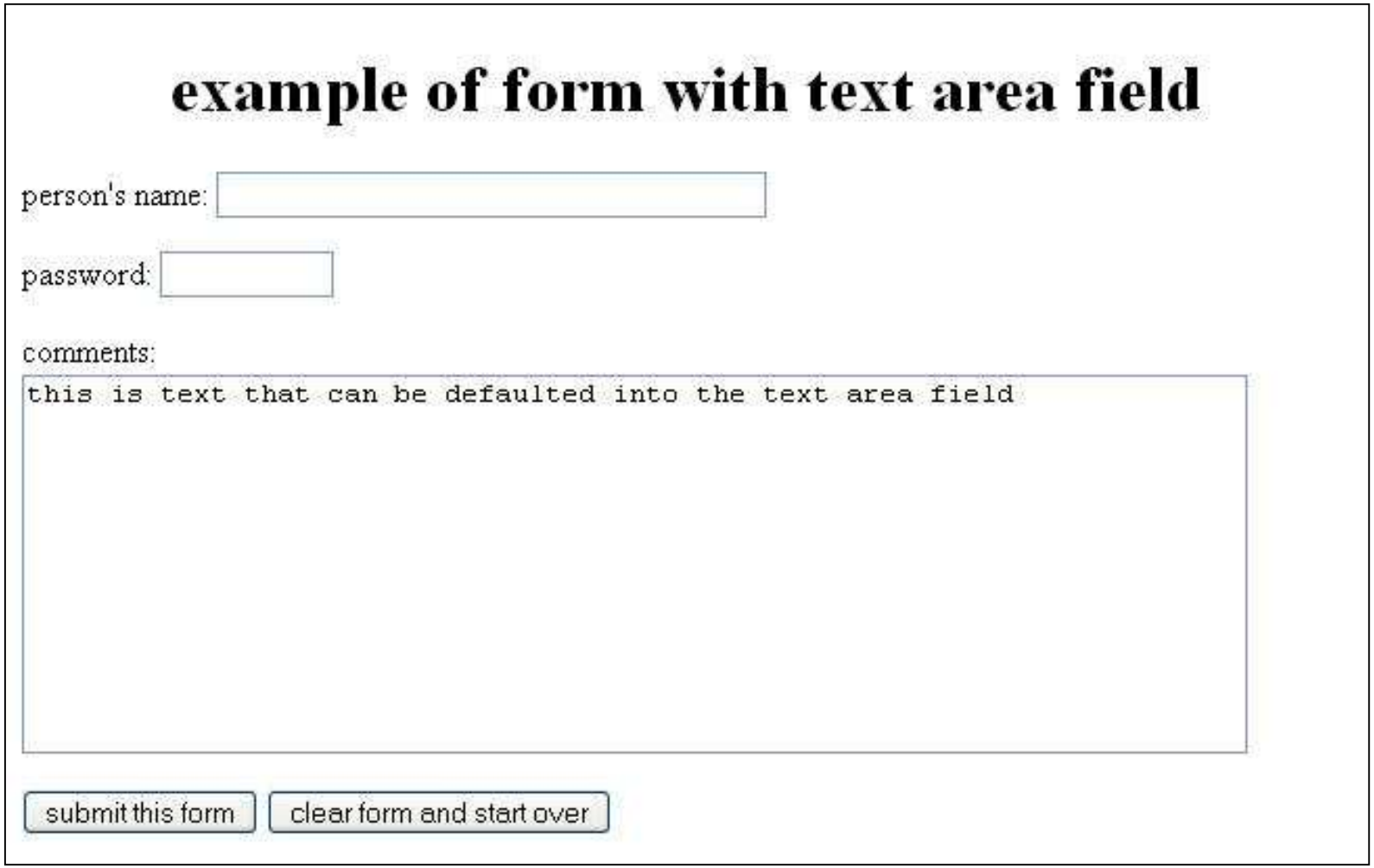
- Allows multiple lines of entry to be entered by the Web Surfer.
- Typical uses are to provide comments the Web surfer can enter.
- The data will be sent back to the CGI program as one field identified by the NAME parameter

```
<p align=center><center><h1>example of form with text area field</h1></center></p>
<form method=post action="http://www.2kweb.net/cgi-bin/formmail.cgi">
     <p>person's name:
          <input type="text" name="persons-name" size="40" maxlength="40"></p>
     <p>password:
          <input type="password" name="password" size="10" maxlength="10"></p>
<p>comments: <br>
          <textarea name="comments" rows="10" cols="70" wrap="virtual">
this is text that can be defaulted into the text area field
          </textarea></p>
     <p>
          <input type="submit" name="request" value="submit this form">
          <input type="reset" name="clear" value="clear form and start over">
     </p>
</form>
```

wrap=off: Long lines are not wrapped in the textarea, nor are they wrapped in the data sent to the processing script.
wrap=soft or wrap=virtual: Long lines are wrapped in the textarea, but are not wrapped in the data sent to the processing script.
wrap=hard or wrap=physical: Long lines are wrapped in the textarea, as well as in the data sent to the processing script.

Text Area Fields (cont.)

- Output from previous slide



Forms

Checkboxes

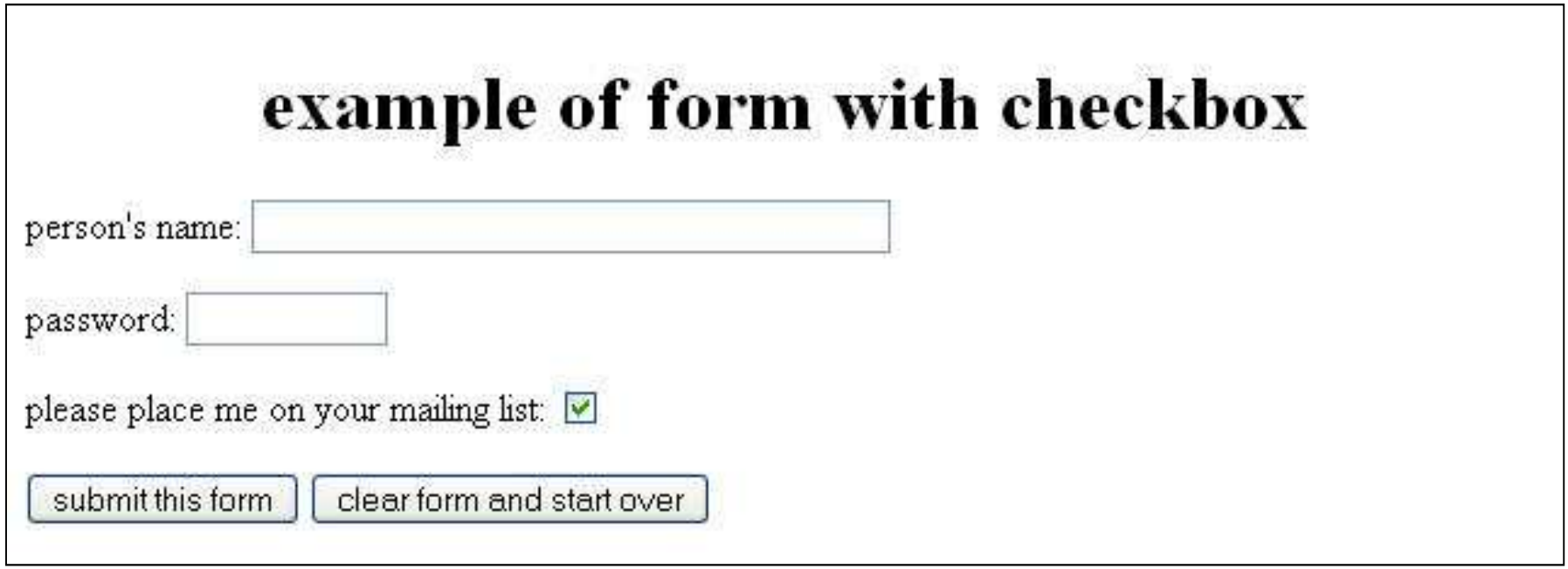
- Allow the web user to click on a box to toggle a value to either yes or no.

```
<p align=center><center><h1>example of form with checkbox</h1></center></p>
<form method=post action="http://www.2kweb.net/cgi-bin/formmail.cgi">
     <p>person's name:
          <input type="text" name="persons-name" size="40" maxlength="40">
    </p>
     <p>password:
          <input type="password" name="password" size="10" maxlength="10">
     </p>
     <p>please place me on your mailing list:
          <input type="checkbox" name="mailing-list" value="yes" checked>
     </p>
     <p>
          <input type="submit" name="request" value="submit this form">
          <input type="reset" name="clear" value="clear form and start
over">
     </p>
</form>
```

Forms

Checkboxes (cont.)

- Output from previous slide



Radio Buttons

- Radio buttons provide a mutually exclusive selection value.
- Only one button may be pressed.
- Pressing an alternate button in a Radio Button group will automatically remove the previous selection.
- To identify a group of radio buttons, all the radio buttons must be next to each other, and have the same value identified in the NAME parameter.

Forms

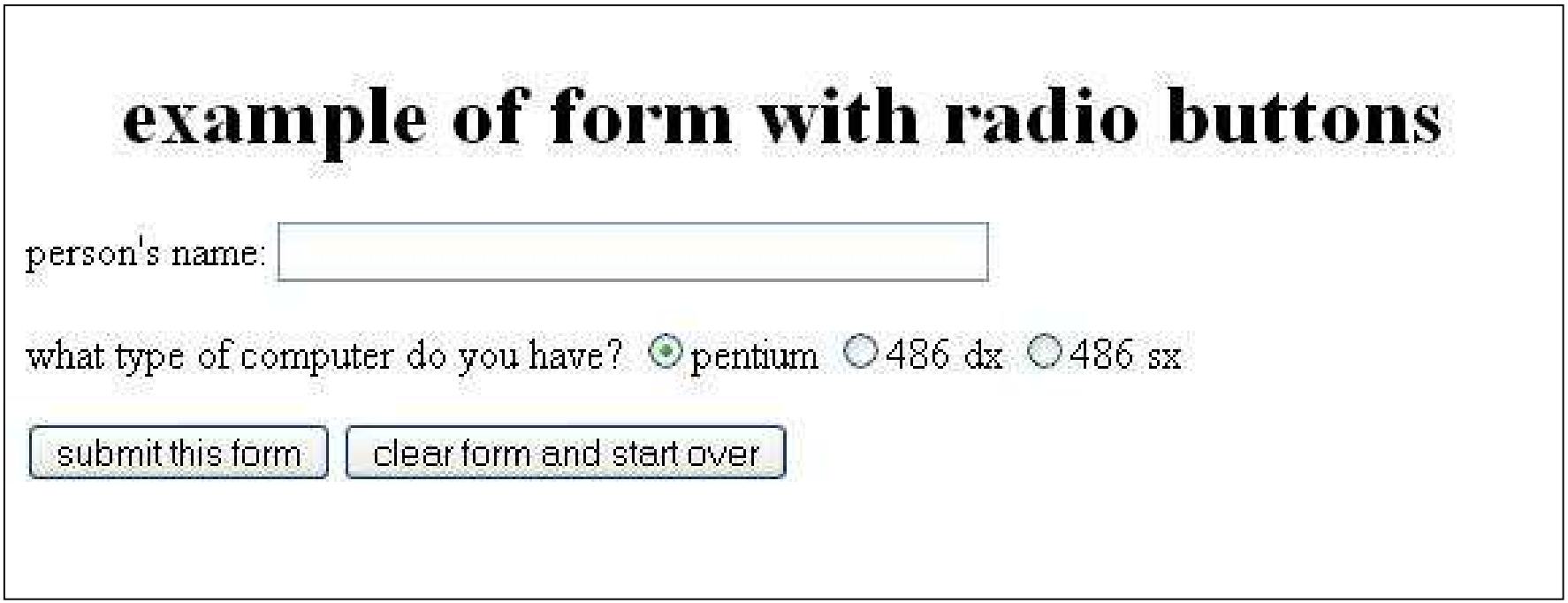
Radio Buttons (cont.)

- For example:.

```
<p align=center>
     <center>
          <h1>example of form with radio buttons</h1>
     </center>
</p>
<form method=post action="http://www.2kweb.net/cgi-bin/formmail.cgi">
     <p>person's name:
          <input type="text" name="persons-name" size="40" maxlength="40">
     </p>
     <p>what type of computer do you have?
          <input type="radio" name="computer-type" value="pentium" checked>pentium
          <input type="radio" name="computer-type" value="486dx">486 dx
          <input type="radio" name="computer-type" value="486sx">486 sx
     </p>
     <p>
          <input type="submit" name="request" value="submit this form">
          <input type="reset" name="clear" value="clear form and start over">
     </p>
</form>
```

Radio Buttons (cont.)

- Output from previous slide



Forms

Combo Boxes

- Provide an efficient way for the Web Surfer to choose a value from a list of valid values.

```
<p align=center><center><h1>example of form with a combo box</h1></center></p>
<form method=post action="http://www.2kweb.net/cgi-bin/formmail.cgi">
     <p>person's name:
          <input type="text" name="persons-name" size="40" maxlength="40"></p>
     <p>password:
          <input type="password" name="password" size="10" maxlength="10"></p>
     <p>please place me on your mailing list:
          <input type="checkbox" name="mailing-list" value="yes" checked></p>
     <p>what country do you live in?
          <select name="country">
               <option value="usa">united states
               <option value="ca">canada
          </select></p>
     <p>
          <input type="submit" name="request" value="submit this form">
          <input type="reset" name="clear" value="clear form and start over"></p>
</form>
```

Combo Boxes (cont.)

- Output from previous slide

Forms

Submit and Reset Buttons

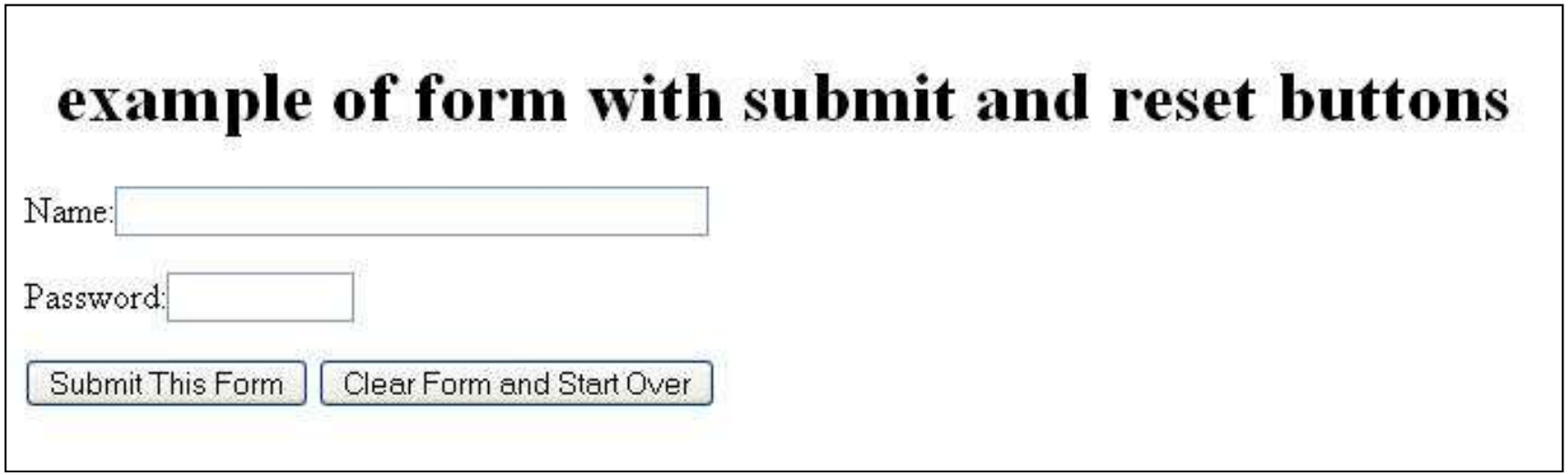
- If a Form has only one text entry field, a submit button is not required, simply pressing the enter key will submit the form to the Program identified in the beginning Form tag.
- If there are more fields, a Submit Button is required.

```
<p align=center><center>
   <h1>example of form with submit and reset buttons</h1></center></p>
<form method=post action="http://www.2kweb.net/cgi-bin/formmail.cgi">
   <p>Name:<input type="text" name="persons-name" size="40" maxlength="40"></p>
   <p>Password:<input type="password" name="password" size="10" maxlength="10"></p>
   <p><input type="submit" name="request" value="Submit This Form">
   <input type="reset" name="clear" value="Clear Form and Start Over">
</form>
```

Submit and Reset Buttons (cont.)

- Output from previous slide

```
<p align=center><center>
   <h1>example of form with submit and reset buttons</h1></center></p>
<form method=post action="http://www.2kweb.net/cgi-bin/formmail.cgi">
   <p>Name:<input type="text" name="persons-name" size="40" maxlength="40"></p>
   <p>Password:<input type="password" name="password" size="10" maxlength="10"></p>
   <p><input type="submit" name="request" value="Submit This form">
   <input type="reset" name="clear" value="Clear Form and Start Over">
</form>
```



Frames

Introduction to Frame

- The best way to learn frames is to simply do them.
- The primary tag for creating frames is the <frameset> tag.
- The following is a frameset tag which is used to define a simple frame

```
<frameset cols="150,*">
</frameset>
```

- The above code will be divided into two frames, the first column is 150 pixels wide, and the second column will receive the balance of available browser window space (*).
- Within the <frameset> tag we need to communicate to the browser what the source HTML Files will be for the left frame and the right frame.

```
<frameset cols="150,*">
      <frame name="left-frame" src="left-frame.html">
      <frame name="right-frame" src="right-frame.html">
</frameset>
```

A Sample: Left/Right Frames

- The frames code for a left and right frame consists of three HTML files.
  - 1. The control HTML file which also contains the HTML for the web page to support browsers that do not support frames.
  - 2. The source for the left frame and
  - 3. The source for the right frame.

Frames

A Sample: Left/Right Frames (cont.)

- Controller HTML File:

```
<html>
<head>
<title>Frames Control Web Page</title>
</head>
<frameset cols="150,*">
  <frame name="left-frame" src="left-frame.html">
  <frame name="right-frame" src="right-frame.html">
  <noframes>
    <body>
    <p>This page uses frames, but your browser doesn't support them.</p>
    </body>
  </noframes>
</frameset>
</html>
```

Frames

A Sample: Left/Right Frames (cont.)

- Left Frame HTML File (Save this file named left-frame.html):

```
<html>
  <head>
    <title>Left Frame Web Page</title>
    <base target="right-frame">
  </head>
  <body>
    <p>This web page is the left frame</p>
  </body>
</html>
```

- Right Frame HTML File (Save this file named right-frame.html)

```
<html>
  <head>
    <title>Right Frame Web Page</title>
    <base target="right-frame">
  </head>
  <body>
    <p>This web page is the right frame.</p>
  </body>
</html>
```

Attribute Value for "target="

_blank Opens the link in a new window or tab
_self Default. Opens the link in the same frame as it was clicked
_parent Opens the link in the parent frame
_top Opens the link in the full body of the window
framename Opens the link in a named frame

Workshop

HTML Tags and Attributes

- Laboratory 2
  - Page 38 (6-13)