

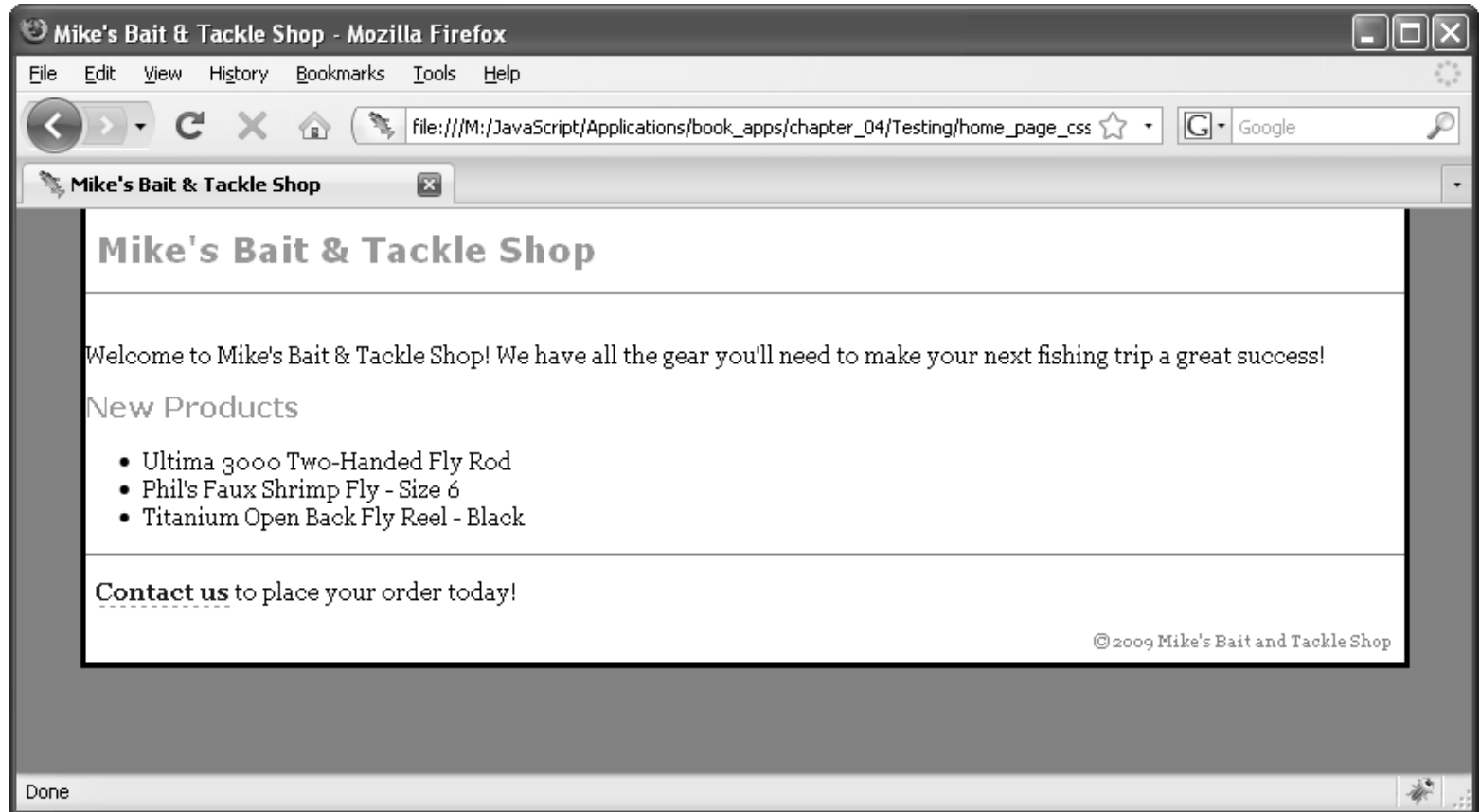
Chapter 4

A crash course in XHTML

An XHTML page that doesn't have a CSS file



The same page with a CSS file for formatting



The XHTML for the web page

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

<html xmlns="http://www.w3.org/1999/xhtml">

<!-- the head section -->
<head>
    <title>Mike's Bait & Tackle Shop</title>
    <meta http-equiv="content-type" content="text/html;
        charset=utf-8" />
    <link rel="shortcut icon" href="site.ico"
        type="image/ico" />
</head>

<!-- the body section -->
<body>
<div id="page">
    <div id="header">
        <h1>Mike's Bait & Tackle Shop</h1>
    </div>
```

The XHTML for the web page (continued)

```
<div id="main">
  <p>Welcome to Mike's Bait & Tackle Shop!
    We have all the gear you'll need to make your
    next fishing trip a great success!</p>
  <h2>New Products</h2>
  <ul>
    <li>Ultima 3000 Two-Handed Fly Rod</li>
    <li>Phil's Faux Shrimp Fly - Size 6</li>
    <li>Titanium Open Back Fly Reel - Black</li>
  </ul>
</div>
```

The XHTML for the web page (continued)

```
<div id="footer">
  <p class="contact">
    <a href="contact.html">Contact us</a>
    to place your order today!</p>
  <p class="copyright">&copy;
    <script type="text/javascript">
      var today = new Date();
      document.writeln( today.getFullYear() );
    </script>
    Mike's Bait and Tackle Shop</p>
</div>
</div>
</body>
</html>
```

The structure of a 1.0 Transitional document

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
    Transitional//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>Mike's Bait and Tackle Shop</title>
  </head>
  <body>
    <!-- The body tags go here -->
  </body>
</html>
```

An XHTML comment

```
<!-- This is a comment so it's ignored by the  
web browser. -->
```


Tags that have both opening and closing tags

```
<p>This text is within the opening and closing tags.</p>
```

Self-closing tags

```
<br />
```

```

```

A tag with 3 attributes

```
<input type="text" name="firstName" id="firstName" />
```

A tag with 3 attributes plus a Boolean attribute

```
<input type="checkbox" name="mailList" id="mailList"  
checked="checked" />
```

Correct and incorrect nesting of tags

A tag with correct nesting

```
<b>This text <i>demonstrates correct</i></b><i>nesting  
of tags.</i>
```

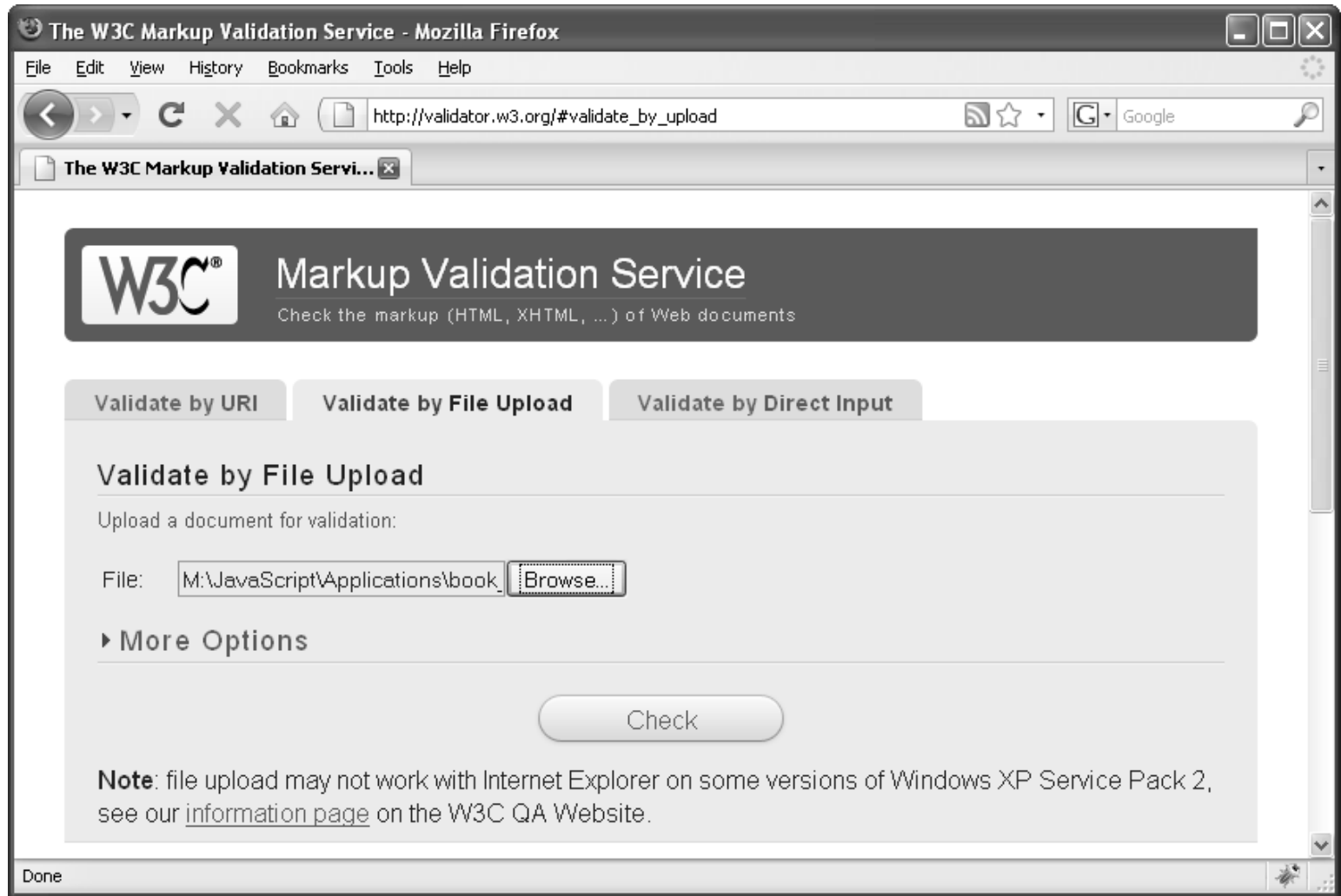
A tag with incorrect nesting

```
<b>This text <i>demonstrates incorrect</b> nesting  
of tags.</i>
```

The syntax rules for XHTML

- The document must begin with a `<!DOCTYPE>` declaration.
- The first tag must be the `<html>` tag.
- Tag names and attributes must be lowercase.
- All attributes must have values and those values must be in quotes.
- When you nest tags, you must close the inner tag before you close the outer tag.
- Extra whitespace is ignored.

The home page for the W3C validator



How to mark JavaScript so it won't cause errors

```
<p class="copyright">&copy;  
  <script type="text/javascript">  
    //<br/>    var today = new Date();<br/>    document.writeln( "&lt;b&gt;"<br/>      + today.getFullYear() + "&lt;/b&gt;" );<br/>    //]]&gt;<br/>  &lt;/script&gt;<br/>Mike's Bait and Tackle Shop&lt;/p&gt;</pre></div><div data-bbox="443 954 916 981" data-label="Page-Footer"><p>Murach's JavaScript, C4 © 2009, Mike Murach &amp; Associates, Inc.</p></div><div data-bbox="951 936 989 980" data-label="Page-Footer"><p>Slide<br/>13</p></div>
```

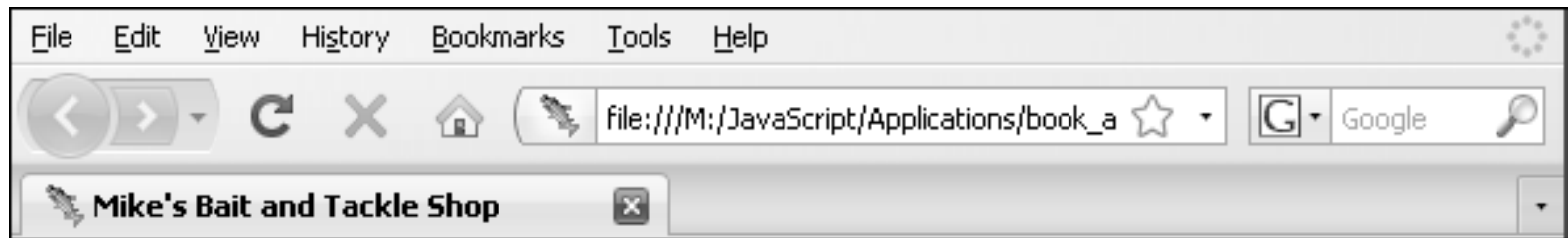
The attributes of the <link> tag

Attribute	Description
href	The URL of the resource being linked to the web page.
rel	The relationship of the resource being linked to the web page.
type	The media type of the resource being linked.

The XHTML for a head section

```
<head>  
  <title>Mike's Bait and Tackle Shop</title>  
  <meta name="author" content="Ray Harris" />  
  <meta http-equiv="content-type" content="text/html;  
    charset=utf-8" />  
  <meta http-equiv="refresh" content="30" />  
  <link rel="shortcut icon" href="site.ico"  
    type="image/ico" />  
  <link rel="stylesheet" href="main.css" type="text/css" />  
  <script type="text/javascript" src="common.js"></script>  
</head>
```

A browser that shows the title and the icon



Core XHTML attributes

Attribute	Description
id	A unique identifier for an element.
class	One or more classes that apply to an element.
title	Additional information about the element.

XHTML that uses the core attributes

```
<div id="main">
  <h1>Mike's Bait and Tackle Shop</h1>
  <p class="first">Welcome to Mike's Bait & Tackle
    Shop!</p>
  <form action="subscribe.php" method="post">
    <p>Please enter your e-mail address to subscribe
      to our newsletter.</p>
    <p>E-Mail:
      <input type="text" name="email"
        id="email"
        title="Enter e-mail here." /></p>
    <p><input type="submit" value="Subscribe"/></p>
  </form>
</div>
<div id="footer">
  <p class="copyright">Copyright 2009.</p>
</div>
```

The XHTML in a web browser

Mike's Bait and Tackle Shop

Welcome to Mike's Bait & Tackle Shop!

Please enter your e-mail address to subscribe to our newsletter.

E-Mail:

Copyright 2009.

Common block tags

Tag	Description
<code><div></code>	Creates an unformatted block of text.
<code><h1></code>	Creates a level-1 heading displayed as 200%, bold text.
<code><h2></code>	Creates a level-2 heading displayed as 150%, bold text.
<code><h3></code>	Creates a level-3 heading displayed as 117%, bold text.
<code><p></code>	Creates a paragraph of text with a blank line after it.

Examples of block tags

```
<div id="main">  
  <h1>This is an h1 tag.</h1>  
  <p>This is a p tag.</p>  
  <h2>This is an h2 tag.</h2>  
  <p>This is a p tag.</p>  
</div>  
<div id="footer">  
  <p>This is a p tag in the footer.</p>  
</div>
```

The block tags in a web browser

This is an h1 tag.

This is a p tag.

This is an h2 tag.

This is a p tag.

This is a p tag in the footer.

Inline tags for formatting text

Tag	Description
 	Starts a new line of text.
<i>	Text displayed in italics.
	Text displayed in bold.
	Emphasized text in italics.
	Strong text in bold.
<code>	Programming code displayed in a monospaced font.
<sub>	Subscripted text.
<sup>	Superscripted text.
<big>	Text displayed larger than normal.
<small>	Text displayed smaller than normal.
	Creates an unformatted group of text that can be styled by CSS.

Examples of inline tags that format text

<p>Text that breaks
 across two lines.</p>

<p>Text formatted in <i>italics</i> and bold.</p>

<p>Text that uses the em tag for italics and the strong tag for boldfacing.</p>

<p>Text that uses <code>the code tag</code> to display a monospaced font.</p>

<p>Text that uses the sub tag₁ and the sup tag³.</p>

<p>Text that uses the <big>big tag</big>, and <small>the small tag</small>.</p>

<p>Text that uses the span tag to identify a book title.</p>

The inline tags in a web browser

Text that breaks
across two lines.

Text formatted in *italics* and **bold**.

Text that uses *the em tag* for italics and **the strong tag** for boldfacing.

Text that uses the `code` tag to display a monospaced font.

Text that uses the sub tag₁ and the sup tag³.

Text that uses the big tag, and the small tag.

Text that uses the span tag to identify a book title.

Tags that create lists

Tag	Description
<code></code>	Creates an unordered list.
<code></code>	Creates an ordered list.
<code></code>	Creates a list item for an unordered or ordered list.
<code><dl></code>	Creates a definition list. It contains pairs of <code><dt></code> and <code><dd></code> tags.
<code><dt></code>	Creates a term in a definition list.
<code><dd></code>	Creates a definition in a definition list that's indented.

Examples of list tags

```
<ul>  
  <li>Unordered List</li>  
  <li>Ordered List</li>  
  <li>Definition List</li>  
</ul>
```

```
<ol>  
  <li>XHTML</li>  
  <li>CSS</li>  
  <li>JavaScript</li>  
</ol>
```

```
<dl>  
  <dt>Local Area Network</dt>  
  <dd>A network of computers directly connected  
    to each other.</dd>  
  <dt>Wide Area Network</dt>  
  <dd>A network of LANs connected by routers.</dd>  
</dl>
```

The lists in a web browser

- Unordered List
- Ordered List
- Definition List

1. XHTML
2. CSS
3. JavaScript

Local Area Network

A network of computers directly connected to each other.

Wide Area Network

A network of LANs connected by routers.

Common XHTML character entities

Entity	Character
&	&
<	<
>	>
©	©
®	®
™	™
¢	¢
°	°
±	±
 	A non-breaking space that will always be displayed.

Examples of character entities

```
<h1>Mike's Bait & Tackle Shop</h1>
<p>Here is some sample HTML code:</p>
<p><code>&lt;h1&gt;Heading 1 Goes Here&lt;/h1&gt;</code></p>
<p>&nbsp;</p>
<p>&copy; 2008 Mike's Bait & Tackle Shop</p>
```

The character entities in a web browser

Mike's Bait & Tackle Shop

Here is some sample HTML code:

```
<h1>Heading 1 Goes Here</h1>
```

© 2008 Mike's Bait & Tackle Shop

Attributes of the <a> tag

Attribute	Description
href	Specifies the URL for a link.
target	Specifies where the destination document should be loaded.
name	Creates an anchor within a web page.

A relative link to another web page

```
<p>Go view our <a href=" ../products.html">product  
list</a>.</p>
```

An absolute link to another web page

```
<p>Read about the <a href="/services.html">services  
we provide</a>.</p>
```

A link to a web page on a different web site

```
<p>Search for our books on  
  <a href="http://www.amazon.com"  
    target="_blank">Amazon.com</a>.  
</p>
```

The <a> tags in a web browser

Go view our product list.

Read about the services we provide.

Search for our books on Amazon.

How to create and use an anchor within a page

How to create an anchor

```
<h3><a id="contact" name="contact">Contact Us</a></h3>
```

How to jump to an anchor on the same page

```
<p>For more information <a href="#contact">contact  
us</a>.</p>
```

How to jump to an anchor on a different page

```
<p>For more information  
<a href="info.html#contact">contact us</a>.</p>
```

Attributes of the tag

Attribute	Description
src	The URL of the image to display.
alt	Alternate text to display in place of the image. This text is read aloud by screen readers.
longdesc	A long description of the image.
height	The height to use for the image in pixels or a percentage.
width	The width to use for the image in pixels or a percentage.

An <image> tag

```
<p></p>
```

The image in a web browser

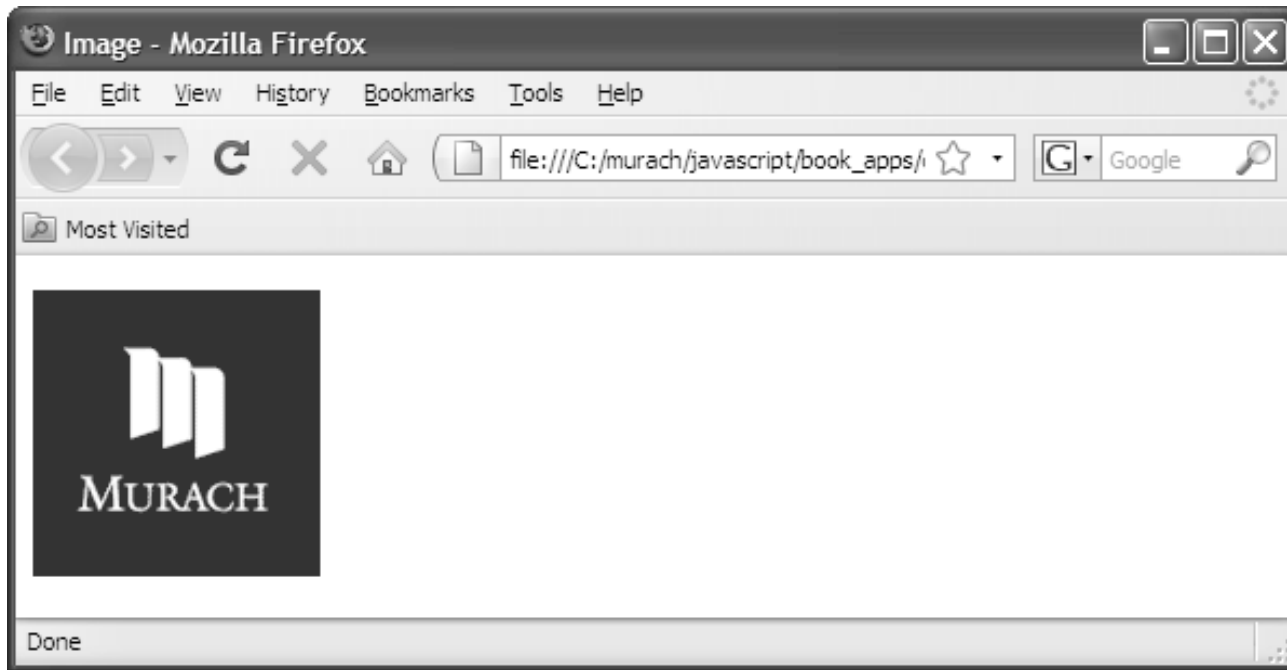


Image formats supported by most browsers

- GIF (Graphic Interchange Format)
- JPEG (Joint Photographic Experts Group)
- PNG (Portable Network Graphics)

The tags for working with tables

Tag	Description
<code><table></code>	Marks the start and end of a table.
<code><tr></code>	Marks the start and end of each row.
<code><th></code>	Marks the start and end of each heading cell within a row.
<code><td></code>	Marks the start and end of each data cell within a row.

Common attributes of the <table> tags

Attribute	Description
border	The thickness of the cell borders in pixels.
cellspacing	The space between table cells in pixels.
cellpadding	The padding between the cell borders and the contents of the cells.
width	The width of the table in pixels or a percentage.
summary	A text description of the contents of the table.

Common attributes of the <table> and <tr> tags

Attribute	Description
align	Controls the horizontal alignment of the content in the row.
valign	Controls the vertical alignment of the content in the row.

The tags for a simple table

```
<table border="1" cellspacing="1" cellpadding="3"
  summary="First Quarter Sales By Region">
  <tr align="center">
    <th>Region</th>
    <th>Jan</th>
    <th>Feb</th>
  </tr>
  <tr align="right">
    <th>West</th>
    <td>$15,684.34</td>
    <td>$18,467.86</td>
  </tr>
  <tr align="right">
    <th>Central</th>
    <td>$22,497.14</td>
    <td>$13,371.34</td>
  </tr>
</table>
```

The table in a web browser

Region	Jan	Feb
West	\$15,684.34	\$18,467.86
Central	\$22,497.14	\$13,371.34

Common attributes of the <th> and <td> tags

Attribute	Description
colspan	Causes a cell to span multiple columns.
rowspan	Causes a cell to span multiple rows.
align	Controls the horizontal alignment of the content of the cell.
valign	Controls the vertical alignment of the content of the cell.

A table with spanned columns and rows

```
<table border="1" cellspacing="1" cellpadding="5"
  summary="First Quarter Sales By Region">
  <tr align="center">
    <th colspan="2" rowspan="2">Sales</th>
    <th colspan="3">First Quarter</th>
  </tr>
  <tr align="center">
    <th>Jan</th>
    <th>Feb</th>
    <th>Mar</th>
  </tr>
  <tr align="right">
    <th rowspan="3">Regions</th>
    <th>West</th>
    <td>$15,684.34</td>
    <td>$18,467.86</td>
    <td>$17,379.67</td>
  </tr>
```

The table tags (continued)

```
<tr align="right">
  <th>Central</th>
  <td>$22,497.14</td>
  <td>$13,371.34</td>
  <td>$25,693.80</td>
</tr>
<tr align="right">
  <th>East</th>
  <td>$25,741.06</td>
  <td>$31,633.25</td>
  <td>$26,712.55</td>
</tr>
</table>
```

The table in a web browser

Sales		First Quarter		
		Jan	Feb	Mar
Regions	West	\$15,684.34	\$18,467.86	\$17,379.67
	Central	\$22,497.14	\$13,371.34	\$25,693.80
	East	\$25,741.06	\$31,633.25	\$26,712.55

Attributes of the <form> tag

Attribute	Description
action	Specifies the URL of the server-side script that will process the data in the form.
method	Specifies the HTTP method to use to submit the form data.

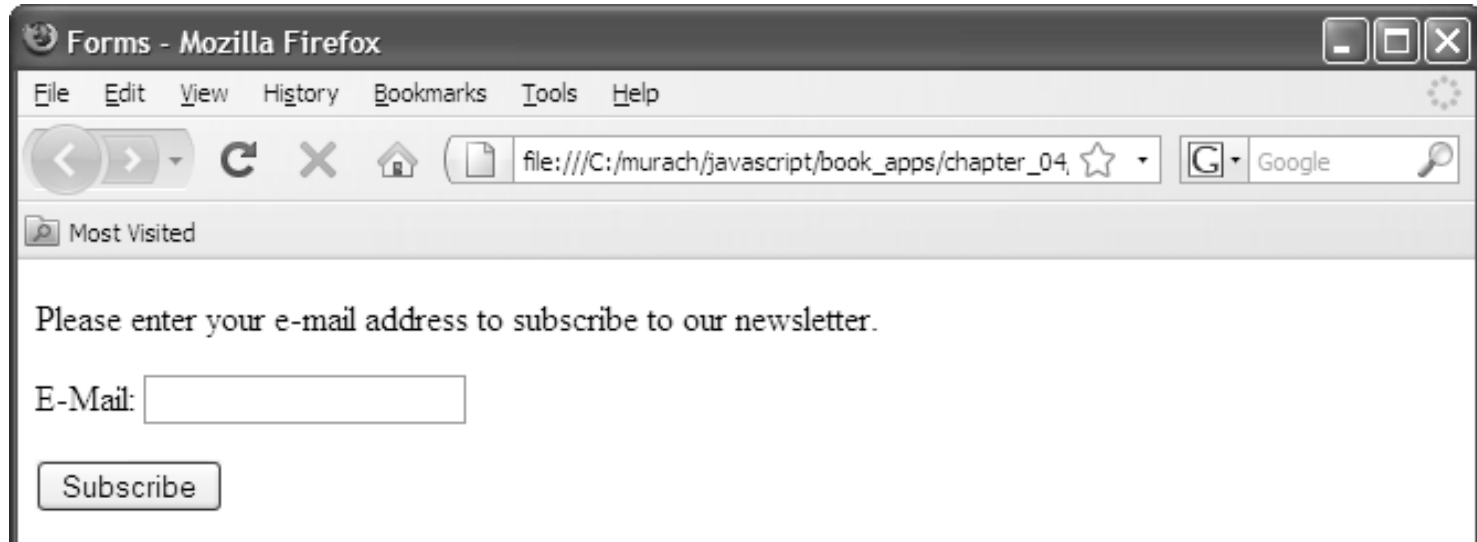
Attributes common to most control tags

Attribute	Description
name	The name for the field.
value	The value stored in the control.
disabled	A Boolean attribute that disables and grays out the input.
readonly	A Boolean attribute that prevents a user from changing the contents of the field.

The tags for a simple form

```
<form action="subscribe.php" method="post">
  <p>Please enter your e-mail address to subscribe
    to our newsletter.</p>
  <p><label for="email">E-Mail:</label>
    <input type="text" name="email" id="email" />
  </p>
  <p><input type="submit" value="Subscribe" /></p>
</form>
```

The form in a web browser



Attributes of the <button> tag and the <input> tag for buttons

Attribute	Description
type	The type of button.
value	The text to submit to the server when the button is clicked.

Examples of <button> tags

```
<p> <button type="submit" name="order" id="order"
      value="order">
      <b>Place Order</b>
</button>
<button type="submit" name="wish" id="wish"
      value="wish">
      <b>Save as Wish List</b>
</button> </p>
<p> <button type="button"
      id="validate"><i>Validate</i></button>
<button type="reset"><i>Reset</i></button> </p>
```

The <button> tags in a web browser



Examples of <input> tags for buttons

```
<p> <input type="submit" name="order" id="order"
      value="Place Order" />
      <input type="submit" name="wish" id="wish"
      value="Save as Wish List" /> </p>
<p> <input type="button" id="validate" value="Validate" />
      <input type="reset" /> </p>
```

The <input> tag buttons in a web browser



Types of form fields

- label
- text field
- hidden field
- password field
- radio button
- check box
- select list
- text area

Attributes of the <label> tag

Attribute	Description
for	The name of the field that the label is associated with.

Attributes of the <input> tag for text fields

Attribute	Description
type	The type of text field.
value	The default value for the field.
maxlength	The maximum number of characters that the user may enter in the field.
size	The width of the field in characters based on the average character width of the font.

The XHTML for labels and text fields

```
<label for="quantity">Quantity:</label>  
<input type="text" name="quantity"  
      id="quantity" value="1" /><br />
```

```
<label for="futureValue">Future Value:</label>  
<input type="text" name="futureValue" id="futureValue"  
      value="$16,256.32" disabled="disabled" /><br />
```

```
<label for="pinCode">Pin Code:</label>  
<input type="password" name="pinCode"  
      id="pinCode" maxlength="6"  
      value="sesame" /><br />
```

```
<input type="hidden" name="product_id"  
      id="product_id" value="Q36" />
```

The text fields in a web browser

Quantity:

Future Value:

Pin Code:

Attributes of the <input> tag for radio and checkbox fields

Attribute	Description
type	The type of field.
value	The text to submit to the server when the field is checked.
checked	A Boolean attribute that causes the field to be checked when the page is loaded.

The XHTML for radio buttons and check boxes

```
<label>Crust: </label><br />
<input type="radio" name="crust" id="crust1" value="thin" />
Thin Crust<br />
<input type="radio" name="crust" id="crust2" value="deep"
        checked="checked" />
Deep Dish<br />
<input type="radio" name="crust" id="crust3" value="hand" />
Hand Tossed<br /><br />
```

```
<label>Toppings: </label><br />
<input type="checkbox" name="pepperoni" id="pepperoni"
        value="yes" />
Pepperoni<br />
<input type="checkbox" name="mushrooms" id="mushrooms"
        value="yes" />
Mushrooms<br />
<input type="checkbox" name="olives" id="olives"
        value="yes" />
Black Olives
```

The radio buttons and check boxes

Crust:

- Thin Crust
- Deep Dish
- Hand Tossed

Toppings:

- Pepperoni
- Mushrooms
- Black Olives

Attributes of the <select> tag

Attribute	Description
size	The number of items to display in the <select> field.
multiple	A Boolean attribute that determines whether multiple items can be selected.

An attribute of the <option> tag

Attribute	Description
selected	A Boolean attribute that causes the option to be selected when the page is loaded.

An attribute of the <optgroup> tag

Attribute	Description
label	The text that's used to group the options.


The XHTML for select lists

```
<label>Crust: </label><br />
<select name="crust" id="crust">
  <option value="thin">Thin Crust</option>
  <option value="deep">Deep Dish</option>
  <option value="hand">Hand Tossed</option>
</select><br /><br />


<label>Toppings: </label><br />
<select name="toppings" id="toppings" size="5"
  multiple="multiple">
  <optgroup label="Free">
    <option value="pepperoni"
      selected="selected">Pepperoni</option>
    <option value="mushrooms">Mushrooms</option>
  </optgroup>
  <optgroup label="Extra Charge">
    <option value="chicken">Chicken</option>
    <option value="pineapple">Pineapple</option>
  </optgroup>
</select>
```


The select lists in a web browser

Crust:

Deep Dish 


Toppings:

Free 

Pepperoni 

Mushrooms

Extra Charge

Chicken 

Attributes of the <textarea> tag

Attribute	Description
rows	The approximate number of rows in the text area.
cols	The approximate number of columns in the text area.

The XHTML for a text area with default text

```
<label>Comments:</label><br />
```

```
<textarea name="comments" id="comments" rows="4" cols="50">
```

```
If you have any comments, we would be delighted to hear from  
you.
```

```
Just delete this text and enter your own.
```

```
</textarea>
```

The text area in a web browser

Comments:

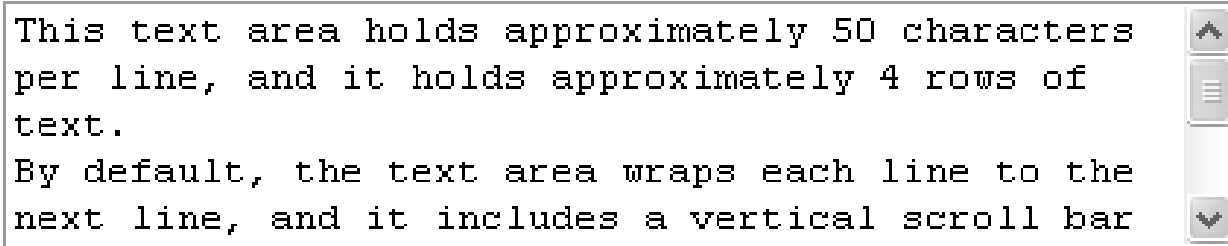
```
If you have any comments, we would be delighted to  
hear from you.
```

```
Just delete this text and enter your own.
```

The text area after text has been entered into it

Comments:

```
This text area holds approximately 50 characters  
per line, and it holds approximately 4 rows of  
text.  
By default, the text area wraps each line to the  
next line, and it includes a vertical scroll bar
```



XHTML that uses the <fieldset> and <legend> tags

```
<fieldset>
<legend>Crust</legend>
  <input type="radio" name="crust" id="crust1" value="c1" />
  Thin Crust<br />
  <input type="radio" name="crust" id="crust2" value="c2"
    checked="checked" />Deep Dish<br />
  <input type="radio" name="crust" id="crust3" value="c3" />
  Hand Tossed
</fieldset>
```

```
<fieldset>
<legend>Toppings</legend>
  <input type="checkbox" value="yes" name="topping1"
    id="topping1" />Pepperoni<br />
  <input type="checkbox" value="yes" name="topping2"
    id="topping2" />Mushrooms<br />
  <input type="checkbox" value="yes" name="topping3"
    id="topping3" />Black Olives
</fieldset>
<p><input type="submit" value="Place Order" /></p>
```

The <fieldset> and <legend> tags

Crust

- Thin Crust
- Deep Dish
- Hand Tossed

Toppings

- Pepperoni
- Mushrooms
- Black Olives

Place Order

The attribute that's used to control the tab order

Attribute	Description
tabindex	To set the tab order for a field, use a value of 0 or more. To take a field out of the tab order, use a negative value.

An XHTML form for a survey

Survey

If you have a moment, we'd appreciate it if you would fill out this survey.

Your information:

First Name:

Last Name:

Email Address:

How did you hear about us?

Search engine Word of mouth Other

Would you like to receive announcements about new products and special offers?

YES, I'd like to receive information about new products and special offers.

Please contact me by