

Basics of Web Design

Chapter 2

HTML Basics
Key Concepts

Copyright © 2019

Terry Ann Morris, Ed.D.
<http://terrymorris.net>

Learning Outcomes

- ▶ Describe the anatomy of a web page
- ▶ Format the body of a web page with block-level elements including headings, paragraphs, lists, and blockquotes
- ▶ Configure the text on a web page with inline elements
- ▶ Configure text with phrase elements
- ▶ Configure special entity characters, line breaks, and horizontal rules
- ▶ Configure a web page using new HTML5 header, nav, main, and footer elements
- ▶ Use the anchor element to link from page to page
- ▶ Configure absolute, relative, and e-mail hyperlinks
- ▶ Test a web page for valid HTML syntax

The Heading Element

`<h1>Heading Level 1</h1>`

`<h2>Heading Level 2</h2>`

`<h3>Heading Level 3</h3>`

`<h4>Heading Level 4</h4>`

`<h5>Heading Level 5</h5>`

`<h6>Heading Level 6</h6>`

Heading Level 1

Heading Level 2

Heading Level 3

Heading Level 4

Heading Level 5

Heading Level 6

The Paragraph Element

<p> tag

- ◉ Paragraph element

<p> ...*paragraph goes here*... </p>

- Groups sentences and sections of text together.
- Configures empty space above and below the paragraph

The Line Break Element

 tag

- ◉ Line Break element
 - Stand-alone tag
 - Called a void element in HTML5

*...text goes here
*

This starts on a new line....

- Causes the next element or text to display on a new line

The Horizontal Rule Element

<hr> tag

- ⦿ Horizontal Rule element
 - void element

<hr>

- Configures a horizontal line on the page
- *In HTML5, it should be used to indicate a thematic break at the paragraph level*

The Blockquote Element

<blockquote>

- ▶ Blockquote element
 - ▶ Indents a block of text for special emphasis

<blockquote>

...text goes here...

</blockquote>

Phrase Elements

- ◉ Indicate the context and meaning of the text
- ◉ Display inline with the text
- ◉ Common Phrase Elements
 - ****
Text is displayed in bold font
 - ****
Text has strong importance and is displayed in bold
 - **<i></i>**
Text is displayed in italic font
 - ****
Text has emphasis and is displayed in italic font

Proper Nesting

CODE:

```
<p><i>Call for a free quote for your web development needs:  
<strong>888.555.5555 </strong></i></p>
```

BROWSER DISPLAY:

*Call for a free quote for your web development needs: **888.555.5555***

HTML List Basics

- ▶ Unordered List
- ▶ Description List (XHTML Definition List)
- ▶ Ordered List

Unordered List

- ▶ Displays information with bullet points
- ▶ Unordered List Element

Contains the unordered list

- ▶ List Item Element

Contains an item in the list

Unordered List Example

```
<h1>My Favorite Colors</h1>
```

```
<ul>
```

```
  <li>Blue</li>
```

```
  <li>Teal</li>
```

```
  <li>Red</li>
```

```
</ul>
```

My Favorite Colors

- Blue
- Teal
- Red

Ordered List

- ▶ Conveys information in an ordered fashion
- ▶ Ordered List Element

Contains the ordered list

- ▶ type attribute determines numbering scheme of list
- ▶ default is numerals

- ▶ List Item Element

Contains an item in the list

Ordered List Example

``

`Apply to school`

`Register for course`

`Pay tuition`

`Attend course`

``

1. Apply to school
2. Register for course
3. Pay tuition
4. Attend course

Description List

- ⦿ Uses:
 - Display a list of terms and descriptions
 - Display a list of FAQ and answers
- ⦿ The Description List element
<dl>
Contains the definition list
- ⦿ The dt Element
<dt>
Contains a term or name
- ⦿ The dd Element
<dd>
Contains a definition or description
Indents the text

Description List Example

<dl>

<dt>IP</dt>

<dd>Internet Protocol</dd>

<dt>TCP</dt>

<dd>Transmission Control Protocol</dd>

</dl>

IP

Internet Protocol

TCP

Transmission Control Protocol

Special Entity Characters

- Display special characters such as quotes, copyright symbol, etc.

Character	Code
©	©
<	<
>	>
&	&
	

The div element

`<div>`

- ▶ Purpose:

- ▶ Configure a specially formatted division or area of a web page

- ▶ Block display with empty space above and below the div

- ▶ Can contain other block display and inline display elements

Structural Elements

▶ Header Element

`<header></header>`

Contains the headings

▶ Nav Element

`<nav></nav>`

Contains the main navigation

▶ Main Element

`<main></main>`

Contains the main content

▶ Footer Element

`<footer></footer>`

Contains the footer

header

nav

main

footer

More Structural Elements

▶ Section Element

- ▶ indicates a portion or “section” of a document, like a chapter or topic

▶ Article Element

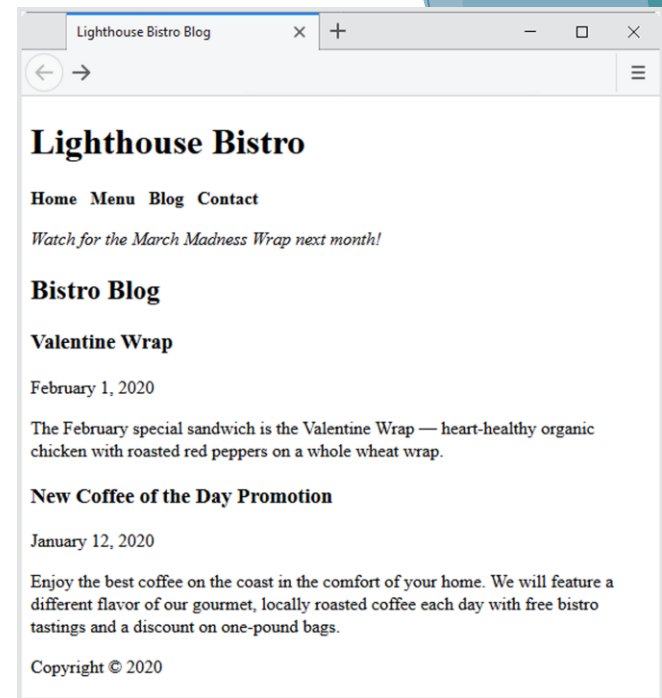
- ▶ indicates an independent entry, like a blog posting, that can stand on its own

▶ Aside Element

- ▶ indicates a sidebar or other tangential content

▶ Time Element

- ▶ represents a date or time



HTML5 Structural Elements

Example:

`<body>`

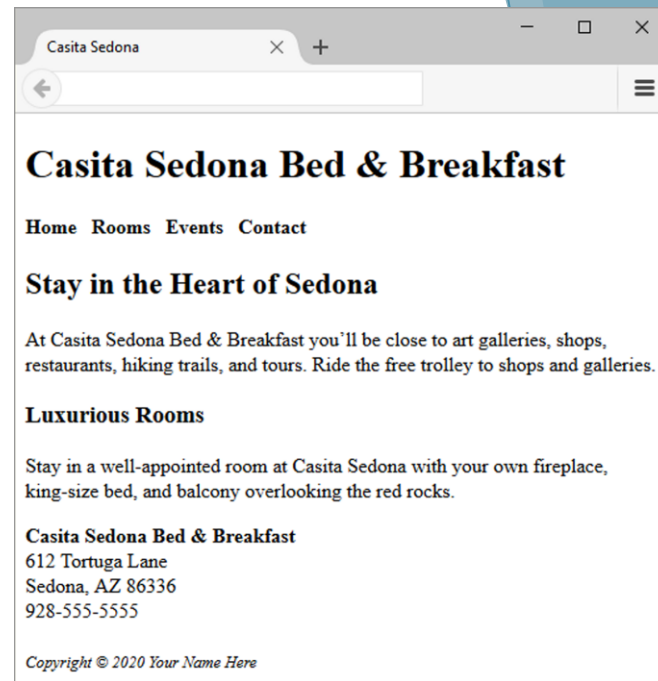
`<header>` *document headings go here* `</header>`

`<nav>` *main navigation goes here* `</nav>`

`<main>` *main content goes here* `</main>`

`<footer>` *document footer information goes here* `</footer>`

`</body>`



The Anchor Element

`<a>`

- The anchor element
 - Inline display element
 - Specifies a hyperlink reference (href) to a file
 - Text between the `<a>` and `` is displayed on the web page

`Contact Us`

► href Attribute

- Indicates the file name or URL
Web page document, photo, pdf, etc.

More on Hyperlinks

- ⦿ Absolute link

- Link to other websites

Yahoo

- ⦿ Relative link

- Link to pages on your own site
- Relative to the current page

Home

Opening a Link in a New Browser Window

- ▶ The target attribute on the anchor element opens a link in a new browser window or new browser tab.

```
<a href="http://yahoo.com" target="_blank">Yahoo!</a>
```


Email Hyperlinks

- ▶ Automatically launch the default mail program configured for the browser
- ▶ If no browser default is configured, a dialog box is displayed

`me@terrymorris.net`

Writing Valid HTML

- ▶ Check your code for syntax errors
 - ▶ Benefit:
 - ▶ Valid code →
more consistent browser display
- ▶ W3C HTML Validation Tool
 - ▶ <http://validator.w3.org>
- ▶ Additional HTML5 Validation Tool
 - ▶ <http://html5.validator.nu>

Summary

- ▶ This chapter provided an introduction to HTML.
- ▶ HTML elements used for inline and block display formatting were introduced.
- ▶ You will use these skills over and over again as you create web pages.