

# Basics of Web Design

Chapter 2  
HTML Basics  
Key Concepts

# 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

## <br> tag

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

*...text goes here <br>*  
*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
  - `<b></b>`  
Text is displayed in bold font
  - `<strong></strong>`  
Text has strong importance and is displayed in bold
  - `<i></i>`  
Text is displayed in italic font
  - `<em></em>`  
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

`<ul>`

Contains the unordered list

- List Item Element

`<li>`

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

`<ol>`

Contains the ordered list

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

- List Item Element

`<li>`

Contains an item in the list

# Ordered List Example

**<ol>**

**<li>Apply to school</li>**

**<li>Register for course</li>**

**<li>Pay tuition</li>**

**<li>Attend course</li>**

**</ol>**

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

# Description List

- ⦿ Formerly called a definition list in XHTML and HTML 4.0
- ⦿ Uses:
  - Display a list of terms and descriptions
  - Display a list of FAQ and answers
- ⦿ The Description List element  
`<dl>` tag  
Contains the definition list
- ⦿ The dt Element  
`<dt>` tag  
Contains a term or name
- ⦿ The dd Element  
`<dd>` tag  
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
©	&copy;
<	&lt;
>	&gt;
&	&amp;
	&nbsp;

# 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

# HTML5 Structural Elements

- Header Element

`<header></header>`

Contains the headings

- Nav Element

`<nav></nav>`

Contains the main navigation

- Main Element

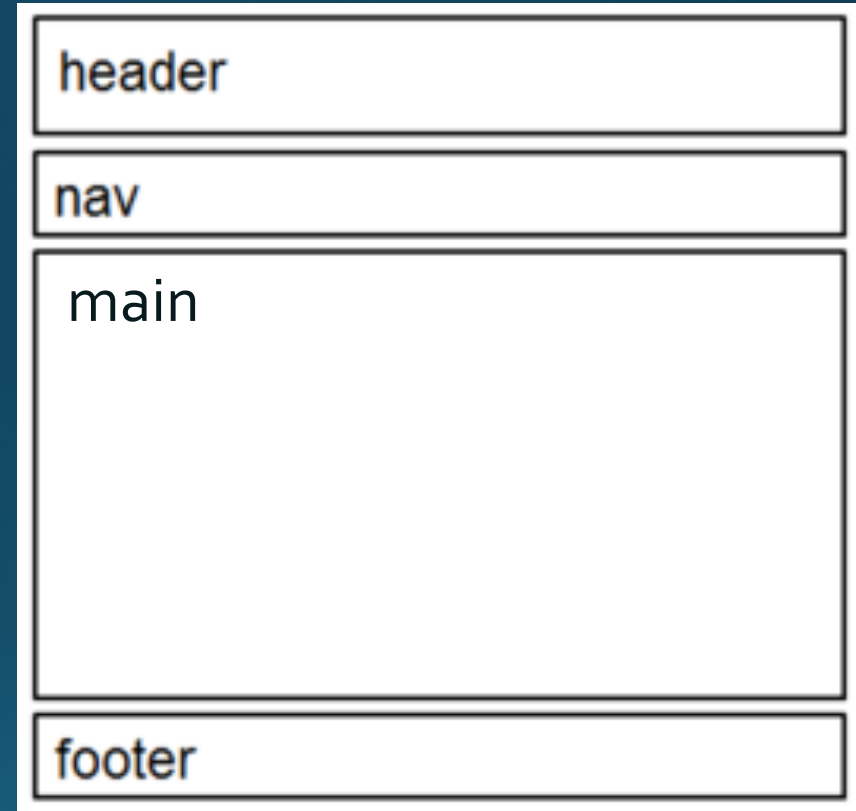
`<main></main>`

Contains the main content

- Footer Element

`<footer></footer>`

Contains the footer



# 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 `</a>` is displayed on the web page.

**`<a href="contact.html">Contact Us</a>`**

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

# More on Hyperlinks

## ◎ Absolute link

- Link to other websites

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

## ◎ Relative link

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

```
<a href="index.html">Home</a>
```

# 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

`<a href="mailto:me@hotmail.com">me@hotmail.com</a>`



# 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.