

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the left and right sides of the frame, creating a modern, dynamic feel. The central area is a clean, white space where the text is positioned.

# Basics of Web Design

## HTML Basics

# 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 header, nav, main, and footer elements
- ▶ Use the section, aside, and article 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
- ▶ 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

- ▶ Uses:
  - ▶ Display a list of terms and descriptions
  - ▶ Display a list of FAQ and answers
- ▶ The Description List element  
**<dl>**  
Contains the description 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
©	&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

# Structural Elements

## ▶ Header Element

`<header></header>`

Contains the headings

## ▶ Nav Element

`<nav></nav>`

Contains the main navigation

## ▶ Main Element

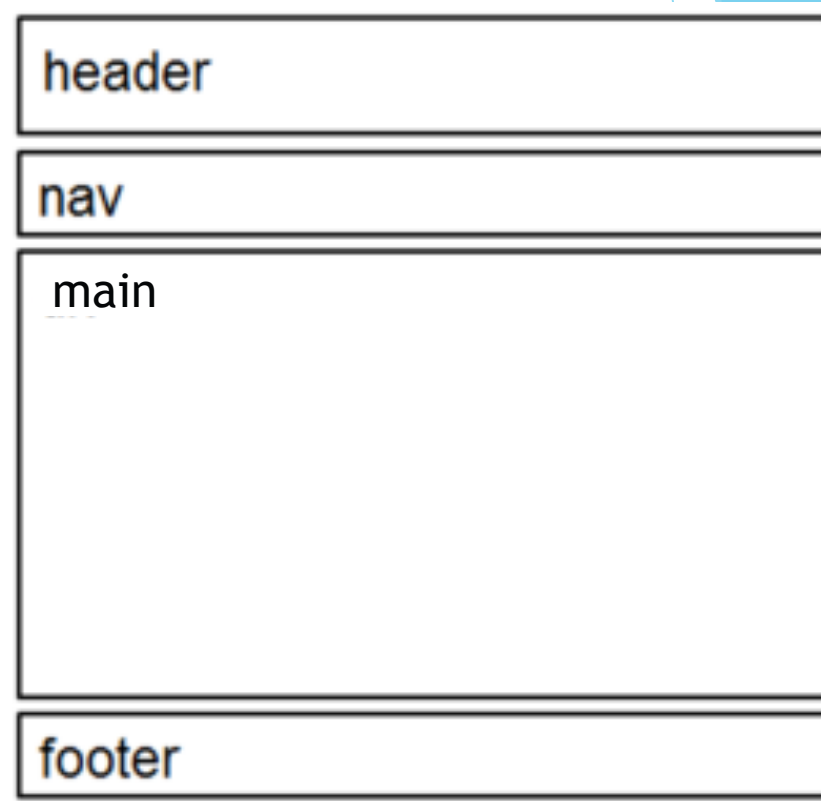
`<main></main>`

Contains the main content

## ▶ Footer Element

`<footer></footer>`

Contains the footer



# More Structural Elements

- ▶ Section Element

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

- ▶ Article Element

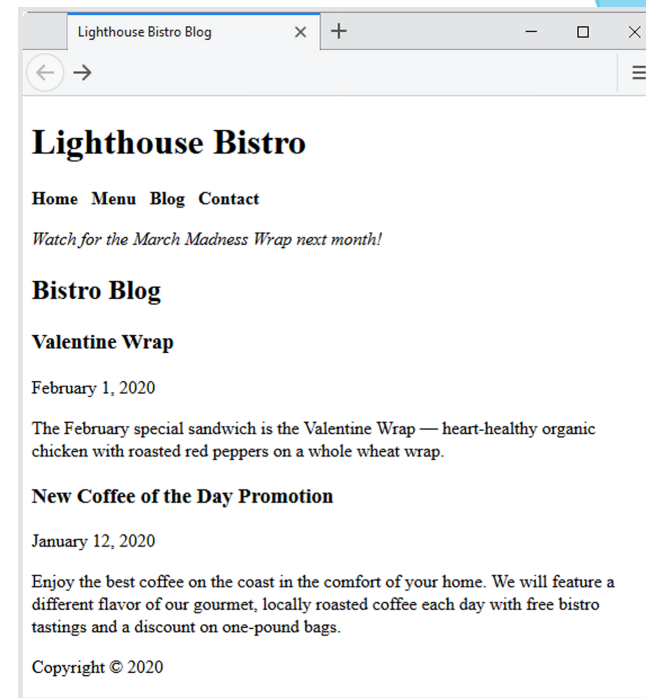
- ▶ indicates an independent entry, like a blog posting, that can stand on its own

- ▶ Aside Element

- ▶ indicates a sidebar or other tangential content

- ▶ Time Element

- ▶ represents a date or time



# HTML5 Structural Elements

Example:

`<body>`

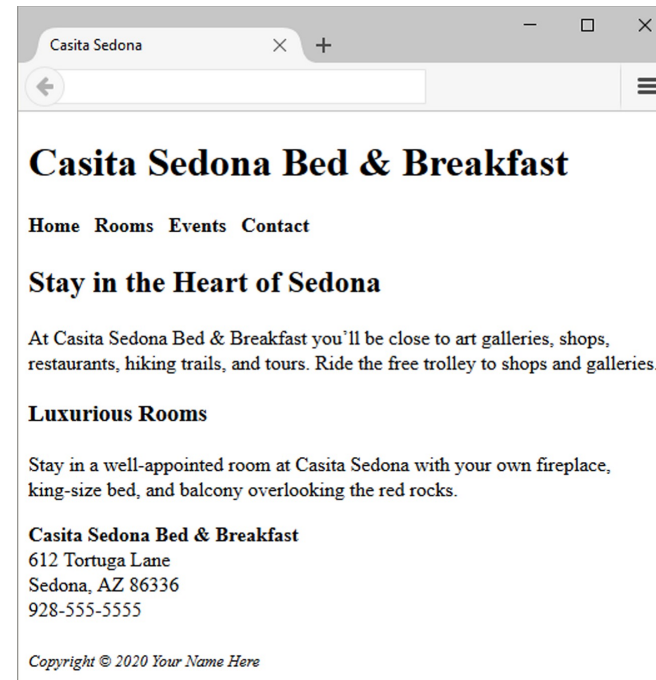
`<header> document headings go here </header>`

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

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

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

`</body>`



# The a element

`<a>`

Also referred to as 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@terrymorris.net">me@terrymorris.net</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>
  - ▶ <http://validator.w3.org/nu>
- ▶ 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.