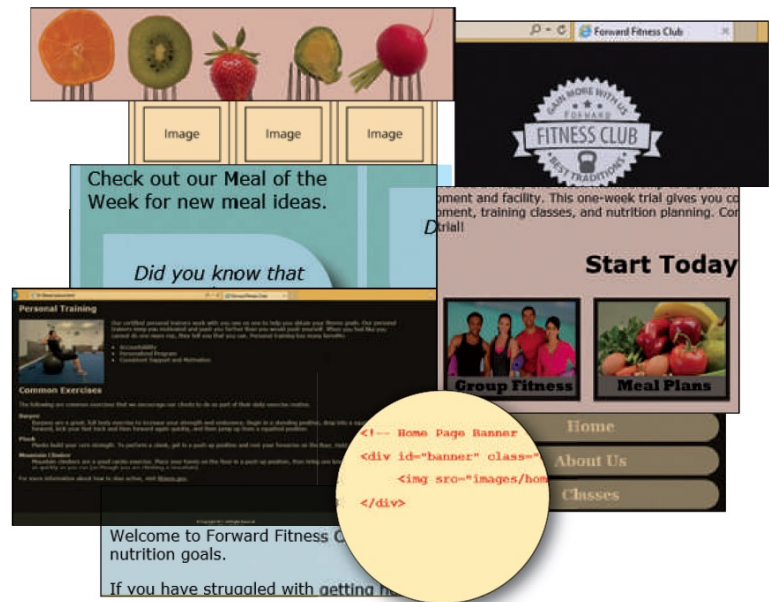


Web Design with HTML5 & CSS3 8th Edition

Chapter 7

Improving Web Design with New Page Layouts



Chapter Objectives

- Explain when to use article, aside, and section elements
- Define figure and figcaption elements
- Redesign wireframes for tablet and desktop viewports
- Explain and use the opacity property
- Describe and use the text-shadow property

Chapter Objectives (continued)

- Add a banner image to a website
- Insert and style a figure element
- Insert and style a section element
- Insert and style an article element
- Insert and style an aside element
- Create a three-column layout
- Describe and use the overflow property

Using HTML5 Semantic Elements

Table 7–1 HTML5 Semantic Elements

Element	Description
<code><article> ... </article></code>	Indicates the start and end of an article area of a webpage. Contains content such as forum or blog posts.
<code><aside> ... </aside></code>	Indicates the start and end of an aside area of a webpage. Contains information about nearby content and is typically displayed as a sidebar.
<code><details> ... </details></code>	Indicates the start and end of a details area of a webpage. Contains additional information that the user can display or hide. Note that this element is not supported by all major browsers at the time of this publication.
<code><figure> ... </figure></code>	Indicates the start and end of a figure area of a webpage. Contains pictures and images.
<code><figcaption> ... </figcaption></code>	Indicates the start and end of a figure caption area of a webpage. Defines a caption for a figure element.
<code><section> ... </section></code>	Indicates the start and end of a section area of a webpage. Contains a specific grouping of content on a webpage.
<code><summary> ... </summary></code>	Indicates the start and end of a summary area of a webpage. Contains a visible heading for the details element on a webpage. Note that this element is not supported by all major browsers at the time of this publication.
<code><time> ... </time></code>	Indicates the start and end of a time area of a webpage. Contains a date/time on a webpage.

Article Element

- The **article element**, as described by the W3C, is
 - a complete, self-contained composition in a document, page, application, or site
 - independently distributable or reusable, e.g. in syndication
- The start and end tags of article elements are `<article>` and `</article>`
- Content placed between these tags will appear on a webpage as part of the `article` element

Article Element (continued 1)

- Articles may be nested within other HTML elements, such as the `main` element, the `section` element, or other `article` elements
- Articles are commonly used to contain news articles, blog and forum posts, or comments

Article Element (continued 2)

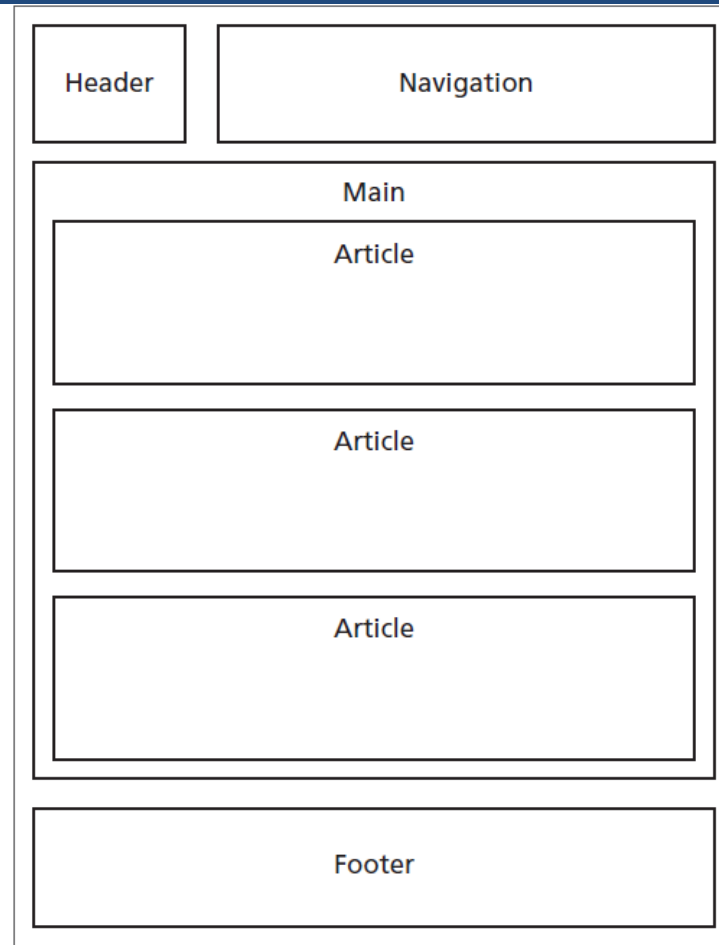


Figure 7-4

Aside Element

- The `aside` element is used as a sidebar that contains additional information about a particular item mentioned within another element
- For example, if an article on a webpage contains a recipe and a list of ingredients, one could include an `aside` element with more information about one of the key ingredients, such as its origin or where to purchase it
- It can be nested within `article` elements or within `main` or `section` elements

Aside Element (continued)

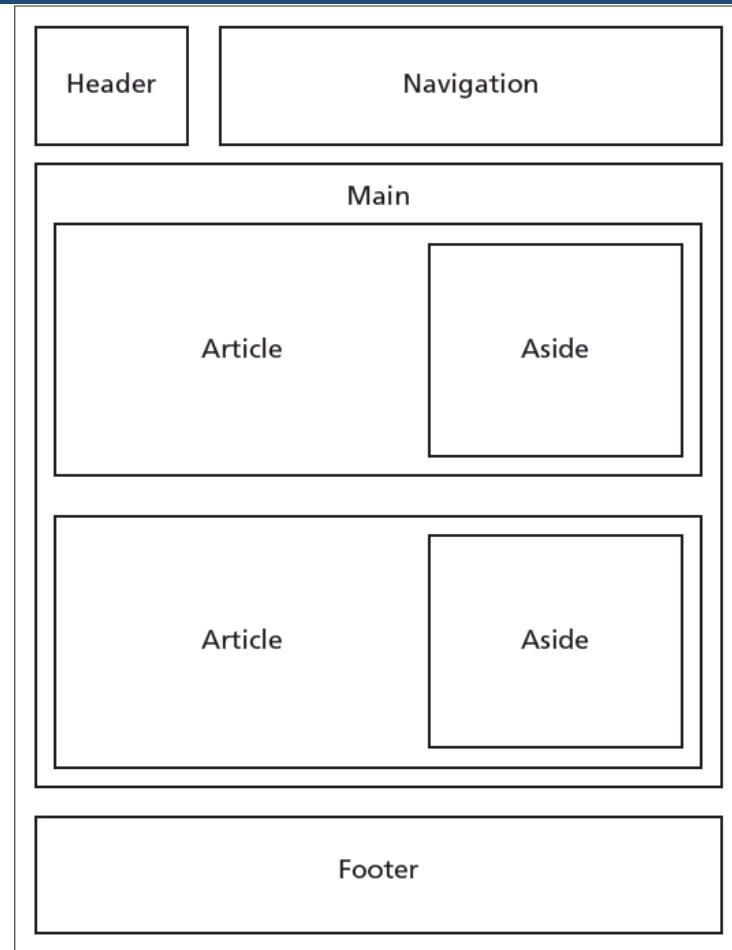


Figure 7-6

Section Element

- The **section element**, as described by the W3C, is an element that
 - represents a generic section of a document or application. Here, a section is a thematic grouping of content. The theme of each section should be identified as a child of the section element
 - is not a generic container element. A general rule is that the section element is appropriate only if the element's contents would be listed explicitly in the document's outline

Section Element (continued 1)

- The following is an example of a several **section** elements nested within an article element

```
<article>
  <h1>Tutorials: Cooking Basics</h1>
  <p>Watch our tutorials to learn
    the basics of good cooking.</p>
  <section>
    <h1>Tutorial 1</h1>
    <p>Assembling basic kitchen tools.</p>
  </section>
  ...
</article>
```

Section Element (continued 2)

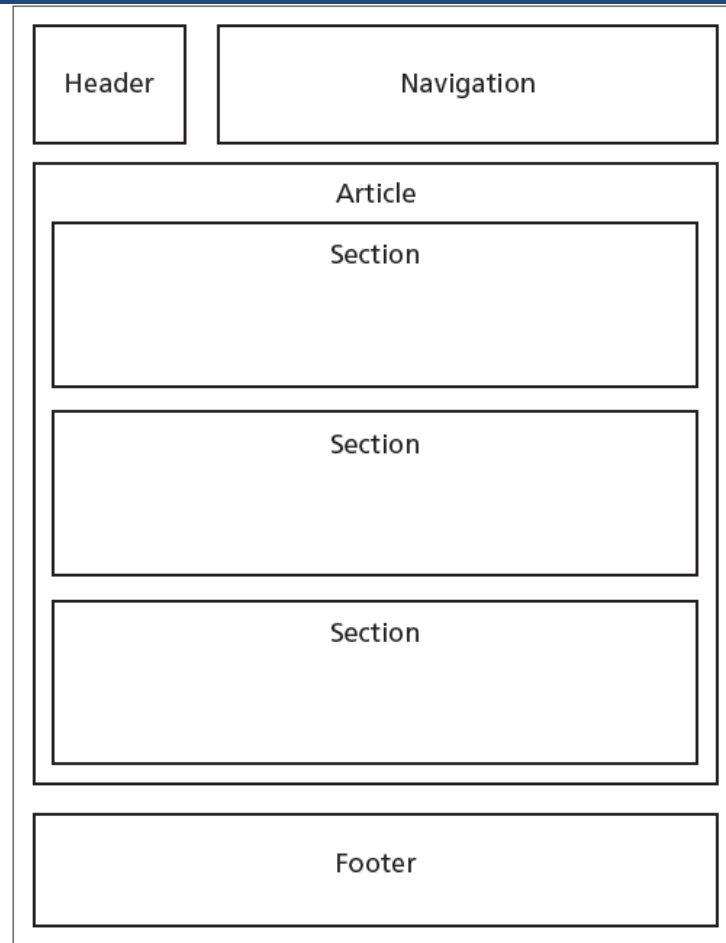


Figure 7-8

Figure and Figure Caption Elements

- The **figure element** is used to group content, such as illustrations, diagrams, and photos
- According to the W3C, the figure element represents some flow content that is self-contained and is typically referenced as a single unit from the main flow of the document
- A `figure` element can contain one or more `img` elements

Figure and Figure Caption Elements (continued 1)

- The `figure` element may contain an optional **figure caption** element, which is used to provide a caption for the figure element
- The start and end tags of the `figure caption` element are `<figcaption>` and `</figcaption>`

Figure and Figure Caption Elements (continued 2)

- The following is an example of the `figure` element and the `figure caption` element

```
<figure>
  <figcaption>New York City
  Highlights</figcaption>
  
  
  
</figure>
```

Figure and Figure Caption Elements (continued 3)

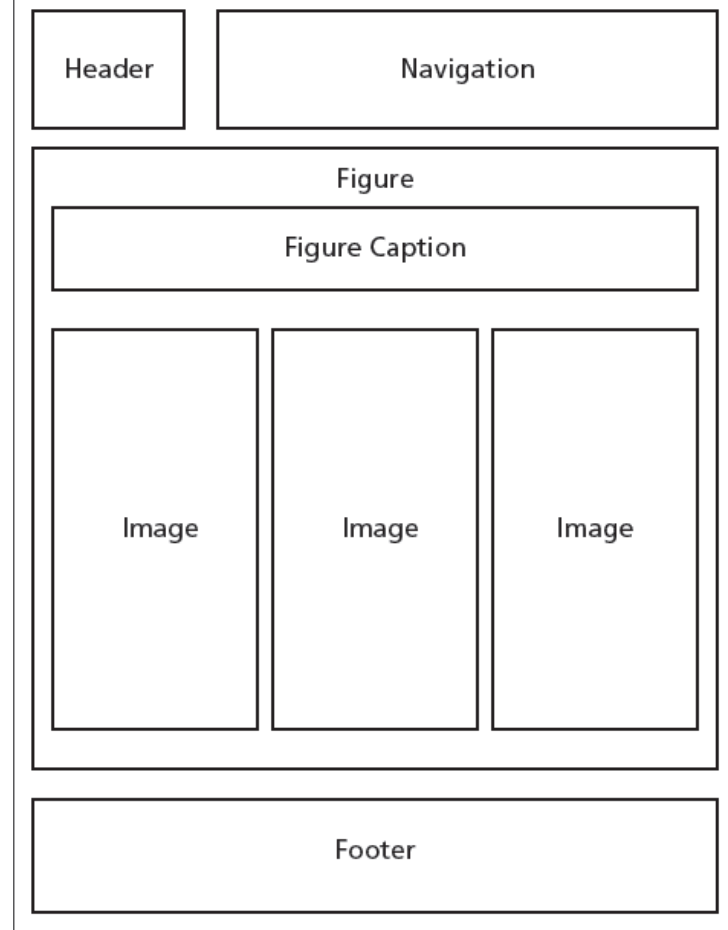


Figure 7-10

Website Layout

- A **banner** is a graphic that spans the width of a webpage and usually brands a website, often by displaying its name or an identifying image
- The CSS3 **opacity** property specifies the transparency of an element
- The **text-shadow** property applies a shadow to text
 - h-shadow value – designates the horizontal position of the shadow
 - v-shadow value – designates the vertical position of the shadow

Website Layout (continued)

- An example of a style rule that applies a text shadow to an element is shown below

```
h1 {  
    text-shadow: 0.2em 0.1em #292933;  
}
```

In this example, a text shadow with a horizontal position of 0.2em, a vertical position of 0.1em, and a dark gray color is applied to an h1 element

Redesigning the Home Page

Home page wireframe for tablet viewport

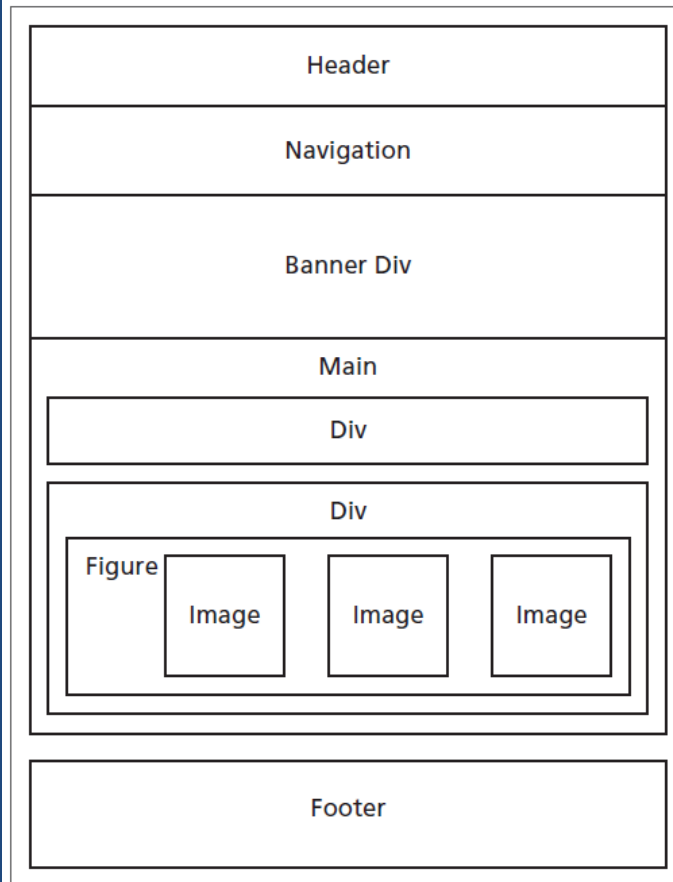


Figure 7-14

Home page wireframe for desktop viewport

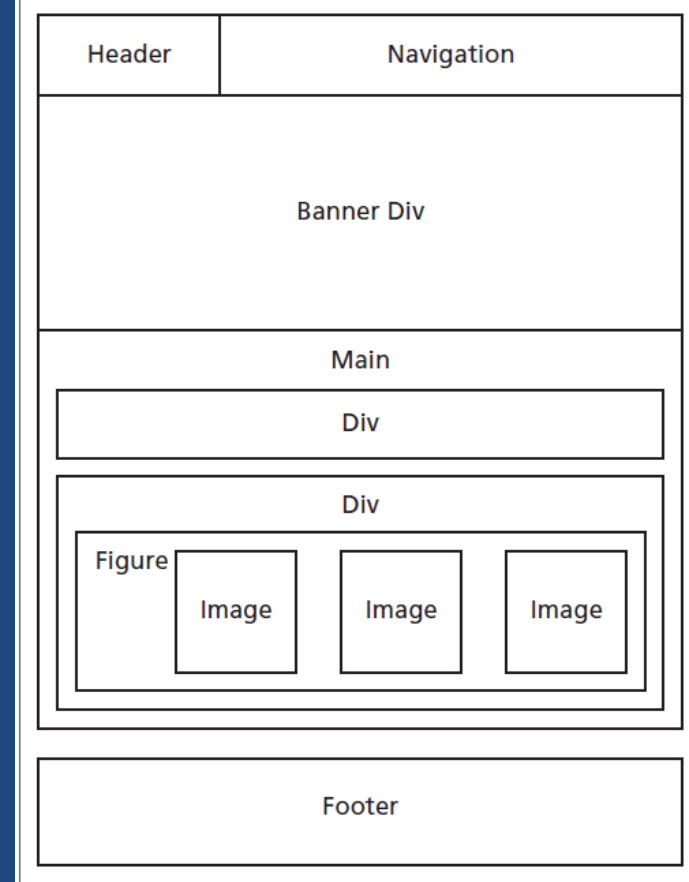


Figure 7-15

To Add a New div Element to the Home Page

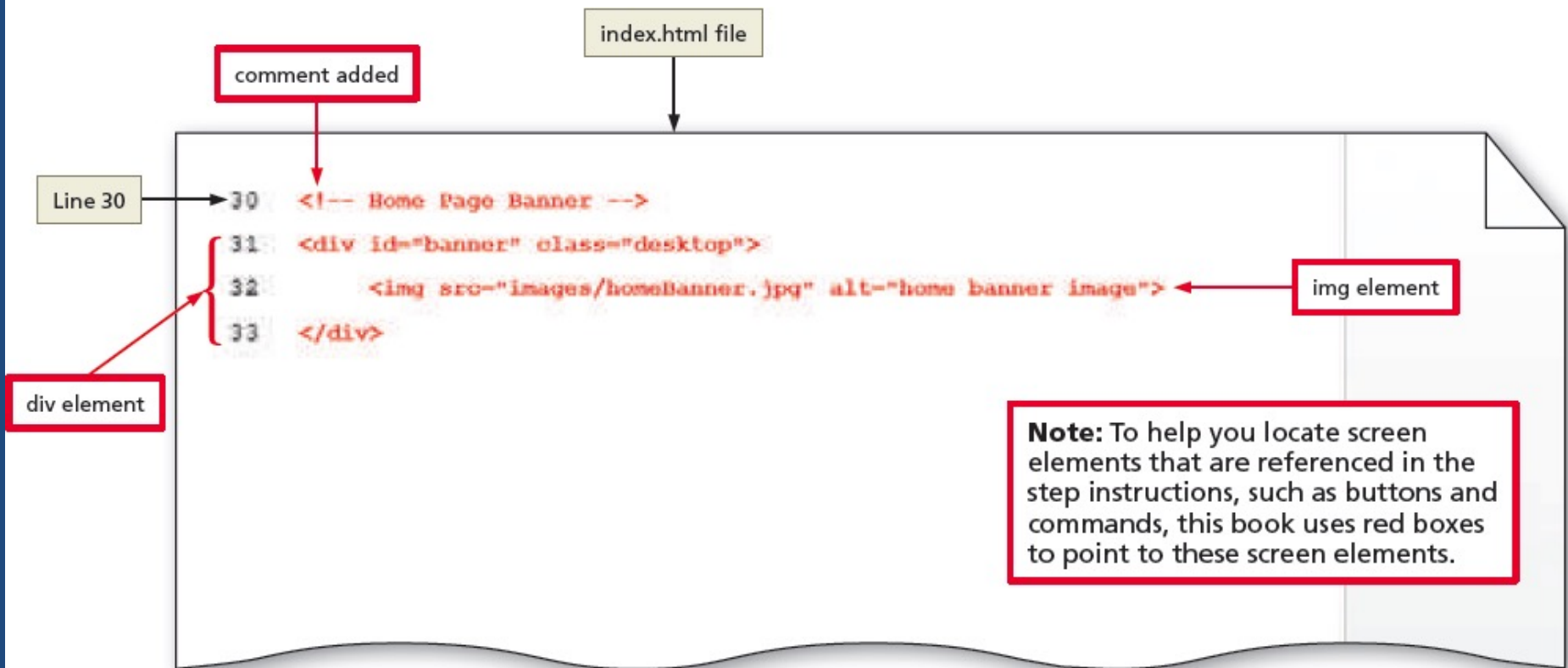


Figure 7-16

To Add a New div Element to the Home Page (continued)

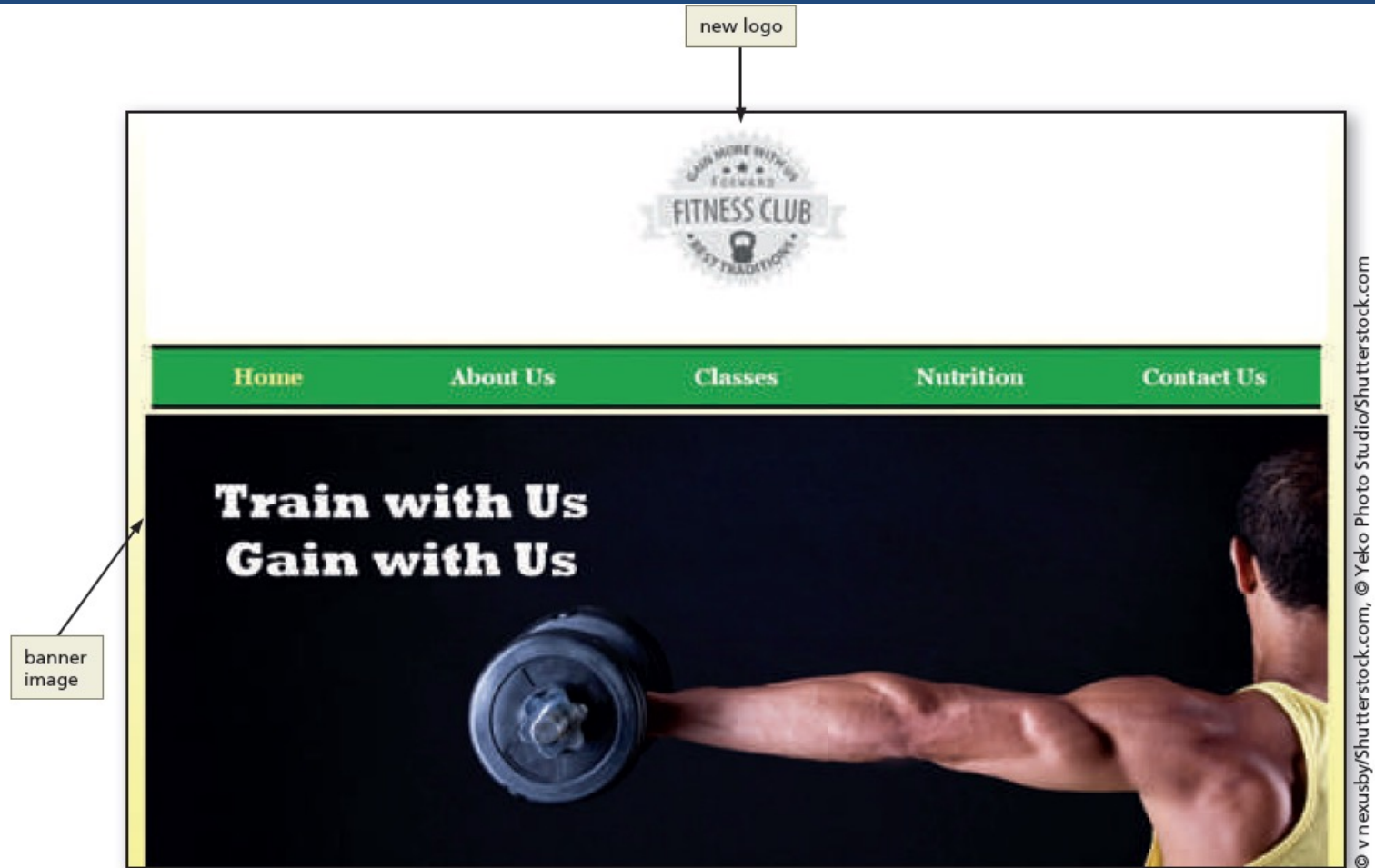


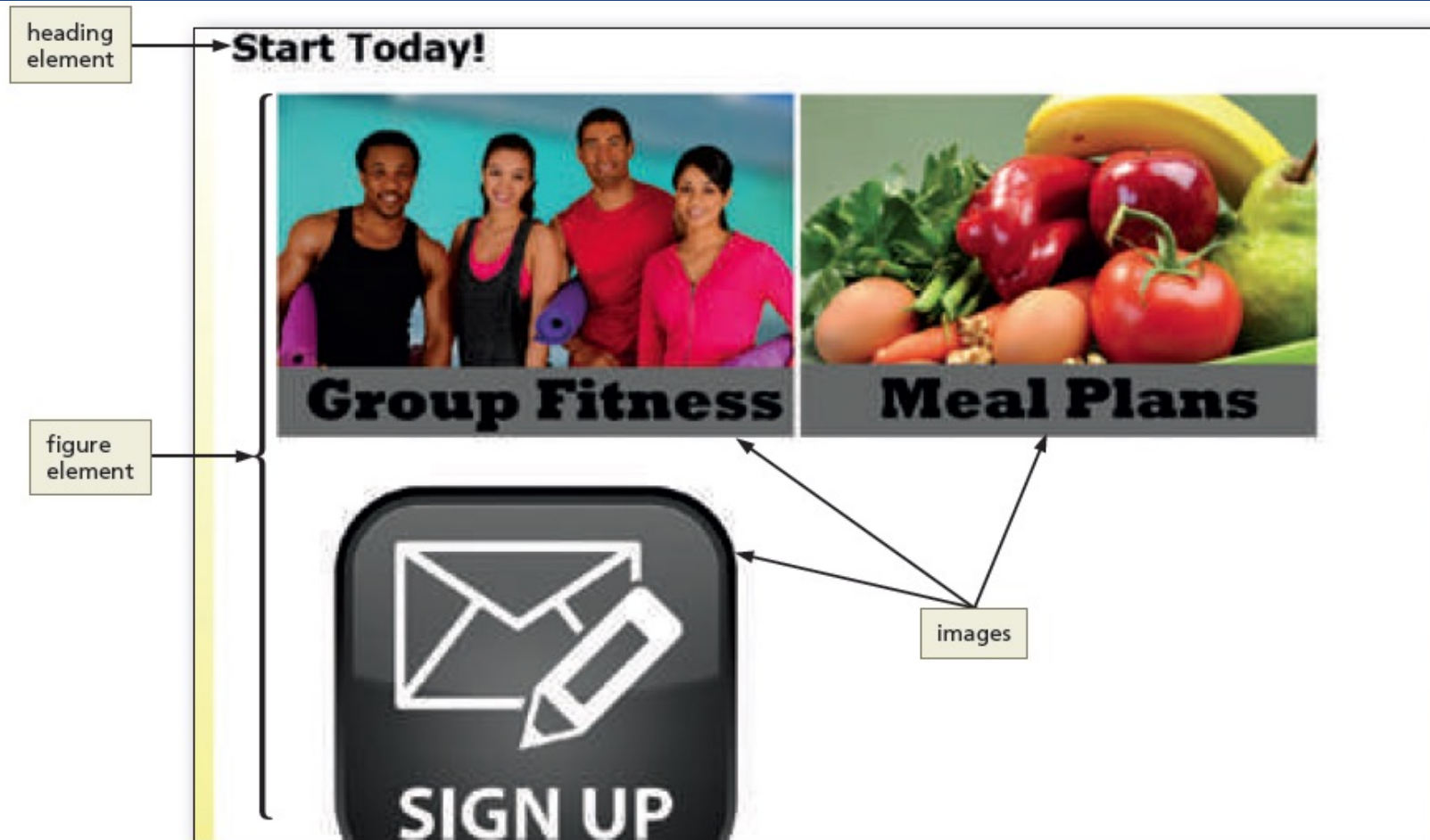
Figure 7-17

To Add a figure Element to the Home Page



Figure 7-18

To Add a figure Element to the Home Page (continued)



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© Milleflore Images/Shutterstock.com

Figure 7-19

To Add New Style Rules to the Tablet Viewport

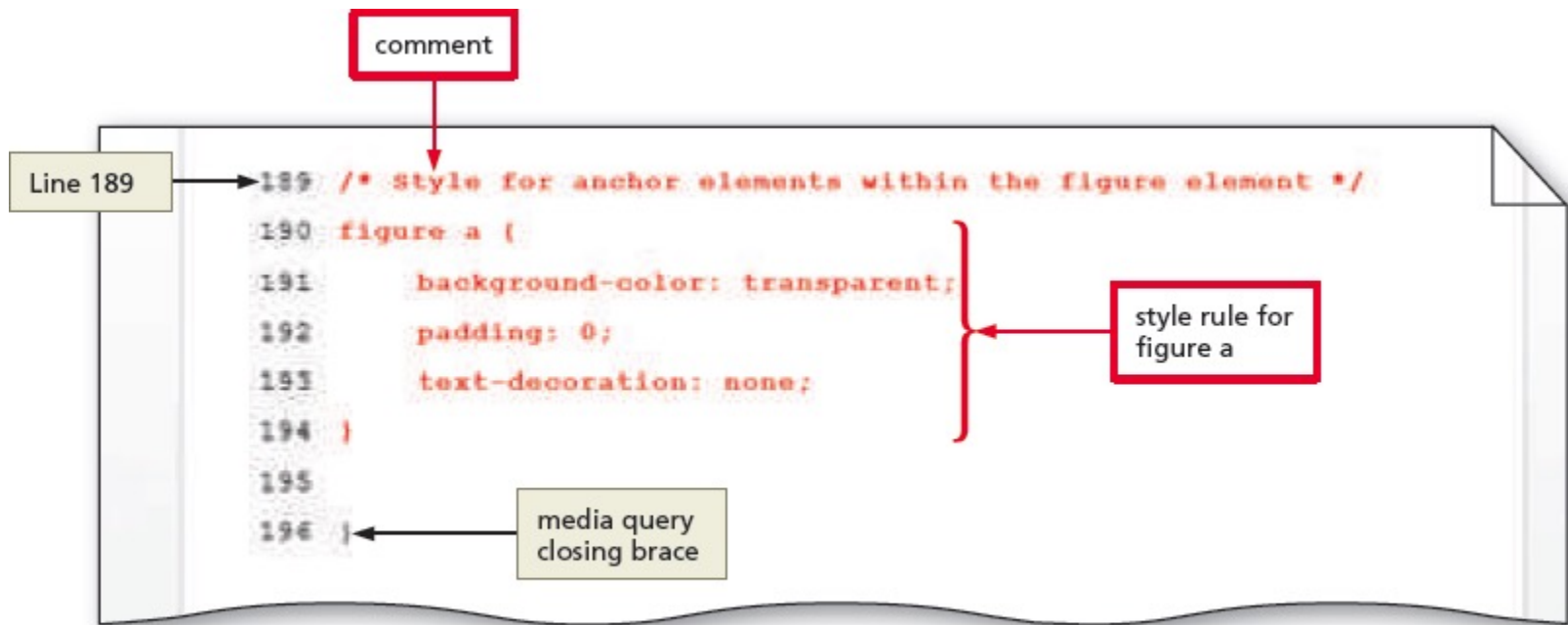


Figure 7-35

To Add Section Elements to the About Us Page

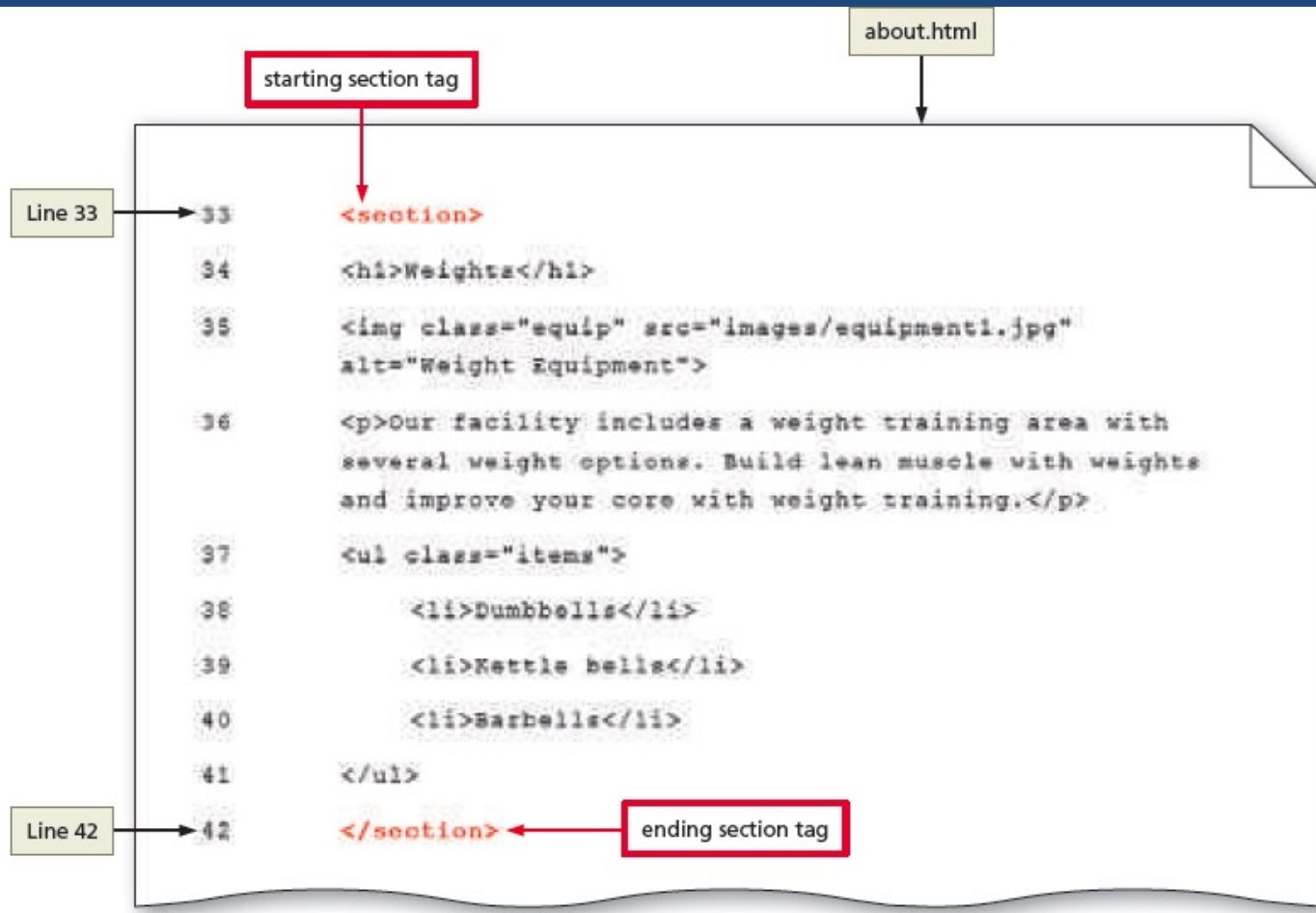


Figure 7-54

To Style the About Us Page for a Tablet Viewport

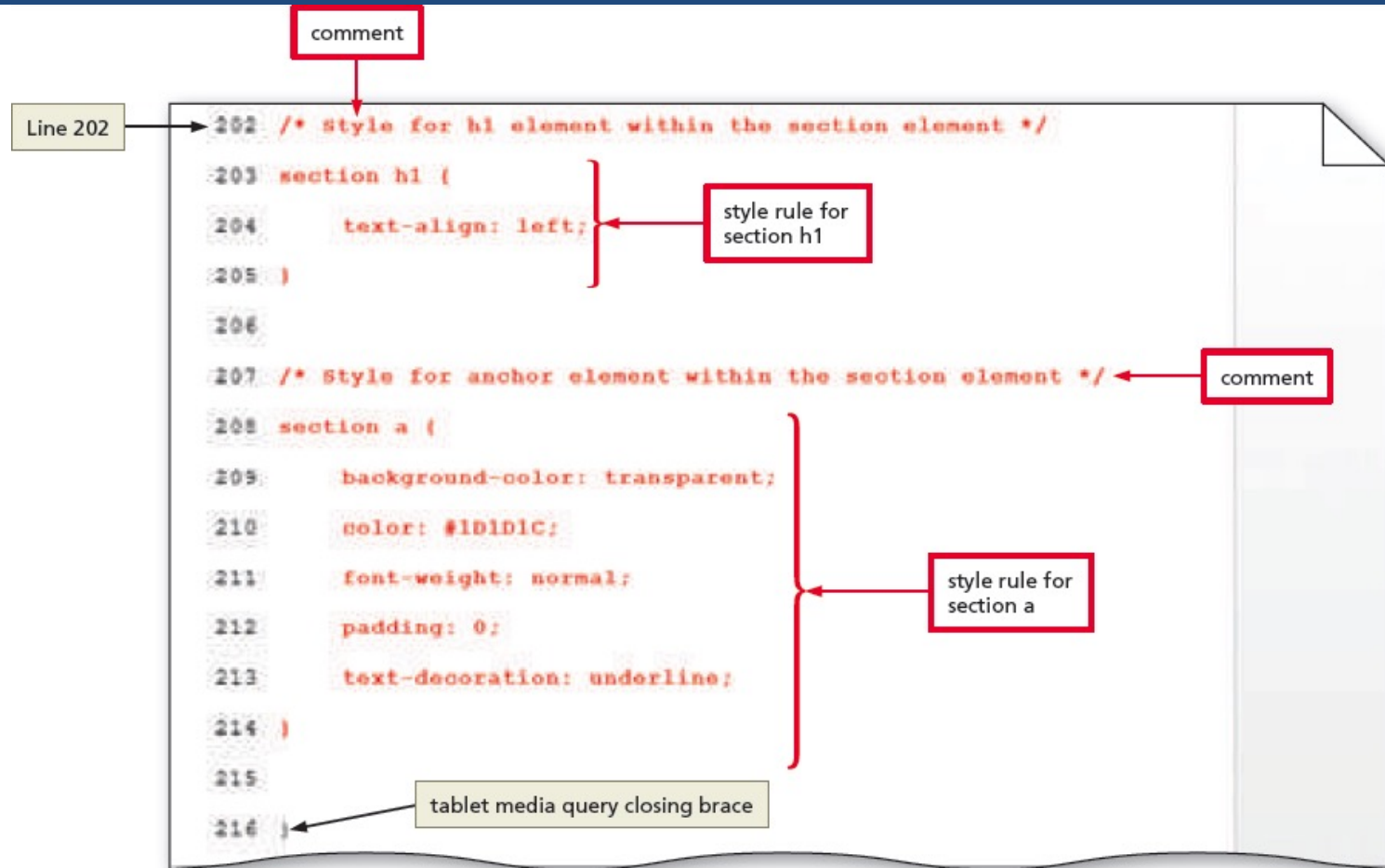


Figure 7-60

To Style the About Us Page for a Tablet Viewport (continued)

section style rules
applied for tablet
viewport

Personal Training



Our certified personal trainers work with you one on one to help you obtain your fitness goals. Our personal trainers keep you motivated and push you farther than you would push yourself. When you feel like you cannot do one more rep, they tell you that you can. Personal training has many benefits.

- Accountability
- Personalized Program
- Consistent Support and Motivation

Common Exercises

The following are common exercises that we encourage our clients to do as part of their daily exercise routine.

Burpee

Burpees are a great, full body exercise to increase your strength and endurance. Begin in a standing position, drop into a squat and extend your hands forward, kick your feet back and then forward again quickly, and then jump up from a squatted position.

Plank

Planks build your core strength. To perform a plank, get in a push up position and rest your forearms on the floor. Hold the position as long as you can.

Mountain Climber

Mountain climbers are a good cardio exercise. Place your hands on the floor in a push up position, then bring one knee up to your chest and then switch as quickly as you can (as though you are climbing a mountain).

For more information about how to stay active, visit fitness.gov.

Photo courtesy of Jessica Minnick

Figure 7-61

link formatting is
modified

Creating the Nutrition Page

Nutrition page wireframe for tablet viewport

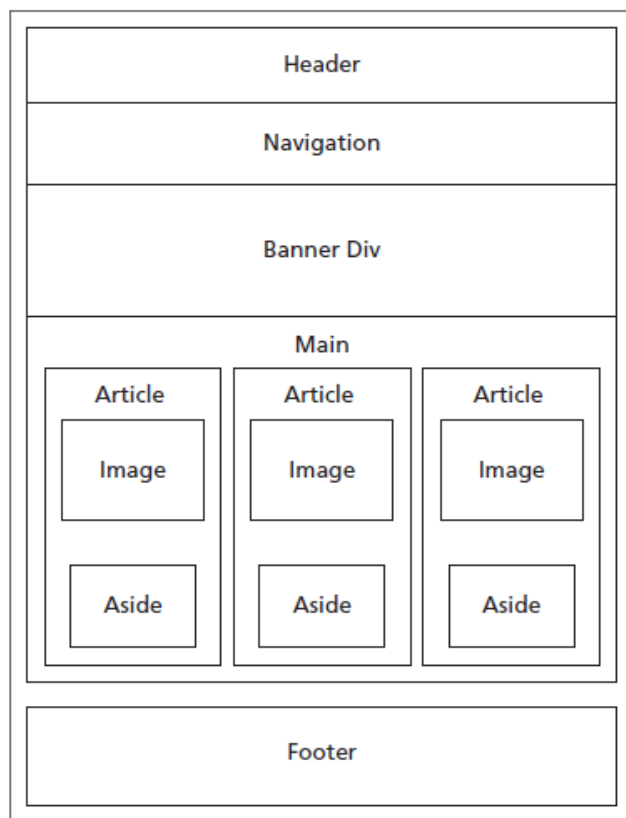


Figure 7-70

Nutrition page wireframe for desktop viewport

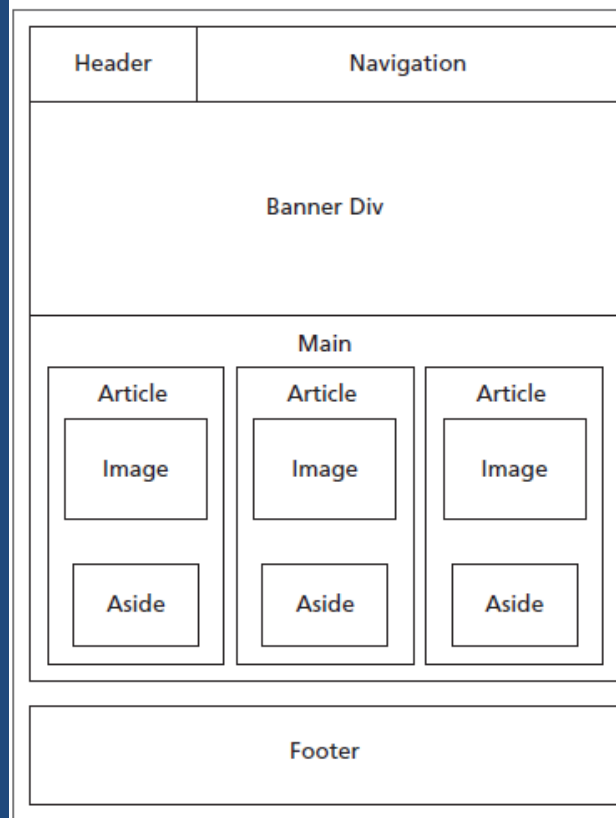


Figure 7-71

Creating the Nutrition Page (continued)

- **Overflow property** – It is used to specify how to manage content when it “spills over” into another element

To Create the Nutrition Page



Figure 7-72

To Add article and aside Elements to the Nutrition Page

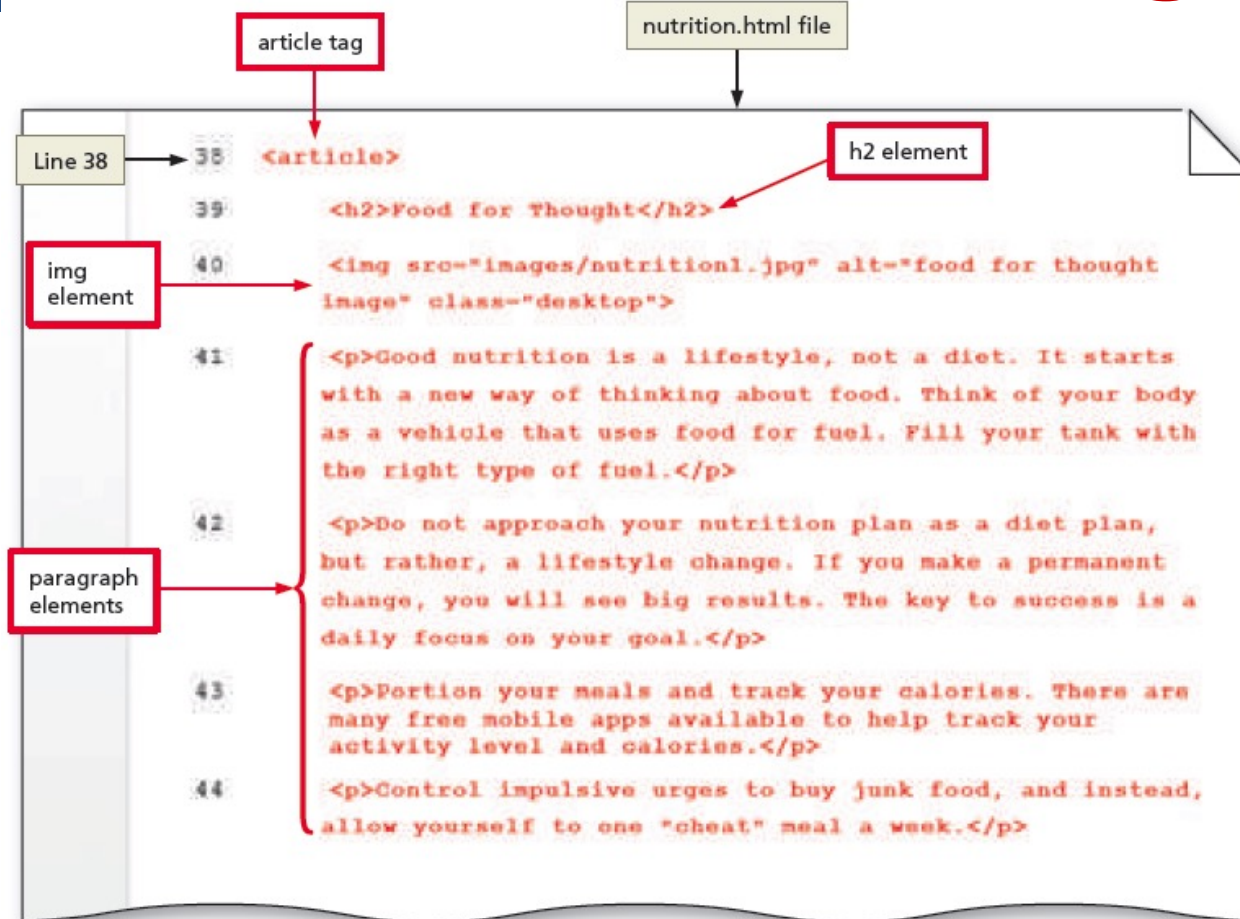


Figure 7-73

To Add article and aside Elements to the Nutrition Page (continued 1)

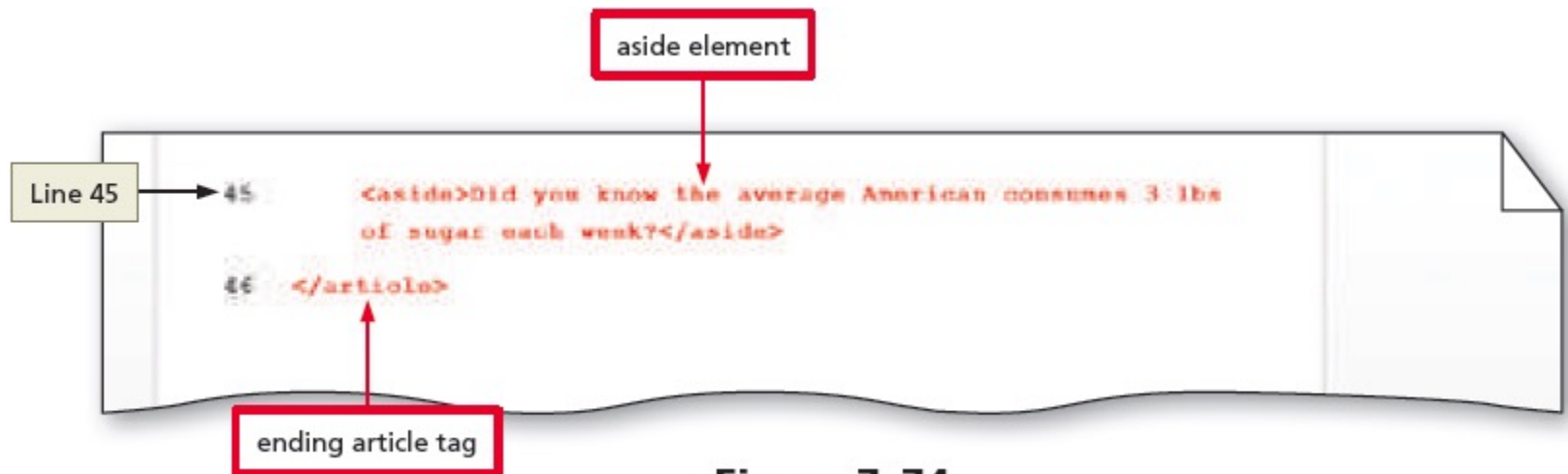


Figure 7-74

To Add article and aside Elements to the Nutrition Page (continued 2)

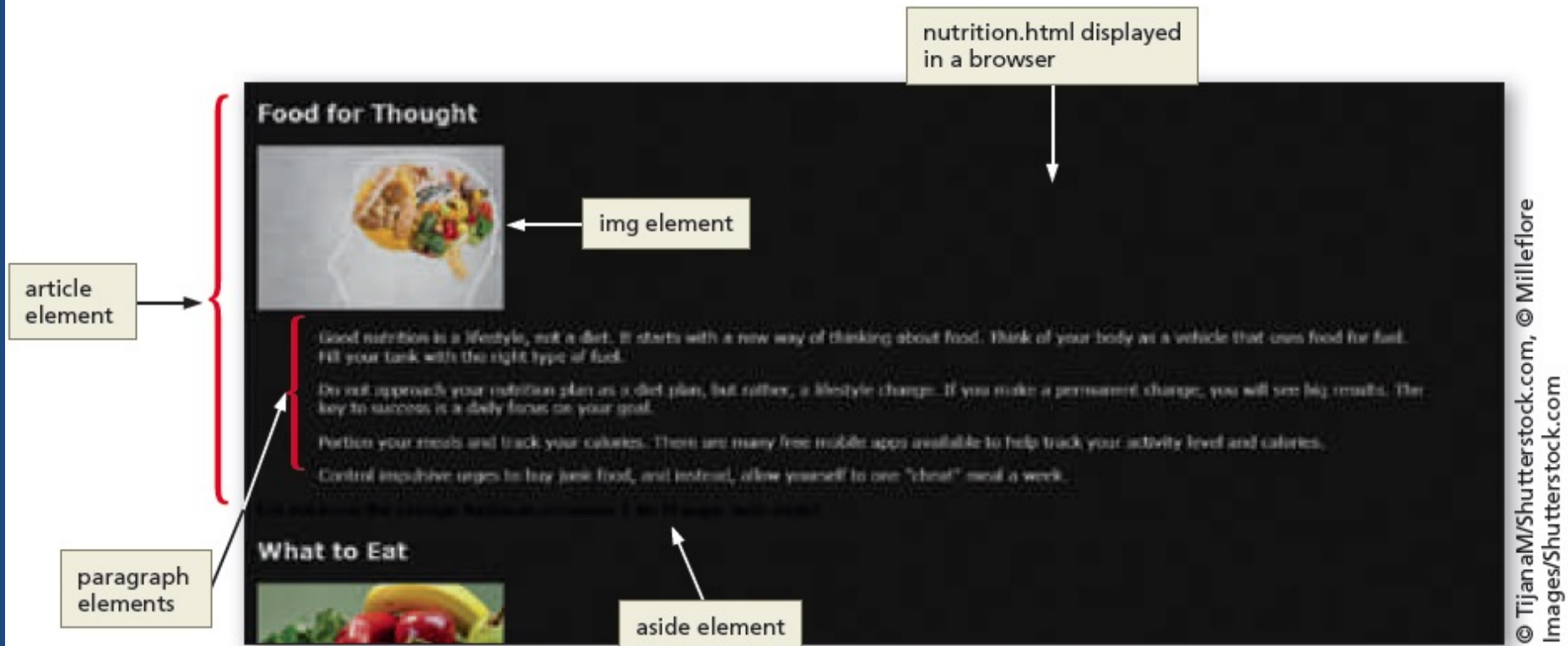


Figure 7-79

To Create a Three-Column Layout for the Nutrition Page in a Tablet Viewport

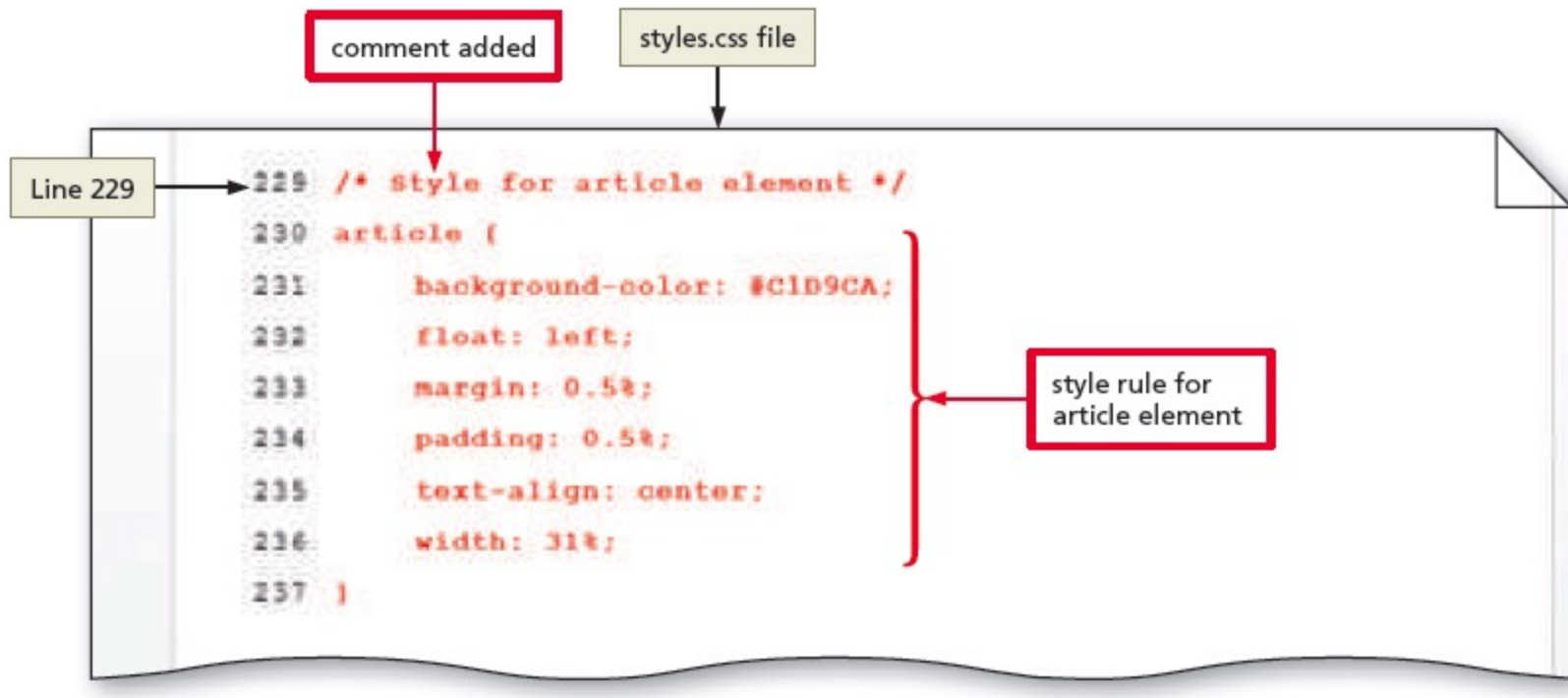


Figure 7-82

To Create a Three-Column Layout for the Nutrition Page in a Tablet Viewport (continued)

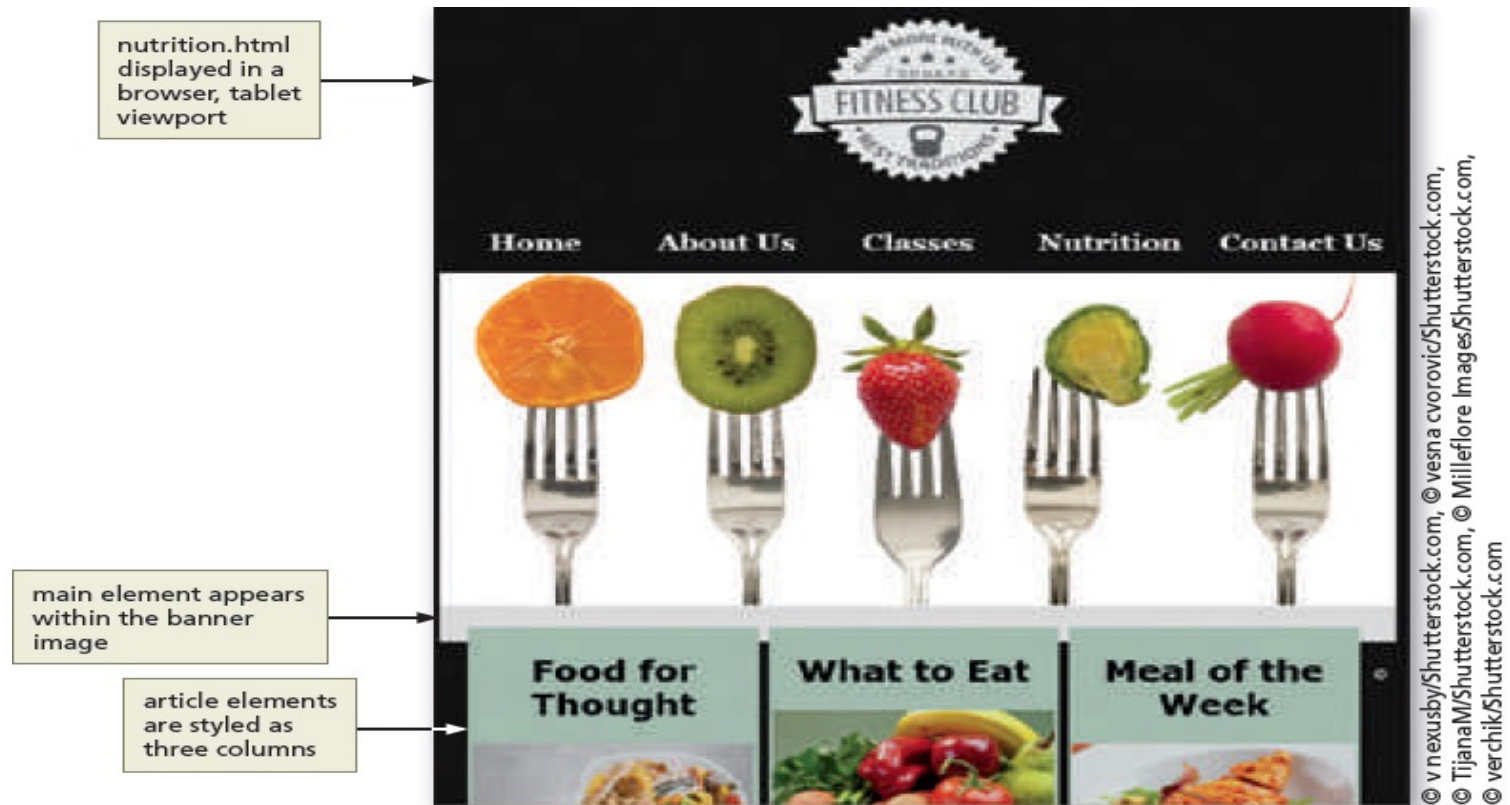


Figure 7-83

To Apply the Overflow Property to the main Element Style Rule

- The **main** element is not in the correct area in Figure 7–83
- The `float` property used within the article style rule displaces the `main` element to the banner image area
- To correct this issue, apply an `overflow` property with a value of `auto` to the `main` style rule contained within the tablet media query
 - Use `overflow: auto;` to add a property and value

To Apply the Overflow Property to the main Element Style Rule (continued)



main element
appears below
banner image

Figure 7-84

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To Style the article Element for the Nutrition Page

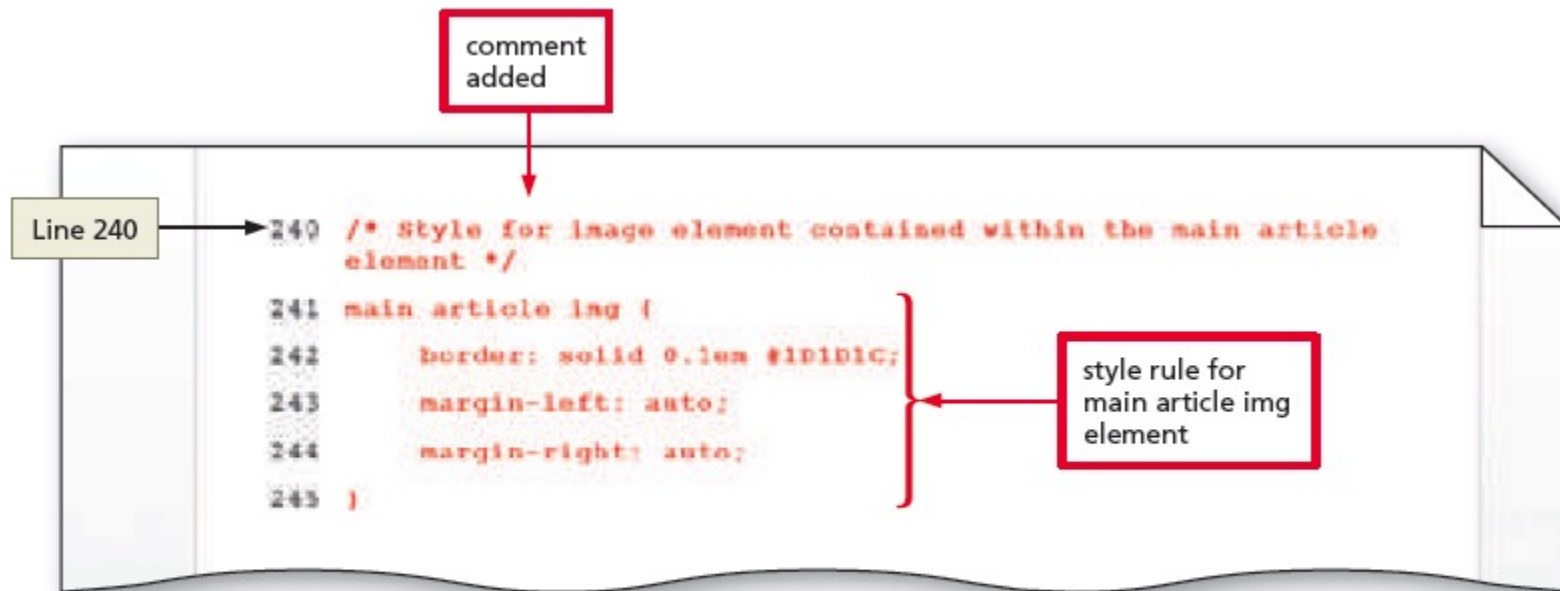


Figure 7-85

To Style the aside Element for the Nutrition Page



Figure 7–89

To Style the aside Element for the Nutrition Page (continued)

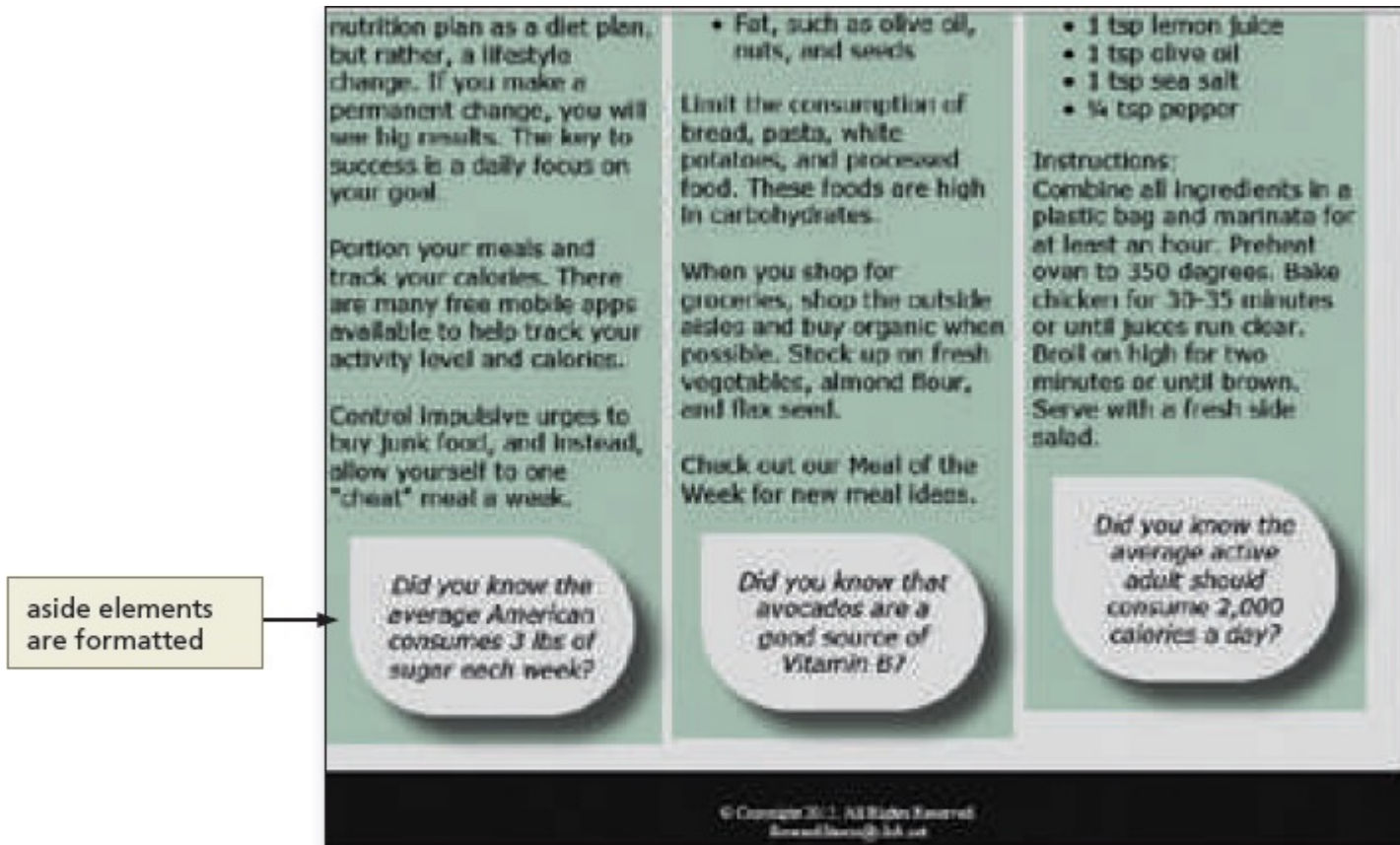


Figure 7-90

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Chapter 7 Complete

