

CP1406 - Week 2

Building a Webpage Template with HTML 5



Introduction

- Building a website from scratch involves a lot of time and planning
 - Professional web design services are in high demand
- Planning before building a website is useful
 - Includes meeting with clients or stakeholders to discover needs, the purpose of the website, and target audience

Designing a Website

- Activities involved in designing a website
 - Planning
 - Articulating the website's purpose
 - Identifying the target audience
 - Creating a site map and wireframe
 - Selecting graphics and colours to use in the site
 - Determining whether to design for an optimal viewing experience across a range of devices – cross-platform, responsive

Identify Your Goal(s) - Starting Point

- Every site has at least one goal
- Designing to best achieve that is your goal as a Web designer and developer
- Examples
 - sell new or existing products
 - promote your business and develop your brand
 - reduce printing costs or call centre overhead
 - ... *what else?*

Identify Your Goal(s)

- Can you write a short (one- to three-sentence) mission statement that clearly states the site's goal(s)?
- What does the client hope to gain from creating and maintaining a Web site?
- How will the success of the site be judged?
 - This question helps check if the goal is valid
 - If you can't measure the success of the mission, you should change the mission until you can

Compare These Mission Statements

1. Training Zone is a company that has been around for over 150 years. They specialise in training people in IT and management skills. This website presents information about the company, its history, some sample articles, contact information and links.
2. The website is intended to increase revenue for Training Zone by promoting the services offered by the company in order to get people to sign up for these services online – increasing both new and repeat customers.

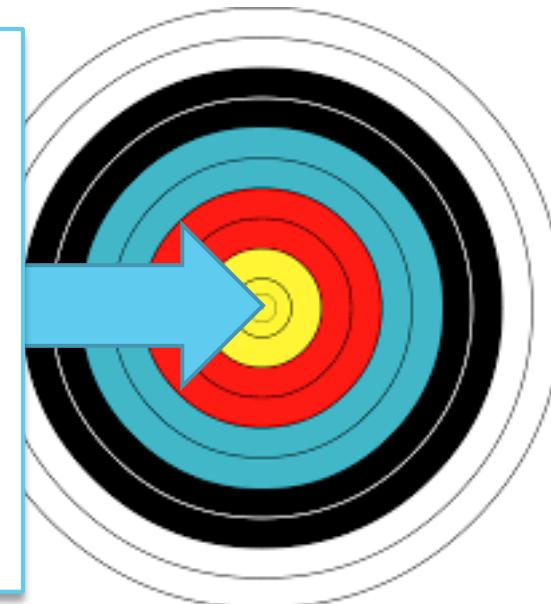
Establish Your Target Audience

- Determining **who** will visit your website is the key to understanding why you need a website, and identifying what it should include.
- Design your sites with those visitors in mind.
- If you can determine **why** your visitors will want to visit your site, you can identify your site's primary purpose and goals.

Design For Your Target Audience

- Who is the target audience?
 - Now how will that affect your design?
 - Design specifically to suit your specific audience

It is very important to see the connection between planning and design. E.g., If we don't design the site to suit our intended **target** audience then there's no point knowing the target audience.



Can you design for "everybody"?

*"I can't give you a sure-fire formula for success,
but I can give you a formula for failure:
try to please everybody all the time."*

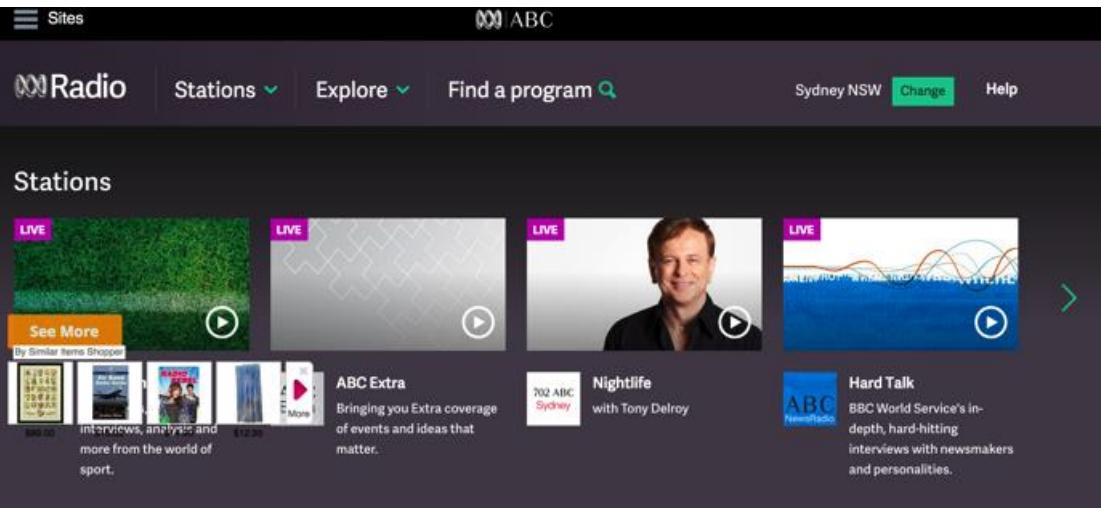
Herbert Bayard Swope Sr. (1882 – 1958)

The first and three-time recipient of the
Pulitzer Prize for Reporting.



Design For Your Target Audience

- Who is the target audience for:
 - <http://www.abc.net.au/radio/>
 - <http://www.abc.net.au/abcforkids/>



Music



Designing a Website - Example

Purpose of the Website	To promote fitness services and gain new clients. The Forward Fitness Club mission: facilitate a healthy lifestyle and help our clients meet their fitness and nutrition goals.
Target Audience	Forward Fitness Club customers are adults between the ages of 18 and 50 within the local community.
Multiplatform Display	Forward Fitness Club recognises the growth in smartphone and tablet usage and wants a single website that provides an optimal viewing experience regardless of whether visitors are using a desktop, laptop, tablet, or smartphone.
Wireframe and Site Map	The initial website will consist of five webpages arranged in a hierachal structure with links to the home page on every page. Each webpage will include a header area, navigation area, main content area, and footer area.

► Table 2-1 Forward Fitness Club Website Plan

Designing a Website

Graphics	Forward Fitness Club wants to display its fitness equipment and logo to help with local branding. Photos of the facility, members, and staff will increase visual appeal.
Colour	Forward Fitness Club wants to use black and white as the primary colours for a clean, sophisticated look.
Typography	To make the content easy to read, the website will use a serif font style for paragraphs, lists, and other body content, while providing contrast by using a sans serif font style for navigation links and headings – more on Typography later
Accessibility	Standard accessibility attributes, such as alternative text for graphics, will be used to address accessibility.

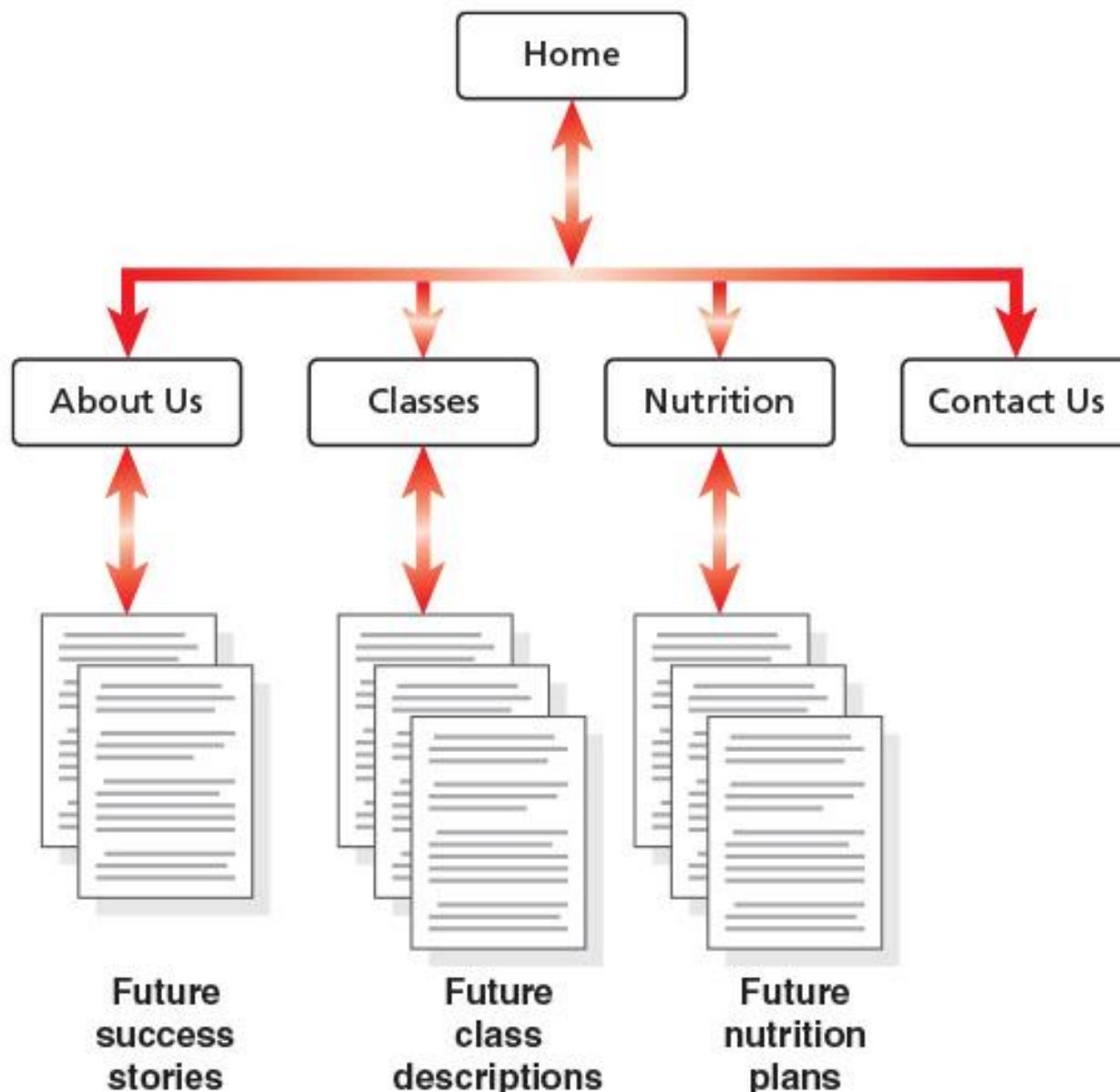
► Table 2-1 Forward Fitness Club Website Plan

Site Map

- Indicates how the pages in a website relate to each other
- Example: Forward Fitness Club website
 - Home page: Introduces the fitness centre and its mission statement
 - About Us page: Showcases the facility's equipment and services
 - Classes page: Includes a schedule of available group training and fitness classes
 - Nutrition page: Provides nutrition tips and simple meal plans
 - Contact Us page: Provides a phone number, email address, physical address, and form for potential clients to request additional information about the fitness centre's services

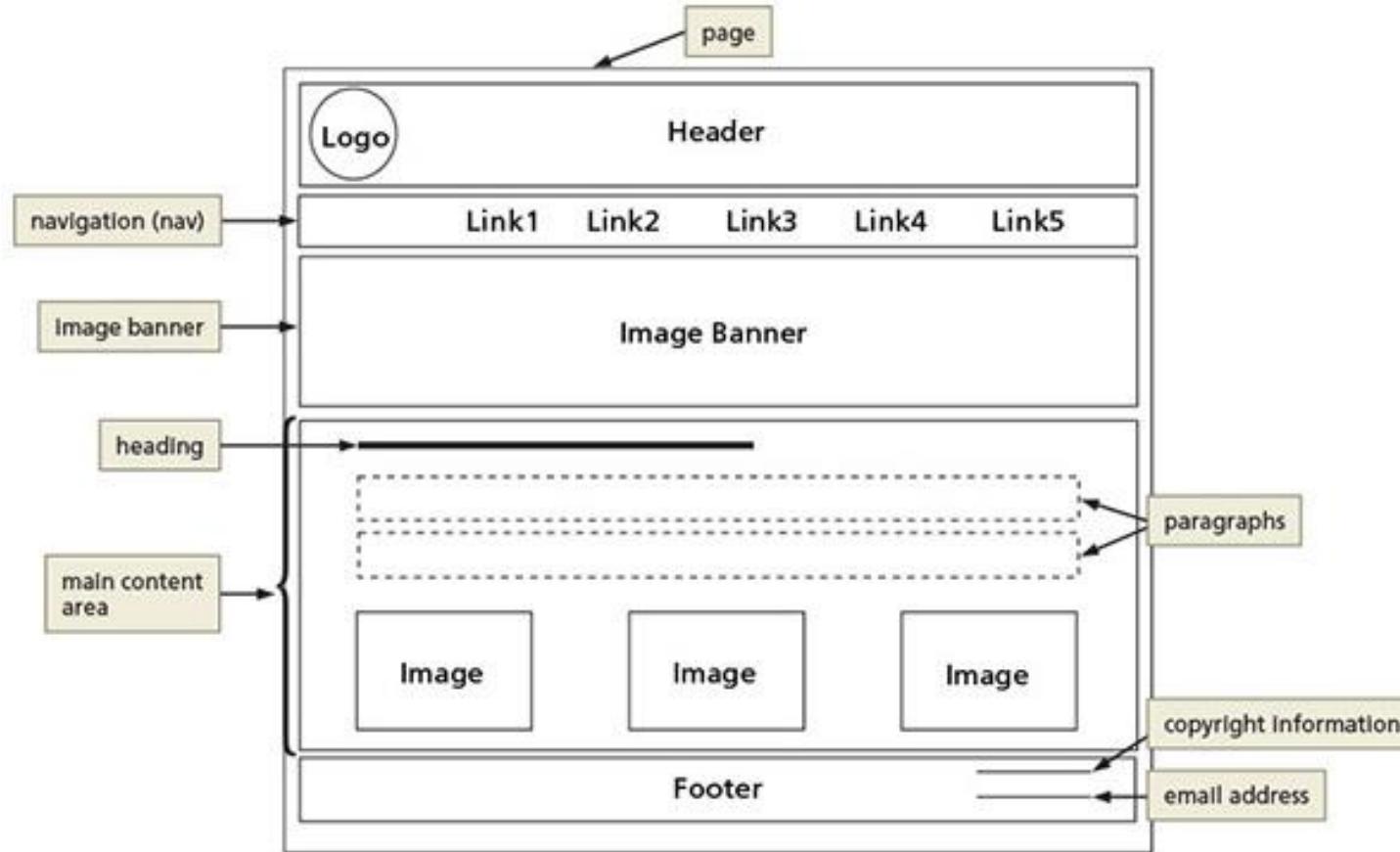
Site Map

- Example: Forward Fitness Club



Wireframe

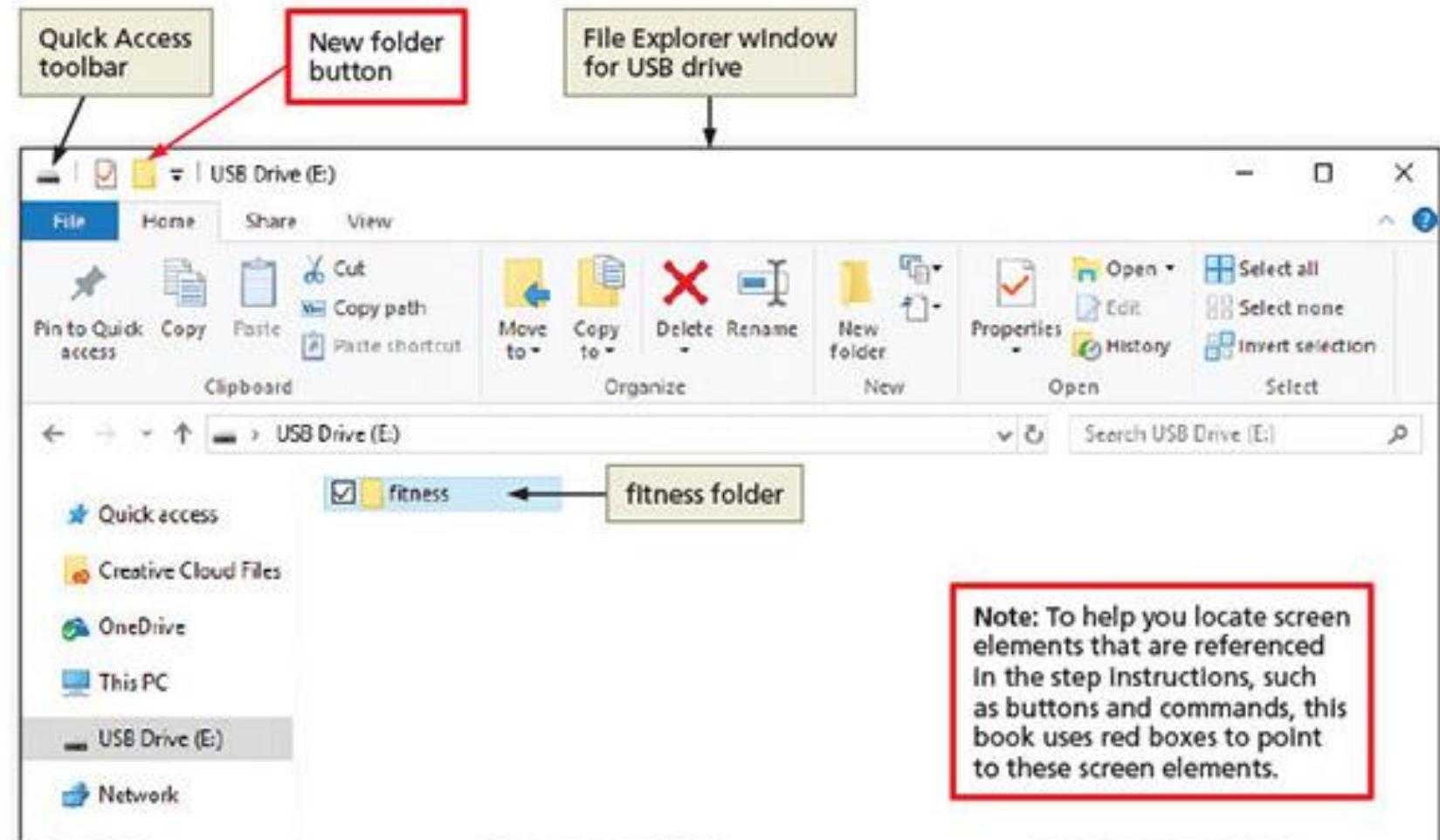
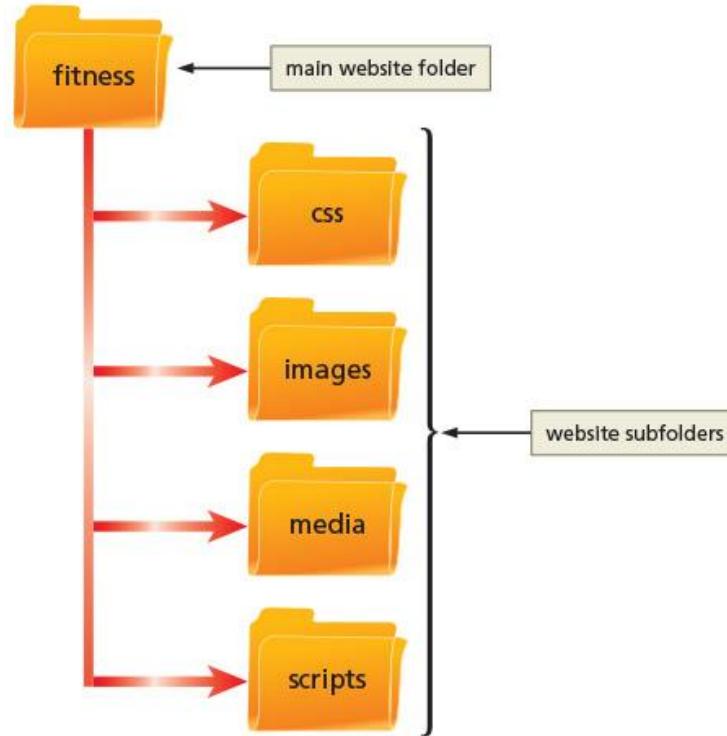
- Wireframe depicts the layout of a webpage, including its major content areas



File Management

- Websites use several types of files
 - HTML files, images, media such as audio and video files, CSS and JavaScript files
- Sites should follow a systematic method to organise files
 - The main folder, also called the root folder, contains all files and other folders for the website

Create a website folder and subfolders



Using HTML 5 Semantic Elements

- Begin a new HTML document by adding the basic required HTML elements
 - DOCTYPE, html, head, and body elements
- HTML 5 introduced several new semantic elements with standardised names
 - Name of each tag reflects the purpose
 - header
 - nav
 - main
 - footer

Using HTML 5 Semantic Elements

Element	Description
<code><header>...</header></code>	Indicates the header information on the webpage. Header content typically consists of a business name or logo and is commonly positioned immediately after the opening <code><body></code> tag.
<code><nav>...</nav></code>	Indicates the start and end of a navigation area within the webpage. The <code>nav</code> element contains hyperlinks to other webpages within a website and is commonly positioned immediately after the closing <code></header></code> tag.
<code><main>...</main></code>	Indicates the start and end of the main content area of a webpage. Contains the primary content of the webpage. Only one <code>main</code> element can appear on a page.

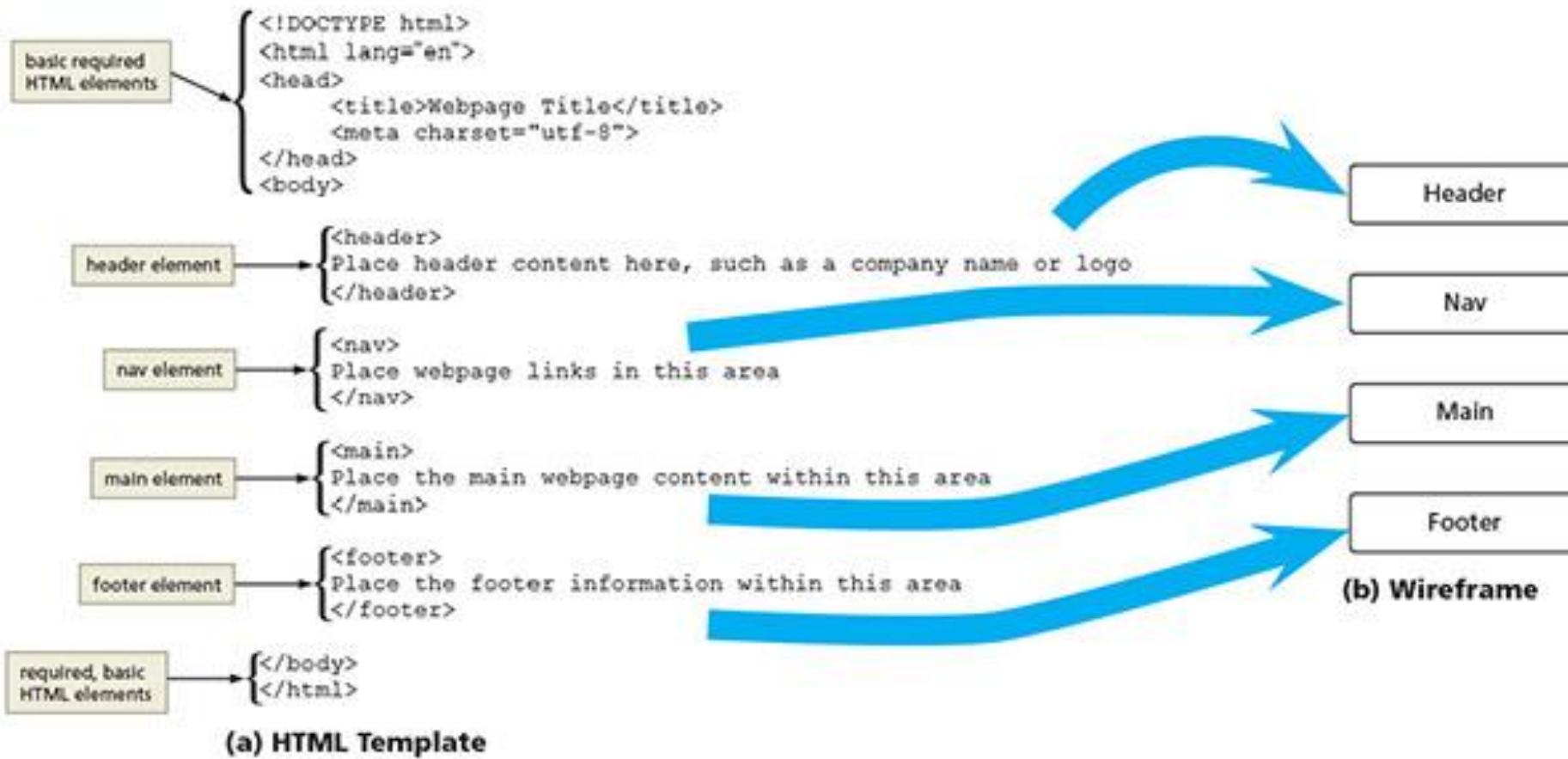
Table 2-2

Using HTML 5 Semantic Elements

Element	Description
<code><footer>...</code> <code></footer></code>	Indicates the start and end of the footer area of a webpage. Contains the footer content of the webpage.
<code><section>...</code> <code></section></code>	Indicates the start and end of a section area of a webpage. Contains a specific grouping of content on the webpage.
<code><article>...</code> <code></article></code>	Indicates the start and end of an article area of a webpage. Contains content such as forum or blog posts.
<code><aside>...</code> <code></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.

▶ Table 2-2

Using HTML 5 Semantic Elements



Creating a Webpage Template

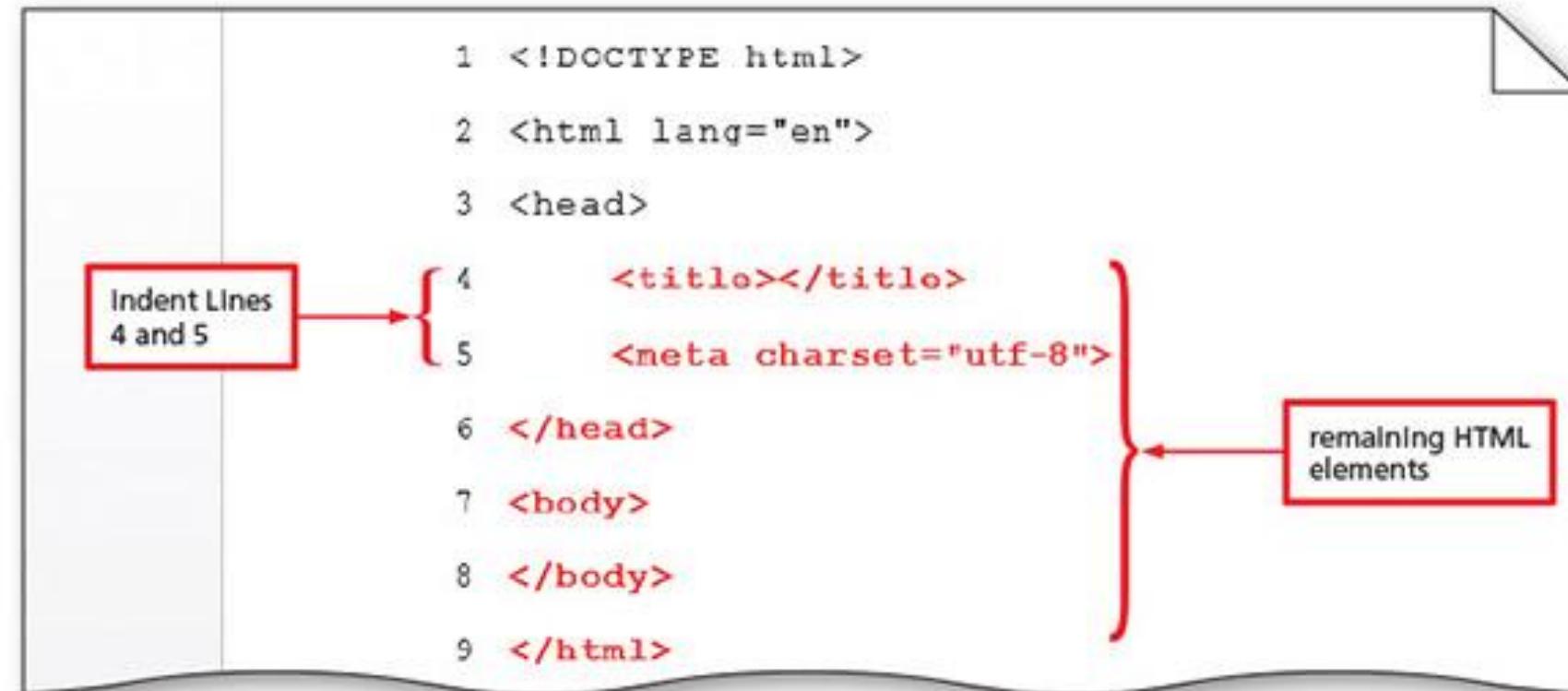
- A hallmark of a well-designed website is that its webpages have the same look and feel
- Pages have the same layout, color scheme, typography, and style of graphics
- Elements work the same way on each page

Creating a Webpage Template

- Templates are used to make sure webpages in a site share a standard layout
 - HTML document containing elements that should appear on each page
 - Instead of creating a webpage from scratch, open the template document in a text editor and save it using the name of the new webpage

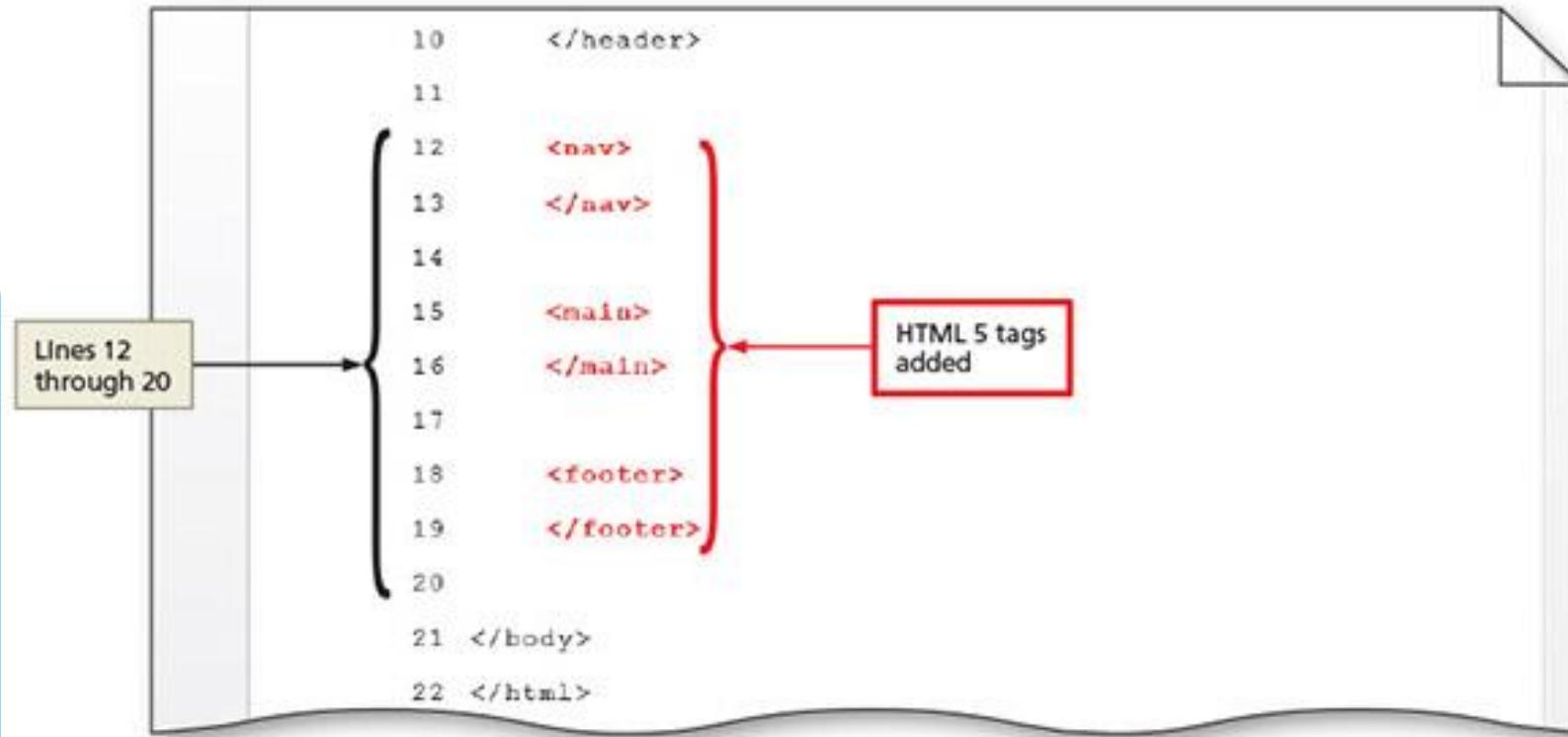
Creating a Webpage Template

- Create a webpage template
 - An HTML document with the HTML elements that define the webpage structure



Creating a Webpage Template

- Add HTML 5 semantic elements to a webpage template
 - Define content areas



Comments

- Comments can provide additional information about the areas within the webpage
 - Add a comment before a tag using the following tag:
 - <! - - Place your comment here - - >
- Word wrap causes text lines to break at the right edge of the window and appear on a new line
 - All entered text is visible in the editor window

Comments

- Add comments to a webpage template

The diagram illustrates the structure of an HTML template with various annotations:

```
1 <!DOCTYPE html>
2 <!-- This website template was created by: Student's
   First Name Student's Last Name -->
3 <html lang="en">
4 <head>
5   <title></title>
6   <meta charset="utf-8">
7 </head>
8 <body>
```

- A callout box labeled "new Line 2" points to the start of line 2.
- A callout box labeled "<html lang= \"en\"> moved to Line 3" points to the start of line 3.
- A red box labeled "comment Inserted" contains a brace that spans the entire multi-line comment starting from line 2.

▶ Figure 2-14

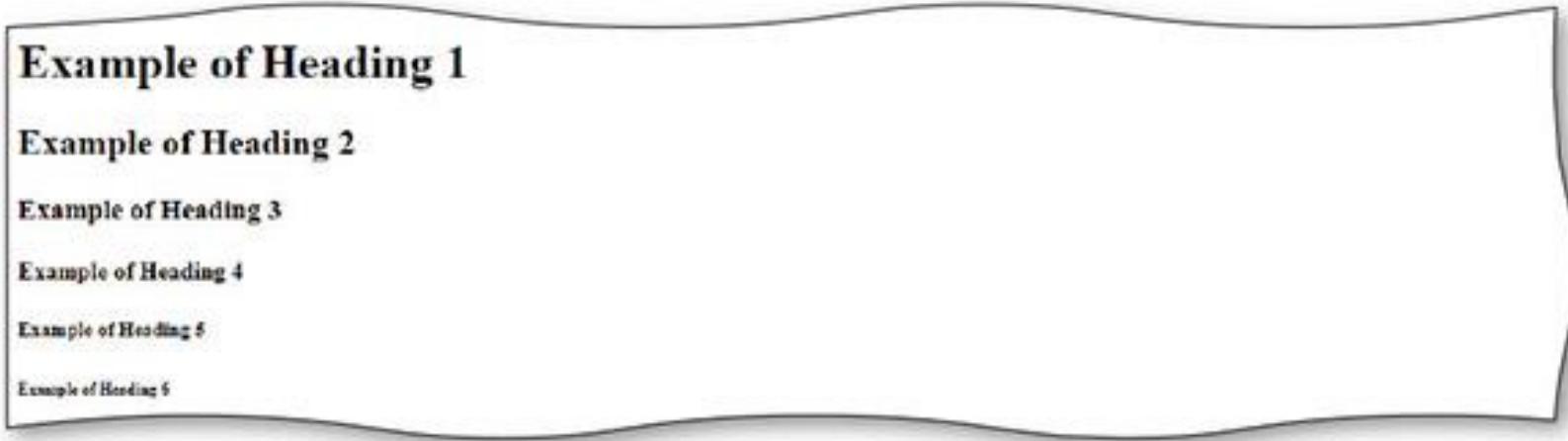
Heading Elements

- Heading elements provide a title or heading before a paragraph of text or section of a page
 - Indicate that a new topic is starting and typically identify or summarise the topic
- Appear in a larger font size than normal text
 - Make it easy for users to quickly scan the page and identify its sections



Figure 2-18

Heading Elements



Example of Heading 1
Example of Heading 2
Example of Heading 3
Example of Heading 4
Example of Heading 5
Example of Heading 6

Figure 2–19

Webpage Content

- Static content that will appear on every webpage can be added to the template
 - Business name or logo, links, and the footer information
- Example of content added between header tags:

```
<header>
    <h1>Forward Fitness Club</h1>
    <h2>Subheading...</h2>
</header>
```

Using Symbol Entities

- A symbol can be added to an HTML webpage by typing its HTML entity name or entity number
 - Inserting an HTML character entity in the code displays a **reserved HTML character** on the webpage
 - Entity name is an abbreviated name
 - Entity number is a combination of the pound sign (#) and a numeric code

Using Symbol Entities

- Add text and nonbreaking spaces to the nav section

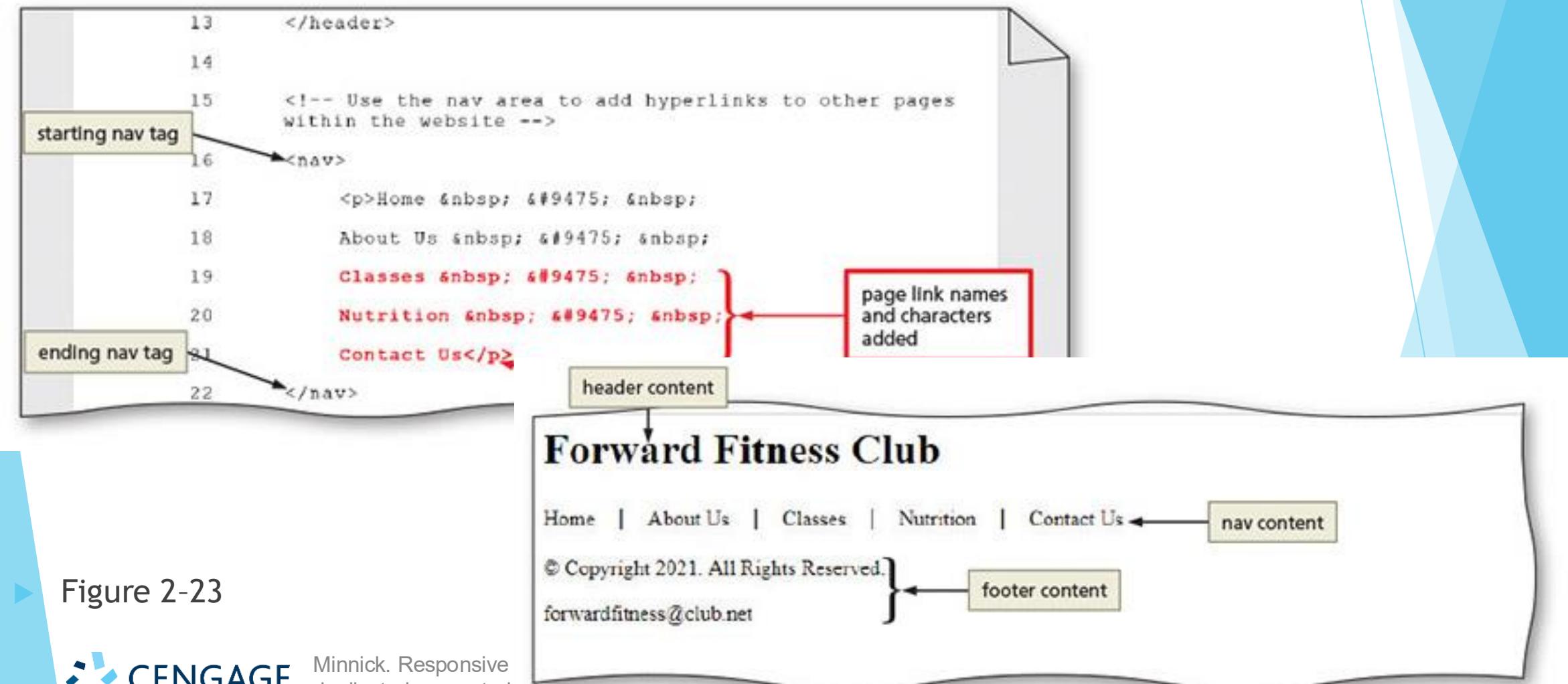


Figure 2-23

Using Symbol Entities

Character	Description	Entity Name	Entity Number
©	Copyright symbol	©	©
®	Registered trademark	®	®
€	Euro	€	€
&	Ampersand	&	&
<	Less than	<	<
>	Greater than	>	>
	Nonbreaking space	 	

Table 2-3 Common Symbol Entities



Validating HTML Documents

- After creation of an HTML file, the document can be validated to verify HTML code validity
- **Validator** checks for errors, indicates where they are located, and suggests corrections
 - If the validator detects an **error** in the code, it displays a **warning**
 - Errors and warnings should (almost always) be fixed

Validating HTML Documents

- Validate the webpage template

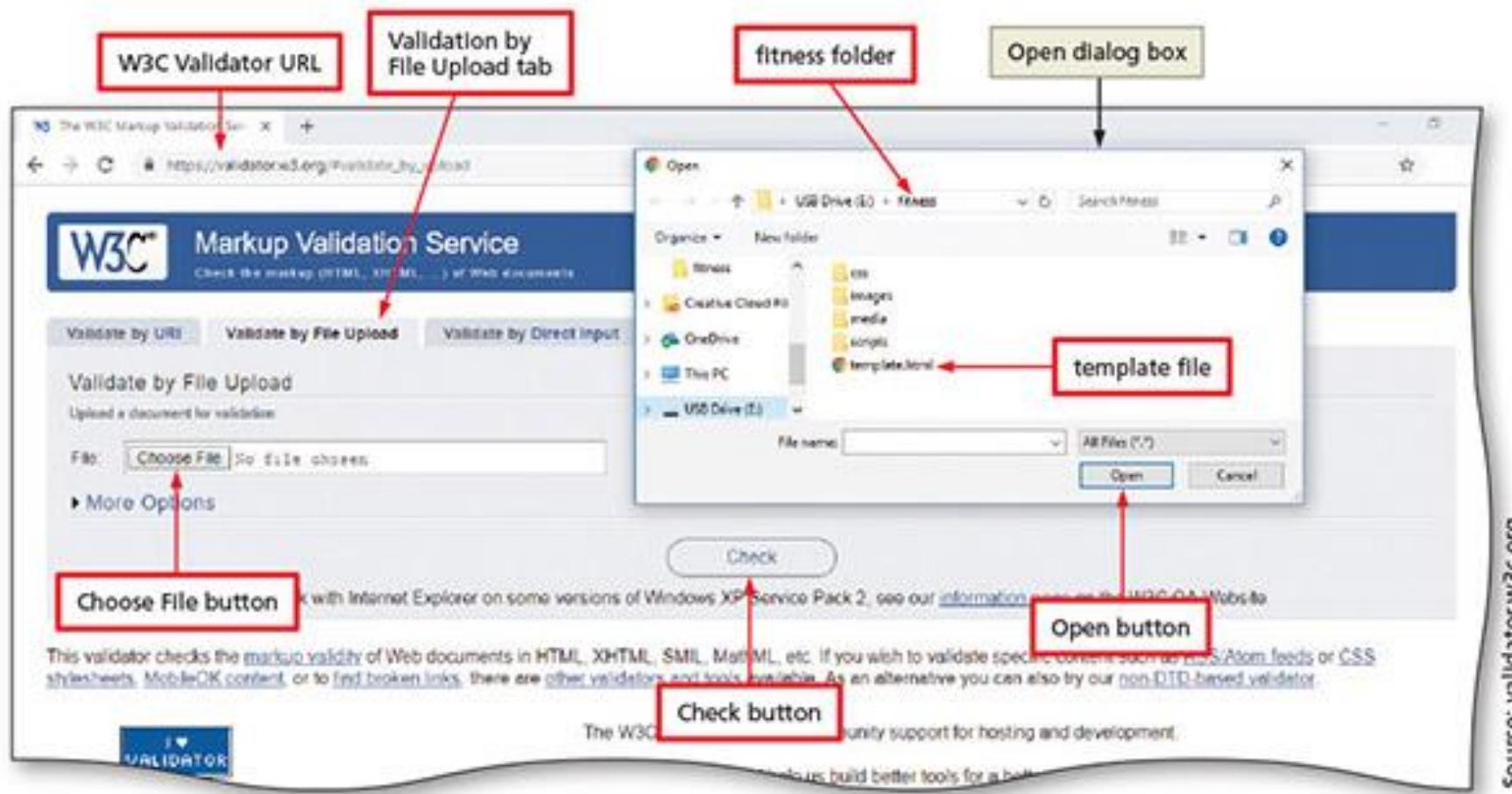
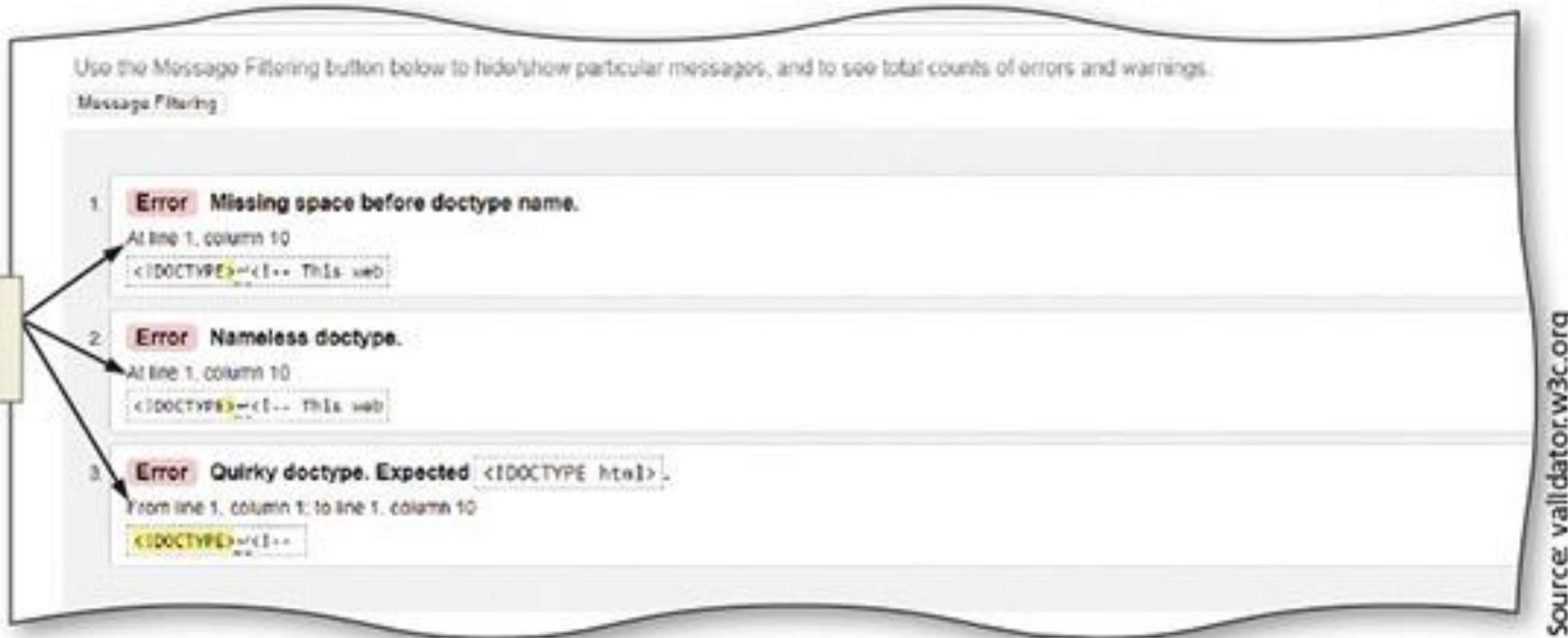


Figure 2-26

Validating HTML Documents

- Validate an HTML document with **errors**



▶ Figure 2-29

Creating a Home Page Using a Webpage Template

- Create a home page using the webpage template (save time) and add content

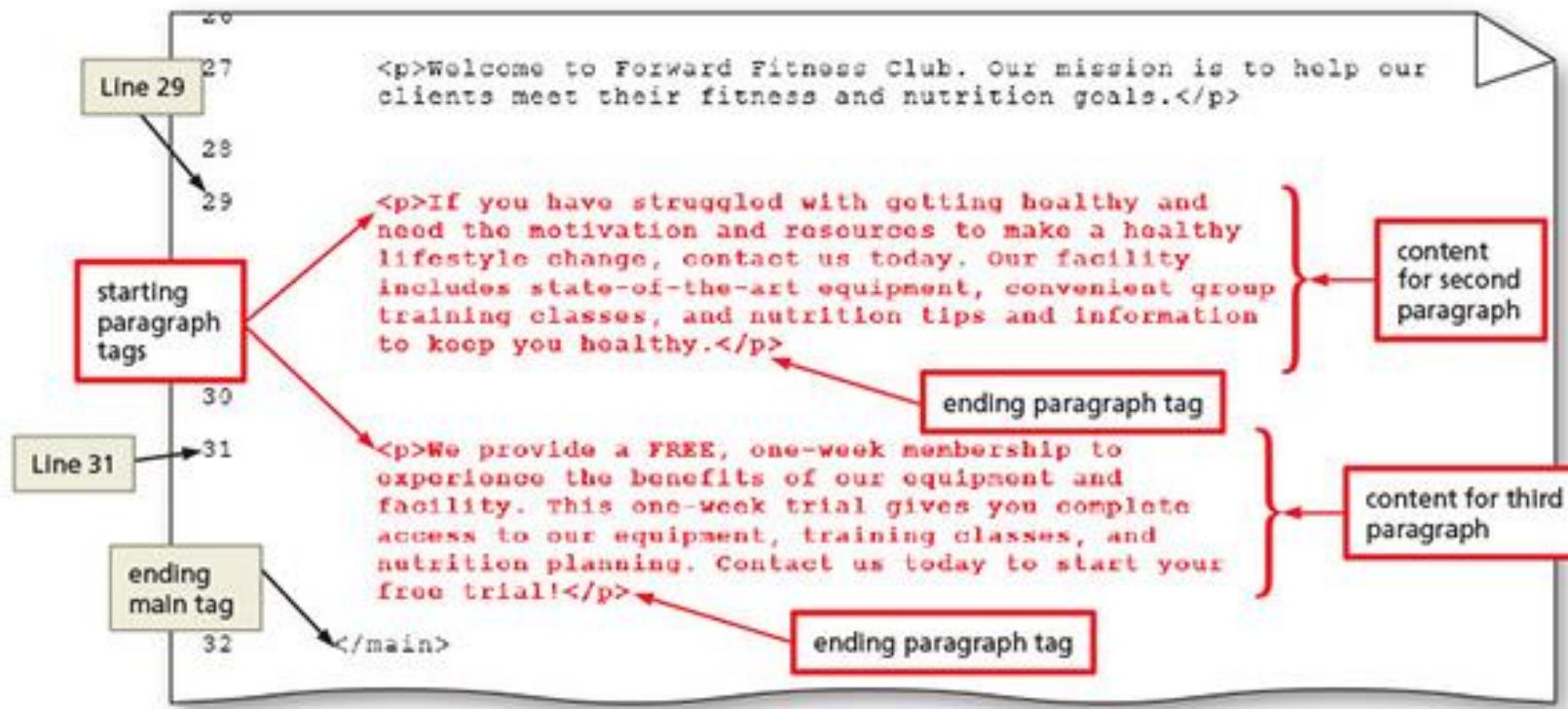


Figure 2-31

Creating a Home Page Using a Webpage Template

- Display a home page in the default browser

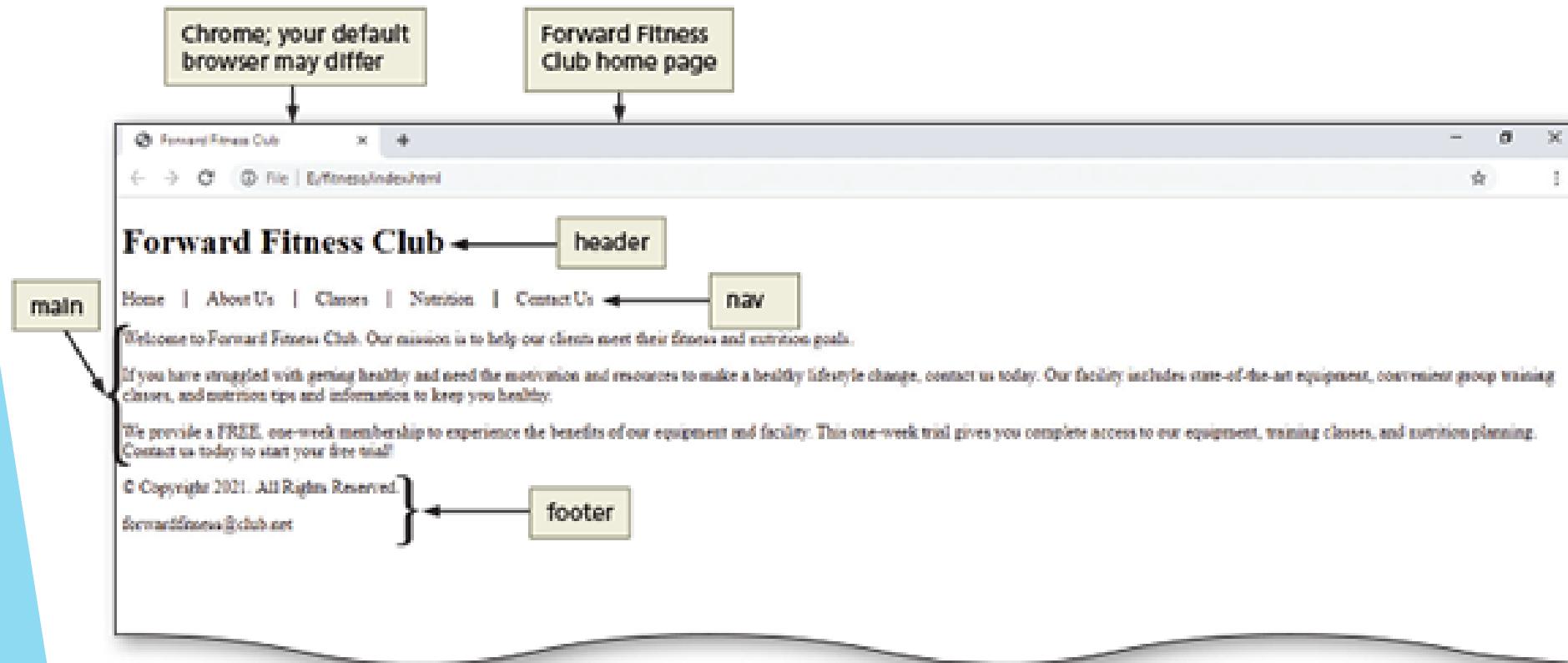


Figure 2-32

Chapter Summary

- In this chapter, you learned about:
 - Preparing a website by organising folders for the webpage files
 - Using HTML 5 structural elements to create a webpage template
 - Validating the template
 - Creating the home page