Web Design Principles
5th Edition

Chapter Three

Planning the Site

Objectives

When you complete this chapter, you will be able to:

- Understand the Web site development process
- Create a site specification
- Identify the content goal
- Analyze your audience
- Build a Web site development team

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Understanding the Web Site Development Process

Understanding the Web Site Development

- You need a good project plan
- Larger projects need a project manager
- Adopt a development framework
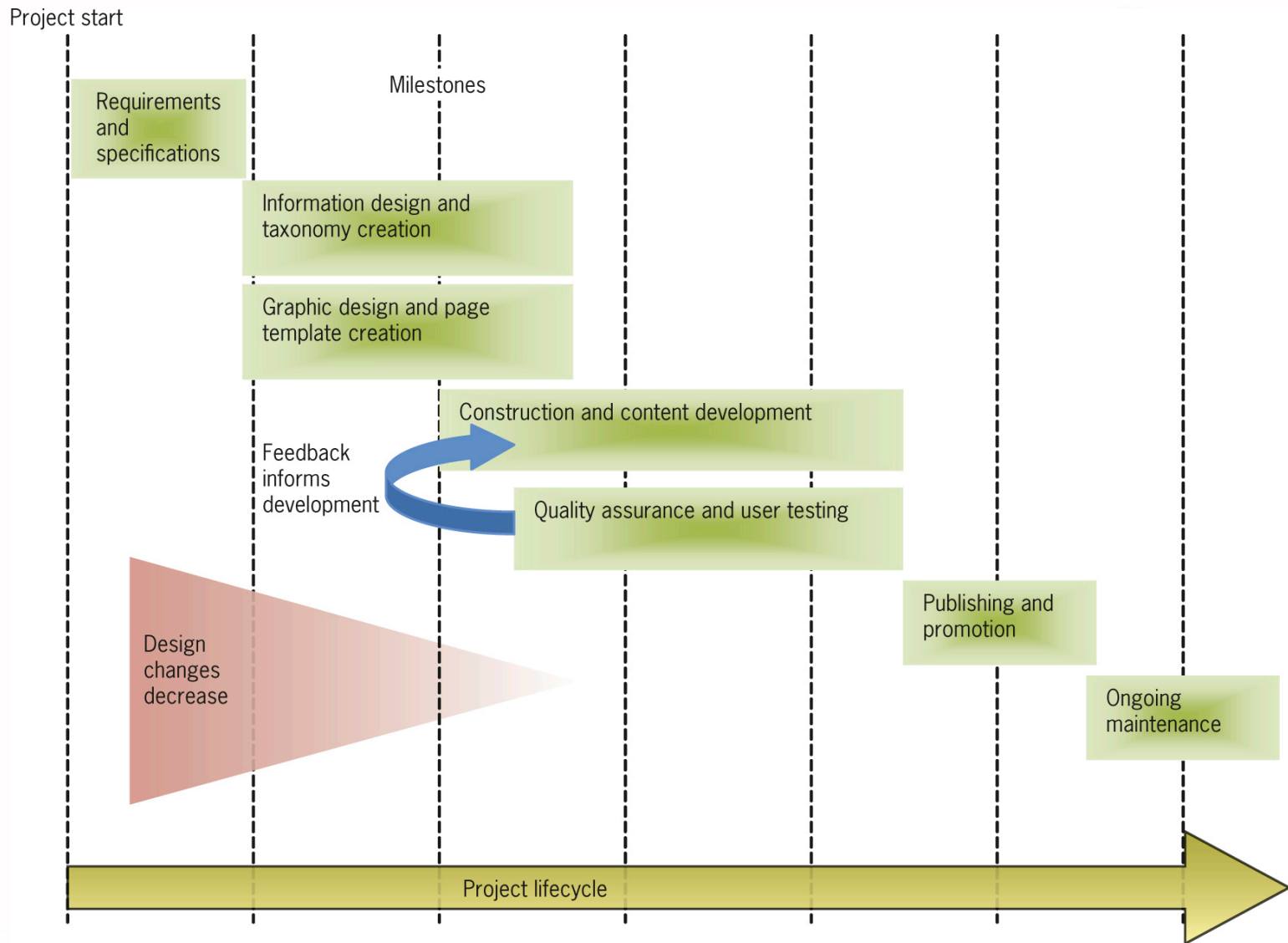- The project life cycle encompasses the entire project from start to finish

Figure 3-1 Web development project lifecycle

Requirements and Specification

- The client presents the requirements for the site
- Requirements are the list of customer needs
- The project team breaks the requirements down to tasks
- The team prepares a project specification that contains:
  - Page layout sketches
  - Audience definition
  - Technical requirements

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Information Design and Taxonomy Creation

- User analysis guides the design of site content
- Goal is to create meaningful content navigation
- Taxonomy is a classification and naming of contents in a hierarchy
- The taxonomy of the site structures the topic hierarchy and navigation

Graphic Design and Page Template Creation

- Designers prepare sketches and page mockups to represent page layouts
- All page layouts start with a mockup
- Mockups can be easily edited based on feedback
- Wireframes document a more stable page design
- Wireframes offer a more complete view of what the final design will look like
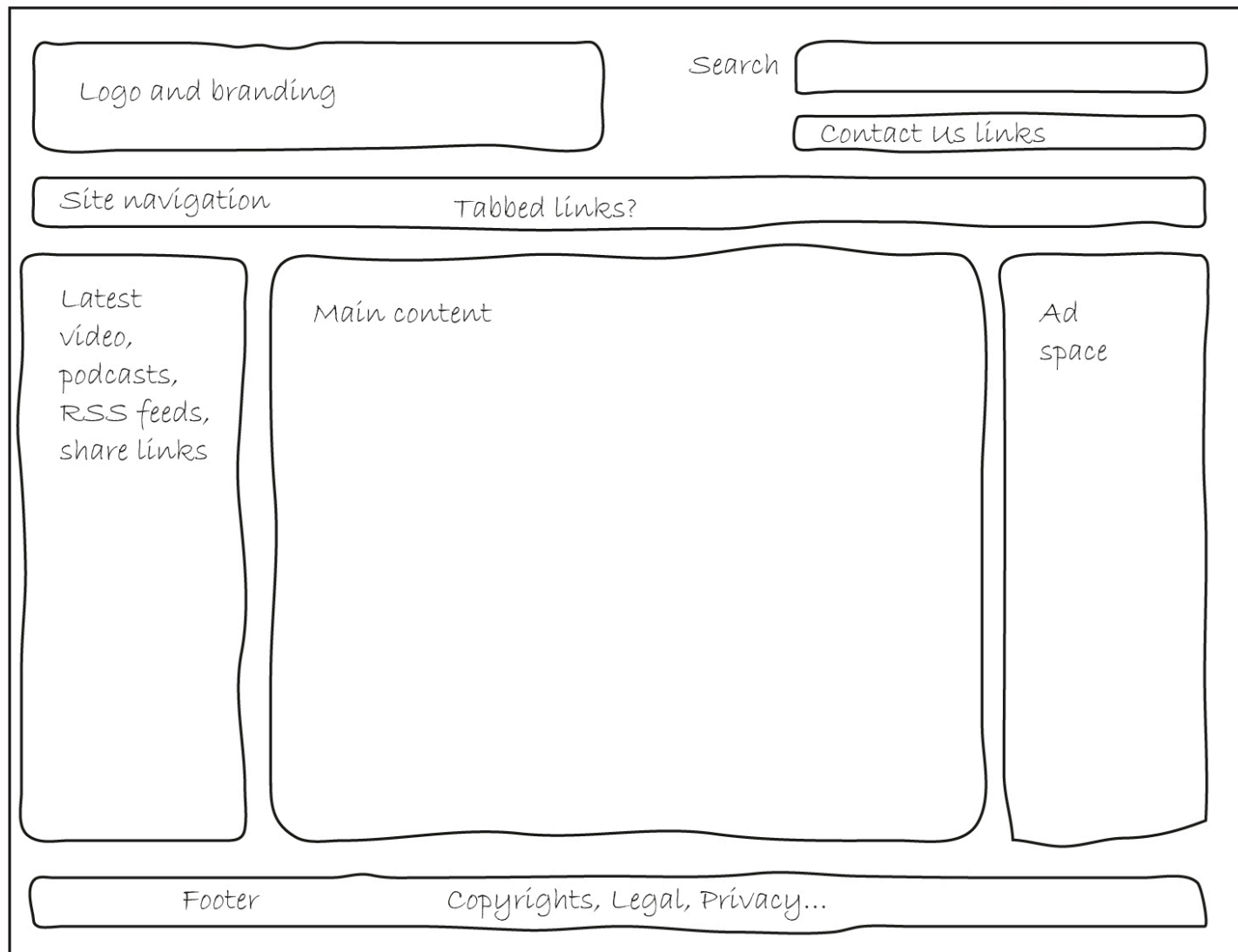
Figure 3-2 Web page mockup

The mockup shows a hand-drawn web page layout with the following labeled sections:
- Logo and branding
- Search
- Contact Us links
- Site navigation
- Tabbed links?
- Latest video, podcasts, RSS feeds, share links
- Main content
- Ad space
- Footer
- Copyrights, Legal, Privacy...
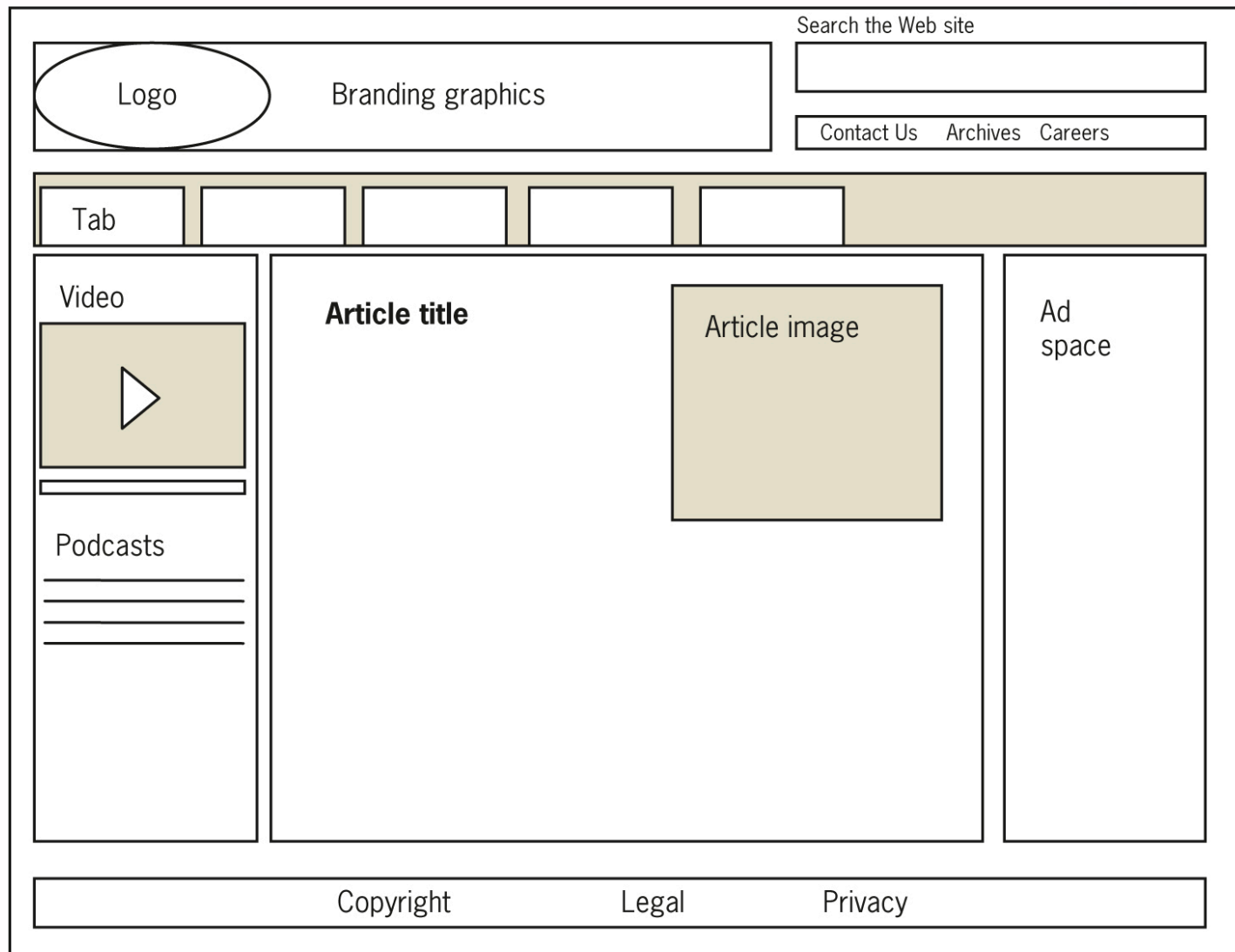
Figure 3-3 Sample wireframe for page layout

Construction and Content Development

- Construction begins when the design stage is mostly complete

- This stage includes technical development of the site

- Some testing will occur during this stage

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Quality Assurance and User Testing

- Quality assurance validates the technology of the site
- User testing validates the design
- Cross-platform testing and usability testing ensure users can access content easily

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Publishing and Promotion

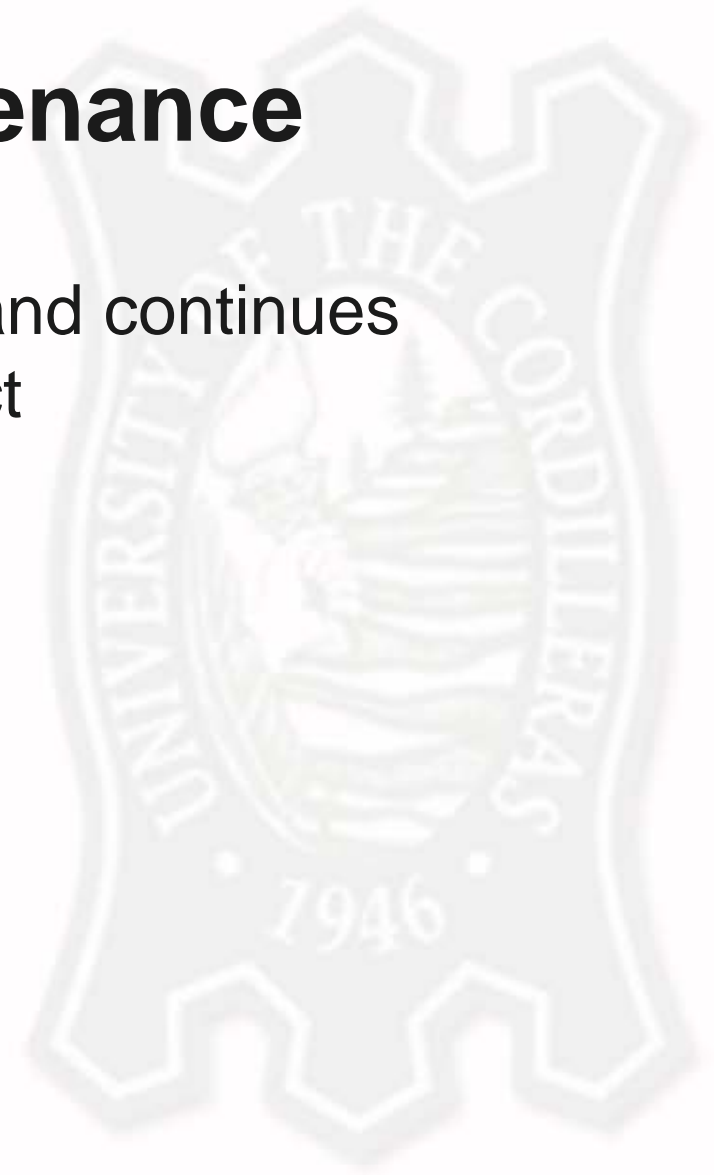- The site is published to the Web
- Promotion of the site begins

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Ongoing Maintenance

- Starts when the site goes live and continues throughout the life of the project

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Creating a Site Specification

Creating a Site Specification

- Who is the client for the site?
- Can you write a two- or three-paragraph mission statement that briefly states the site's goals?
- What do you envision as the goal of the site?
- What do you (or your company or organization) hope to gain from creating and maintaining a Web site?
- What are the requirements for the Web site?

Creating a Site Specification

- Are the requirements feasible?
- How will you judge the success of the site?
- Who is the target audience?
- What are the limiting technical factors?
- What is the budget?
- Is this a new site or an upgrade?

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Identifying the Content Goal

Identifying the Content Goal

- Examine closely what type of site you are building

- Your objectives and your users' objectives may be quite different

- Adopt your users' perspective

- Think about the type of content you're presenting and look to the Web for examples of how best to present it

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Identifying the Content Goal

- Types of Web sites:
    - Billboard
    - Publishing
    - Portal
    - Special interest
    - Blog
    - Social networking

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Identifying the Content Goal

– Wikis

– RSS

– Virtual gallery

– E-commerce, catalog, online shopping

– Product support

– Intranet/Extranet

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Analyzing Your Audience

Analyzing Your Audience

- Produce an audience definition:
  - What is it that users want when they come to your site?
  - How can you attract them and entice them to return for repeat visits?
  - What type of computer and connection speed do your typical visitors have?

Analyzing Your Audience

- Who are the typical members of your audience?
    - Are they male or female?
    - What level of education do they have?
    - What is their reading and vocabulary level?
    - What level of technical aptitude do they have?
- Why do people come to your site?
    - Do they want information?
    - Do they want to download files?
    - Are they looking for links to other Web sites?

Using Web Analytics

- Web analytics are statistics gathered by Web servers

- Reporting tools can analyze the statistics

- You can track user activity on your Web site

- You can see where your visitors come from and which pages they like the best

Identifying Technology Issues and Accessibility Constraints

- Think about where users are located and what their technology level might be

- Test in different environments and with different technologies

- Consider the physical capabilities of your users

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Identifying Technology Issues and Accessibility Constraints

You can identify accessibility constraints

- Review the WCAG 2.0 and section 508 guidelines
- In new sites, plan for accessibility
- In existing sites, assess the current accessibility
- Look to other real-life accessibility implementations

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Identifying Software Tools

- Try to use software that matches the complexity needs of your site
- Move up to more advanced tools as your skills grow
- Learn to use graphics tools as well
- Look to shareware and freeware options

Building a Website Development Team

Building a Web Site Development Team

- Project managers
- HTML developers
- Designers
- Writers and information designers
- Application developers
- Database administrators
- Server administrators

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Creating Conventions for Filenames and URLs

- Plan the filename conventions for your site
- Find out which operating system your server uses
- Make sure file structures are transferable from development machines to the Web server

Naming Files

- File naming conventions vary across operating systems
- The ISO 9660 standard works across all operating systems
- Leave out special characters
- Use the correct file extensions
- Use underscores instead of spaces
- Use all lowercase letters

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Operating System and File System	Filename Conventions
ISO 9660 Standard	Maximum of eight letters followed by a period and a three-letter extension; allowed characters are letters, numbers, and the underscore (_)
Newer PCs: Windows 7, Windows Vista, Windows XP (NTFS), Windows 2000 (NTFS), Microsoft Windows/NT (NTFS)	Maximum of 255 letters, all characters allowed except \ / * " < >	: ?
Older PCs: Windows 98 (FAT32), Windows 95 (VFAT), DOS, and Windows 3.x (FAT file system)	The same as ISO 9660 but with the following additional characters allowed: $ % ' ` - @ ^ ! & [ ] ( ) # This format is also compatible with newer PC operating systems
Newer Macintosh: O/S 8.1 to OS X	Maximum of 255 characters, all characters allowed except the colon (:)
Older Macintosh: Operating systems released before O/S 8.1	Maximum of 31 letters, all characters allowed except the colon (:) This format is also compatible with newer Macintosh operating systems
UNIX	Maximum of 255 letters, all characters allowed except the forward slash (/) and spaces

Table 3-2   File Naming Conventions

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Using Complete or Partial URLs

- Complete URLs are the unique address of a file on the Web

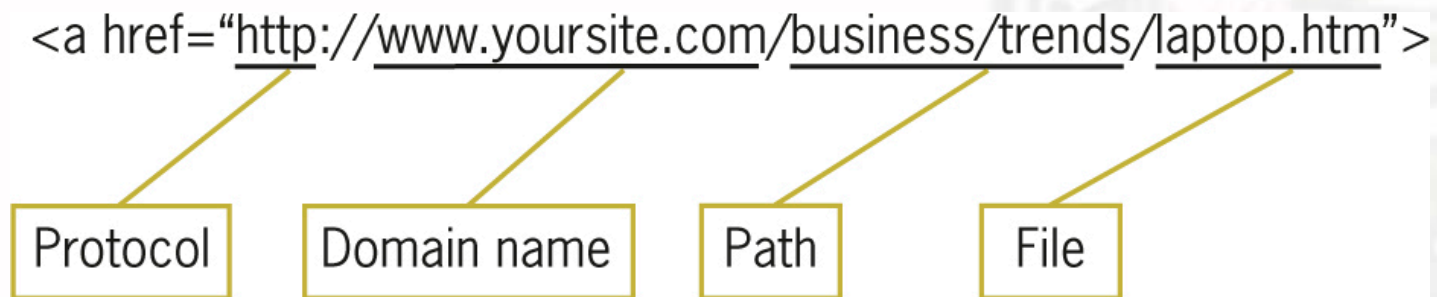<a href="http://www.yoursite.com/business/trends/laptop.htm">

Protocol   Domain name   Path   File

Figure 3-7 Parts of a complete URL

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Using Complete or Partial URLs

- Partial URLs locate a file that resides on your own computer or server

```
<a href="laptop.htm">link text</a>
```

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Setting a Directory Structure

- You build a site on a development computer but host it on a different computer
- The files for your Web site must be transferred from the development computer to the hosting computer
- Your file structure must be transferable
- Use relative paths to indicate file locations

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Single Folder Structure

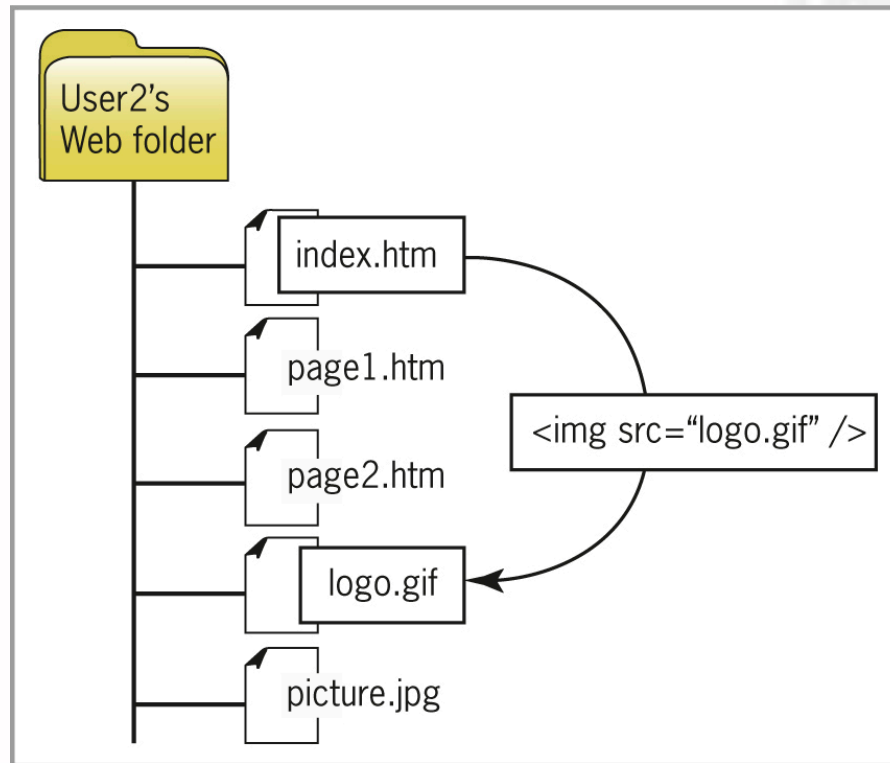- All files are contained in the same folder

Figure 3-8 Simplified single folder file structure

Hierarchical Folder Structure

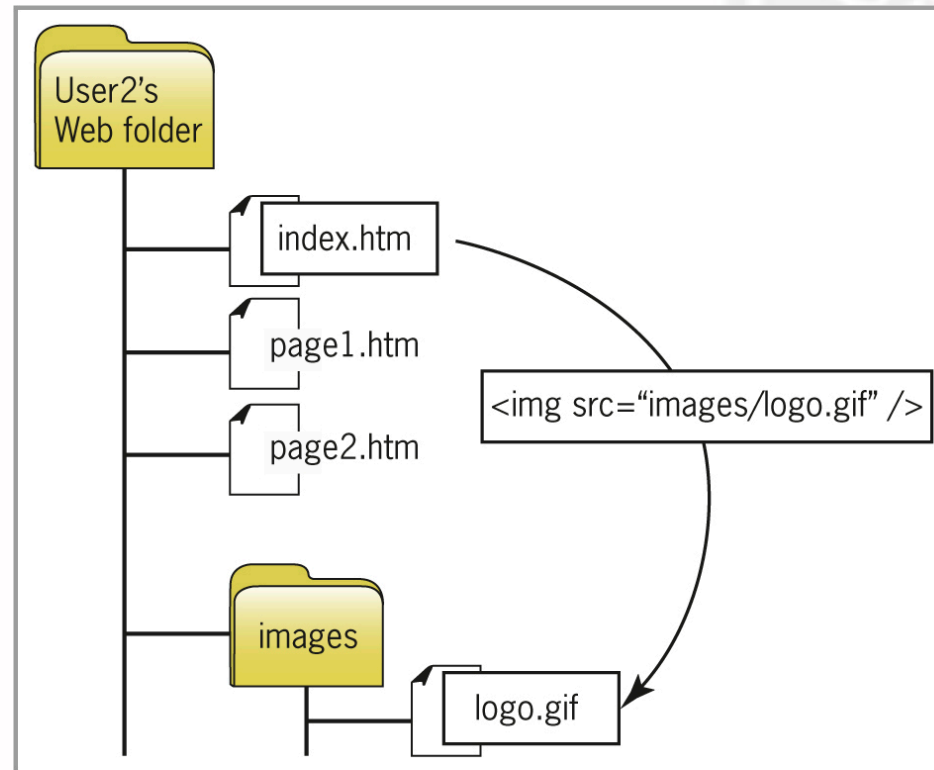- Content is separated into different folders

Figure 3-9 Basic hierarchical folder structure

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Creating a Site Storyboard

- Plan your site by creating a storyboard flowchart
- The flowchart shows structure logic and taxonomy
- This is an important planning step
- You can visualize and refine your site design

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Organizing Information Structure

- Think about your users' information needs
- How should your information design map look?
- Review the following sample structures and adapt them to information needs
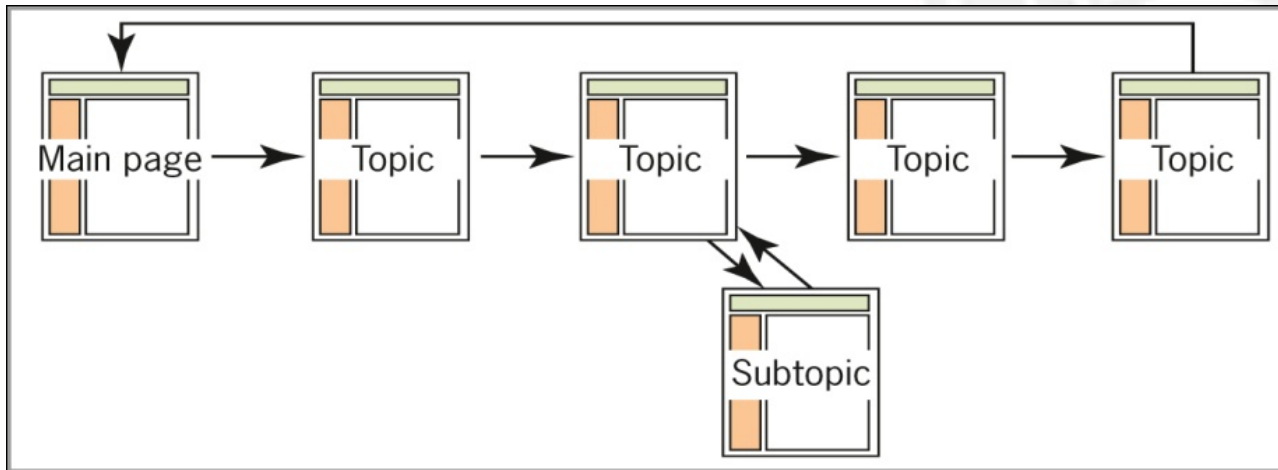
Linear Structure

Figure 3-11 Linear information structure

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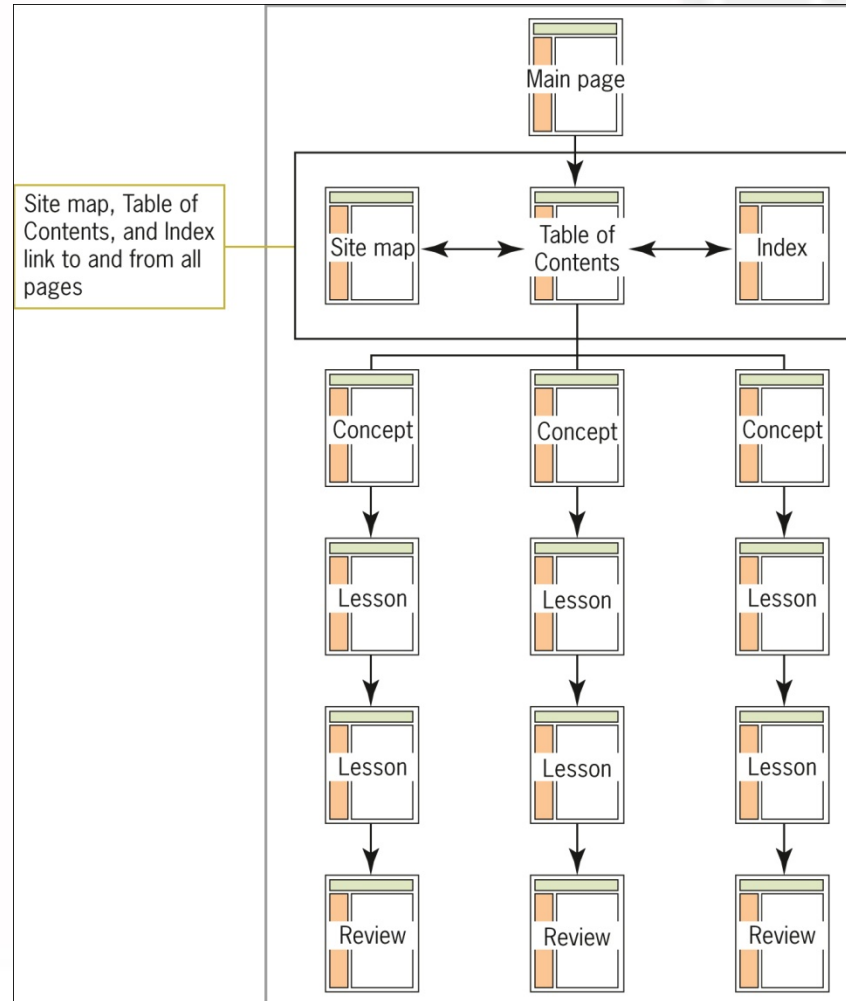**Information Technology**
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Tutorial Structure

Site map, Table of Contents, and Index link to and from all pages

Figure 3-12 Tutorial structure

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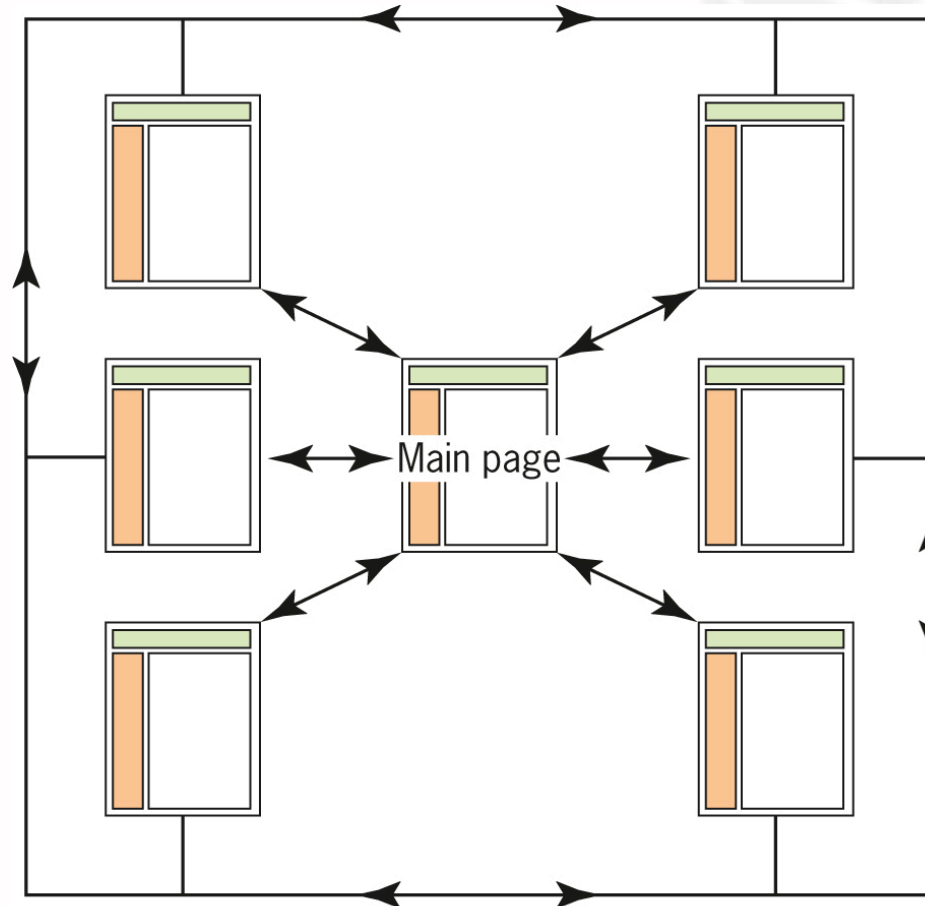
Web Structure

Figure 3-13 Web structure

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Hierarchical Structure

Figure 3-14 Hierarchical structure

Cluster Structure
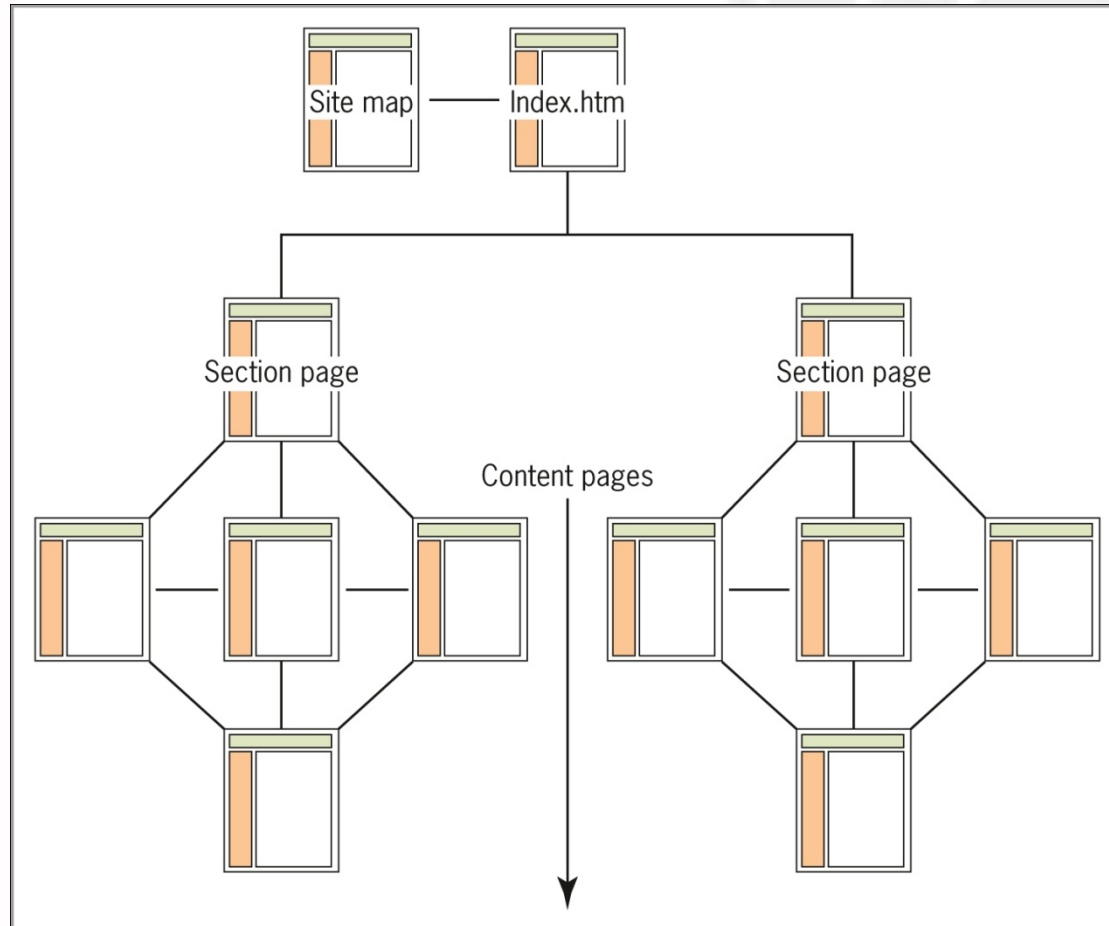
Figure 3-15 Cluster structure

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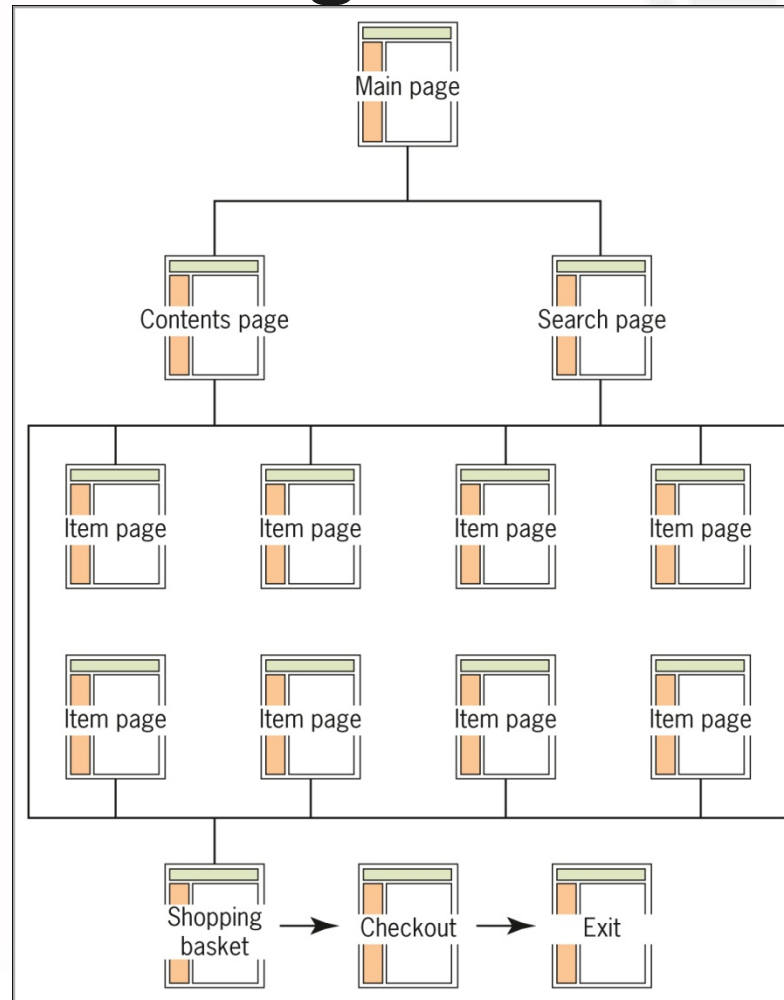
Catalog Structure

Figure 3-16 Catalog structure

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Publishing Your Web Site

Choosing a Web Hosting Service Provider

- The Web hosting service hosts your Web site
- Select a Web hosting service appropriate to the size of your Web site
- Check for the following features
  - DSL and cable access
  - Accessible technical support
  - E-mail addresses
  - SQL database support
  - Secure socket layer support

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Registering a Domain Name
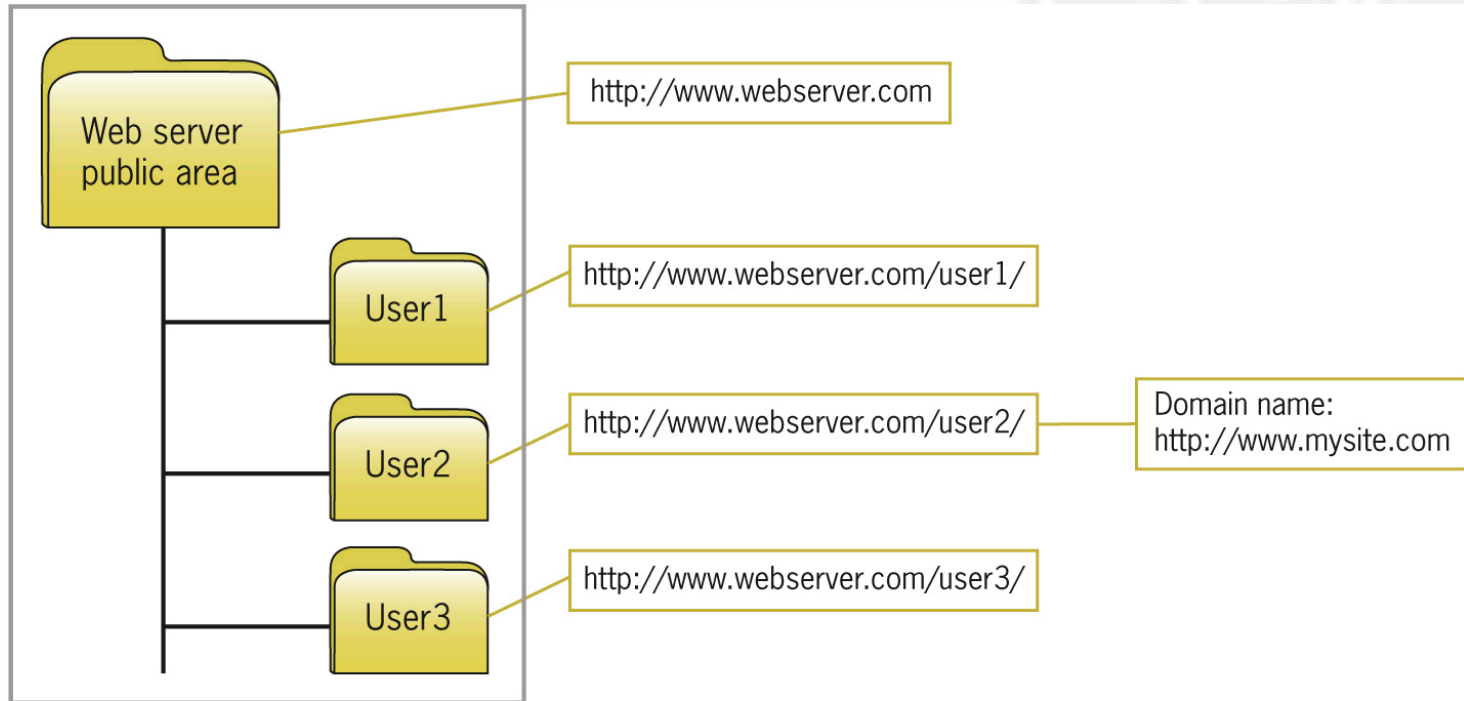
Figure 3-17 Domain name hides the actual path

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Web Hosting Service Comparison Checklist

- Is the Web host local or national?

- What are the details of the different hosting packages?

- Are there bandwidth limits for the number of visitors your site receives per month?

- Does the Web host offer technical support?

- How many e-mail addresses do you get?

- Does the Web host provide software and offer support for the latest connection technologies?

- Does the Web host offer enhanced services?

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Uploading Your Files with FTP

- To publish pages on the Web, you must send your HTML code, images, and other files to the Web server
- FTP software let you transfer the files
- Some HTML-editing software has built-in FTP
- There are many shareware and freeware FTP programs to choose from

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Testing Your Web Site

- Multiple browsers
- Multiple operating systems
- Connection speeds
- Display types
- Link testing

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Usability Testing

- Vary your subjects
- Formalize your testing
- Develop a feedback form

Summary

- A successful Web site is the result of careful planning

- Become familiar with the Web development lifecycle

- Start with pencil and paper

- Write a site specification document

- Identify the content goal

- Analyze your audience

- An effective site is a team effort

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Summary

- Create portable filename conventions
- Create an information structure for your site
- Shop carefully when seeking a Web host
- Learn to use FTP software
- Test, test, test!