MASSEY UNIVERSITY

COMPUTER SCIENCE & INFORMATION TECHNOLOGY
SCHOOL OF FUNDAMENTAL SCIENCES

Web Site Planning

Based on: Joel Sklar (2012), *Principles of Web Design*, 5th Edition, Cengage, Chapter 2

Topic Outline/Objectives

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

1. Understand the Web site development process;
2. Create a site specification;
3. Identify the content goal;
4. Analyze your audience; and
5. Build a Web site development team.

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; and
- The project life cycle encompasses the entire project from start to finish.

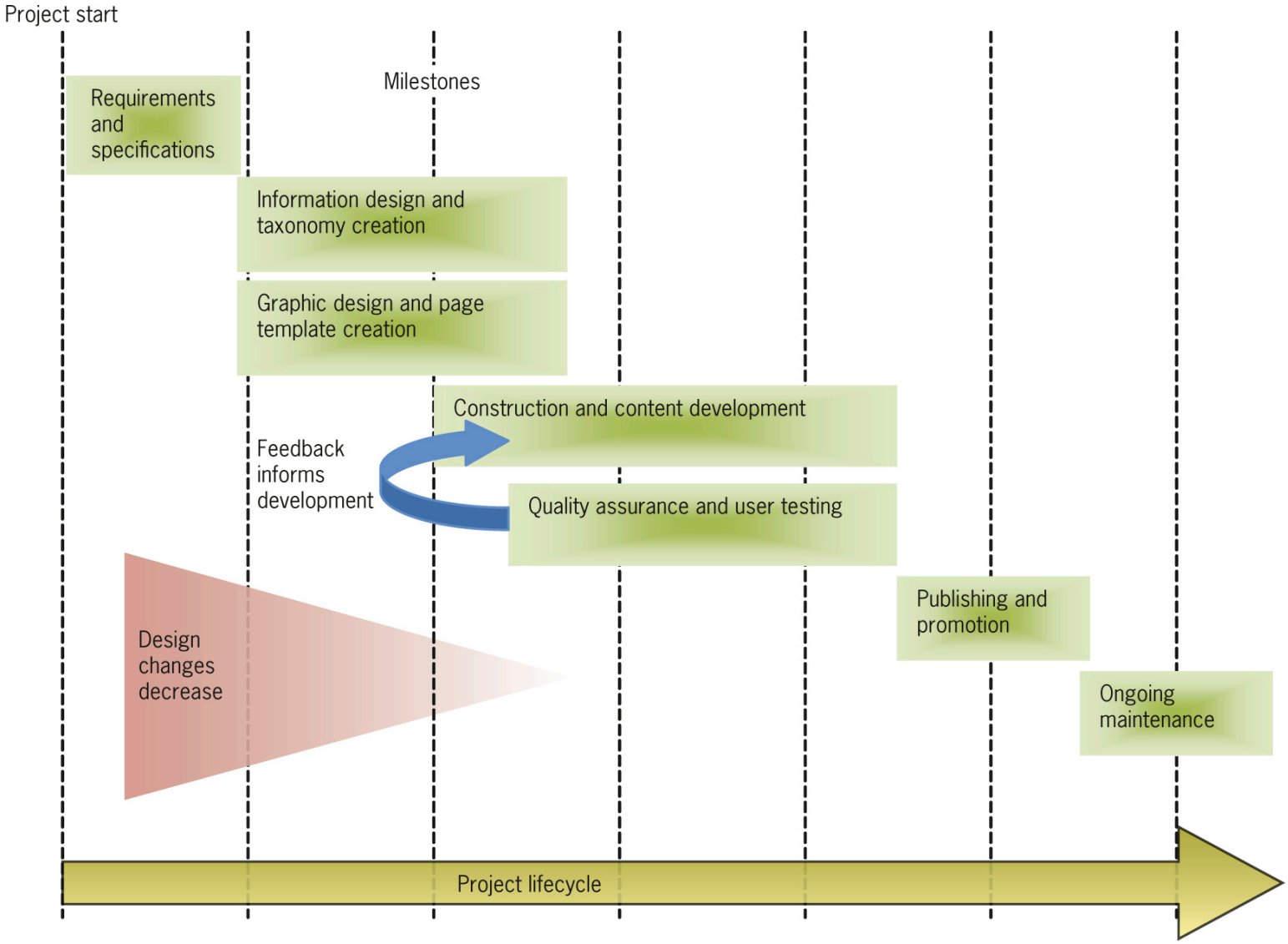


Figure 3-1 Web development project lifecycle

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

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

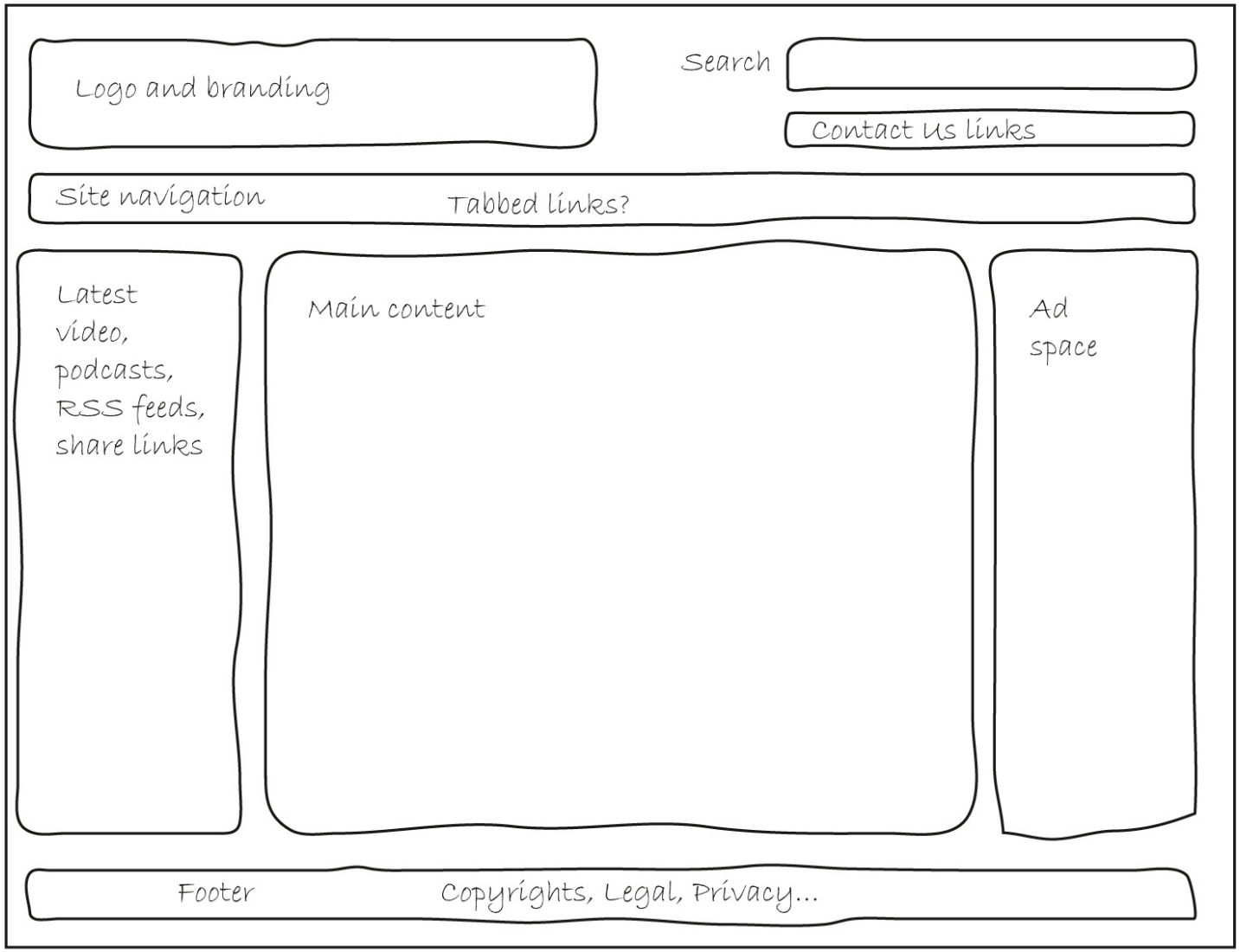


Figure 3-2 Web page mockup

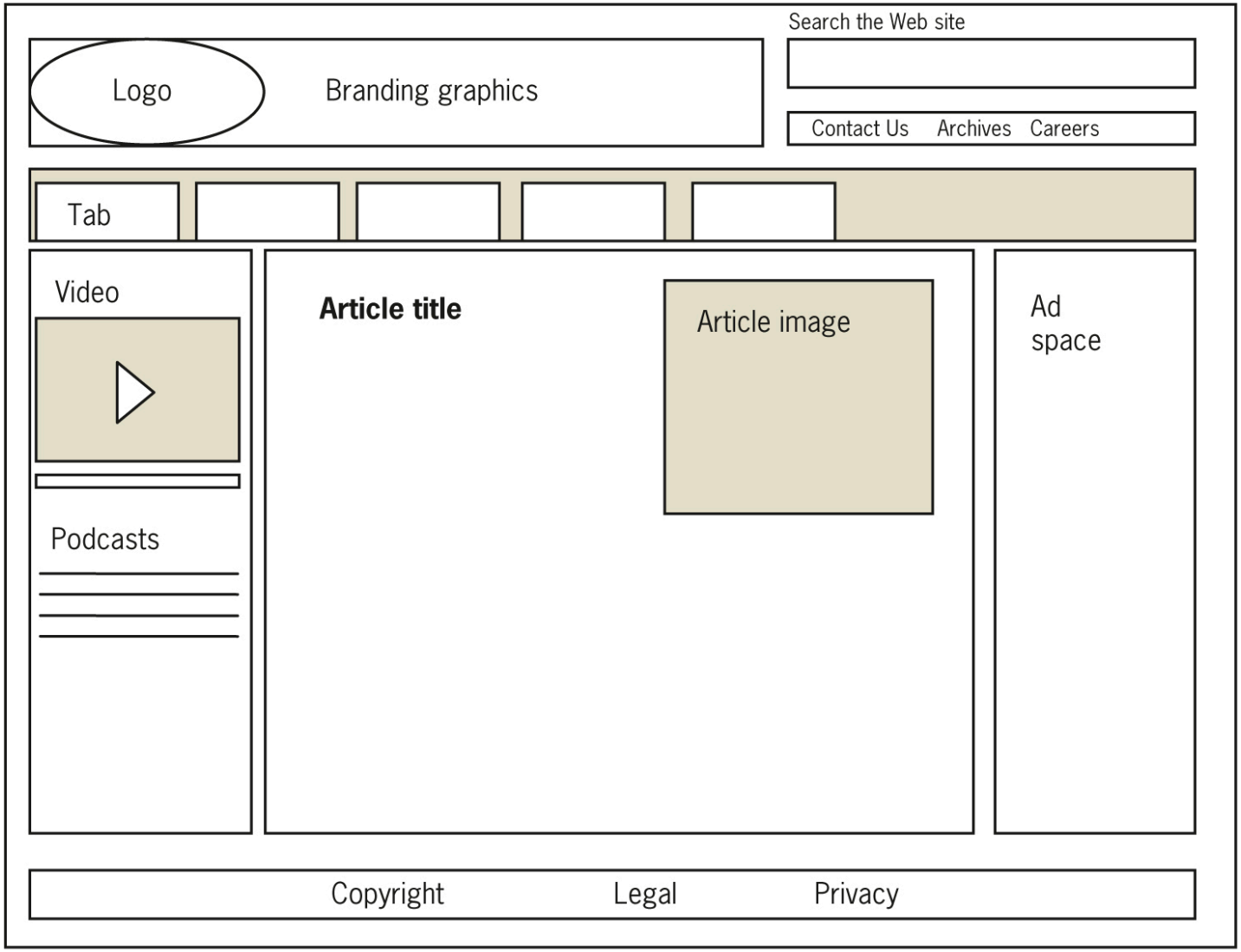


Figure 3-3 Sample wireframe for page layout

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

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

Publishing and Promotion

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

Ongoing Maintenance

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

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?

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

Identifying the Content Goal

Types of Web sites:

- Billboard
- Publishing
- Portal
- Special interest
- Blog
- Social networking

Identifying the Content Goal

- Wikis
- RSS
- Virtual gallery
- E-commerce, catalog, online shopping
- Product support
- Intranet/Extranet

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

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

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

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

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

Using Complete or Partial URLs

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

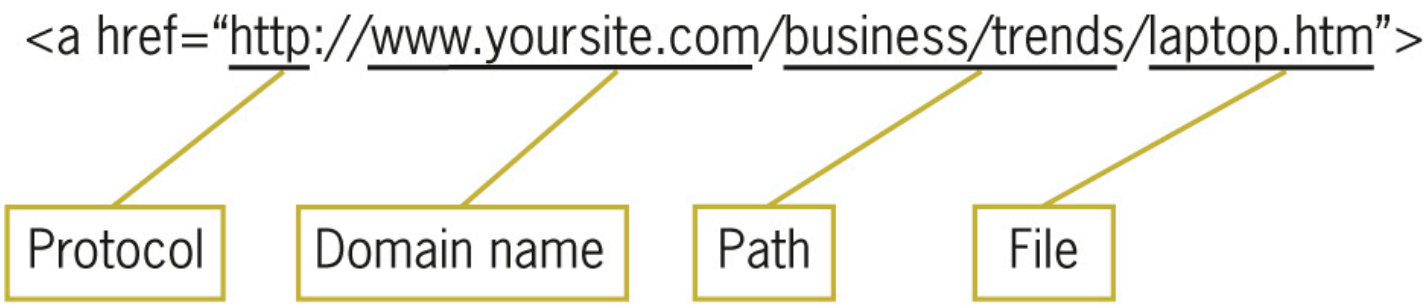


Figure 3-7 Parts of a complete URL

Using Complete or Partial URLs

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

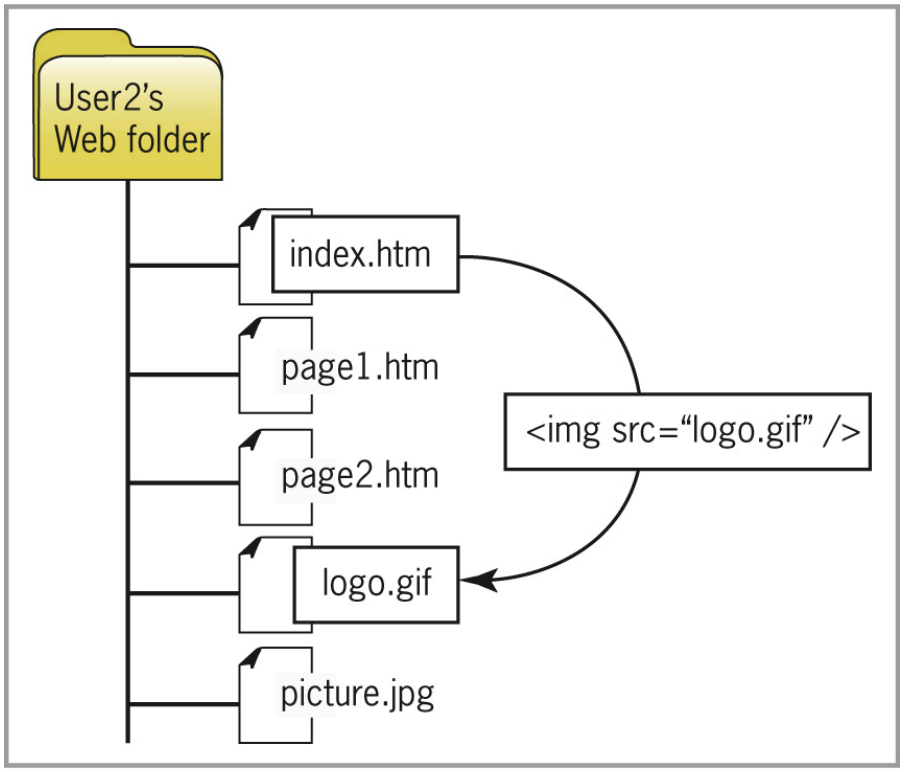
```
<a href="laptop.htm">link text</a>
```

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

Single Folder Structure

All files are contained in the same folder



Hierarchical Folder Structure

Content is separated into different folders

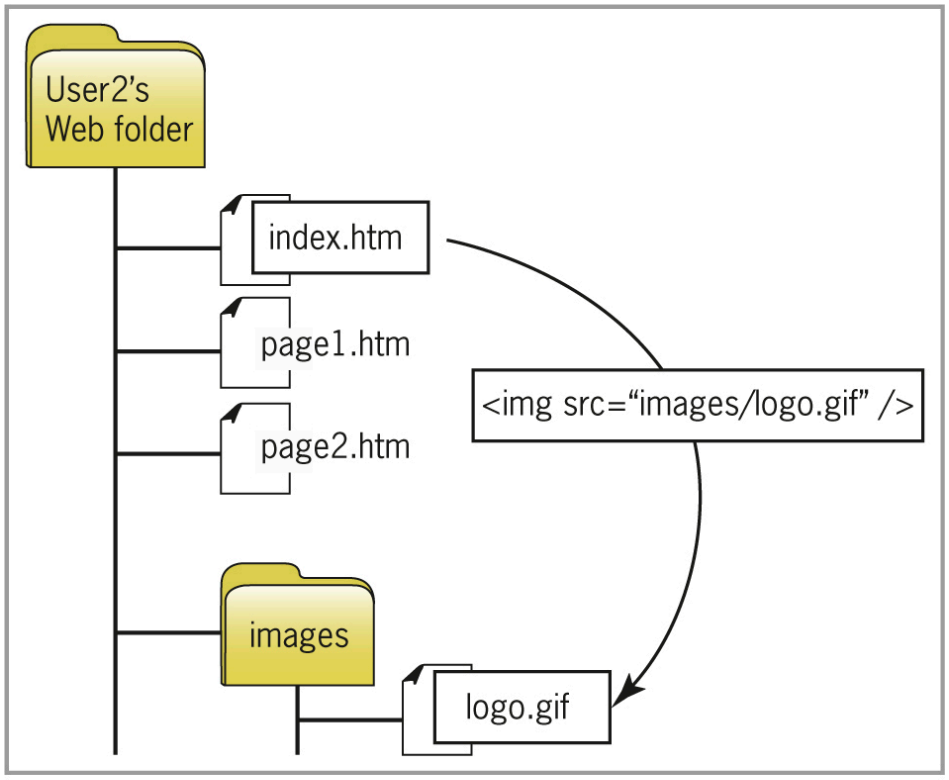


Figure 3-9 Basic hierarchical folder structure

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

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

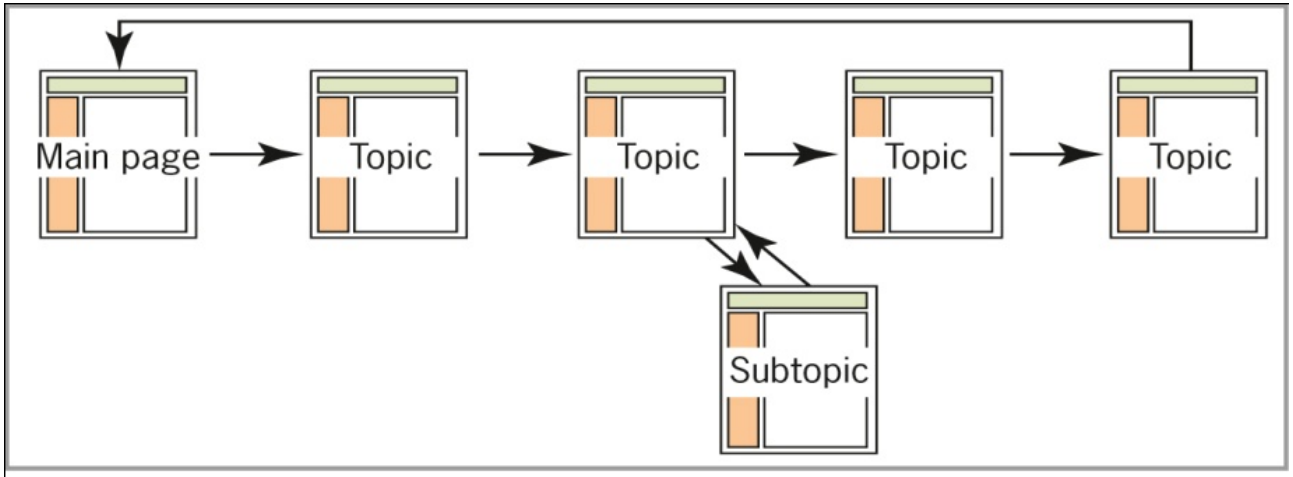


Figure 3-11 Linear information structure

Tutorial Structure

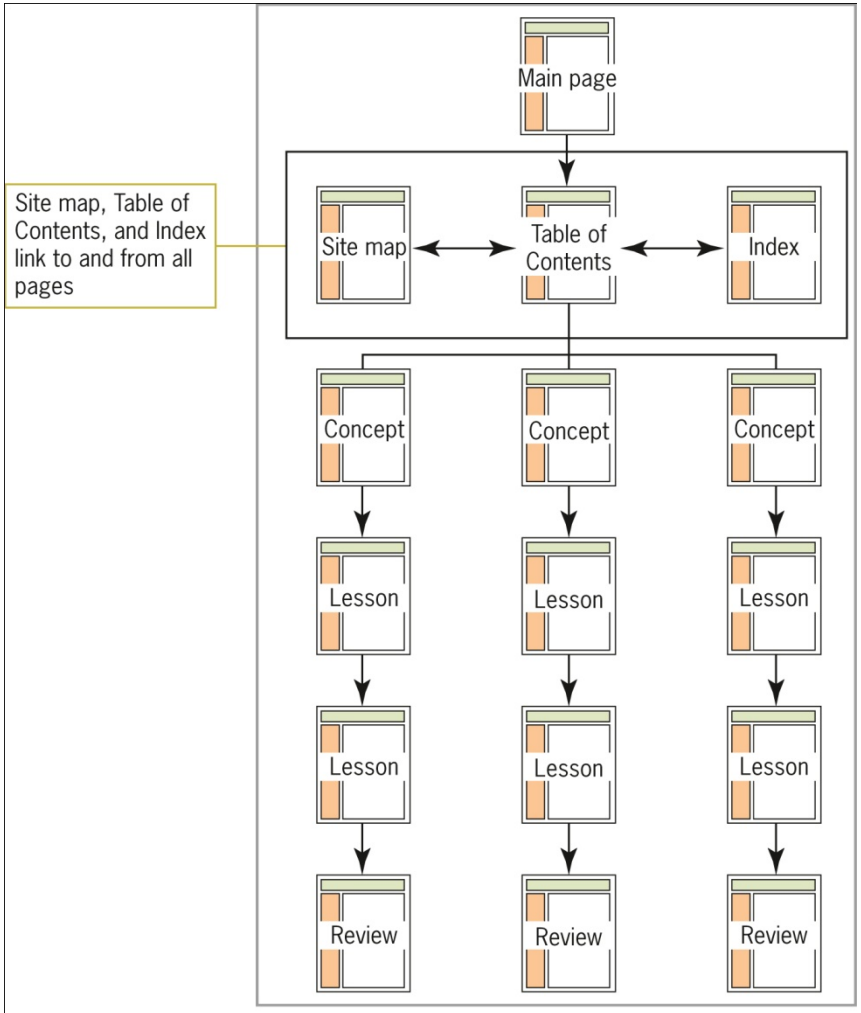


Figure 3-12 Tutorial structure

Web Site Structure

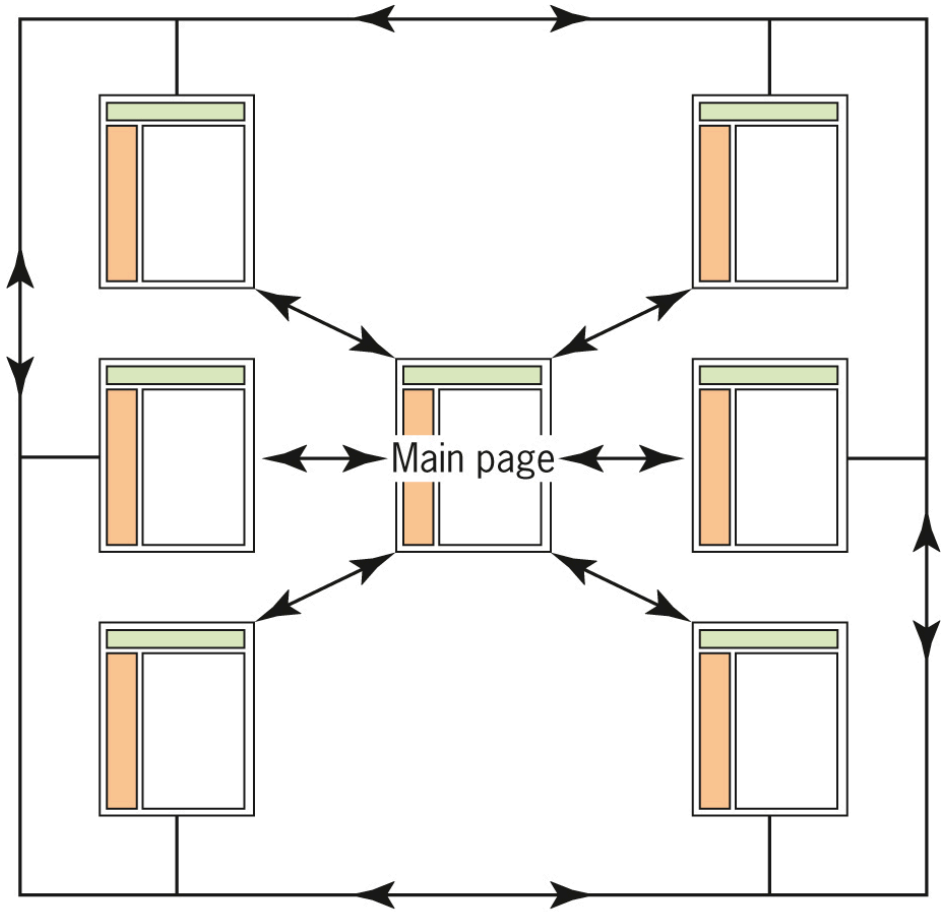


Figure 3-13 Web structure

Hierarchical Structure

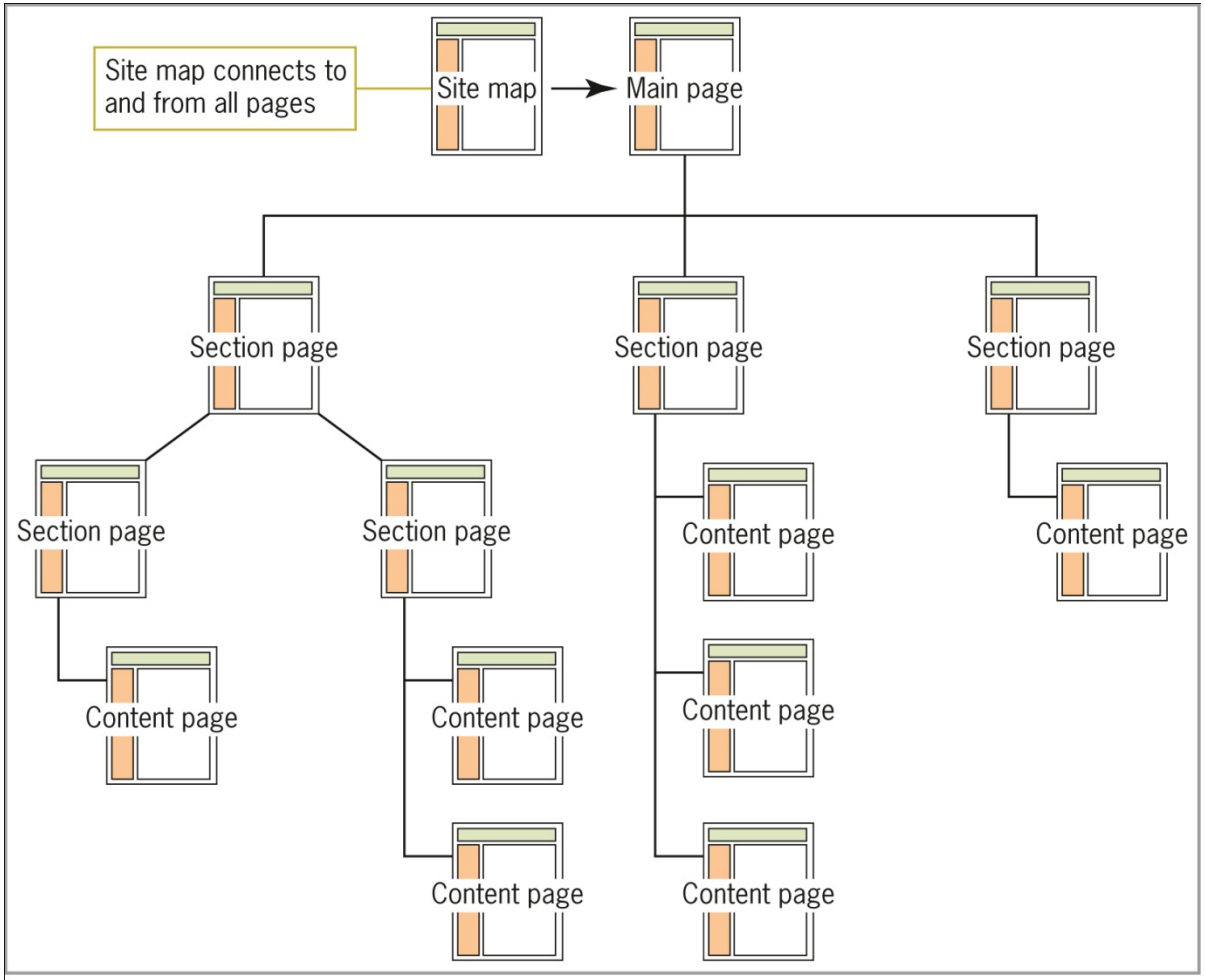


Figure 3-14 Hierarchical structure

Cluster Structure

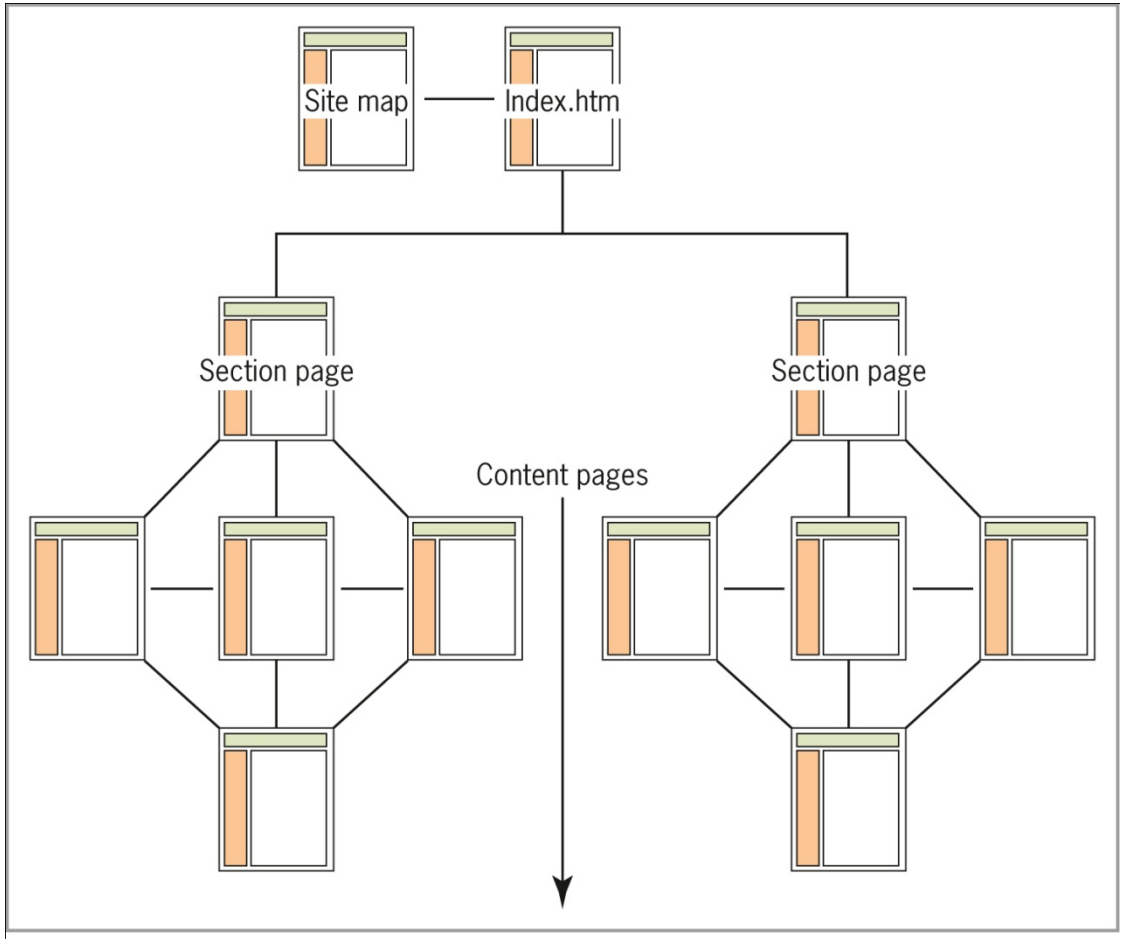


Figure 3-15 Cluster structure

Catalog Structure

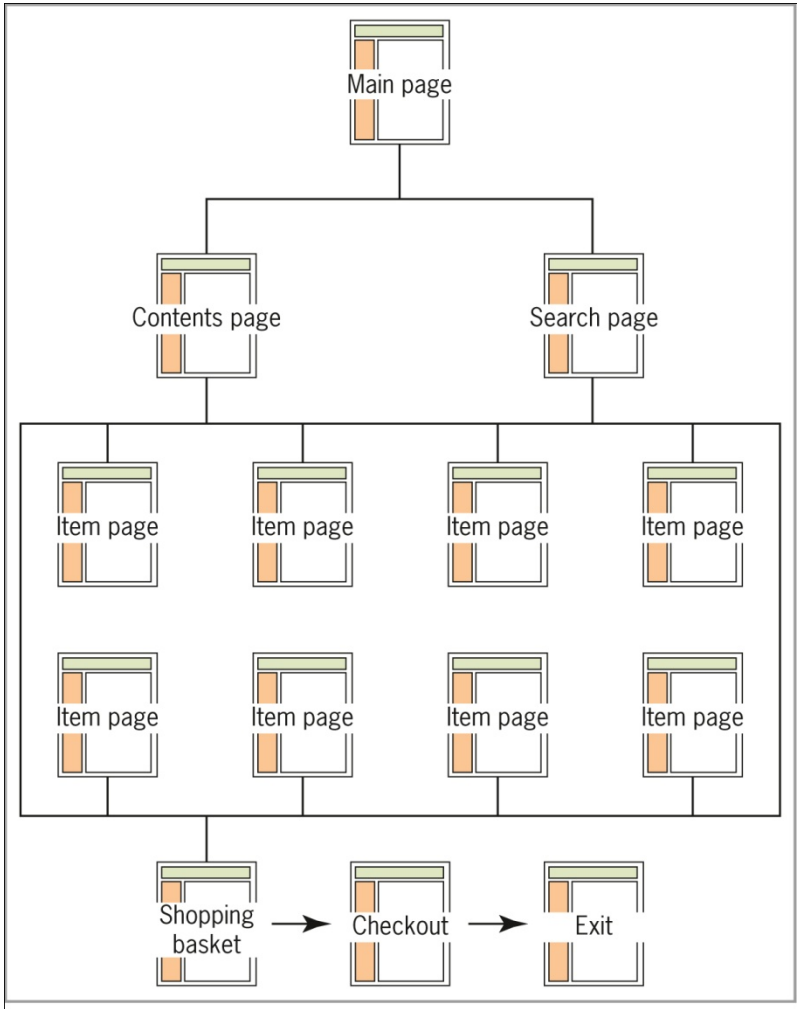


Figure 3-16 Catalog structure

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*

Registering a Domain Name

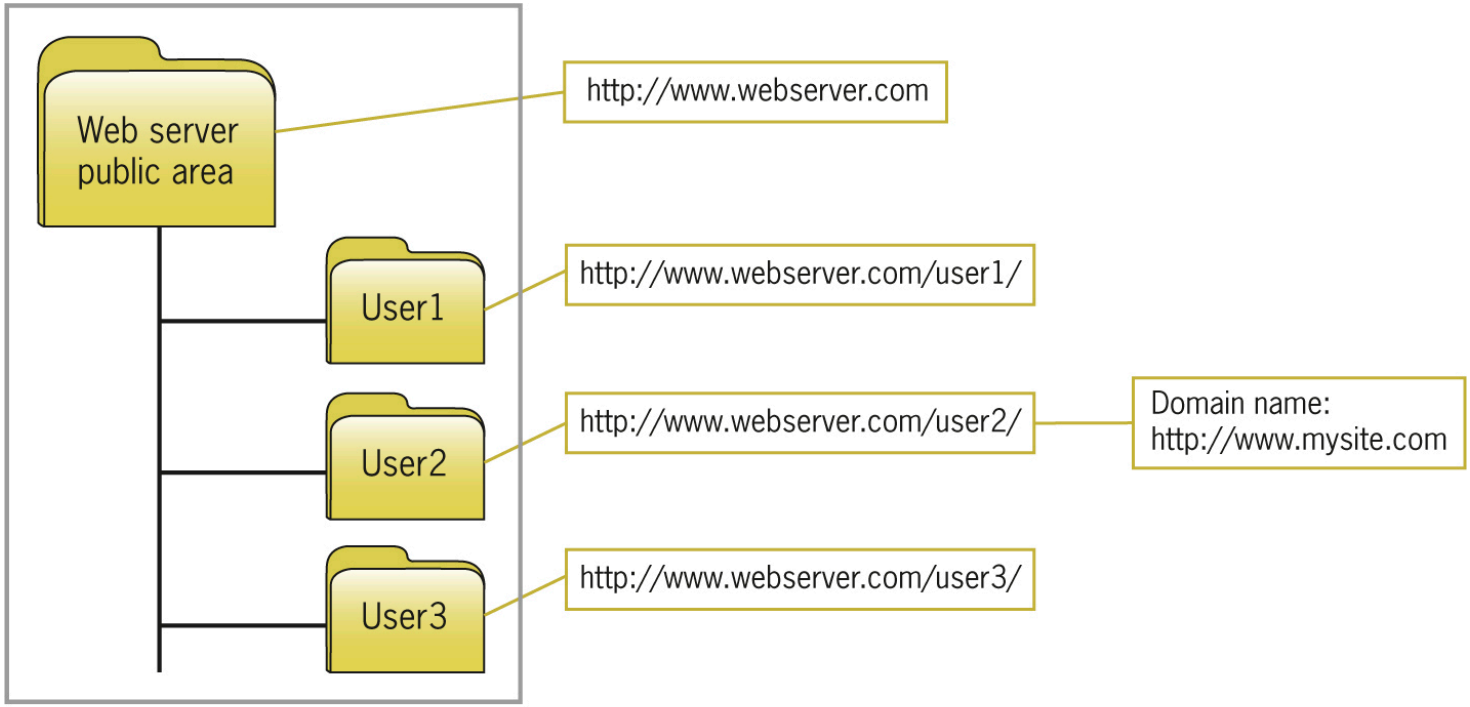


Figure 3-17 Domain name hides the actual path

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?

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

Testing Your Web Site

- Multiple browsers;
- Multiple operating systems;
- Connection speeds;
- Display types; and
- Link testing.

Usability Testing

- Vary your subjects;
- Formalize your testing; and
- Develop a feedback form.

Summary - I

- 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

Summary - II

- 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!