Web Design Chapter 2:

Web Publishing Fundamentals

A Guide to this Instructor's Manual:

We have designed this Instructor's Manual to supplement and enhance your teaching experience through classroom activities and a cohesive chapter summary.

This document is organized chronologically, using the same headings in <u>red</u> that you see in the textbook. Under each heading you will find (in order): Lecture Notes that summarize the section, Figures and Boxes found in the section, if any, Teacher Tips, Classroom Activities, and Lab Activities. Pay special attention to teaching tips, and activities geared toward quizzing your students, enhancing their critical thinking skills, and encouraging experimentation within the software.

In addition to this Instructor's Manual, our Instructor's Resources CD also contains PowerPoint Presentations, Test Banks, and other supplements to aid in your teaching experience.

For your students:

Our latest online feature, CourseCasts, is a library of weekly podcasts designed to keep your students up to date with the latest in technology news. Direct your students to http://coursecasts.course.com, where they can download the most recent CourseCast onto their mp3 player. Ken Baldauf, host of CourseCasts, is a faculty member of the Florida State University Computer Science Department where he is responsible for teaching technology classes to thousands of FSU students each year. Ken is an expert in the latest technology and sorts through and aggregates the most pertinent news and information for CourseCasts so your students can spend their time enjoying technology, rather than trying to figure it out. Open or close your lecture with a discussion based on the latest CourseCast.

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Chapter Objectives

After completing this chapter, students will be able to:

- Describe the advantages of web publishing
- Discuss basic web design principles
- Define the requirements for writing for the web
- Explain the use of color as a web design tool
- Identify web publishing issues

39: Introduction

LECTURE NOTES

- Discuss the overall advantages of web publishing
- Describe writing for the web and the effective use of color as basic design principles
- Mention the technical, legal, privacy, accessibility, and usability issues surrounding web publishing

CLASSROOM ACTIVITIES

1. Class Discussion: Ask students to discuss whether they prefer to use the web or print media for information gathering and the reasons for their preference.

40: Advantages of Web Publishing

LECTURE NOTES

- Define the terms currency advantage, aggregators, connectivity advantage, interactivity advantage, web-based forms, cost advantages, and delivery advantage
- Use Figures 2-1 through 2-4 to discuss the advantages of web publishing over print publishing in terms of currency, interactivity, cost, and delivery
- Use Figures 2-5 and 2-6 in your discussion of the use and features of web-based forms

FIGURES: 2-1, 2-2, 2-3, 2-4, 2-5, 2-6

BOXES

40: DESIGN TIP: Although your website might not need as frequent updating as a news-oriented or B2C website, you still must take care to keep the website's content up to date, and take advantage of connectivity tools to communicate and interact with website visitors.

- 42: Q & A: Do all websites contain continually updated content? No. Some websites focus on content that might not change over time, for example websites that publish biographies or content based on research papers. The primary concerns of visitors to these types of websites are author credibility and content accuracy.
- 43: Q & A: Do other advantages exist to using social networking and other interactivity tools? Yes. Website administrators rely on data such as the number of users who commented on, shared, viewed, or "liked" webpage content to gauge success. This type of data is called analytics. To learn more, use a search engine to search for *web analytics*.
- 44: DESIGN TIP: After you publish your website, plan to review the website's content for credibility,

accuracy, and timeliness on a regular basis and update the content as necessary.

- 44: DESIGN TIP: Build into your website appropriate ways to promote interactivity, such as a contact page, web-based form, or blog.
- 45: Q & A: Where can I find free photographs? Using professional photographs can enhance your webpage content. Websites such as www.flickr.com and www.morguefile.com allow photographers to post photos for use, for little or no cost. No matter where you get your photos, remember always to give credit to the artist. Cost-free does not mean copyright free the artist still owns the rights to the images, even if you do not have to pay for them.
- 46: DESIGN TIP: Use your website to expand on your printed content. For example, if you have a large event to promote, mail a postcard directing users to the landing page for the event. Postcards cost less than letters to print and mail. Provide minimal details on the postcard, and have participants sign up for the event online to save the costs of printing and sending registration materials.

TEACHER TIP

You might choose to have a news print media publishing professional, such as a newspaper editor or journalist, speak to the class on the ways the Internet and the web have changed the news publishing industry.

CLASSROOM ACTIVITIES

1. Class Discussion: Ask students to bring comparative examples of print and web publishing to discuss in class in terms of the currency, interactivity, cost, and delivery of the comparative examples.

2. Quick Quiz:

- 1. What is the web's currency advantage? (Answer: The ability to quickly and inexpensively update webpages)
- 2. What is the web's interactivity advantage? (Answer: The ability to connect with visitors using interactive webpage elements to promote two-way conversations)
- 3. What is the web's delivery advantage? (Answer: A faster and less expensive way to get information before a target audience)

LAB ACTIVITIES

45: Encourage students to complete the steps in YOUR TURN: Exploring Currency and Interactivity.

46: Basic Web Design Principles

LECTURE NOTES

- Define the terms balance, symmetrical, asymmetrical, proximity, white space, contrast, focal point, unity, visual identity, brand, branding specifications, tag line, and alignment
- Describe how the presence or absence of balance can affect a visitor's perceptions of a webpage
- Use Figure 2-7 to illustrate symmetric web design
- Use Figure 2-8 to illustrate proximity of webpage elements

- Use Figure 2-9 to explain how contrast is used to stimulate attention and establish the focal point on a webpage
- Describe how unity is used to create and maintain a visual identity for a website and its publisher as shown in Figure 2-10
- Describe typical website branding specifications
- Use Figure 2-11 to explain the importance of proper alignment of webpage elements

FIGURES: 2-7, 2-8, 2-9, 2-10, 2-11

BOXES

46: Q & A: **Do web design principles change?** Yes. As new web technologies, programming, languages, apps, and tools develop, so do the current principles of web design. For more information about the most updated web design principles, use a search engine to search for *web design principles* and filter or sort the results to show only the most recent articles.

47: TOOLKIT: **Responsive Web Design.** To learn more about responsive web design principles, see Appendix C.

- 47: Q & A: **Is empty space on a webpage always white?** No. The empty space or *white space* on a webpage is filled with the page's background color, which can be any color, including white.
- 48: DESIGN TIP: You can create white space by adding line breaks, paragraph returns, paragraph indents, and space around tables and images. Responsive web design principles allow for minimal white space for websites viewed on smartphones and other devices with small screens.
- 48: DESIGN TIP: Using a slide show or gallery enables you to have one central focal point whose content changes automatically or as a result of user intervention. You can feature several articles at once in a small amount of space.
- 49: DESIGN TIP: Use balance, proximity, and white space to create effective, organized webpages. Use contrast to stimulate interest and establish a focal point for your webpages.
- 49: DESIGN TIP: Generate a sense of unity, maintain visual identity, and promote your brand at your website by using consistent alignment, branding elements, and a common color scheme across all pages at the website.

TEACHER TIP

You might choose to invite a webpage designer or graphic designer to speak to the class on the basic design concepts of balance, proximity, contrast, focus, unity, and alignment.

CLASSROOM ACTIVITIES

1. Critical Thinking: Why is adherence to basic design principles important to the development of a website?

2. Quick Quiz:

- 1. ____ is the harmonious arrangement of elements. (Answer: Balance)
- 2. A symmetric arrangement of web elements creates a(n) ____ atmosphere. (Answer: conservative, safe, and peaceful)
- 3. A(n) _____ is a dominating segment of a webpage that directs visitors' attention to a center of interest or activity. (Answer: focal point)
- 4. The combination of design elements identified with the website and its publisher are referred to as the ____ of the website. (Answer: visual identity)

LAB ACTIVITIES

- 1. Ask students to search the web for at least two pages that *do not* adhere to one or more basic design principles of balance, proximity, contrast, focus, unity, and alignment. Then discuss their research with the class.
- 2. Give students two or three tag lines (for example, There is No Substitute (Porsche), Think Small (Volkswagen), or American by Birth. Rebel by Choice (Harley Davidson)) with which they may not be familiar. Then ask them to research the tag lines to identify the company behind each tag line, its products or services, and whether the tag line is effectively used at the company's website.

50: Writing for the Web

LECTURE NOTES

- Define the terms chunked text, scannability, netiquette, and inverted pyramid style
- Discuss using language that is straightforward, contemporary, and geared toward an educated audience
- Explain the importance of accuracy and currency
- Describe how visitors read online text
- Use Figure 2-12 to illustrate creating chunked text
- Point out the scannability guidelines on page 52
- Use Figure 2-13 to illustrate the classic newswriting style of the inverted pyramid

FIGURES: 2-12, 2-13

BOXES

50: DESIGN TIP: Web designers use grids and horizontal layouts, as well as simplified typography, single-page layouts, and an 'app-like' interface as part of responsive web design.

50: Q& A: How long to website visitors spend deciding whether to read content or move on? Website visitors spend an estimated 20-30 seconds on a webpage deciding if the content meets their needs or if they should go to another website for the desired information or products.

51: DESIGN TIP: To help web users more easily find your website, carefully consider the text that you place in headings to use search engine optimization techniques to their best advantage. To learn more about SEO techniques for headings, see Appendix D.

- 51: DESIGN TIP: To keep webpage text succinct, place information that is not crucial, such as historical backgrounds or related topics, on linked subsidiary pages, either within the content as linked text, or as a separate link or list of links at the bottom or side of an article. For example, in a business news article about a company, you can include links to the company's website, the NASDAQ website to show the company's current stock price, and a related story from a previous day.
- 51: DESIGN TIP: Establish credibility for your website by providing accurate, verifiable content. Show content currency by including the date the content was last updated.
- 52: DESIGN TIP: Website visitors typically scan online text looking for useful information instead of reading the text word for word. Chunking text allows your website visitors to quickly scan your webpages. This improves usability and also makes your page content more easily readable on a mobile device.
- 52: Q & A: Is chunked text appropriate for all webpage text? In some situations, a webpage might contain lengthy text articles that are intended to be printed and read offline. In these situations, you should present the text in its entirety and not chunked.
- 52: Q & A: How can you ensure your web content will be well-received and not offend readers? **Netiquette** is a list of guidelines that help web users and developers to interact and create content. Netiquette rules govern the use of certain words, phrases, and formatting. For more information, use a search engine to search for *netiquette*.
- 53: DESIGN TIP: When writing in the inverted pyramid style, summary text should include the "who, what, when, where, and why" of the topic. Avoid transitional words or phrases, such as "similarly," "as a result," or "as stated previously."

TEACHER TIP

You might choose to invite a content writer/editor to speak to the class on tips for writing scannable text.

CLASSROOM ACTIVITIES

1. Class Discussion: What are the advantages and disadvantages of writing scannable web text? When is it appropriate to use scannable text and when is it inappropriate.

2. Quick Quiz:

- 1. You should avoid using industry jargon or slang in website text. True or False? (Answer: True)
- 2. It is always a good choice to include humor in your website text. (Answer: False; humor can be taken out of context and might be misunderstood or misinterpreted)

LAB ACTIVITIES

1. Ask students to browse or search for a website that does not effectively use scannable text. Then report back to the class on their research. Include ideas or examples of ways the website's text could be rewritten to be more scannable.

53: Color as Web Design Tool

LECTURE NOTES

- Define the terms color wheel, primary colors, secondary colors, cool colors, warm colors, complementary colors, RGB color system, values, color depth, and hexadecimal system
- Describe how color is used as a design tool
- Use Figure 2-14 to describe the color wheel: primary, secondary, cool, and warm colors
- Explain the RGB and hexadecimal color systems, and use Figure 2-15 to show the use of WYSIWYG editors to select colors without having to know their hexadecimal values
- Discuss the cultural implications of color

FIGURES: 2-14, 2-15

BOXES

- 55: Q & A: What is the browser- or web-safe palette? The web-safe palette is a set of 216 of the available 256 colors displayed by an 8-bit monitor. Fewer and fewer web visitors today use 8-bit monitors; therefore, many web designers no longer restrict their color choices to the web-safe palette.
- 55: Q& A: **Does color matter?** Yes, For example, although white represents purity in the United States, it can mean death or mourning in some Asian countries and might be offensive to those visitors. For more information about using color as a design tool, use a search engine to search for *website color palettes*.
- 55: DESIGN TIP: Before making color choices for your website, visit several commercial and noncommercial websites to find examples of color schemes you like that fit with your website's branding. Consider using a color scheme generator to find compatible colors.

TEACHER TIP

You might choose to bring samples of print media in which color is used as a design tool. Then break students into teams to review the use of color in each sample. You might also choose to have students locate the related website, if one exists, and try to determine if specific branding specifications for color, typeface, or other elements identifiable in the print media are followed on the website's pages.

CLASSROOM ACTIVITIES

1. Critical Thinking: Why is it important to consider the cultural implications of color in web design?

2. Quick Quiz:

- 1. The ____ is a design tool used to help choose effective and appealing color combinations. (Answer: color wheel)
- 2. The color notation 255:102:153 indicates a color in the ____ color system. (Answer: RGB)

3. What is color depth? (Answer: The actual number of colors a monitor can display)

LAB ACTIVITIES

56: Encourage students to complete the steps in YOUR TURN: Exploring Webpage Color Schemes.

56: Web Publishing Issues

LECTURE NOTES

- Define the terms bandwidth, thumbnail, graphical display browsers, alternative text, resolution, pixel, auto-rotate, copyright, copyright notice, phishing, spoofing, personally identifiable information (PII), encryption, decryption, Secure Sockets Layer (SSL), cookies, big data, privacy policy statement, accessibility, usability, and user experience (UX)
- Discuss the relations hip between bandwidth and transfer rate
- Discuss why different browsers or different versions of the same browser might display a
 webpage differently
- Discuss the relationship between monitor resolution and webpage design, and use Figure 2-16 to discuss mobile devices
- Use Figure 2-17 to explain copyright protection for intellectual property, such as webpage content
- Use Figure 2-18 to illustrate a disclaimer of liability notice and discuss the reasons for posting such a notice
- Explain the importance of protecting visitors' personally identifiable information and the posting of privacy and security statements using Figure 2-19
- Explain the difference between web accessibility and web usability using Figure 2-20; stress that these are related but different concepts

FIGURES: 2-16, 2-17, 2-18, 2-19, 2-20

BOXES

56: Q& A: What is Lynx? Lynx is a nongraphical display browser, which means that it displays only text. Lynx was one of the original browsers. Many web surfers use Lynx because of visual disabilities or to increase search speeds. Web developers still test their websites in Lynx to make sure that users who search the Internet with images turned off can access website content.

57: DESIGN TIP: Create faster-loading webpages and follow responsive web design practices by reducing the file size of images or using thumbnail images.

57: DESIGN TIP: Webpages might appear quite differently when viewed with different devices, platforms, browsers, and browser versions. For this reason, use responsive web design techniques, and test your webpages using multiple devices and browsers before publishing your website.

57: TOOLKIT: **Responsive Web Design.** For more information about designing webpages that accommodate mobile devices' rotation and zoom features, see Appendix D.

58: DESIGN TIP: When designing a webpage, use techniques that adapt to multiple resolutions. For

example, design for a lower resolution and then add an attractive background that appears on either side of the page when viewed at a higher resolution.

- 58: Q & A: **Should I design a separate mobile website?** The current trend is to use responsive web design techniques so that websites can be viewed on multiple devices and screen sizes. For more information about web design expert recommendations regarding creating websites for mobile devices, use a search engine to search for *creating mobile websites*.
- 59: Q & A: What are phishing and spoofing? Phishing and spoofing are methods of misleading people into revealing personal or financial information. In a phishing scheme, a perpetrator imitates a legitimate company, such as an ISP or online bank, and sends an email message requesting that the user verify account information. The message directs users to a fraudulent website, which may look authentic but is actually a fake. The fraudulent website then collects the user's information using forms and other collection methods that appear to be legit imate. Spoofing is the creation of a fraudulent version of a website that appears to use the original website's URL.
- 59: Q&A: **How can I protect my webpage content?** Include the following on your website: a copyright notice, a policy for using images or content from your website, and contact information for those who want to use your work. For more information about protecting your webpage content from copyright violations, use a search engine to search for *protecting webpage copyrights*.
- 60: DESIGN TIP: Using connectivity tools to allow website visitors to share your content helps to protect you from copyright concerns. These tools direct the visitor back to your website, which allows you to share your content or connect to other websites' content while clearly crediting the source.
- 60: Q&A: **What are digital certificates and signatures?** Digital certificates and signatures are methods for verifying a content's source. For more information about these tools, use a search engine to search for *digital certificates and signatures*.
- 61: Q&A: **Should I be worried about big data?** While privacy advocates use the term, big data, to refer to large collections of personal data collected and used without permission, some corporations use it to refer to data sets and collection tools used for legitimate business purposes, such as record keeping or targeted marketing. For more information about big data, use a search engine to search for *big data concerns*.
- 62: DESIGN TIP: Establish privacy and data security policies for your website operations. Make sure that everyone associated with designing, maintaining, and operating the website is aware of the policies. Explain your policies to website visitors by publishing a privacy and security policy statement.
- 62: Q&A: **What are some accessibility guideline examples?** For more information about web accessibility guidelines, use a search engine to search for *WAI* and *Section 508*.

- 63: DESIGN TIP: Design your website to be accessible by people with various types of special needs, such as lost or impaired vision or color blindness, by following the WAI and Section 508 guidelines for web accessibility. If using a WYSIWYG editor, use the tools provided by the program to check for potential accessibility issues.
- 63: Q&A: What are UX principles? UX incorporates all elements of good web design, including website structure, the use of text, color, and images, navigational elements, and other design guidelines discussed throughout this text. For more information about UX, use a search engine to search for *user experience guidelines*.

TEACHER TIP

You might choose to invite a legal professional to speak to the class about copyright issues and the web.

CLASSROOM ACTIVITIES

1. Class Discussion: Ask students to discuss the reasons behind copyright protection for intellectual property. Must a website post a copyright notice to protect its intellectual property? If yes, why? If no, why not?

2. Quick Quiz:

- 1. ____ is the quantity of data transmitted in a specific time frame. (Answer: Bandwidth)
- 2. Adding a(n) ____ description when images are turned off in a browser helps visitors better understand a page's content. (Answer: alternative text or the alt=text attribute)
- 3. Web ____ involves designing websites to ensure that people with various types of special needs can use website features. (Answer: accessibility)
- 4. Social Security numbers, credit card numbers, names, addresses, and telephone numbers are all examples of _____. (Answer: personally identifiable information, or PII)
- 5. What is the goal of UX? (Answer: To enhance the user's website experience in order to meet the user's needs and make the user feel their visit was worthwhile)

LAB ACTIVITIES

- 59: Encourage students to complete the steps in YOUR TURN: Viewing Websites on Mobile Devices.
- 62: Encourage students to complete the steps in YOUR TURN: Exploring Website Privacy and Data Security Issues.

End of Chapter Material

- **Chapter Review** summarizes the key points from the chapter.
- Terms to Know is an alphabetical list of the chapter's key terms with corresponding page numbers.
- Test Your Knowledge provides matching term and short answer questions to help solidify
 what students learned in the chapter.

- **Learn It Online** is a series of online student exercises that test students' knowledge of chapter content and key terms.
- Trends provides the opportunity for research and writing on timely topics.
- **At Issue** offers two web-based research exercises that challenge students' perspective of web design and surrounding technologies.
- **Hands On** provides two assignments that challenge students to both browse and search the World Wide Web for more information about chapter concepts.
- **Team Approach** presents two assignments that reinforce the chapter concepts while encouraging teamwork and collaboration.
- Case Study is an ongoing development process in web design in which students apply the concepts discussed in the chapter to the design and development of their own website.

Glossary of Key Terms

accessibility (62) hexadecimal system (54) aggregator (41) interactivity advantage (42) alignment (50) inverted pyramid style (52) alternative text (57) netiquette (52) personally identifiable information (PII) (60) asymmetrical (46) phishing (59) auto-rotate (57) pixel (57) balance (46) bandwidth (56) primary colors (53) big data (61) privacy policy statement (61) brand (49) proximity (47) branding specifications (49) resolution (57) RGB color system (54) chunked text (51) scannability (52) color depth (54) color wheel (53) secondary colors (53) complementary colors (54) Secure Sockets Layer (SSL) (60) connectivity advantage (41) spoofing (59) contrast (48) symmetrical (46) cookies (60) tag line (49) cool colors (53) thumbnail (56) copyright (59) unity (49) copyright notice (59) usability (63) cost advantage (45) user experience (UX) (63) currency advantage (40) values (54) visual identity (49) decryption (60) delivery advantage (45) warm colors (53) encryption (60) web-based form (44)

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