

# Web Design, Sixth Edition

## End of Chapter Solutions

### CHAPTER TWO

#### WEB PUBLISHING FUNDAMENTALS

##### Matching Terms

- |    |   |    |   |     |   |
|----|---|----|---|-----|---|
| 1. | K | 5. | G | 9.  | C |
| 2. | L | 6. | H | 10. | J |
| 3. | D | 7. | F | 11. | A |
| 4. | E | 8. | B | 12. | I |

##### Short Answer

- 1. List and explain the advantages of web publishing over print.**

Web publishing has many advantages over print including currency, connectivity, interactivity, cost, and delivery. The web's currency advantage lies in the ability to update webpages quickly and inexpensively. The web's connectivity advantage is the ability to instantaneously distribute and share content. The web's interactivity advantage allows for data and resource sharing that enables communication with a website's Customer Service or Sales Department or that allows users to post comments on an article. Unlike print, the cost of publishing web content does not vary based on its length, color composition, or design complexity. The web's delivery advantage enables the fast and inexpensive distribution of published information over the Internet and the web.

- 2. Identify the basic design principles that help webpages deliver a powerful message and leave a distinct impression.**

Successful web publications combine creativity with the basic design principles of balance and proximity, contrast and focus, and unity and visual identity.

**3. *Discuss how responsive web design principles influence web design.***

Responsive web design ensures the content is viewable on multiple devices and screen sizes. RWD guidelines recommend using grids to lay out content so that you can easily move, resize, and reorder it to fit the device. RWD principles allow for minimal white space for websites viewed on smartphones and other devices with small screens.

**4. *Discuss the role of branding in promoting unity and maintaining visual identity.***

The consistent application of branding specifications for color, images, and text applied to all of the entity's media strengthens and promotes the brand. Examples of design elements that promote unity, create a visual identity, and contribute to branding an entity both in print media and on webpages include logos, fonts, colors, and tag lines.

**5. *Define chunked text and discuss reasons for using chunked text to create scannable web content.***

Most website visitors, especially those using mobile devices, prefer to quickly scan webpages for useful information, and not read long passages of onscreen text. The chunked text technique breaks webpage text into small sections with headings, subheadings, and bulleted lists that adequately but concisely cover the topic. Chunked text is much easier to scan, and will adapt better to devices with smaller screens, as the content under the headings and subheadings can be hidden until a website visitor clicks on it.

**6. *Explain the role of color as a web design tool.***

The use of color helps to set a website's mood as well as provide contrast between page elements. Color reinforces a brand identity, helps bring focus to and differentiate webpage sections, increases contrast, and improves readability. To use color as a design

tool effectively, you must understand color basics: the color wheel, how monitors display colors, and visitors' expectations for color on the web.

**7. *Describe the color wheel and identify primary colors and secondary colors.***

A basic tool for understanding color as a design tool is the color wheel, which is a visual representation of the relationship between colors. The color wheel can help you choose effective and appealing color combinations. The basis of the color wheel is the set of primary colors—red, yellow, and blue. The secondary colors—orange, green, and purple—result from combining two primary colors.

**8. *Explain how to incorporate UX into the web design.***

Web designers incorporate user experience (UX) practices into webpage design. The goal of UX is to enhance the user's website experience in order to meet the user's needs and make the user feel their visit was worthwhile. UX incorporates all elements of good web design, including website structure, the use of text, color, and images, navigational elements, and other design guidelines.

**9. *Briefly discuss each of the following web publishing issues:***

***a. Bandwidth***

Bandwidth is the quantity of data transmitted in a specific time frame, measured in bits per second (bps). A larger bandwidth indicates a higher data transfer rate.

***b. Resolution***

Resolution is the measure of a display device's sharpness and clarity, related directly to the number of pixels it can display.

***c. Legal and privacy concerns***

You are responsible for obtaining all permissions for content on your website, and can be subject to fines or prosecution for any violations. To provide security for transmission

of personal or confidential information, such as credit card transactions, e-commerce websites use encryption, which prevents unauthorized recipients from reading data.

**d. Accessibility and usability**

Designers incorporate features called web accessibility to ensure their websites are usable by people with various types of special needs, such as lost or impaired vision or color blindness. Web usability involves designing a website and its pages so that all visitors to the website can easily and quickly satisfy their goals. Web designers incorporate user experience (UX) practices into webpage design.

## **TRENDS**

### **1 Section 508**

Research the latest developments in accessibility standards. Make a list of three important accessibility considerations, and note whether they are new or existing issues. Visit two websites to see if these websites meet the considerations.

*Essays will vary. Students should list at least three accessibility concerns, and evaluate two websites with regard to these considerations.*

### **2 Big Data**

Research types of information collected as part of big data. Find articles stating pros and cons of big data practices by companies and other institutions. What concerns do you have about big data? How could big data practices benefit you? Will you take measures to protect yourself from big data? If so, how and why?

*Essays will vary. Students should cite articles that explore both positives and negatives regarding big data, and bring personal concerns and experience into the essay.*

## **AT ISSUE**

### **1 Personally Identifiable Information**

Make a list of at least three websites into which you have entered personally identifiable information. Think about the information you have entered into each source and whether you feel comfortable knowing that others could access this information. Find privacy statements on each website. Does the statement provide assurance to your concerns?

*Essays will vary. Students should list at least three instances where they have used PII. They should evaluate the websites' privacy concerns.*

## **2 Accuracy**

Explain how accuracy affects the overall user impression and contributes to the success or failure of a website. How can you ensure accuracy with your content? What measures can you take to reassure your audience that your content is accurate?

*Essays will vary. Students should discuss the importance of accuracy, and how to ensure accuracy in content and convey assurances to website visitors.*

**Students' responses to HANDS ON, TEAM APPROACH, and CASE STUDY activities will vary.**

## CHAPTER 2: WEB PUBLISHING FUNDAMENTALS

### MULTIPLE CHOICE

1. From the perspective of design, \_\_\_\_\_ is the harmonious arrangement of elements. *p. 47*
  - a. white space
  - b. proximity
  - c. balance**
  - d. inverted pyramid style
2. A(n) \_\_\_\_\_ arrangement of web elements is centered or even and suggests a conservative, safe, and peaceful atmosphere. *p. 47*
  - a. symmetric**
  - b. asymmetric
  - c. principle
  - d. chunked
3. \_\_\_\_\_ means that you place related elements close to each other. *p. 47*
  - a. Focus
  - b. Contrast
  - c. Proximity
  - d. Symmetric
4. \_\_\_\_\_ is a mix of elements to stimulate attention. *p. 48*
  - a. Focus
  - b. Contrast
  - c. Proximity**
  - d. Balance
5. A \_\_\_\_\_ is a dominating segment of a webpage that directs visitors' attention to a center of interest or activity. *p. 49*
  - a. contrast
  - b. focal point**

- c. white space
  - d. pixel
6. \_\_\_\_\_ is the combination of design elements identified with the website and its publisher. *p. 50*
- a. Visual identity**
- b. Brand
  - c. Branding specification
  - d. Unity
7. A basic tool for understanding color as a design tool is the \_\_\_\_\_. *p. 52*
- a. palette
  - b. RGB
  - c. complementary color system
  - d. color wheel**
8. Which of the following is considered a warm color? *p. 52*
- a. red**
  - b. blue
  - c. green
  - d. purple
9. A \_\_\_\_\_ image is a miniature version that links to a larger image. *p. 58*
- a. Photoshop
  - b. bandwidth
  - c. thumbnail**
  - d. chunked
10. \_\_\_\_\_ is the measure of a display device's sharpness and clarity, related directly to the number of pixels it can display. *p. 59*
- a. Bandwidth
  - b. Resolution**
  - c. Pixel
  - d. Tag line

## TRUE FALSE

- T**   **F**   1. Compared with print publishing, updating web content is more cost effective. *p. 46*
- T**   **F**   2. When web elements are positioned asymmetrically, it means they are centered and balanced. *p. 48*
- T**   **F**   3. White space on a webpage must always be white. *p. 49*
- T**   **F**   4. You use contrast to stimulate interest and establish a focal point for your webpages. *p. 49*
- T**   **F**   5. Horizontal and vertical alignment of webpage elements ensures a consistent presentation and increases readability. *p. 51*
- T**   **F**   6. The RGB system uses 16 symbols, the letters A-F, and digits 0-9 to signify values. *p. 53*
- T**   **F**   7. Lynx is a graphical display browser, which mean that is displays only text. *p. 58*
- T**   **F**   8. Bandwidth is the ownership right to an image. *p. 58*
- T**   **F**   9. Sharing a link to the original source does not violate copyright laws. *p. 61*
- T**   **F**   10. Web accessibility features help to ensure that websites are usable by people with various types of special needs. *p. 64*



## SHORT ANSWER

1. Common **web-based form** elements include text boxes, check boxes, and a Submit button. *p. 44*
2. The empty space surrounding text and graphics is called **white space**. *p. 49*
3. The dominating segment of a webpage that directs visitors' attention to a center of interest or activity is called the **focal point**. *p. 49*
4. A general definition of the term **brand** is the assurance or guarantee that a business or organization offers to its customers. *p. 50*
5. **Alignment** is the placement of objects in fixed or predetermined positions, rows, or columns. *p. 51*
6. Computer monitors project color using the **RGB** color system, which combines channels of red, green, and blue light. *p. 52*
7. **Chunked** text is text that is broken into small sections with headings, subheadings, and bulleted lists. *p. 55*
8. The **inverted pyramid** style is a classic news writing style that places a summary first, followed by details, and then any background information. *p. 57*
9. **Bandwidth**, which is the quantity of data that can be transmitted in a specific time frame, is measured in bits per second. *p. 58*
10. **Encryption** is a process that encodes data into illegible content. *p. 62*

# 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 **red** 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.

### Table of Contents

[39: Introduction](#)

[40: Advantages of Web Publishing](#)

[47: Basic Web Design Principles](#)

[51: Color as Web Design Tool](#)

[54: Writing for the Web](#)

[58: Web Publishing Issues](#)

[End of Chapter Material](#)

[Glossary of Key Terms](#)

### 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 the different advantages of web over print publications. Which do they find most relevant or valuable to their lives? Why?

### 40: Advantages of Web Publishing

#### LECTURE NOTES

- Define the terms **currency advantage**, **connectivity tools**, **aggregators**, **connectivity advantage**, **convergence**, **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

41: Q&A: **Do all websites contain continually updated content?** No. Some websites focus on content that might not change over time, for example, academic or historical 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.

42: 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: **Are connectivity and convergence the same?** No. Connectivity refers to connections between content, such as links and shares. **Convergence** is the trend of connecting information and accounting between devices. For example, convergence means that you can access your social media accounts on multiple devices without separate log-ins.

44: 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*.

45: 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.

45: DESIGN TIP: Build into your website appropriate ways to promote interactivity, such as a contact page, web-based form, or blog.

**46: Q&A: Where can I find free photographs?** Using professional photographs can enhance your webpage content. Websites such as [www.flickr.com](http://www.flickr.com) and [www.morguefile.com](http://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.

**47: DESIGN TIP:** Use your website to expand upon 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 Connectivity.

### **47: 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 how RWD techniques use 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

47: 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 up-to-date 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.

48: TOOLKIT: **Responsive Web Design** To learn more about responsive web design principles, see Appendix C. You can create and adjust consistent white space by using the CSS to specify indents and line spacing for text, and space around tables and images.

48: DESIGN TIP: You can create and adjust consistent white space by using the CSS to specify indents and line spacing for text, and space around tables and images.

49: 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.

49: DESIGN TIP: Using a slide show or gallery enables you to have one central focal point with content that changes automatically or as a result of user intervention. You can feature several articles at once in a small amount of space.

49: TOOLKIT: **Appendix C: RWD** Responsive web design principles allow for minimal white space for websites viewed on smartphones and other devices with small screens. See Appendix C for more information.

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.

51: 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.

51: 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.

## 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.

**51: 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 2-12 to describe the color wheel: primary, secondary, cool, and warm colors
- Explain the RGB and hexadecimal color systems, and use Figure 2-13 to show the use of web development tools to select colors without having to know their hexadecimal values
- Discuss the cultural implications of color
- Discuss how color can meet your target audience expectations

FIGURES: 2-12, 2-13

## BOXES

Q&A: 53: **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 have 8-bit monitors; therefore, many web designers no longer restrict their color choices to the web-safe palette.

Q&A: 53: **Does color matter?** Yes. For example, natural colors, such as greens and brown, might be a good fit for a website with an ecofriendly agenda. Some colors have cultural meanings in different

countries. For more information about using color as a design tool, use a search engine to search for *website color palettes*.

54: 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 and color trends.

#### 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.

### **54: 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 2-14 to illustrate creating chunked text
- Point out the scannability guidelines on page 56
- Use Figure 2-15 to illustrate the classic newswriting style of the inverted pyramid

FIGURES: 2-14, 2-15

#### BOXES

54: 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.

55: DESIGN TIP: To keep webpage text succinct, place information that is not crucial, such as historical backgrounds or related topics, on 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.

55: DESIGN TIP: Consider hiring a copywriter or content expert to create or adapt your web content. Content that reads well for the web and is accurate and error-free can help position your website as a valuable resource.

55: 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.

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

56: 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 makes your page content more easily readable on a mobile device.

57: 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*.

57: TOOLKIT: **Appendix D: SEO** Within the summary text are key terms that improve a website's SEO rankings. To learn more about SEO, see Appendix D.

58: DESIGN TIP: When writing in the inverted pyramid style, summary text should include the “who, what, when, where, and why” of the topic. To simplify language, 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. Discuss how mobile considerations might affect your written website content.



## 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.

**58: Web Publishing Issues**

## LECTURE NOTES

- Define the terms **bandwidth**, **thumbnail**, **graphical display browsers**, **alternative text**, **resolution**, **pixel**, **auto-rotate**, **copyright**, **copyright notice**, **phishing**, **spoofing**, **masking**, **personally identifiable information (PII)**, **encryption**, **decryption**, **Secure Sockets Layer (SSL)**, **cookies**, **big data**, **privacy policy statement**, **accessibility**, **usability**, and **user experience (UX)**
- Discuss the relationship 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 auto-rotate
- 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

**58: 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.

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

59: DESIGN TIP: Webpages will 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.

59: TOOLKIT: **Appendix C: RWD** For more information about designing webpages that accommodate mobile devices' rotation and zoom features, see Appendix C.

60: 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.

60: Q&A: **What is the mobile-first strategy?** Mobile-first is a web design trend that encourages web designers to first design for mobile devices, rather than standard laptop or desktop monitor sizes. Mobile-first techniques include RWD principles, as well as other trends such as one-page websites, and expandable or hidden content or navigation. For more information, use a search engine to search for *mobile-first web design*.

60S: Q&A: **What is Creative Commons?** Creative Commons is a nonprofit organization that provides guidelines for artists and others to protect and license creative content, including images, music, and more. Creative Commons allows content and media creators to establish permissions for use of their works, such as enabling use for entertainment or recreation purposes, but not for any commercial use.

61: 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 legitimate. **Spoofing** is the creation of a fraudulent version of a website that appears to use the original website's URL by **masking**, or hiding the actual URL while displaying the URL the visitor intended to reach. Visitors to a spoofed website may be fooled into entering account information, or downloading content that contains a virus.

61: 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 crediting the source clearly.

62: 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*.

62: 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*.

63: 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*.

63: 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 policy statement.

64: 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*.

65: 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.

#### 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 Multiple 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.
- **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 (64)             | hexadecimal system (53)                        |
| aggregator (41)                | interactivity advantage (42)                   |
| alignment (51)                 | inverted pyramid style (57)                    |
| alternative text (59)          | masking (61)                                   |
| analytics (44)                 | netiquette (57)                                |
| asymmetrical (48)              | personally identifiable information (PII) (62) |
| auto-rotate (59)               | phishing (61)                                  |
| balance (47)                   | pixel (59)                                     |
| bandwidth (58)                 | primary colors (52)                            |
| big data (63)                  | privacy policy statement (63)                  |
| brand (50)                     | proximity (48)                                 |
| branding specifications (50)   | resolution (59)                                |
| chunked text technique (55)    | RGB color system (52)                          |
| color depth (53)               | scannability (56)                              |
| color wheel (52)               | secondary colors (52)                          |
| complementary colors (52)      | Secure Sockets Layer (SSL) (62)                |
| connectivity advantage (41)    | spoofing (61)                                  |
| connectivity tools (40)        | symmetrical (47)                               |
| contrast (49)                  | tag line (50)                                  |
| convergence (42)               | thumbnail (58)                                 |
| cookies (62)                   | unity (50)                                     |
| cool colors (52)               | usability (65)                                 |
| copyright (61)                 | user experience (UX) (65)                      |
| copyright notice (61)          | values (52)                                    |
| cost advantage (46)            | visual identity (50)                           |
| currency advantage (40)        | warm colors (52)                               |
| decryption (62)                | web-based form (44)                            |
| delivery advantage (46)        | white space (48)                               |
| encryption (62)                |  |
| focal point (49)               |  |
| graphical display browser (58) |  |

[Top of Document](#)