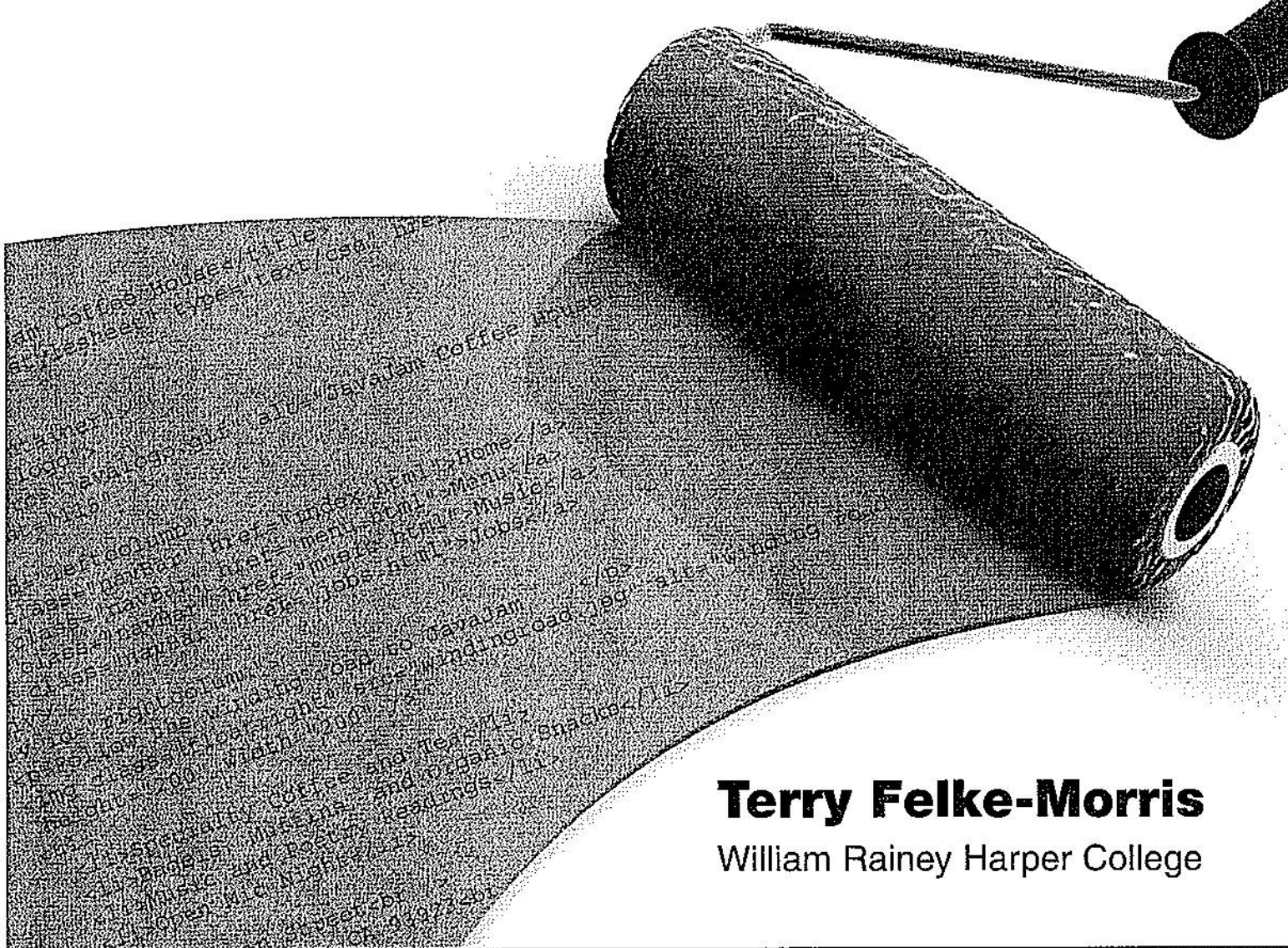


Web Development & Design Foundations

EDITION

4

with XHTML



Terry Felke-Morris

William Rainey Harper College

Web Development & Design Foundations

EDITION

4

with **XHTML**



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Preface

Web Development and Design Foundations with XHTML is intended for use in a beginning Web development course. Since CSS has become a standard for Web design, this edition now introduces CSS early on and integrates this topic throughout the text, including CSS-based page layouts. The text covers the basics that Web developers need to develop their skills:

- Internet concepts
- Creating Web pages with XHTML
- Configuring text, color, and page layout with CSS
- Web design best practices
- Accessibility standards
- The Web development process
- Using media and interactivity on Web pages
- Web site promotion
- E-commerce and the Web
- JavaScript™

A special feature of this text is the *Web Developer's Handbook*, which is a collection of appendixes providing resources such as an XHTML reference, a comparison of HTML and XHTML, a CSS reference, and Section 508 Standards reference.

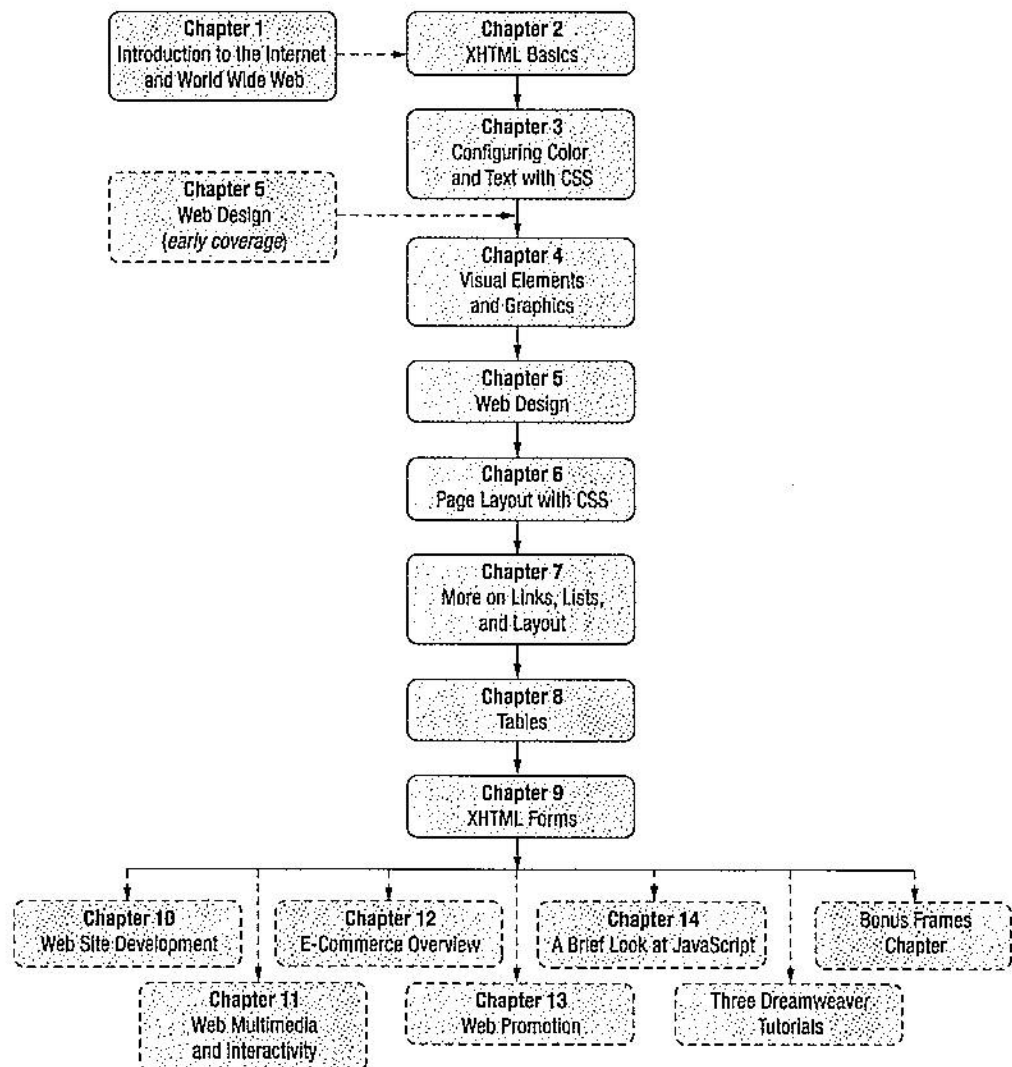
Student files are available for download from the Companion Website for this book at <http://www.aw.com/felke>. These files include solutions to the Hands-On Practice exercises, Web Site Case Study starter files, an introduction to FTP, and three Adobe® Dreamweaver® tutorials. See the access card in the front of this book for further instructions.

Organization of the Text

The textbook is designed to be used in a flexible manner, and it can adapt easily to suit a variety of course and student needs. Chapter 1 provides introductory material, which may be skipped or covered depending on the background of students. Chapters 2 through 4 introduce XHTML and CSS coding. Chapter 5 discusses Web design best practices and can be covered anytime after Chapter 2 (or even along with Chapter 2). Chapters 6 through 9 continue with XHTML and CSS topics.

Any of the following chapters may be skipped or assigned as independent study, depending on time constraints and student needs: Chapter 10 (Web Site Development), Chapter 11 (Web Multimedia and Interactivity), Chapter 12 (E-Commerce Overview), Chapter 13 (Web Promotion), and Chapter 14 (A Brief Look at JavaScript). Students usually enjoy the three Dreamweaver tutorials, which are available for download from the Companion Website for this book at <http://www.aw.com/felke>. The Companion Website also provides an FTP tutorial and a bonus chapter on frames. A chapter dependency chart is shown in Figure P.1.

Figure P.1
The textbook is flexible and can be adapted to individual needs



Brief Overview of Each Chapter

Chapter 1: Introduction to the Internet and the World Wide Web. This brief introduction covers the terms and concepts related to the Internet and the Web with which Web developers need to be familiar. For many students, some of this will be a review. Chapter 1 provides the base of knowledge on which the rest of the book is built.

Chapter 2: XHTML Basics. As HTML and XHTML are introduced, examples and exercises encourage students to create sample pages and gain useful experience. Solution pages for the Hands-On Practice are available in the student files.

Chapter 3: Configuring Color and Text with CSS. The technique of using Cascading Style Sheets to configure the color and text on Web pages is introduced. Students are encouraged to create sample pages as they read through the text. Sample pages for the Hands-On Practice are available in the student files.

Chapter 4: Visual Elements and Graphics. This chapter discusses the use of color and graphics on Web pages. Students are encouraged to create pages as they read through the text. Sample pages for the Hands-On Practice are available in the student files.

Chapter 5: Web Design. This chapter focuses on recommended Web site design practices and accessibility. Some of this is reinforcement because hints about recommended Web site design practices is incorporated into the XHTML chapters.

Chapter 6: Page Layout with CSS. This chapter continues the study of CSS begun earlier and introduces techniques for positioning and floating Web page elements, including a two-column CSS page layout. Sample pages for the Hands-On Practice are available in the student files.

Chapter 7: More on Links, Lists, and Layout. This chapter revisits earlier topics and introduces more advanced techniques related to hyperlinks, configuring navigation links in an unordered list, and a three-column CSS page layout. Students are encouraged to create pages as they read through the text. Sample pages for the Hands-On Practice are available in the student files.

Chapter 8: Tables. This chapter focuses on the XHTML elements used to create tables. Methods of configuring the table with CSS are introduced. Students are encouraged to create pages as they read through the text. Sample pages for the Hands-On Practice are available in the student files.

Chapter 9: XHTML Forms. This chapter focuses on the XHTML elements used to create forms. Methods of configuring the form with CSS are introduced. Students are encouraged to create sample pages as they read through the text. Sample pages for the Hands-On Practice are available in the student files.

Chapter 10: Web Site Development. A focus on the process of Web site development includes the job roles needed for a large-scale project, the Web development process, and Web hosting. A Web host checklist is included in this chapter.

Chapter 11: Web Multimedia and Interactivity. This chapter offers an overview of topics related to adding media and interactivity to Web pages. These topics include video, audio, Flash®, Java™ applets, JavaScript, DHTML, and Ajax. Students are encouraged to create pages as the topics are discussed. Sample pages for the Hands-On Practice are available in the student files.

Chapter 12: E-Commerce Overview. This chapter introduces e-commerce, security, and order processing on the Web.

Chapter 13: Web Promotion. This chapter discusses site promotion, from the Web developer's point of view, focusing on search engines and indexes.

Chapter 14: A Brief Look at JavaScript. This chapter provides an introduction to client-side scripting using JavaScript. Sample pages for the Hands-On Practice are available in the student files.

Web Developer's Handbook Appendixes: The *Handbook* contains appendixes that include resources and tutorials useful to students, such as an XHTML reference, a list of special characters, a CSS property reference, a comparison of HTML and XHTML, and a Section 508 Standards reference.

Features of the Text

Well-Rounded Selection of Topics. This text includes both “hard” skills such as XHTML, CSS and JavaScript (Chapters 2, 3, 4, 6, 7, 8, 9, and 14) and “soft” skills such as Web design (Chapter 5), Web site promotion (Chapter 13), and e-commerce (Chapter 12). Two methods of publishing pages to the Web (using an FTP application and Dreamweaver) are demonstrated in the student files. This well-rounded foundation will help students as they pursue careers in Web development. Students and instructors will find classes more interesting because they can discuss, integrate, and apply both hard and soft skills as students create Web pages and Web sites.

Hands-On Practice. Web development is a skill and skills are best learned by hands-on practice. This text emphasizes hands-on practice through practice exercises within the chapters, end-of-chapter exercises, and the development of Web sites through ongoing real-world case studies. The variety of exercises provides instructors with a choice of assignments for a particular course or semester.

Web Site Case Studies. There are four case studies that continue throughout most of the text (beginning at Chapter 2). An additional case study begins in Chapter 5. The case studies serve to reinforce skills discussed in each chapter. Instructors can cycle assignments from semester to semester or allow students to choose the case study that most interests them. Sample solutions to the case studies are available on the Instructor Resource Center at <http://www.aw.com/irc>.

Web Research. Each chapter offers Web research activities that encourage students to study topics introduced in the chapter.

Focus on Web Design. Most chapters offer additional activities that explore Web design topics related to the chapter. These activities can be used to reinforce, extend, and enhance the course topics.

FAQ

FAQs. In her Web development courses, the author is frequently asked similar questions by students. They are included in the book and are marked with the identifying FAQ logo.



Checkpoints. Each chapter contains two or three Checkpoints—groups of questions intended for students to self-assess their understanding of the material. A special Checkpoint icon appears with each group of questions.



Focus on Accessibility. Developing accessible Web sites is more important than ever, and this text is infused with accessibility techniques throughout. The special icon shown here makes accessibility information easy to find.



Focus on Ethics

Focus on Ethics. Ethics issues as related to Web development are highlighted throughout the text with the special ethics icon shown here.



Color Insert. Some figures also appear in the 12-page full-color insert. These figures are identified with the tag shown here.

Reference Materials. *Web Developer's Handbook* Appendixes offer reference material, including an XHTML reference, a list of special characters, a CSS property reference, a comparison of HTML and XHTML, and a Section 508 Standards reference.

Supplemental Materials

Student Resources. The following resources are available to all readers of this book at <http://www.aw.com/felke>:

- Student files for Web page exercises and Web Site Case Study assignments
- Adobe Dreamweaver tutorials
- FTP tutorial
- Bonus frames chapter
- A complimentary access code for this resource is available with a new copy of this book. Subscriptions may also be purchased online.

Instructor Resources. The following supplements are available to qualified instructors only. Visit the Addison-Wesley Instructor Resource Center (<http://www.aw.com/irc>) or send an e-mail to computing@aw.com for information on how to access them:

- Solutions to the end-of-chapter exercises
- Solutions for the case study assignments
- Test questions
- PowerPoint® presentations
- Sample syllabi

Author's Web Site. In addition to the publisher's Companion Website for this book, the author maintains a Web site at <http://www.webdevfoundations.net>. This Web site contains additional resources including a color chart, Flash learning/review games, Adobe Flash Tutorial, Adobe Fireworks® Tutorial, Adobe Photoshop® Tutorial, and a page for each chapter with examples, links, and updates. This Web site is not supported by the publisher.

Thank you to Mark DuBois, Professor at Illinois Central College and WOW (World Organization of Webmasters) Director of Education, for his most careful review and many constructive suggestions for improving this book. A special thank you also goes to Jean Kent, North Seattle Community College, for taking time to provide additional feedback and sharing student comments about the book.

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About the Author

Terry Felke-Morris is an Associate Professor at William Rainey Harper College in Palatine, Illinois. She holds a Master of Science degree in information systems and numerous certifications, including Adobe Certified Dreamweaver 8 Developer, WOW Certified Associate Webmaster, Microsoft Certified Professional, Master CIW Designer, and CIW Certified Instructor.

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