

HOW TO DESIGN AND WRITE WEB PAGES TODAY

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all levels will find the advice presented helpful in writing papers; business professionals will value the practical guidance offered by these handbooks; and anyone who needs to express a complaint, opinion, question, or idea will welcome the methods conveyed in these texts.

PREFACE

The arts are made great, not by those who are without scruple in boasting about them, but by those who are able to discover all of the resources which each art affords.

—Isocrates, ca. 390 B.C.¹

First, a disclaimer. This book will not teach you everything you need to know about writing and designing for the Web.

No single book can.

But what this book will do is provide you with just about everything you need in order to *learn* everything you need to know to write and design for the Web.

The Web is unique among all forms of digital communication, in that top to bottom, the Web is language. Language that you can learn to read and write. From the visual designs of your pages, to the structure of your pages, to the Web servers that deliver your pages to readers, the Web is nothing but language. And those who wish to be rhetorically successful on the Web must command the languages and accompanying concepts behind the languages in order to best communicate with the unique audience for any given Web site.

Contrary to how software companies market their products, the ability to write and design and communicate effectively on the Web is not determined by how much money you have, the software you can afford to buy, or the whims of a particular computer company.

It is determined by how well you can command the languages of the Web to best communicate with the audience you are hoping to reach through your Web site and other forms of digital identity that you establish on the Web.

RHETORIC AND TECHNOLOGY

Even though, for most of us, the Web is a commonplace technology, it is still tempting to think of it as an entirely new form of communication. But the challenges of writing for the Web are just a recent development in the more than 2,500-year-old tradition known as the art of rhetoric. And it is rhetoric—not technology alone—that has informed and guided the writing and design advice in this book.

Now, you are probably more familiar with the word “rhetoric” in its popular, negative usage: politicians in particular thoroughly enjoy attacking one another for spouting “empty rhetoric” or “heated rhetoric.” My PhD is in rhetoric, and I often tell my family and friends that it’s the dirtiest word for which you can get a PhD. All joking aside though, the popular usage of the word “rhetoric” is unfortunate, and there are interesting historical reasons for why that negative sense of rhetoric is so common, but suffice it to say that there are also positive meanings of “rhetoric.”

Rhetoric, in its better sense, is a productive, generative art of communicating with other human beings. The art of rhetoric enables people to discover, as it is expressed in Aristotle’s *Rhetoric*, the available means for developing something to say, and for supporting what they say.² Rhetoric also suggests how to establish the best form to say something in, and to deliver the form appropriately for a particular audience in a particular context of time, values, and beliefs.

All of these issues—development, form, audience, and context—are central to maximizing the affordances, or available means, of Web communication. And all of the Web’s affordances are derived from language: the language of the content you post to the Web (your text, images, multimedia, even page design), of course. But the Web also has its own languages, including the Extensible Hypertext Markup Language (XHTML), Cascading Style Sheets (CSS), and ECMAScript, better known as JavaScript. You can even use language to control Apache,

the world’s most popular Web server,³ to better deliver your content across the Web.

DON’T CALL THEM, THEY’LL CALL YOU

But here’s the trick with the Web: you rarely get to actively contact your audience, the way you do with an email or an instant message. Most of the time, your audience has to find you—usually through a search engine, such as Google. But they might also find you via your Twitter account or a bookmark of your site that someone has posted to Diigo. On the Web, we have to write so as to make sure that we are found. And that means writing for other computers, like search engines, in addition to writing for, and connecting with, human beings.

Once a human being has found your site, though, your rhetorical work has only just begun. You’ve been able to attract your audience’s attention, but now you must work to maintain their attention: not just for the length of their visit to your site, but for as long as you continue to maintain your site. And that’s where the long-term challenge of Web design lies. Anyone can post a site, and anyone can draw people to that site; but providing an experience that merits return visits (or job offers, or admission to school, or more customers for your business or members of your club) is a matter of good content, good design, and masterful use of the technologies that make up the Web.

In other words, it’s all a matter of good rhetoric.

But learning technologies apart from rhetoric will gain you nothing more than technical proficiency. Learning the rhetoric apart from the technologies and languages will leave you at the mercy of whatever technology you can afford (or person you can afford to hire) to build your Web pages for you.

KNOWLEDGE AND VOCABULARY

Writing and designing for the Web is an important end in itself. But the techniques and approaches that this book offers are also grounded in a particular view of human relationships to technology: writing and designing for the Web is not just about helping

you to work differently with Web technologies, but about deepening your understanding of them to change how you think, learn, and talk about them, too.

One thing you will notice about this book is that it does not shy away from the technical knowledge and vocabulary surrounding Web writing and design. There is a very good reason for this: more than any other form of digital writing, writing for the Web is a community activity. People work together to establish new practices and technologies for communicating on the Web. Two examples of that are open-source blogging software such as WordPress⁴ and the Microformats.org⁵ community, which is helping to make the information on Web pages easier to share and use away from the Web.

But in order to join or even simply benefit from the knowledge of any community—whether photographers, football fans, carpenters, knitters, poker players, medical doctors, or Web designers—you have to know or be willing to learn the words that that community uses in *addition* to engaging in photography, carpentry, poker, or whatever activity the community is known for. Think for a moment about your hobbies, your college major, or classes you have taken: in each of those areas, you have acquired specialized knowledge and technical words to talk about different subjects in ways that are more sophisticated than someone outside of your hobby, college major, or classroom.

Writing for the Web is no different: its terms may be unfamiliar and technical, but you know technical terms from other domains already. Web design and development is just another domain of knowledge. This book does not expect that you know these terms already, but it will help you learn them, search the Web for them, and use them to talk and collaborate with others on Web projects.

ESSENTIAL TOOLS AND TECHNOLOGY

In addition to the knowledge and words, you have to know the tools that a community uses: in the Web's case, the tools are the languages—particularly XHTML, CSS, and JavaScript—that people write with when they write for the Web, and a few generic pieces of software: a text editor, a search engine, and a Web browser.

However, this book does not teach Web writing according to one particular piece of software, and it outright discourages the use of what-you-see-is-what-you-get (WYSIWYG) software packages, such as Microsoft FrontPage or Adobe Dreamweaver, because WYSIWYGs fail Web writers at three important things:

- First, WYSIWYGs fail at supporting revisions to pages. Writing must always be revised. It never comes out perfectly the first time. And on the Web, things other than writing will also need revision: for example, your design might work in one Web browser, but not another. Web page creation is relatively easy; Web page revision is not—unless you understand how you wrote the page initially.
- Second, software packages for creating Web pages fail to prepare you for other, more advanced forms of Web production. If you want, for example, to build a custom template for a WordPress site, you have to understand how to write with the Web's languages; there is no WYSIWYG system for WordPress templates. (True, you can download a WordPress template of someone else's design, but that diminishes the rhetorical impact your site would otherwise have if it featured your own unique design.)
- Third, if you learn how to create Web pages only according to one piece of software, then your abilities will be dependent on the continued existence of that software. And even if the software's brand name continues to exist, the company behind it may radically restructure the software's interface and features—and you'll find yourself a beginner all over again.

It was exactly those three problems that I encountered in my own Web design work that led me to develop new methods to teach my students to design Web pages the way I write about in this book.

That said, my philosophy toward learning digital communication technologies is simple: learn them right and learn them well the first time. If you know or are willing to learn the languages of the Web—XHTML, CSS, JavaScript—then you will always know how to build Web pages, regardless of what software you have available. Learning

the languages of the Web, coupled with the concepts for thinking and talking about them, will make it even easier for you to pick up other languages, or changes to existing ones, in the future.

The only tools you absolutely have to have to build a Web site are a Web-friendly text editor, a search engine, and a good Web browser, all of which are available as free downloads. There are suggestions for each later in this book.

- **A Web-friendly text editor** is where you do your writing; it is the view of your Web page where you do your work. But not only are you writing the content of a page that someone else will read, you are also writing, in the Web's languages, about your content. And when you learn to write in the Web's languages, you can then begin to shape not just what but *how* someone will read your pages. You may also find, as I have, that writing about your content in XHTML and CSS even helps you refine the content itself to better reach your audience.
- **A search engine** is your portal to XHTML, CSS, and JavaScript references and guides (so you don't have to memorize everything about those languages) and your means of discovering the many communities of people who are devoted to the art of writing and designing for the Web. A chapter toward the end of this book lists some trustworthy references and helpful communities to get you started.
- And finally, a **good Web browser**—I recommend Mozilla Firefox—is the last essential piece of technology you need. As a solid development browser, Firefox will provide an initial real-world view of your Web pages and, with the help of some add-ons (also free), will help you to refine your page's construction and design before you test them on as many other browsers and devices as you can. (However, the approaches to Web writing and design suggested in this book will help you to minimize differences from browser to browser.)

I have also created a Rapid Prototyping Kit (RPK) that is available as a free download from this book's companion Web site. The RPK will help you start building your site and its pages with confidence, while

still giving you plenty of flexibility to tailor your site for the specific needs of your audience.

ORGANIZATION OF THIS BOOK

This book is a complete approach to Web writing and design: it takes you from learning to read the Web like a writer and designer, up through posting a complete, customized Web site—even a custom-designed WordPress blog, if you're interested. The book itself is organized into a few key sections:

- “What Am I Writing?” looks at the rhetorical situation of the Web, particularly why an online identity that you develop and control is essential to have—and possible to establish even before you begin to build your Web site.
- “Issues and Challenges” presents the guiding principles for making informed decisions about every component of your site—from bits of text and images on individual pages to the navigation and architecture of your entire site—with regard to the issues of accessibility, usability, and sustainability. All three issues are key to building a site that reaches the widest possible audience while giving you the freedom to constantly revise and improve (rather than simply maintain) your site over time.
- “Strategies for Success” covers essential techniques and strategies that you need to write and design individual Web pages. Because a Web site is basically a collection of pages, any successful Web site will depend on the solid construction of individual pages, including page elements such as branding, text and media content, and navigation.
- “Problems and Solutions” moves to the challenges surrounding construction and maintenance of an entire Web site, such as developing a site architecture and employing methods to display repeated content (such as branding and navigation) over multiple pages from a single file. It also looks at setting up and customizing a popular open-source blog package, WordPress, to power your site. This section concludes with a chapter on tracking visitors, using site statistics packages, and making

material that you post to your site easier to share with others on Facebook and elsewhere, so as to broaden your identity across the Web.

- And finally, “Resources for the Future” provides a topical list of additional print and digital publications to consult to extend your knowledge of writing and designing for the Web. It also lists links to galleries of Web design to peruse for inspiration, and some suggested Google search terms to help you discover even more resources.

Because this book is about Web design, it will necessarily cover many technical topics and terms. A glossary is provided to help you manage the book’s many technical words and concepts.

A NOTE ABOUT SCREEN CAPTURES

To add visual interest and to illustrate certain concepts or techniques, I have included screen captures of different views of Web pages throughout the book. These are all of my own making, because I subscribe to graphic designer Paul Rand’s view that

words about art and design are best explained in the presence of the artist’s work. The reader, then, can more readily understand what the writer is talking about, and whether opinions expressed are based on empirical or theoretical values.⁶

The examples I’ve provided from my work are not necessarily great. In fact, I’m just as likely to showcase something that I’ve done previously that was bad design as I am to show off an example that was good. But in all cases, because the examples are of my own making, I can talk honestly and accurately about how they were made, and why.

The limitations of print being what they are, I encourage you to look at the live versions of all screen captures, which are available via this book’s companion Web site. In the “Resources for the Future” section, as well as on the companion site, there are links to some amazing Web design galleries that you should browse for examples that are far more inspiring than mine.

HOW (AND WHERE) TO READ THIS BOOK

I have written this book in an environment similar to what I hope you’ll read it in: near the computer, with Web editor and Web site handy, browser open, and ready to try new things, learning at every step. You will also want to use your browser to open this book’s illustration- and example-rich companion Web site at <http://sustainablewebdesign.com/book/>. The companion site features

- a Rapid Prototyping Kit (RPK) for building your Web site,
- live versions of the examples in this book (plus others),
- up-to-date instructions for working with different technologies, and
- notes about any corrections or modifications to the content of this book.

You can, of course, read this book straight through. But I suggest you begin with the “What Am I Writing?” section. Next, read quickly through the “Issues and Challenges” section, so that you at least expose yourself to some of the key concerns of Web writing and design. Then, download the RPK and, with your text editor and Web browser handy, start working through the “Strategies for Success” section, planning and building your own basic pages, fixing any mistakes (we all make them!), and sketching out page designs for your Web site. You might want to revisit the “Issues and Challenges” section before moving on to the early chapters of “Problems and Solutions.”

As you get down to the work of building your site, work through Chapter 20 to learn how to develop an organized architecture for your site. Refer also to the Web-available instructions mentioned in that chapter for getting your own local Web server set up on a USB drive, so that you can better test and design your pages before going live.

If you’re enthusiastic about the idea of running your own WordPress-driven site, read through Chapters 21 and 22; otherwise, save those for later and look at Chapter 23 and how to go about publishing your Web site to the open Web. Finally, Chapter 24 will guide you in ways to both technologically and legally simplify how others may share your content, extending your identity and reach across the Web.

PREFACE

NOTES

1. Isocrates, "Against the Sophists," in vol. 2 of *Isocrates*, trans. G. Nordlin, Loeb Classical Library (Cambridge: Harvard University Press, 1929), 169.
2. Aristotle, *Rhetoric*, in *The Rhetoric and Poetics of Aristotle*, trans. W. R. Roberts (New York: The Modern Library, 1984).
3. "September 2009 Web Server Survey," Netcraft.com (September 23, 2009), http://news.netcraft.com/archives/2009/09/23/september_2009_web_server_survey.html
4. WordPress.org, <http://wordpress.org>
5. Microformats.org, <http://microformats.org>
6. Paul Rand, *Design, Form, and Chaos* (New Haven, CT: Yale University Press, 1993), xii.

ACKNOWLEDGMENTS

This book is largely the product of teaching students who put an incredible amount of trust in the unorthodox thing I encourage them to do: abandon the constraints of software and learn to write the Web by hand; not as programmers, but as writers and designers.

I am still grateful, many years later, to the first group of undergraduate students to whom I taught standards-based Web design in a multimedia writing course—and to David Blakesley, who encouraged me to teach the course while I was a graduate student at Purdue University. And I am also grateful to the graduate students in technical communication and information architecture at Illinois Institute of Technology, who expressed enthusiasm and encouragement while reading the draft form of this book in our Web design class. In particular, I offer special thanks to Laurie Riley, Kelly Schaefer, and April Wedekind, who offered thoughtful responses to this book's earliest draft chapters, and to Erica Dekker and Susan Mallgrave for their comments and corrections when the book was nearly complete. I also thank my graduate assistant, Freddrick Logan, for his work on this project.

Many thanks to the Mozilla Foundation for its policy allowing writers to reproduce screen captures of the Firefox Web browser and to Frank Hecker for answering my questions about the Mozilla Foundation's policies. Thank you also to Chris Pederick (chrispederick.com) for creating and maintaining the Web Developer Add-on for Firefox and for permitting me to showcase it in screen shots throughout this

CHAPTER 1

Why Write for the Web?

The fact that you are holding this book in your hands (or displaying it on your screen) might tempt you to skip this chapter. You probably already have reasons for writing for the Web. But this chapter offers some ideas about writing for the Web that will help you strengthen and clarify your own sense of purpose in establishing or improving your Web presence.

WRITING TO BE FOUND

Whether you are building a Web site for yourself, or for a business or organization, there is no more important reason to write for the Web than to build a stable, custom online identity that you control. It is no secret that schools and employers search the Web for their applicants' names as part of their admissions or hiring process. And yet for many people, the results that show up in Google and other Web search results are far from ideal in conveying an accurate, well-rounded identity.

Do a Google search for yourself right now (also known as ego surfing). Be sure and try variations on your name. If your name is Catherine, for example, but you sometimes go by Cathy, search for both (with your last name, of course!). You might even want to search for alternate spellings of your name: in Catherine's case, Katherine and Kathy. When I ego surf, I also routinely search Google and Google's Blog Search for combinations such as:

- Karl Stolley
- "Karl Stolley" (with quotation marks, to search first and

- “Stolley, Karl” (with quotes, to search last name first, as some pages list names that way)

What kinds of results appear for you? People with common names, like Jim Smith, may see results for dozens, even hundreds of so-called **Googlegangers**: people with the same name, but vastly different (and sometimes morally suspect) interests and backgrounds.

People with multiple Googlegangers will want to whittle down the results. Try adding to your name the city where you live, your employer, job title, occupation or professional field, or perhaps the school you attend. For example, I will search for these variations:

- Dr Stolley technical communication
- Professor Stolley Illinois Institute of Technology

Even for people with uncommon names, the search results may not be encouraging. There may be no results for your name at all. And if there are results, they may be scattered, confusing, and downright goofy: perhaps you were quoted in a story for a school or local newspaper. You might find yourself on a missing classmates page in the alumni area of a college or university Web site. Or perhaps you used your real name when replying to an online forum about troubles with the type of car you drive. You might even find that some well-meaning relative tagged you in an unflattering photograph on Flickr.

In all of those cases, the results do not point positively to one page or another that fully and accurately represents you. As you look at the list appearing with your name, ask yourself: “What would a potential employer, a potential college or graduate school think of these results?” If you’re working on a Web site for a business or a club, and searching the Web for its name, ask yourself what potential customers or members would think.

Scattered, random results are frustrating. And if you have your own Web site already, it might be even more frustrating to discover that it does not appear as the number one ranking for your name search on Google, or even in the top ten.

The methods for writing and designing Web pages presented in this book will help you to establish your Web presence and likely improve

STAYING SAFE ONLINE

Everyone’s heard news stories of identity theft, stalking, and other horrors of life on the Web. There’s no need to recount them here, or to let them act as a deterrent for building a Web presence. But there are some simple things you should do to establish an online presence while keeping yourself safe:

- Never post or reveal anything online that you wouldn’t want to appear on a billboard next to a busy highway. (If that doesn’t bother you, then reword it as “Never post or reveal anything that you wouldn’t want your mother to see.”)
- Even more important, **never post or reveal anything online about others—your friends, family, coworkers, colleagues—that they wouldn’t want on a billboard or seen by their mothers.** Just because Uncle Jimmy willingly posed for that wacky picture at the family reunion doesn’t mean that he wants his coworkers to see it on Facebook (and then print it and hang it up all over the break room at work).
- **Don’t reveal information about yourself (or others) in Tweets or Facebook status messages that could endanger you, your family, or your property.** “Walking home alone late at night along Lincoln Ave”; “Left the kids at home by themselves”; or “New computer was left at the back door of the house. Too bad I’m at work.”
- Many sites—from banks to email providers—feature “security questions” meant to aid you in accessing your account should you forget your username or password. **Be very careful about choosing security questions whose answers are available online.** If you have listed your hometown or high school in an online profile, avoid security questions like “What is your city of birth?” or “What is your high school mascot?” If a site allows you to write your own security questions, choose that option, and keep them obscure: “What was your family language word for milk?” or “Where do you think you lost your favorite toy in third grade?”
- Visit <http://www.onguardonline.gov> to learn more about online and computer safety.

WRITING TO ESTABLISH AN ONLINE IDENTITY

Whether you have a Web site or not, one of the best first steps for establishing an online identity is to begin microblogging. There are a few sites that support this activity, although perhaps the most popular is Twitter.¹ Twitter will help you to establish a Web presence by fre-

or less. You can post to Twitter via its Web site, special add-ons to your Web browser, or stand-alone clients like TweetDeck.² It is also possible to post to your Twitter account from just about any kind of mobile phone. In Twitter-speak, to post is to tweet.

Registration on Twitter is quick and free (see the “Controlling Your Name” sidebar for help choosing a Twitter username). But Twitter might seem ridiculous to those who haven’t tried it: What possible good can 140-character microblog posts do for establishing an online

USERNAMES AND PASSWORDS

One problem with using `username` for your usernames is that it’s not terribly hard for anyone to guess (then again, neither are usernames that become part of URLs, as they do on Twitter).

To keep your accounts secure, then, you need to use very strong passwords. It’s now conventional wisdom to avoid using dictionary words, the username itself, or an all-number password. Here, though, is a strategy for creating rock-solid passwords:

- Use an acronym derived from song lyrics, a line in a poem, or some other phrase that you’ll remember easily. “Yankee Doodle came to town, riding on a pony” becomes `YDcttroap`.
- Unlike usernames, which I prefer to keep all lowercase, mix in some uppercase letters (I prefer to do this at the beginning or end of a password); “Yankee Doodle” has uppercase built in: `YDcttroap`.
- Swap out letters with numbers and symbols (note that some services disallow certain characters; adjust accordingly). `YDcttroap` might become `YDc++r0ap`, with plus signs replacing the `ts`, and a zero replacing the lowercase `o`.
- If you have no other nonalphanumeric symbols, throw in an exclamation mark at the beginning or end: `!YDccttr0ap`

The acronym will make the password easy to remember, but only time and your own consistency (e.g., treating letter `Os` as zeros) will make number- and symbol-swapping memorable. This technique works well not only for Web services like Twitter, but for securing online bank accounts, home wireless networks, and computer account logins, too. Remember, too, that the longer the password, the better.

identity? The answer lies in many little lessons that Twitter teaches about Web writing in general:

- **Be interesting.** Yes, you can announce to Twitter that you’re eating a sandwich or walking the dog. But that’s not terribly interesting. It’s much better to post your perspective on issues you care about, or share the thinking side of your professional work or even your hobbies.
- **Frequent activity is essential to any Web presence.** Nothing is more important to Web audiences than fresh content and signs of life, or what I call living content. Pages that appear not to have been updated for some time are suspect to Web audiences and might seem to have been abandoned. With Twitter’s 140-character limit, it is easy to update often and without the extended efforts required of full-on blogs or Web sites.
- **Get to the point, because no one has time.** Brevity is key to Web writing. No one has time, so maximum rhetorical impact has to be achieved in few words. Frequent use of Twitter will help you learn the art of minimal expression.
- **Write once, publish (just about) everywhere and often.** Some people use their Twitter account to update their Facebook status, and many others use Twitter’s RSS feeds to publish their latest Tweets to their own custom Web sites. Updating Twitter, in other words, causes multiple sites to update simultaneously for these individuals. A single act of writing keeps multiple online presences fresh with living content.
- **There is more to connecting on the Web than linking to pages.** An essential part of Twitter is following others’ tweets and, by posting interesting things, others following yours. Building networks of connections with other humans, and not just their Web pages, is an essential part of being found on the Web and establishing an identity that is not an island unto itself.

In addition to Twitter, you might also consider establishing a Facebook account.³ Both Twitter and Facebook will make it easy for you to announce your new or redesigned Web site when the time is right.

CONTROLLING YOUR NAME

Control as many accounts and register as many domain names of your name or your organization's name as possible, even if they go unused. Sites like Namechk* let you check the availability of usernames over hundreds of sites and services all at once, but here is a starter list (I use yourname as an example; in my case it would be karlstolley):

- The .com, .org, and .net Top Level Domains (TLD) of your name (e.g., yourname.com, yourname.org, yourname.net; see Chapter 5)
- Twitter (e.g., twitter.com/yourname)
- Diigo (e.g., diigo.com/yourname)
- Facebook (e.g., facebook.com/yourname)
- Google (used with Gmail and other Google services, e.g., your.name@gmail.com)
- Yahoo! (used with Flickr and other Yahoo! services, e.g., flickr.com/yourname; note that Flickr and other services may require additional steps to claim URLs/usernames)
- MySpace, particularly "My URL" (e.g., mspace.com/yourname)

Of course, if your name is common enough, yourname may not be available. Consider these alternatives with the example name of Jane Amy Smith:

- jane-smith (addition of a hyphen)
- jane-a-smith (middle initial plus hyphens to improve readability)
- jane-amy-smith (middle name plus hyphens)

Notice that in all of those examples, "Jane" and "Smith" were parts of the URLs/usernames. The reason is simple: a Web search for a particular person is going to include a first and last name, having both in the URL or username may very well improve the ranking in search.

Here are other guidelines for those unable to register yourname:

- Don't add numbers corresponding to your birthday or birth month/year (see the "Staying Safe Online" sidebar).
- Don't include the place where you live (people move, after all).
- For some, professions or job titles might make sense (e.g., jane-smith-plumber), but career changes are commonplace, too.

Whatever variation you make, keep it readable and memorable.

*Namechk, <http://namechk.com>

But Twitter will allow you to start establishing a presence in Google search results immediately (provided you do not elect to protect your Tweets).

Beyond microblogging, there are other general categories of Web sites where you can begin to establish your online presence by registering and using an account:

- **Social bookmarking sites**, such as Diigo, let you share bookmarks to things you find on the Web
- **Social networking sites**, such as LinkedIn, MySpace, in addition to Twitter and Facebook
- **Photo sharing sites**, such as Picasa and Flickr
- **Video sharing sites**, such as YouTube and Vidler

WRITING TO CONNECT WITH PEOPLE

A central idea in this book is that you write and design for the Web in order to be found. But being found requires more than good search rankings. You need to go out and find others, too. Twitter, Facebook,

DO UNTO OTHERS

Simply stated, **Don't let your Web site or social media account (Twitter, Flickr, MySpace) come to shape the identities of others who have not established their own Web presence.**

Once you begin to write and design for the Web, you may find yourself referring to friends and colleagues by name. I have a simple rule about this: **never refer by full name to someone who does not have a Web site, or who is not a public figure or published author.** If someone blogs or Tweets under an alias, refer to her by her alias, not her full name.

It is also good practice to **avoid referring to conflicts or sensitive situations in your family, school, or workplace, even if you withhold names.** My own preference is to avoid referring to family, school, or workplace entirely—unless it's the kind of news that someone could be given an award for and that has been announced elsewhere first.

At the same time, if someone does have a Web site and you are positively referring to him by name, be sure to link to his site. This helps strengthen the other person's Web presence; with luck, and your own kind treatment of others, they will link back and do the same for you.

and other social Web sites allow you to do this through direct “follow” or “friend” relationships.

There are less structured ways of connecting with others, too. Just as you searched for your own name in Google and other search engines above, you can search for the names of your friends, peers, and colleagues, too. Some of them may have Web sites and blogs. Finding new people is as simple as searching for interests, professions, or careers and the words “personal Web site” or “blog.”

Blogs, in particular, present terrific opportunities for connecting with others, particularly through comment functions available in most blogging software. Comments allow readers to add reactions and indicate interest in others’ writing, and on many blogs, to share the address to their own Web sites.

If you don’t yet have a Web site that you control, you can always share your Twitter address when you comment on a blog post. When you do have your own URL, add it to your Twitter profile. Readers intrigued by your comment on someone’s blog, and interested by your Tweets, could easily follow the link in your profile to your Web site.

And once you have your own Web site, particularly if it includes a blog component (see Chapter 22), regularly linking to others’ sites or blog posts and portfolio items helps you to establish even more connections with other people. (Chapter 24 will talk about server statistics and other means for getting a sense of who is visiting and linking to your site.)

NEXT STEPS

On the Web, we write to be found. Twitter is a great first step to establishing an online presence, as are other social media sites that allow you to connect with other people. But such sites are just a start; a custom Web site is still a crucial component of your online identity and presence. Once you have a custom Web site, your many other online presences—Twitter, Facebook, Diigo—can be used for *lifestreaming*:⁴ announcing new content, site changes, and so on at your Web site, to audiences you share a closer connection with already.

The next chapter will address the important rhetorical skill of reading the Web, which will help you see how others have worked to establish an identity for themselves.

NOTES

1. Twitter, <http://twitter.com>
2. TweetDeck, <http://tweetdeck.com>
3. Facebook, <http://www.facebook.com>
4. Paul McFedries, “Lifestreaming,” Word Spy, <http://www.wordspy.com/words/lifestreaming.asp>

CHAPTER 2

Reading the Web

Every view of the Web is unique, depending on such technological conditions as the type of computer, the fonts it has installed, the resolution of its screen, and certainly its Web browser. Someone viewing a Web site on an Apple computer with the Safari Web browser will see a very different view of a Web page compared to someone on a Windows computer using Internet Explorer. Someone using a mobile phone to view the Web will see still another view. And a person with low vision might not even see the Web, but will hear it read aloud instead.

For new and seasoned Web writers and designers alike, this is the most important lesson to learn: every view of the Web is unique, and every view of the Web *should* be unique. This is not a failure of the Web, but rather one of its strengths. The goal of every Web writer and designer should be to capitalize on the differences and needs of a wide range of readers to make each unique view as great as possible. (That means abandoning any attempts to make all experiences of a Web site exactly the same.)

Much of this book consists of guidance for writing and designing to those differences. But the purpose of this chapter is to help you learn to view and read the Web not as a casual user, but as a writer and designer. It is important that Web writers and designers appreciate just how differently a page may appear under certain circumstances. Understanding these differences from a reader's perspective will make you a much more effective writer and designer when it comes to creating pages that work optimally in many different browsing environments.

READING WITH MULTIPLE BROWSERS AND DEVICES

Many people access the Web using the browser that came installed on their computers: for Windows users, this means Microsoft Internet Explorer; for Mac users, Safari. But Web writers and designers need to go beyond their own habitual browser use and look at the Web in many different ways, using multiple browsers (see the sidebar "A Web-Reading Toolkit").

A WEB-READING TOOLKIT

To read the Web (and later to test your own designs) in as many ways as possible, install some or all of the following free browsers and tools:

All Users (Windows, Mac, and Linux)

- Mozilla Firefox (<http://www.mozilla.com/firefox>)
- Chris Pederick's Web Developer Add-on for Firefox (<https://addons.mozilla.org/firefox/addon/60>)
- Google Chrome (<http://www.google.com/chrome/>)
- Opera browser (<http://www.opera.com/>)

Windows Users

- Internet Explorer 8 or above (IE)
- Microsoft Expression Web SuperPreview (For testing multiple versions of IE) (<http://expression.microsoft.com/en-us/dd565874.aspx>)
- Safari for Windows (<http://www.apple.com/safari/download/>)
- Lynx for Windows (<http://home.pacific.net.sg/~kennethkwok/lynx/>)

Mac Users

- Lynx for OS X (http://www.apple.com/downloads/macosx/unix_open_source/lynxtextwebbrowser.html)

If you cannot install software, try a Google search for "browser emulator" to find sites that offer approximations of the views provided by different browsers.

Try making yourself use a different browser every day for a week or so. Try alternating between, say, Mozilla Firefox, Google Chrome, Opera, and Internet Explorer, particularly with sites you visit every day. You may even find that different browsers are better for different activities. On Windows computers, I prefer Chrome for most of my daily use: reading my Gmail account, posting to Twitter, and managing my Web sites. On Mac, I prefer Safari (whose WebKit engine is also used in Chrome). And on all computers, I rely on Firefox for Web design and development. Because Firefox is open source, people have built many excellent Web design add-ons for it, such as Chris Pederick's Web Developer Add-on that's used throughout this book.

Many Browsers, Few Engines, One Web

There are dozens and dozens of Web browsers available: Mozilla Firefox and Opera are two browsers that can be used on Windows, Mac OS X, and Linux operating systems. Mozilla Firefox is also what is known as an open-source browser: Firefox's source code is openly available to everyone. It is also developed and tested by a large group of volunteers and a smaller group of paid individuals working for the Mozilla Foundation. Opera, like Microsoft's Internet Explorer and Apple's Safari browser, is a proprietary browser, meaning that most of its code is kept secret and is developed almost exclusively by each company's employees.

But unlike Firefox and Opera, some browsers are designed for only one or two operating systems. Internet Explorer has only been available on Windows machines since its version 6. Konqueror is a Linux-only browser. Safari has both its native Mac OS X version and a Windows version. A look at the Wikipedia page that lists Web browsers will give you a rough idea of just how many browsers there are, and which are unique to different operating systems and mobile devices.¹

The good news for adventurous readers of the Web is even better news for Web designers: most Web browsers use one of three rendering engines: Mozilla's Gecko engine,² the WebKit engine (used in Apple Safari and Google Chrome),³ and Microsoft's Trident engine. In many respects, browsers based on Gecko and KHTML/WebKit generally display Web pages very similarly. Firefox and Chrome, for example, tend to display pages the same way; although depending on the operating system (Windows, Mac OS X, Linux), each browser will have access

to different fonts (see Chapter 10). The Trident engine, which tends to be the most unpredictable, is used in Internet Explorer and AOL Explorer.

If you regularly change up your browser use, you will see that some Web sites take a hostile approach to readers who aren't using a specific browser. It's not uncommon to encounter Web sites ranging from banking sites to university and corporate intranet/Web portals that demand that visitors use a specific Web browser. People attempting to view the site with the "wrong" browser may be greeted with nothing more than a message stating, "Your browser is not supported." Gee, thanks.

The approaches to Web design in this book emphasize designing in a browser-neutral way. The technology and standards exist for browser-neutral design (see Chapter 4), but it is an eye-opening experience to see just how many Web sites are still designed to work only on specific browsers.

ASSESSING PURPOSE AND CONTEXT

Like any other piece of writing (or design), successful Web sites have some type of general, controlling purpose. The purpose of a portfolio Web site, for example, is to promote its creator's work. A collaboratively written blog may have the purpose of advancing views on a particular topic, from graphic design to a specific political position or issue.

Yet as obvious as a site's controlling purpose might be, there are often other purposes at work. The controlling purpose of the Gmail or Hotmail sites is to enable people to access and read their email accounts. But such sites also have the purpose of generating ad revenue and alerting users of other services on the site. A personal blog may have the controlling purpose of offering its author a platform for expressing her views, but it also, through links to blogs that she reads, has the purpose of establishing her as part of a particular community on the Web.

A site's purpose is always situated in many contexts: a charitable organization's Web site is situated in a broad context of interested supporters and of other Web sites maintained by similar organizations. Sometimes a site's authors deliberately inject their site into a particular context, even through design. For example, if a particular charity

KEEPING A DESIGN JOURNAL

It's a good idea to maintain a record of sites that you've visited and found to be instructive and inspiring. But design ideas and inspiration can come from many places. Magazines, billboards, even DVD menus and title sequences to movies and television shows can all be sources of ideas. Consider keeping one or more of the following kinds of design journals as you read and, later, as you design and write:

- **A blank, bound sketchbook.** These can be found for cheap at most bookstores. They're very useful for cutting and pasting ideas from printed matter, sketching out your own ideas, and keeping notes about designs that you find.
- **A Diigo or other social bookmarking account.** This is great for keeping track of inspiring sites. I use a dedicated "design inspiration" tag in my account. The short notes area that Diigo offers for posts is a good way to briefly summarize why the site is enjoyable or inspiring.
- **An HTML or word processor file stored on your computer.** I never post negative comments about people's sites on Diigo, but I'm brutally honest in the HTML file that I store on my computer. A digital file helps you keep notes about ideas that didn't work, including screenshots and clickable links back to the site, when that is helpful.

supports high school athletes from underprivileged backgrounds, it might design its site to look something like ESPN.com. Such a design choice would help to put the organization in the context of sports and sport Web sites. (Whether that design choice would increase donations is another matter. An overly lavish Web site design could conceivably hurt a charitable organization if it appears that donations are all spent on Web design.)

When reading a Web site, challenge yourself to identify its purpose and context. Sometimes the purpose is expressed in the site's content: writing, images, and other media. Design also plays a role in conveying purpose and context, as does the performance of the site. The next sections offer lists of questions to consider for reading according to content, design, and performance.

Reading for Content

Reading for content is the most obvious way to read the Web. It's probably how you read it already. Content is the most important aspect of any site; readers may tolerate terribly designed Web sites if the site's content is still good. Here are some more specific questions to guide you in thinking about the effectiveness of different Web sites' writing and design choices:

- **Text:** How long are the chunks of text on the site? Does the site make use of headings and bulleted or numbered lists? Are the sentences punchy and direct, long and complex, or some mixture of the two? Does the site offer contextual links in its text? Are the links to other places in the site? Or to external sites?
- **Photographs:** What kinds of photographs or other images are presented on the site? Do the photographs appear to be part of the site's content? Or are they part of the overall design? If the photographs are meant as content, are they presented in a way that makes their content clear or interesting? Are they highly compressed? Pixelated? Distorted? Do small, thumbnail-sized photographs link to larger versions of the same image?
- **Video and Media:** If a site includes video or animations and other media, consider the same questions as for the photographs above. Also, does the video or animation run smoothly, or does it appear choppy? Is it paced in such a way that it can be read (if it includes text) or comprehended? If the media includes sound, does the sound sync with the moving image? Is the sound too loud or too soft? Distorted or crystal clear?
- **Controls:** Are the labels on the site's navigation area(s) accurately descriptive of the pages they link to? Are the functions of other page controls, such as those for printing or emailing the page, made clear? Does the site use icons or text links for controls, or both?
- **Layout and Design:** Layout and design are a kind of content, too. Are text, photos, and media arranged in a way that makes sense for the site's purpose and context? What impressions do the site's colors convey? Does the design seem to support the

content of the site—or to contradict it? Does the design affect how credible you believe its author/designer to be?

Reading for Design

Effective Web sites carefully knit their designs and content together. On such sites, the design is clearly much more than a simple container for holding content. Rather, it reinforces or adds interest to the site's content. Users might tolerate sites with solid content but poor design, but they will love well-designed sites with great content.

- **Text:** Are pieces of text presented in a way that is inviting, that makes you want to read? Are fonts sized and colored appropriately to ensure the text is readable? Does the text stretch across large areas of the screen? Or is it contained to narrower columns?
- **Photographs:** Are photographs and other art part of the site's design? Do they compete for attention with the rest of the site's content? Are the photographs presented in true-to-life color? Or are they monochromatic? Do colors in the photographs appear in other site design elements—font colors, borders, shaded areas?
- **Video and Media:** Have the edges of video and media been integrated with the design of the site? Or are they simply placed on the page with a stark border between the video/media content and the page design? Are there buttons for pausing/playing the media? Do they match the rest of the site design in terms of their shape and color?
- **Controls:** What is it about the site's controls that make them clear (or not) as navigation? Do the site's controls stand out from the rest of the design and content, or are they integrated? If there are icons or buttons on the site, do their colors, shape, and texture seem to fit with the rest of the design?
- **Layout and Design:** Is the design inviting? Does it encourage you to explore the site's other content? Would you estimate that the design is original or a template taken from somewhere else? Does it seem like the site's designer had content in mind while making the design? If the design appears to be custom, do you think that its creator spent a great deal of time on it?

Reading for Performance

Some sites are absolutely striking to gaze at on the screen. But where they reveal their weaknesses is often in performance: pages and/or images that take a long time to load, navigation and other controls that behave unpredictably, or slow-moving animations that seem to stop time itself and make the whole site feel like it's made of molasses. High performance rarely reveals itself the way poor performance does, simply because readers expect pages to load quickly, text to be readable, and so on.

- **Text:** Is the text readable, both in length and in screen presentation? Has the text been overstyled with bold, italic, and underline all at once? Are there typos or plain old bad writing that slow down your reading? Do contextual links take you to misleading places?
- **Photographs:** Are photographs sized appropriately? Are they worth the download time? Does the site have physically small photographs that seem to take forever to load? Do the photographs have an appropriate amount of detail and clarity for the subject matter that they convey?
- **Video and Media:** Do video and media elements stream? Or must you wait for the whole file to download before it begins to play? Do Flash movies contain some sort of preloader to indicate download activity while you wait for the movie? Are there any media elements, particularly sounds, that play automatically when you load a page? Are there controls for starting, stopping, or skipping any media elements? Does the presence of media elements make other actions, like scrolling down the page, seem choppy or slow?
- **Controls:** Do site navigation controls behave predictably? If there are any movements or pop-ups involved, is it easy to control them with your mouse? Are the movements or pop-ups distracting? Or do they clarify events that are happening as you use the site? Do links open up in new windows, or the same window?
- **Layout and Design:** How quickly does the page content appear with its full layout? As the page loads, do items appear one place on the screen, and then jump into place elsewhere?

As you move from one page to another in the same site, does it take a long time for the page to be “redrawn,” or does the design appear to be almost static, with only the content changing?

Reading by Breaking

In addition to looking at sites in modern, graphical browsers like Firefox, Safari, and Opera, it is instructive to view sites in the Lynx browser or a Lynx emulator, which provide text-only views of a site. Viewing a site as text only will give you a sense of what will be read aloud to low-vision readers, and in what order, when they visit a site. Lynx will also reveal what some mobile phone browsers may render.

For a more nuanced way of looking at a site with certain features disabled, install the Web Developer Add-on for Firefox. With it, you can choose to disable any JavaScript on a site, disable the display of images, and even disable the page's CSS.

“Breaking” a page in those ways gives you more than a view similar to users without JavaScript, image display, or CSS. It also gives you hints as to how a page has been made: if you turn off CSS, for example, and the page's design barely changes, it means the page's author used outdated, HTML-based methods for designing the pages (see Figures 2.1 and 2.2). With CSS off, there should be no design other than default browser styles (see Figures 2.3 and 2.4). If JavaScript is disabled and content disappears, the site's author probably uses JavaScript to generate content rather than placing the content directly in the HTML where it belongs.

- **Text:** Do the site's headings and lists still appear to be headings and lists in default styling in Lynx or with CSS disabled? Are all contextual links still clickable and usable in the absence of JavaScript? Does the text refer to any missing photographic or media content in a way that makes the site confusing or unusable?
- **Photographs:** Does alternate text appear for missing photographs? Is the text a meaningful alternative, one that would be useful to someone without the ability to view the site's images?
- **Video and Media:** Is there any alternate content offered for video and other media, particularly when the site is viewed

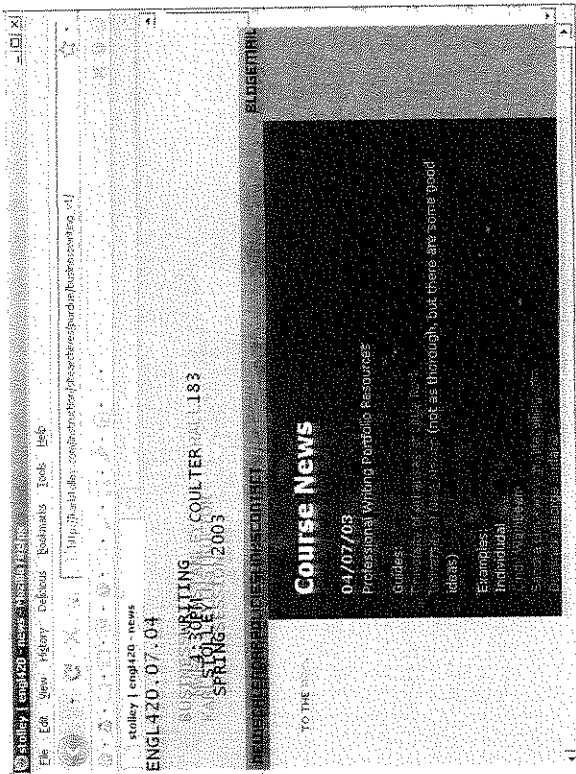


Figure 2.1. An old course Web site that I created with HTML-based design. Figure 2.2 has CSS disabled, but the design is basically the same.

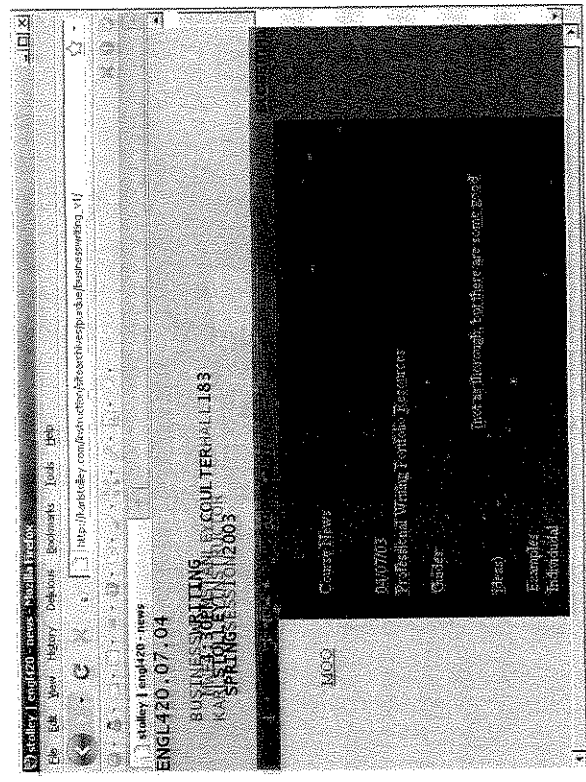


Figure 2.2. The same design as Figure 2.1, but with CSS disabled. Because the design used outdated HTML properties, it is virtually identical when CSS is disabled.

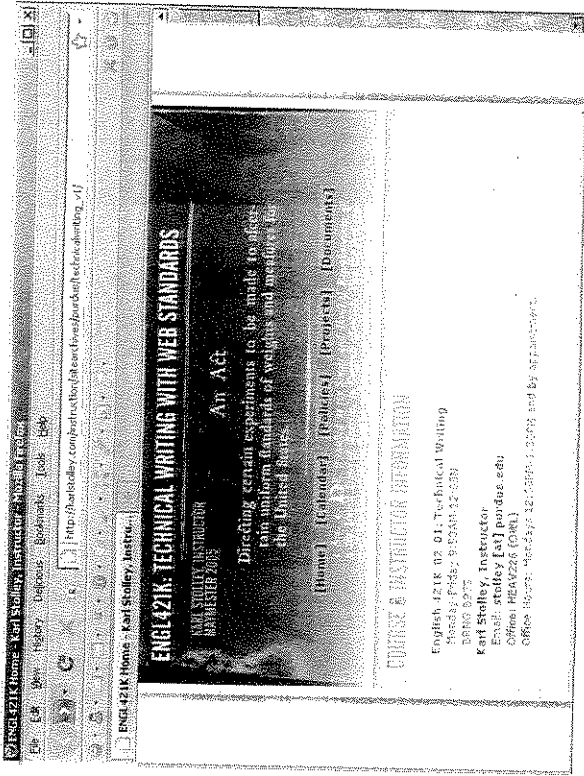


Figure 2.3. A course Web site that I created with CSS-based design, about a year after the one in Figures 2.1 and 2.2. Figure 2.4 has CSS disabled, leaving no traces of the design.

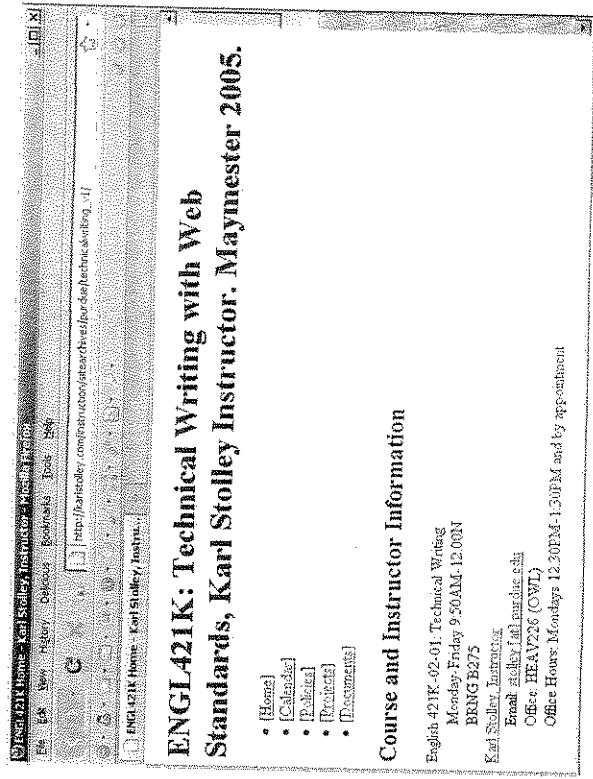


Figure 2.4. The same design as Figure 2.3, but with CSS disabled. All that is left is the default browser styling—evidence of a modern, CSS-based design.

in Lynx? Does disabling JavaScript cause Flash movies to no longer display/load? Are there links to download the media for viewing/hearing outside of the browser?

- **Controls:** If JavaScript is disabled, is it still possible to navigate the site? Do any page functions cease to operate in terms of printing, sharing, and so on? Are image galleries still browseable? If images are disabled, do you see alternate text for buttons or other controls?
- **Layout and Design:** Even in Lynx, are headings, paragraphs, and lists clear? Or does text run together or seem to be spaced in strange ways? When disabling CSS, is a page still useful in terms of the order the content appears in? Is the page useful/navigable in mobile devices, or when using the “Small-Screen Rendering” in the Web Developer Add-on (found under the Miscellaneous menu)?

NEXT STEPS

There is no one best way to write a site’s content, create its design, or ensure its performance. But reading a variety of Web sites—the ones you use everyday, plus some of the gallery sites suggested at the end of this book—will help you to develop a sense of the range of approaches to building Web sites. Reading a variety of sites for design and performance will also help you get inspired to start working on your own design.

But content is still the most important aspect of a site. In the next chapter, we will look at how you can begin gathering and creating content for your Web site while you begin to learn the Web writing and design technologies covered in “Strategies for Success.”

NOTES

1. Wikipedia, “List of Web Browsers,” http://en.wikipedia.org/wiki/List_of_web_browsers
2. Mozilla Developer Center, “Gecko,” <https://developer.mozilla.org/en/gecko>
3. The WebKit Open Source Project, <http://webkit.org/>

CHAPTER 3

Creating Web Content

The content for your site is essential to have on hand when designing Web pages. Although you can work with dummy content, such as *Lorem ipsum* text,¹ stock photographs, and so on, site designs emerge more organically from their real content. Designs, in turn, will shape how your content is prepared: if you have a content area that is a certain number of pixels wide, that will guide the dimensions for sizing your images.

This chapter is an overview to preparing content for the Web. Specific aspects of content creation and revision will be explored in greater detail throughout the rest of the book. But the ideas here will help you to start gathering, creating, and preparing the written, photographic, audio, and video content for your Web site immediately, in formats that are Web friendly.

WRITTEN CONTENT

The written content of your site is crucial to your site being found and accessible. Even if you are a photographer or a visual artist, search engines index and allow people to search the writing of your page. Image searches aren’t image searches at all, but rather searches on “captions, descriptions, and other contextual information.”² Written content can also be read aloud or presented as Braille, and therefore made accessible to readers requiring assistive technologies. That is why all media elements—image, audio, and video—should have text equivalents.

OPEN-SOURCE SOFTWARE FOR IMAGES, AUDIO, AND VIDEO

Software for editing photos, audio, and video can cost hundreds, even thousands, of dollars. The good news is that there are many good free and open-source alternatives to expensive software. All of the software listed here rival or best commercial-grade software, and work on Windows, Mac, and Linux:

- **Image editing with GIMP:** The unfortunately named GIMP stands for GNU Image Manipulation Program. It is a solid, surprisingly feature-rich and customizable graphics package. (<http://www.gimp.org/>)
- **Audio editing with Audacity:** A fully featured audio editor. I personally prefer Audacity to all but professional-grade audio products. It requires a plugin to output audio to MP3, but otherwise has everything necessary for preparing audio for the Web. (<http://audacity.sourceforge.net>)
- **Video editing with Avidemux:** A simple, straightforward video editor. While it doesn't have a lot of effects or bells and whistles, that can be a plus if you're just learning to cut and edit video. (<http://fixounet.free.fr/avidemux/>). (Your computer may also come with video editing software, such as Windows Movie Maker or Apple's iMovie.)

A Google search for these and other open-source media applications will also point you to portable versions that can be run on a USB drive, if you don't have your own computer.

Web audiences typically expect a Web site's written content to be direct and to the point, with plenty of headings and lists to make the content navigable. Posting to Twitter is a great way to learn to write more directly: How expressive can you be in 140 characters or less? In addition to a direct style, written content should be rich with keywords that you think your intended audience might plug in to search engines. Writing teachers always teach students to write with thick, rich description. That approach to writing pays big dividends on the Web: it helps your ranking in Web searches on key terms, while also helping you to better communicate with your readers.

Although I prefer to compose most Web content directly in my text editor, there is nothing wrong with composing your text (but not your XHTML or CSS) in a word processor. (Just be sure that you use the Unicode character set, UTF-8, in your XHTML; see Chapter 9.)

Keep in mind the following if you decide to write in your word processor:

- **Do not waste time doing a lot of formatting in the word processor.** You'll be pasting your text directly into XHTML, which has no visual properties of its own, so any formatting is going to be lost anyway. An empty line of space between headings, paragraphs, and lists is more than enough formatting.
- **Separate headings and list items with extra lines of empty space by using the Enter key.** Lines of white space will be useful when you go to add your XHTML markup later. If the visual formatting in the word processor helps you write, use it. But be careful of copying bulleted lists from word processors, though, as the bullet itself often gets translated to an asterisk (*) when it's pasted into a text-only environment, like a Web editor.
- **Paste any word processor text into the "code view," if you are using a WYSIWYG Web editor.** Some WYSIWYGs try to be helpful by retaining markup to the text copied from word processor documents, but that markup can be a real pain to edit later.
- **Do not import images into your word processor documents.** Images must be treated in a particular way for the Web (see Chapter 18). However, if you know of an image you want to accompany your text, you might make a note of it in your word processor file for future reference.

- **Do not post word processor documents on your site.** If you are creating a portfolio or thinking of posting forms for a small business Web site, you might be tempted to post and link directly to a word processor document. In most cases, it is better to publish word processor documents in Portable Document Format (PDF), and then post the PDF to your Web site. Mac users can create PDFs using the built-in features of the OS X operating system; Windows users need either the full Adobe Acrobat software, or an open-source alternative like PDFCreator.³ (See Chapter 6 for more information about accessible Web file formats.)

Regardless of where you write, prefer direct sentences and paragraphs and make good use of headings and lists. Headings and lists help

readers navigate a page quickly to get a sense of its content, or help them find the specific content returned by a Google search.

CONTENT IMAGES

Content images, including photographs, scans, and illustrations, can help a Web site's content spring to life. Like all media content, images must be prepared for the Web in particular ways.

Preparing images for the Web is a compromise between the size, in bytes, of an image file and its quality. Image quality is a matter of the

ESSENTIAL EQUIPMENT

Capturing images and perhaps audio and video is key to developing original media content for your Web site. Here is a list of essential equipment that you should consider purchasing. You may even discover that your school or public library has some of this equipment available for your use:

- **A digital camera.** The quality that even cheap digital cameras provide is often more than enough for Web purposes. Look for cameras that have a high optical zoom (3x or above; digital zoom is not terribly useful), a rechargeable battery, and removable memory cards. But in a pinch, even a cell phone camera or a Web cam can get you started.
- **A scanner.** Good scanners are available for around \$100, especially if they aren't bundled with a printer/fax machine. For Web purposes, a low-quality scanner is more than enough for scanning in artwork and printed matter. If you only have a few things to scan, try to find a scanner at your school or library.
- **A digital video camera.** Many digital still cameras come with some sort of limited video capability. There are also inexpensive video cameras available, some of which plug directly into your computer with an onboard USB connection.
- **A good quality microphone.** Computers are very good at capturing audio that sounds great, provided you have a quality microphone. Stores that cater to musicians usually have a better selection of microphones available than electronics retailers. For recording the human voice, look into purchasing a condenser microphone that comes with its own power source, usually an onboard battery (just remember to power it off when you're done recording).

dimensions (in pixels) of an image and in the case of JPEG (.jpg) images, a matter of image compression, which removes some data from an image to reduce its file size.

Always keep copies of your original photographs and scans. Photographs and images that come off of a digital camera or scanner are almost never Web ready; they must be resized, compressed, and otherwise edited first. But keep all of the original image files, in case you ever need to re-edit them.

Here are some basic approaches to preparing your images for the Web, which should be saved in either JPEG or PNG format (see Chapter 18 for more about loading media onto your pages):

- **Learn to use the crop and resize functions in your image editor.** Most image editors have filters for all sorts of visual effects, and all of them have controls for adjusting the contrast, brightness, and other visual properties of images. But to start, the two most important features you should learn are cropping, which helps you cut off the edges of a photograph, and resizing (sometimes called resampling), which reduces the dimensions of an image to Web-appropriate sizes.
- **Images for the Web display according to their actual pixel dimensions, so coordinate those with your layout.** Most image editors have dots per inch (DPI) or pixels per inch (PPI) settings alongside their resize function. But Web images display independently of any DPI or PPI setting: 72dpi or 96dpi are both common settings for Web images, but the setting only has an effect when the image is printed. What matters in the screen display of Web images is actual pixel dimensions: an 800-pixel-wide by 600-pixel-tall image will display in a Web browser as 800 by 600 regardless of whether the file's DPI is set to 300 or even 1.
- **Different photographs will look best at different compression rates.** When you go to save your image, most image editors offer some type of slider that varies the compression of JPEG images. High compression means lighter files and faster downloads, but at the expense of image quality. And image quality varies under the same compression rate: a picture of the sky, which has a large area of roughly the same color, will get

with high contrast details, like black letters on a white street sign, will get little “sparklies” and other compression artifacts around the high-contrast area. Get to know your image editor and the way it compresses different images.

You can find examples of image treatment at the book’s companion Web site, <http://sustainablewebdesign.com/book/>.

MEDIA CONTENT: AUDIO AND VIDEO

The focus on this book is textual content and images; however, here are some rough guidelines for working with audio and video. See the book’s companion Web site for recommended reading about audio and video.

Audio Content

Audio content destined for the Web should be prepared in MP3 format; while MP3 is a proprietary file format, it is also widely used in all sorts of desktop and portable digital audio players.

Preparing MP3 audio files is a complex matter, but here are some basic settings that you should use: output your files as 8-bit stereo sound. Perhaps the most important setting on MP3 files is their bit rate; for voice applications, 64 kilobits per second (kbs) will provide adequate sound quality, although 128 kbs often sounds noticeably better. However, the higher the bit rate, the larger the sound file.

Be sure also to record and prepare your MP3 audio at a 44.1 kHz sample rate, simply because that sample rate is supported by Flash and other players, and there are no savings in file size with MP3s when you lower the sample rate. For a technical but all-in-one discussion of this, see <http://www.blogarithms.com/index.php/mp3secrets/>.

Video Content

Video content is the most complicated material to prepare for the Web. In addition to shooting and editing your video, it is essential that sound syncs with motion. For most purposes, posting video on YouTube is an ideal solution (Chapter 18 lists other, similar sites for video hosting). First, the videos are stored and transferred from YouTube’s servers, not

yours. This keeps you from expending large amounts of bandwidth, or the amount of data your server can serve at any one time, on your own server. YouTube also does a generally outstanding job of behind-the-scenes compression and resizing of video, though be sure to consult their documentation on making and posting videos.⁴ Finally, maintaining a YouTube account is yet another way to establish your presence on the Web. Because YouTube allows you to set up a profile that can include a link to your Web site, you may be able to attract YouTube users to your site.

The only problem with YouTube is that the code it provides for embedding videos on your Web site does not adhere to Web standards. (See Chapter 18’s discussion of JavaScript and the SWFObject 2.0, which addresses this issue.) For testing purposes, though, there is nothing wrong with cutting and pasting the YouTube code. You can swap it out with the JavaScript-based solution before your site goes live, or as a future improvement.

NEXT STEPS

The work of writing and designing your pages depends on the real content of your site. Now that you have some idea of how to prepare for the Web the content you should be gathering and writing, it’s time to look at what a Web page is, the history of how pages have been made, and why standards for Web writing and design are so important.

NOTES

1. Lorem ipsum, <http://www.lipsum.com/>
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