

The Yale Style Guide

Planning

Web sites are developed by groups of people to meet the needs of other groups of people. Unfortunately, Web projects are often approached as a "technology problem," and projects are colored from the beginning by enthusiasms for particular Web techniques or browser plug-ins (Flash, digital media, XML, databases, etc.), not by real human or business needs. People are the key to successful Web projects. To create a substantial site you'll need content experts, writers, information architects, graphic designers, technical experts, and a producer or committee chair responsible for seeing the project to completion. If your site is successful it will have to be genuinely useful to your target audience, meeting their needs and expectations without being too hard to use.

Although the people who will actually use your site will determine whether the project is a success, ironically, those very users are the people least likely to be present and involved when your site is designed and built. Remember that the site development team should always function as an active, committed advocate for the users and their needs. Experienced committee warriors may be skeptical here: these are fine sentiments, but can you really do this in the face of management pressures, budget limitations, and divergent stakeholder interests? Yes, you can — because you have no choice if you really want your Web project to succeed. If you listen only to management directives, keep the process sealed tightly within your development team, and dictate to imagined users what the team imagines is best for them, be prepared for failure. Involve real users, listen and respond to what they say, test your designs with them, and keep the site easy to use, and the project will be a success.

What are your goals?

A short statement identifying two or three goals should be the foundation of your Web site design. The statement should include specific strategies around which the Web site will be designed, how long the site design, construction, and evaluation periods will be, and specific quantitative and qualitative measures of how the success of the site will be evaluated. Building a Web site is an ongoing process, not a one-time project with static content. Long-term editorial management and technical maintenance must be covered in your budget and production plans for the site. Without this perspective your electronic publication will suffer the same fate as many corporate communications initiatives — an enthusiastic start without lasting accomplishments.

Know your audience

The next step is to identify the potential readers of your Web site so that you can structure the site design to meet their needs and expectations. The knowledge, background, interests, and needs of users will vary from tentative novices who need a carefully structured introduction to expert "power users" who may chafe at anything that seems to patronize them or delay their access to information. A well-designed system should be able to accommodate a range of users' skills and interests. For example, if the goal of your Web site is to deliver internal corporate information, human resources documents, or other information formerly published in paper manuals, your audience will range from those who will visit the site many times every day to those who refer only occasionally to the site.

Design critiques

Each member of a site development team will bring different goals, preferences, and skills to the project. Once the team has reached agreement on the mission and goals of the project, consensus on the overall design approach for the Web site needs to be established. The goal at this stage is to identify potential successful models in other Web sites and to begin to *see the design problem from the site user's point of view*.

Unfortunately, production teams rarely include members of the target audience for the Web site. And it is often difficult for team members who are not already experienced site designers to articulate their specific preferences, except in reference to existing sites. Group critiques are a great way to explore what makes a Web site successful, because everyone on the team sees each site from a user's point of view. Have each team member bring a list of a few favorite sites to the critique, and ask them to introduce their sites and comment on the successful elements of each design. In this way you will learn one another's design sensibilities and begin to build consensus on the experience that your audience will have when they visit the finished site.

Content inventory

Once you have an idea of your Web site's mission and general structure, you can begin to assess the content you will need to realize your plans. Building an inventory or database of existing and needed content will force you to take a hard look at your existing content resources and to make a detailed outline of your needs. Once you know where you are short on content you can concentrate on those deficits and avoid wasting time on areas with existing resources that are ready to use. A clear grasp of your needs will also help you develop a realistic schedule and budget for the project. Content development is the hardest, most time-consuming part of any Web site development project. Starting early with a firm plan in hand will help ensure that you won't be caught later with a well-structured but empty Web site.

Developing a site specification

The site specification is the planning team's concise statement of core goals, values, and intent, to provide the ultimate policy direction for everything that comes next. Designing a substantial Web site is a costly and time-consuming process. When you're up to your neck in the daily challenges of building the site, it can be surprisingly easy to forget why you are doing what you are, to lose sight of your original priorities, and to not know on any given day whether the detailed decisions you are making actually support those

overall goals and objectives. A well-written site specification is a powerful daily tool for judging the effectiveness of a development effort. It provides the team with a compass to keep the development process focused on the ultimate purposes of the site. As such, it quickly becomes a daily reference point to settle disputes, to judge the potential utility of new ideas as they arise, to measure progress, and to keep the development team focused on the ultimate goals.

At minimum, a good site specification should define the content scope, budget, schedule, and technical aspects of the Web site. The best site specifications are very short and to the point, and are often just outlines or bullet lists of the major design or technical features planned. The finished site specification should contain the goals statement from the planning phase, as well as the structural details of the site.

Goals and strategies

- What is the mission of your organization?
- How will creating a Web site support your mission?
- What are your two or three most important goals for the site?
- Who is the primary audience for the Web site?
- What do you want the audience to think or do after having visited your site?
- What Web-related strategies will you use to achieve those goals?
- How will you measure the success of your site?
- How will you adequately maintain the finished site?

Production issues

- How many pages will the site contain? What is the maximum acceptable count under this budget?
- What special technical or functional requirements are needed?
- What is the budget for the site?
- What is the production schedule for the site, including intermediate milestones and dates?

- Who are the people or vendors on the development team and what are their responsibilities?

These are big questions, and the broad conceptual issues are too often dismissed as committees push toward starting the "real work" of designing and building a Web site. However, if you cannot confidently answer all of these questions, then no amount of design or production effort can guarantee a useful result.

Avoiding "scope creep"

The site specification defines the scope of your project — that is, what and how much you need to do, the budget, and the development schedule. "Scope creep" is the most prevalent cause of Web project failures. In badly planned projects, scope creep is the gradual but inexorable process by which previously unplanned "features" are added, content and features are padded to mollify each stakeholder group, major changes in content or site structure during site construction are made, and more content or interactive functionality than you originally agreed to create is stuffed in. No single over-commitment is fatal, but the slow, steady accumulation of additions and changes is often enough to blow budgets, ruin schedules, and bury what might have been an elegant original plan under megabytes of muddle and confusion.

Don't leap into building a Web site before you understand what you want to accomplish and before you have developed a solid and realistic site specification for creating your Web site. The more carefully you plan, the better off you will be when you begin to build your site.

One excellent way to keep a tight rein on the overall scope of the site content is to specify a maximum page count in the site specification. Although a page count is hardly infallible as a guide (after all, Web pages can be arbitrarily long), it serves as a constant reminder to everyone involved of the project's intended scope. If the page count goes up, make it a rule to revisit the budget implications automatically — the cold realities of budgets and schedules will often cool the enthusiasm to stuff in "just one more page."

A good way to keep a lid on scope creep is to treat the page count as a "zero sum game." If someone wants to add pages, it's up to them to nominate other pages to remove or to obtain a corresponding increase in the budget and schedule to account for the increased work involved.

Changes and refinements can be a good thing, as long as everyone is realistic about the impact of potential changes on the budget and schedule of a project. Any substantial change to the planned content, design, or technical aspects of a site must be tightly coupled with a revision of the budget and schedule of the project. People are often reluctant to discuss budgets or deadlines frankly and will often agree to substantial changes or additions to a development plan rather than face an awkward conversation with a client or fellow team member. But this acquiescence merely postpones the inevitable damage of not dealing with scope changes rationally.

The firm integration of schedule, budget, and scope is the only way to keep a Web project from becoming unhinged from the real constraints of time, money, and the ultimate quality of the result. A little bravery and honesty up front can save you much grief later. Make the plan carefully, and then stick to it.

Site design

At this stage the project acquires its look and feel, as the page grid, page design, and overall graphic design standards are created and approved. Now the illustrations, photography, and other graphic or audiovisual content for the site need to be commissioned and created. Research, writing, organizing, assembling, and editing the site's text content is also performed at this stage. Any programming, database design and data entry, and search engine design should be well under way by now. The goal is to produce all the content components and functional programming and have them ready for the final production stage: the construction of the actual Web site pages.

Typical products or contract deliverables at the end of this stage could include:

Content components, detailed organization and assembly

- Text, edited and proofread
- Graphic design specifications for all page types
 - Finished interface graphics for page templates
 - Header and footer graphics, logos, buttons, backgrounds
- Detailed page comps or finished examples of key pages
 - Site graphic standards manual for large, complex sites
- Interface design and master page grid templates completed
 - Finished HTML template pages
- Illustrations
- Photography

Functional and logic components

- JavaScript scripts, Java applets designed
- Database tables and programming, interaction prototypes completed
- Search engine designed and tested

Templates

Whether you develop your site on your own or hire a professional Web developer, you should develop page templates for your new Web site. It's much easier to add new pages if you can start from a page that already has the basic navigation and site graphics in place. If you share page development with other people, you will also want to be able to give your team members templates to use, along with instructions on how to handle page text and content graphics according to your standards. Popular Web site development software packages such as Macromedia's Dreamweaver offer powerful templates and standard reusable libraries of site graphics and HTML that make it easy to create new

Accessibility

For many organizations, providing equal access to Web pages is institutional policy, if not a federal mandate. It is critical, therefore, that you validate your designs and page templates and the content of your site throughout the development process to ensure that your pages are accessible to all users. To check the accessibility of your pages you can use a tool like Bobby (www.cast.org/bobby). Bobby is a free service provided by the Center for Applied Special Technology. After you supply the URL (Uniform Resource Locator) of your page, Bobby checks the page against the Web Accessibility Initiative guidelines and flags potential barriers for users with disabilities. Bobby also recommends changes that will improve the accessibility of your pages. Check your designs at every development milestone to avoid time-consuming and potentially costly revamping efforts.

Site construction

Only at this mature stage of the project are the bulk of the site's Web pages constructed and filled out with content. By waiting until you have a detailed site architecture, mature content components, and a polished page design specification you will minimize the content churning, redundant development efforts, and wasted energy that inevitably result from rushing to create pages too soon. Of course, you will always learn new things about your overall design as the prototype matures into the full-blown Web site. Be prepared to refine your designs as you navigate through the growing Web site and discover both weak spots and opportunities to improve navigation or content.

Once the site has been constructed, with all pages completed and all database and programming components linked, it is ready for beta testing. Testing should be done primarily by readers outside your site development team who are willing to supply informed criticism and report programming bugs, typographic errors, and critique the overall design and effectiveness of the site. Fresh users will inevitably notice things that you and your development team have overlooked. Only after the site has been thoroughly tested should you begin to publicize the URL address of the site to a larger audience.

Typical products or contract deliverables at the end of this stage should include:

- Finished HTML for all Web pages, all page content in place
- Finished navigation link structure
- All programming in place and linked to pages, ready for beta testing
- All database components in place and linked to site pages
- All graphic design, illustration, and photography in place
- Final proofreading of all site content
- Detailed testing of database and programming functionality
- Testing and verification of database reporting features
- Testing of site reader support procedures, answering email, etc.
- Archives of all site content components, HTML code, programming code, and any other site development materials

PAGE DESIGN

If you ask why something works and you push back far enough, eventually everything seems to be based on contrast: the ability to distinguish one thing from another. Composition, sequencing, even legibility all rely on devices that affect the contrast between things.

— Chris Pulman, *The Education of a Graphic Designer*

We seek clarity, order, and trustworthiness in information sources, whether traditional paper documents or Web pages. Effective page design can provide this confidence. The spatial organization of graphics and text on the Web page can engage readers with graphic impact, direct their attention, prioritize the information they see, and make their interactions with your Web site more enjoyable and efficient.

Visual logic

Graphic design creates visual logic and seeks an optimal balance between visual sensation and graphic information. Without the visual impact of shape, color, and contrast, pages are graphically uninteresting and will not motivate the viewer. Dense text documents without contrast and visual relief are also harder to read, particularly on the relatively low-resolution screens of personal computers. But without the depth and complexity of text, highly graphical pages risk disappointing the user by offering a poor balance of visual sensation, text information, and interactive hypermedia links. In seeking this ideal balance, the primary design constraints are the restrictions of HTML and the bandwidth limitations on user access ranging from slow modems to high-speed connections such as Ethernet or DSL.

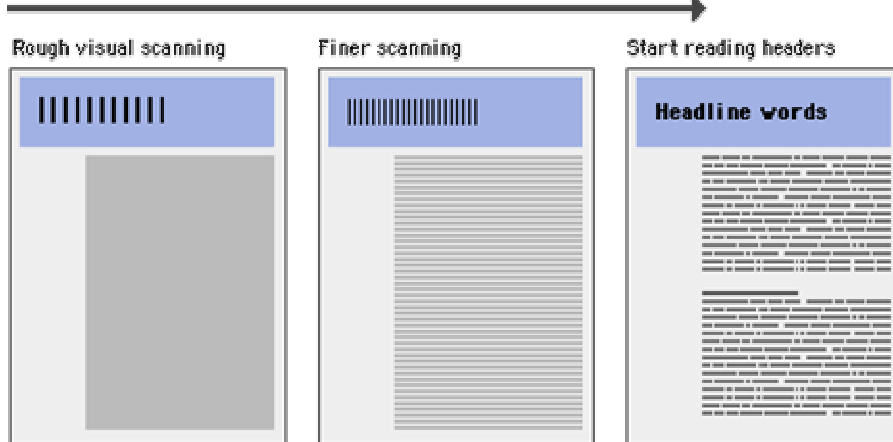
Visual and functional continuity in your Web site organization, graphic design, and typography are essential to convince your audience that your Web site offers them timely, accurate, and useful information. A careful, systematic approach to page design can simplify navigation, reduce user errors, and make it easier for readers to take advantage of the information and features of the site.

Visual hierarchy

The primary task of graphic design is to create a strong, consistent visual hierarchy in which important elements are emphasized and content is organized logically and predictably.

Graphic design is visual information management, using the tools of page layout, typography, and illustration to lead the reader's eye through the page. Readers first see pages as large masses of shape and color, with foreground elements contrasting against the background field. Secondly they begin to pick out specific information, first from graphics if they are present, and only then do they start parsing the harder medium of text and begin to read individual words and phrases:

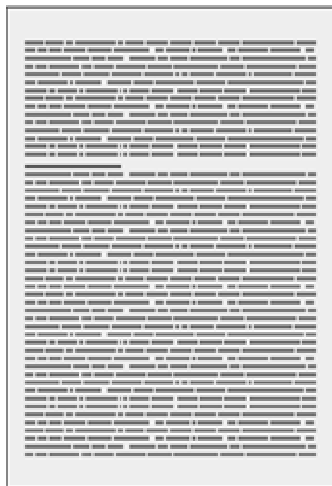
Visual scanning of page structure over time



Contrast is essential

The overall graphic balance and organization of the page is crucial to drawing the reader into your content. A dull page of solid text will repel the eye as a mass of undifferentiated gray, without obvious cues to the structure of your information. A page dominated by poorly designed or overly bold graphics or typography will also distract or repel users looking for substantive content. You will need to strike an appropriate balance between attracting the eye with visual contrast and providing a sense of organization:

Dull; no focal points, no graphic structure



Stronger visual structure; better contrast, visual entry points



Visual balance and appropriateness to the intended audience are the keys to successful design decisions. The most effective designs for general Internet audiences use a careful balance of text and links with relatively small graphics. These pages load into browsers quickly, even when accessed from slow modems, yet still achieve substantial graphic impact:

WILLIAMS-SONOMA | SHOP | SEASONAL FEATURES | GIFTS | RECIPES | SEARCH | CUSTOMER SERVICE | SIGN IN | 

[Back to previous page](#)

Mini-Tarts

These pastries are ideal for entertaining. Garnish the mincemeat tarts with whipped cream and the lemon tarts with meringue, fresh seasonal fruit or candied ginger.

Ingredients:
 1 1/4 cups all-purpose flour
 1/3 cup confectioners' sugar
 1/2 tsp. salt
 10 Tbs. (1 1/4 sticks) chilled unsalted butter, cut into pieces
 2 egg yolks, lightly beaten with 1 Tbs. water
 1 jar (20 oz.) lemon curd or mincemeat tart filling
 Whipped cream, meringue, fresh fruit or candied ginger for garnish


Directions:
 In the bowl of a food processor, combine the flour, sugar and salt and pulse to mix. Add the butter and process in short pulses until pea-size crumbs form, 20 to 25 seconds. While pulsing, add the egg yolk mixture and process to form large, moist crumbs, 10 to 15 seconds more.

Turn the dough out onto a lightly floured surface, shape the dough into a ball and divide it in half. Shape each half into a flat, 5-inch disk, cover with plastic wrap and refrigerate at least 1 hour.

Position a rack in the center of an oven and preheat to 400°F.

Working with one piece of dough at a time, roll out to 1/4-inch thickness. Using a 3-inch round cookie cutter, cut out 12 rounds of pastry. Transfer a round to each well of a 12-well mini-tart plaque or mini-muffin pan. Using your fingers, press the pastry to fit into the well. Bake until the tart shells are evenly golden and crisp, 18 to 22 minutes. Cool the tart shells in the plaque for 5 minutes, then remove from the plaque and cool to room temperature.

Fill each tart shell with 1 1/2 Tbs. tart filling. Garnish with whipped cream, meringue, fresh fruit or candied ginger. Makes 12 tarts.



Related Products:

 Cuisinart PowerPrep Plus Food Processor, Chrome
\$399.00

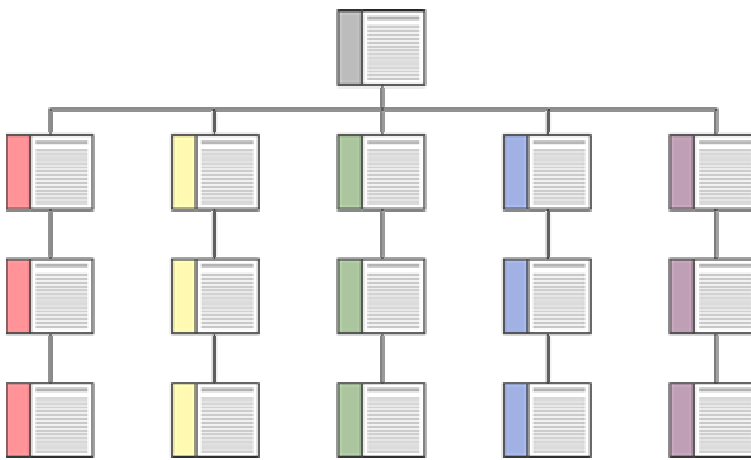
 Mini-Tart Plaque
Regular: \$25.00 Sale: \$18.99

www.williams-sonoma.com

When establishing a page design for your Web site, consider your overall purpose, the nature of your content, and, most important, the expectations of your readers.

Consistency

Establish a layout grid and a style for handling your text and graphics, then apply it consistently to build rhythm and unity across the pages of your site. Repetition is not boring; it gives your site a consistent graphic identity that creates and then reinforces a distinct sense of "place" and makes your site memorable. A consistent approach to layout and navigation allows readers to adapt quickly to your design and to confidently predict the location of information and navigation controls across the pages of your site.



If you choose a graphic theme, use it throughout your Web site. The Bridgeman Art Library home page banner, below, sets the graphic theme for the site and introduces distinctive typography and a set of navigation buttons:

The world's most comprehensive
source of art images for publication

The Bridgeman Art Library

london: +44 (0)20 7727 4055
email: info@bridgeman.co.uk
new york: +1 212 828 1238
email: info@bridgemanart.com
paris: +33 (0) 1 53 40 70 60
email: paris@bridgeman.co.uk

feature
21/04/2001

Bridgeman acquires
Giraudon
The acquisition of the
Giraudon collection and
brand strengthens
Bridgeman's position as
the world's leading source
of fine art images.

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portfolio
news
features
copyright
about us

→ To get the most out of
the site, please log in.

email
password

log in new user

www.bridgeman.co.uk

Below is a banner at the top of an interior page in the Bridgeman Art Library site. Note how the typography and the navigation theme are carried over to the interior banners. There is no confusion about whose site you are navigating through:

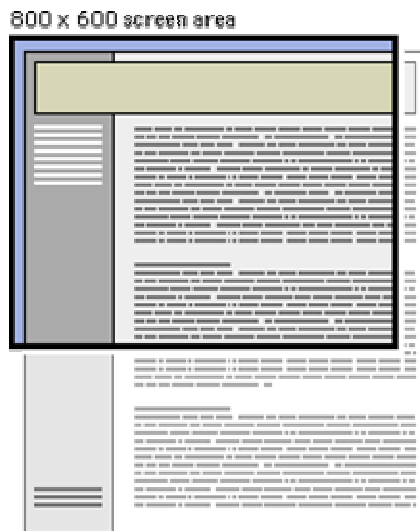
browse
browse
search
portfolio
news
features
copyright
about us



www.bridgeman.co.uk

Page dimensions

Although Web pages and conventional print documents share many graphic, functional, and editorial similarities, the computer screen, not the printed page, is the primary delivery site for Web-based information, and the computer screen is very different from the printed page. Computer screens are typically smaller than most opened books or magazines. A common mistake in Web design is spreading the width of page graphics beyond the area most viewers can see on their seventeen- or nineteen-inch display screens:



Graphic safe areas

The "safe area" for Web page graphics is determined by two factors: the minimum screen size in common use and the width of paper used to print Web pages.

Most display screens used in academia and business are seventeen to nineteen inches (forty-three to forty-eight centimeters) in size, and most are set to display an 800 x 600-pixel screen. Web page graphics that exceed the width dimension of the most common display screens look amateurish and will inconvenience many readers by forcing them to scroll both horizontally and vertically to see the full page layout. It's bad enough to have to scroll in one (vertical) direction; having to scroll in two directions is intolerable.

Too-wide layout does not fit on 800 x 600 screen



www.microsoft.com and www.mapquest.com

Even on small computer screens it is possible to display graphics that are too wide to print well on common letter-size, legal-size, or A4 paper widths. Current browser versions attempt to resolve printing problems by providing the option to scale the page contents to fit the standard paper width. However, many users are unaware of the "fit to page" option. Another problem is that wide pages that are scaled to fit are often illegible because the type has been scaled excessively. In many Web pages, however, printing is a secondary concern. Just be aware that your readers will either lose the right margin of your layout or produce a scaled document if they print wide pages in standard vertical print layout. Pages with lots of text should *always* be designed to print properly because most readers will print those pages to read them more comfortably. If the page layout is too wide readers will lose several words from each line of text down the right margin or have to contend with small type.

The graphic safe area dimensions for printing layouts and for page layouts designed to use the maximum width of 800 x 600 screens are shown below:

Graphic "safe area" dimensions for layouts designed to print well:

Maximum width = 560 pixels

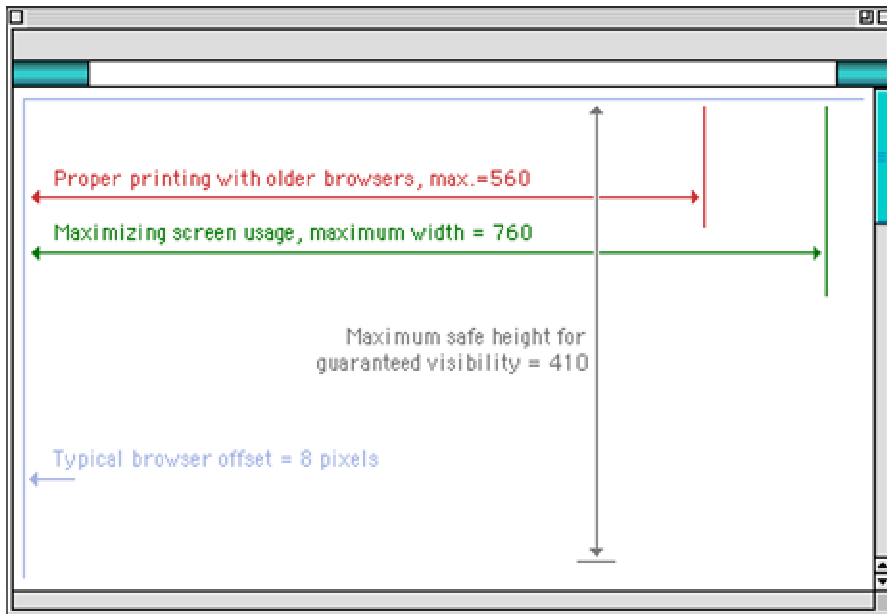
Maximum height = 410 pixels (visible without scrolling)

Graphic "safe area" dimensions for layouts designed for 800 x 600 screens:

Maximum width = 760 pixels

Maximum height = 410 pixels (visible without scrolling)

GRAPHIC SAFE AREAS FOR 800 X 600 SCREENS



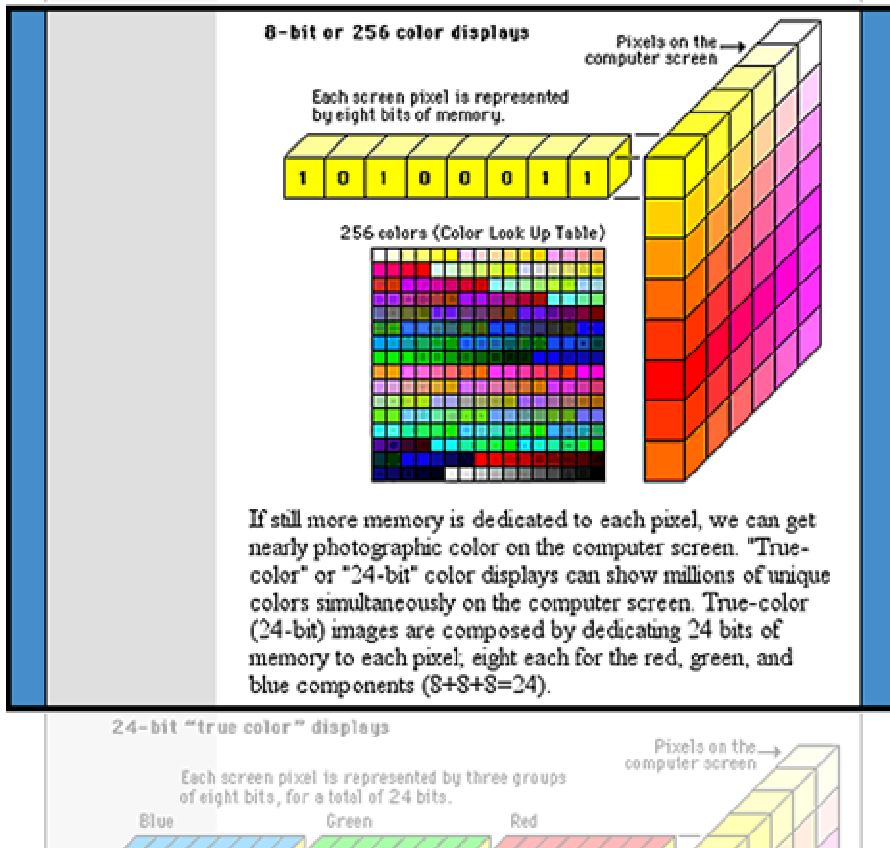
Page length

Determining the proper length for any Web page requires balancing four factors:

1. The relation between page and screen size
2. The content of your documents
3. Whether the reader is expected to browse the content online or to print or download the documents for later reading
4. The bandwidth available to your audience

Researchers have noted the disorientation that results from scrolling on computer screens. The reader's loss of context is particularly troublesome when such basic navigational elements as document titles, site identifiers, and links to other site pages disappear off-screen while scrolling. This disorientation effect argues for the creation of navigational Web pages (especially home pages and menus) that contain no more than one or two screens' worth of information and that feature local navigational links at the beginning and end of the page layout. Long Web pages require the user to remember too much information that scrolls off the screen; users easily lose their sense of context when the navigational buttons or major links are not visible:

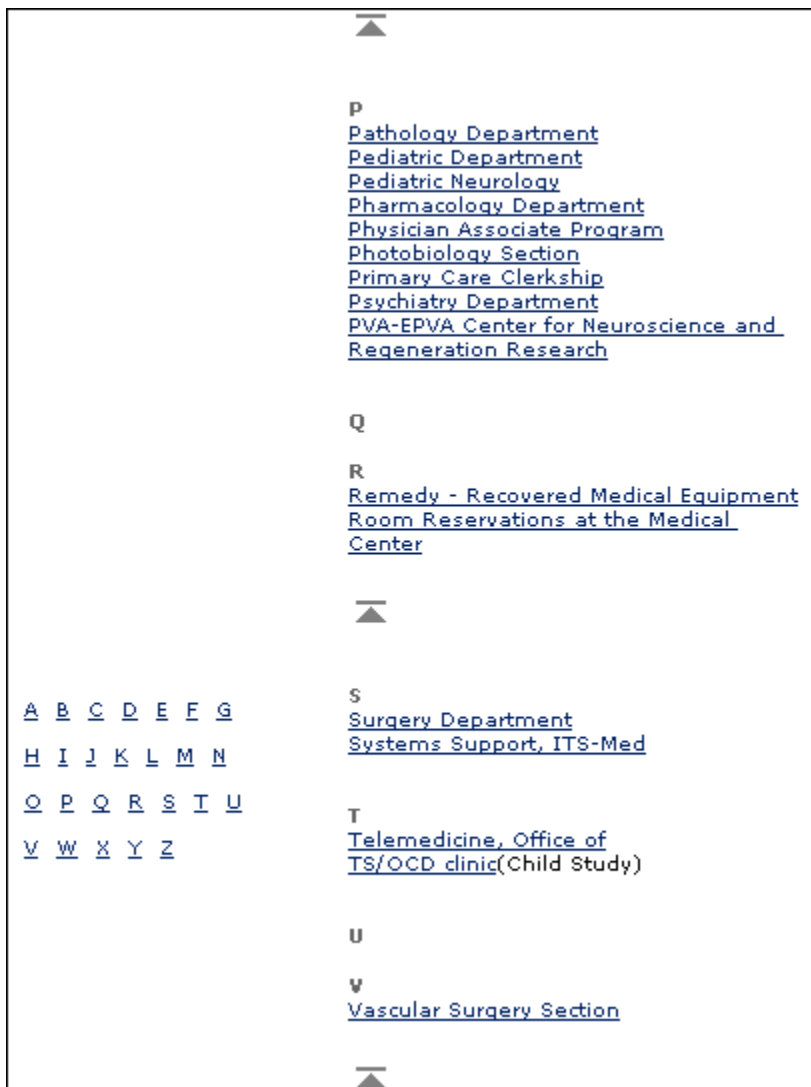
computer display is called an "eight-bit" or "256-color" display, and is very common in current microcomputing, especially on lap-top computers and older desktop machines.



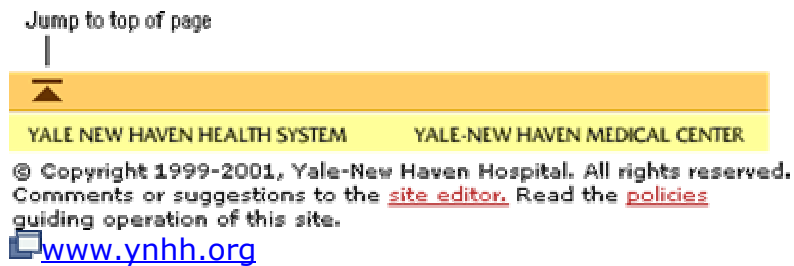
Scrolling

In long Web pages the user must depend on the vertical scroll bar slider (the sliding box within the scroll bar) to navigate. In some graphic interfaces the scroll bar slider is fixed in size and provides little indication of the document length relative to what's visible on the screen, so the reader gets no visual cue to page length. In very long Web pages small movements of the scroll bar can completely change the visual contents of the screen, leaving the reader no familiar landmarks to orient by. This gives the user no choice but to crawl downward with the scroll bar arrows or risk missing sections of the page.

Long Web pages do have their advantages, however. They are often easier for creators to organize and for users to download. Web site managers don't have to maintain as many links and pages with longer documents, and users don't need to download multiple files to collect information on a topic. Long pages are particularly useful for providing information that you don't expect users to read online (realistically, that means any document longer than two printed pages). You can make long pages friendlier by positioning "jump to top buttons" at regular intervals down the page. That way the user will never have to scroll far to find a navigation button that quickly brings him or her back to the top of the page.



All Web pages longer than two vertical screens should have a jump button at the foot of the page:



If a Web page is too long, however, or contains too many large graphics, the page can take too long for users with slow connections to download. Very large Web pages with many graphics may also overwhelm the RAM (random access memory) limitations of the user's Web browser, causing the browser to crash or causing the page to display and print improperly.

Content and page length

It makes sense to keep closely related information within the confines of a single Web page, particularly when you expect the user to print or save the text. Keeping the content in one place makes printing or saving easier. But more than four screens' worth of information forces the user to scroll so much that the utility of the online version of the page begins to deteriorate. Long pages often fail to take advantage of the linkages available in the Web medium.

If you wish to provide both a good online interface for a long document and easy printing or saving of its content:

- Divide the document into chunks of no more than one to two printed pages' worth of information, including inlined graphics or figures. Use the power of hypertext links to take advantage of the Web medium.

- Provide a link to a separate file that contains the full-length text combined as one page designed so the reader can print or save all the related information in one step. Don't forget to include the URL of the online version within the text of that page so users can find updates and correctly cite the source.

In general, you should favor shorter Web pages for:

- Home pages and menu or navigation pages elsewhere in your site
- Documents to be browsed and read online
- Pages with very large graphics

In general, longer documents are:

- Easier to maintain (content is in one piece, not in linked chunks)
- More like the structure of their paper counterparts (not chopped up)
- Easier for users to download and print

Design grids for Web pages

Consistency and predictability are essential attributes of any well-designed information system. The design grids that underlie most well-designed paper publications are equally necessary in designing electronic documents and online publications, where the spatial relations among on-screen elements are constantly shifting in response to the user's input and system activity.

Grids bring order to the page

Current implementations of HyperText Markup Language do not allow the easy flexibility or control that graphic designers routinely expect from page layout software or multimedia authoring tools. Yet HTML can be used to create complex and highly functional information systems if it is used thoughtfully. When used inappropriately or inconsistently, the typographic controls and inlined graphics of Web pages can create a

confusing visual jumble, without apparent hierarchy of importance. Haphazardly mixed graphics and text decrease usability and legibility, just as they do in paper pages.

A balanced and consistently implemented design scheme will increase readers' confidence in your site.

Poor page layout;
no visual hierarchy



Better layout; predictable, modular,
clear visual structure



No one design grid system is appropriate for all Web pages. Your first step is to establish a basic layout grid. With this graphic "backbone" you can determine how the major blocks of type and illustrations will regularly occur in your pages and set the placement and style guidelines for major screen titles, subtitles, and navigation links or buttons. To start, gather representative examples of your text, along with some graphics, scans, or other illustrative material, and experiment with various arrangements of the elements on the page. In larger projects it isn't possible to exactly predict how every combination of text and graphics will interact on the screen, but examine your Web layout "sketches" against both your most complex and your least complex pages.

Your goal is to establish a consistent, logical screen layout, one that allows you to "plug in" text and graphics without having to stop and rethink your basic design approach on each new page. Without a firm underlying design grid, your project's page layout will be driven by the problems of the moment, and the overall design of your Web site will seem patchy and confusing.

Vertical stratification in Web pages

A Web page can be almost any length, but you've only got about forty-five square inches "above the fold" — at the top of your page — to capture the average reader, because that is all he or she will see as the page loads. One crucial difference between Web page design and print page design is that when readers turn a book or magazine page they see not only the whole next page but the whole two-page spread, all at the same time. In print design, therefore, the two-page spread is the fundamental graphic design unit.

Print design can achieve a design unity and density of information that Web page design cannot emulate. Regardless of how large the display screen is, the reader still sees one page at a time, and even a twenty-one-inch screen will display only as much information as is found in a small magazine spread:

Design for screens of information

Most Web page designs can be divided vertically into zones with different functions and varying levels of graphics and text complexity. As vertical scrolling progressively reveals the page, new content appears and the upper content disappears. A new graphic context is established each time the reader scrolls down the page. Web page layouts should thus be judged not by viewing the whole page as a unit but by dividing the page into visual and functional zones and judging the suitability of each screen of information. Notice the vertical structure of the home page reproduced below. The top screen of information is much denser with links because it is the only area that is sure to be visible to all users:



- First screen**
- Highest priority
 - Most graphics
 - Highest density of links

“Above the fold”

“Below the fold”

- Second screen**
- Lower priority items
 - Less graphic
 - Density of links less critical



Page headers and footers

Many Web authors surrender to the giddy thrills of large home page graphics, forgetting that a Web page is not just a visual experience — it has to function efficiently to retain its appeal to the user. Remember that the page builds its graphic impact only gradually as it is downloaded to the user. The best measure of the efficiency of a page design is the number of options available for readers within the top four inches of the page. A big, bold graphic may tease casual Web surfers, but if it takes the average reader thirty seconds to download the top of your page, and there are few links to be seen until he or she scrolls down the page (causing even longer delays), then you may lose a big part of your audience before you offer them links to the rest of your site.

Page headers: Site identity

Careful graphic design will give your Web site a unique visual identity. A "signature" graphic and page layout allows the reader to grasp immediately the purpose of the document and its relation to other pages. Graphics used within headers can also signal the relatedness of a series of Web pages. Unlike designers of print documents, designers of Web systems can never be sure what other pages the reader has seen before linking to the current page. Sun Microsystems's many Web pages and subsites all include a signature header graphic that includes basic navigation links:



Even if you choose not to use graphics on your pages, the header area of every Web page should contain a prominent title at or near its top. Graphics placed above the title line should not be so large that they force the title and introductory text off the page on standard office-size display screens. In a related series of documents there may also be subtitles, section titles, or other text elements that convey the relation of the displayed

document to others in the series. To be effective, these title elements must be standardized across all the pages in your site.

Page footers: Provenance

Every Web page should contain basic data about the origin and age of the page, but this repetitive and prosaic information does not need to be placed at the top of the page. Remember, too, that by the time readers have scrolled to the bottom of your Web page the navigation links you might have provided at the top may no longer be visible. Well-designed page footers offer the user a set of links to other pages in addition to essential data about the site.

The pages in the IBM Web site all carry a distinctive footer graphic with a consistent visual and functional identity:



www-3.ibm.com/ibm/easy

Titles and subtitles

Editorial landmarks like titles and headers are the fundamental human interface device in Web pages, just as they are in any print publication. A consistent approach to titles, headlines, and subheadings in your documents will help your readers navigate through a complex set of Web pages.

Text styles

The text styles we recommend:

Headline style: Bold, capitalize initial letters of words

- Document titles
- References to other Web sites
- Titles of documents mentioned in the text
- Proper names, product names, trade names

Down style: Bold, capitalize first word only

- Subheads
- References to other sections within the site
- Figure titles
- Lists

Page titles

Web page titles are designated in the HTML document head section with the TITLE tag. The title is crucial for several reasons. Often the title is the first thing users with slow Internet connections will see; it also becomes the text for any bookmarks the reader makes to your pages. In addition, most search engines regard the page title as the primary descriptor of page content, so a descriptive title increases the chance that a page will appear as the result of a related search query.

The page title should:

- Incorporate the name of your company, organization, or Web site
- Form a concise, plainly worded reminder of the page contents

Always consider what your page title will look like in a long list of bookmarks. Will the title remind the reader of what he or she found interesting about your pages?

Text formatting for web documents

Some points about text formatting specific to the Web:

- Excessive markup. Beware of too much markup in your paragraphs. Too many links or too many styles of typeface will destroy the homogeneous, even "type color" that characterizes good typesetting.
- Link colors. If you are including links in the body of your text, choose custom link colors that closely match your text color. Reading from the screen is hard enough without struggling with distracting link colors scattered across the page.
- Use the best tool. Write your text in a good word processing program with spell-checking and search features. Transfer your text to HTML only after it has been proofread.
- Style sheets in word processors. Don't use the word processor's style sheets to produce "All capitals" or other formatting effects. You will lose those special formats when you convert to plain ASCII text for HTML use.
- Special characters. Don't use the "smart quotes" feature. Avoid all special characters, such as bullets, ligatures, and typographer's en and em dashes, that are not supported in standard HTML text. Consult a good HTML guidebook (we recommend several in the References) for the listing of special and international characters supported through HTML's extended character formatting.
- No auto hyphens. Never use the automatic hyphenation feature of your word processor on text destined for the Web. This may add nonstandard "optional hyphen" characters that will not display properly in Web browsers.