

GRAPHIC EXCHANGE

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WAYS TO MAKE WEB PAGES THAT DON'T WORK



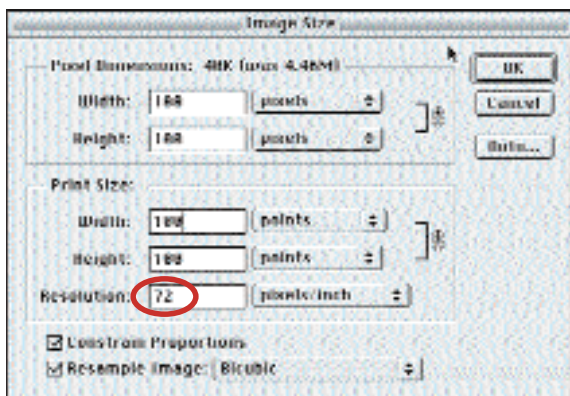
BY LIDKA SCHUCH A publication is any printed or monitor-displayed work offered for distribution. But what makes a digital publication so different from a printed one and so much more difficult to design? • Unlike a printed project, digital work will be viewed on many monitors and in many different computer environments — most of them inferior to the high end graphics workstation on which it was created.

Web sites, of course, are digital publications. We have all visited good sites and bad sites; good sites are always designed with users' displays in mind — that is, designed for the lowest common denominator. • Here are ten ways to make web pages that don't work:



1 USE LOTS OF BIG, PRETTY, COLORFUL HIGH-RES PICTURES

Have you ever pressed the Stop button in your browser after waiting five minutes for a page to load, still knowing there's five more to go? I certainly have — many



times. Slow loading is generally caused by too many images which are too big and/or too high resolution.

A standard monitor resolution is 72 ppi, so use only 72 ppi images. And never forget the first principle of good de-

sign: "Less is more." Nowhere is this more true than in the web environment. The objective in web page design is to create files that are as small as possible.

WYSIWYG web design programs allow us to resize graphics in the HTML layout, but many programs let us do things with no regard to the output. For the web, enlarging an image means you end up seeing a lot of big pixels; if you reduce it, you add more bytes to your file size.

You should always resize an image to its final dimensions in Photoshop, not in an HTML layout program.



2 IGNORE THE USER'S MONITOR DIMENSIONS AND PROPORTIONS

Few graphic designers have full page monitors, and most clients certainly don't. Most people have 15" displays, but there are plenty of business people with only 13" screens. If a web site is designed for a larger monitor, it means one has to scroll sideways to be able to see the full width of a page. This can be very annoying, especially if the page is full of text. Here are some guidelines for lowest common denominator page dimensions:

A full 13" display at 72 ppi resolution is 600 pixels wide

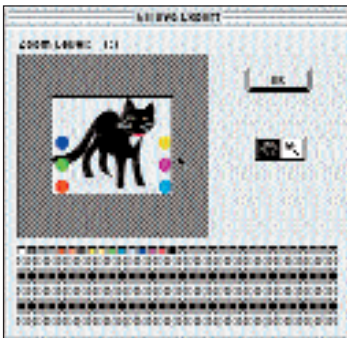
x 400 pixels high. 600 x 400 is the standard screen dimension for games and interactive multimedia programs. But these types of applications use the full width and height of a monitor. To view web sites, we need a browser, and any browser has scroll bars and pulldown menus. So the working width of a web page should not be bigger than 550 pixels. Sometimes the length matters and sometimes it doesn't. The best rule of thumb is that if you want someone to see the full page on a monitor, it should not be any longer than 340 pixels.

If you expect viewers to print out pages (e.g. a resumé) from your web site, it's best to take into consideration the fact that most printers print on 8.5" x 11" sheets and many still have 1" wide margin settings. Doing a little simple math will let you find a safe width for this kind of page: 8.5" - 2" = 6.5" x 72 pixels/inch = 468 pixels.



GIFs: USE ALL COLORS AVAILABLE

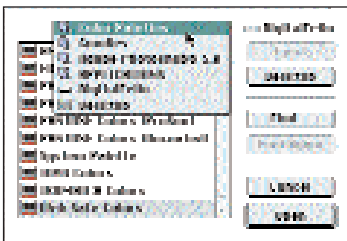
Here's another way to make graphics bigger and clumsier than they should be. GIF is one of two file formats used for the web and is good for either line art or im-



GIF with 16 colors, too few for this image. File size 1.3 KB.



GIF with 160 colors, viewed on 256 color display, file size 3.6 KB. Experts say that for the lowest common denominator output, the whole page including all graphics should not be bigger than 100K.



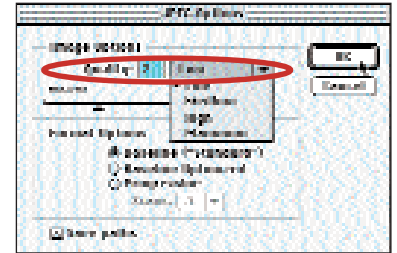
ages with very few colors because it supports Indexed Color mode (which consists of only 256 colors). However, often we don't need that many colors. The fewer colors used, the smaller the file.

Preview your file, reducing the number of colors, and stop just before the color starts to disintegrate. It also pays to change the color depth of your monitor to 256 while working on GIF graphics for web pages. To avoid dithering flat colors to their approximate values, use the Browser CLUT (Color LookUp Table) palette for color accuracy. For more info on palettes (and other web issues) check out www.webreference.com.



COMPRESS JPEGs USING MAXIMUM QUALITY

As we all know, JPEG compression is lossy. It is based on the premise that "what we don't see, we don't need". Since the human eye has a hard time distinguishing 1% grey from 2% grey and 99% from 100%, out goes the information about these tones in a JPEG compressed image. Of course, the less compression, the higher the quality, the bigger the file size and the longer the loading time. So what quality are we really after with any monitor-displayed, 72 ppi image?



Monitors with 24-bit color depth have enough colors (256 R x 256 G x 256 B = 16.7 million, to be exact) to display an image pixel for pixel, so if an image with its quality slider set on 2 looks good on your 24-bit monitor, it will look good on any 24-bit monitor — aside from the fact that standard gamma for the Mac is 1.8, but for Windows it's 2.2, which will generally make it look darker on a Windows machine.

The problem is that most people have less than 24-bit displays. If, for instance, a 24-bit image is displayed on an 8-bit (256-color) monitor, the computer reduces the number of colors to its own fixed 256-color palette, which creates dithering. Dithering is more acceptable in continuous tone images (photographic or painted images with many tones) than in line art (illustration art with relatively few colors), but nevertheless it will still downgrade the image.

So, for monitor output, use high JPEG compression and low quality (around 2 or 3 is just fine).

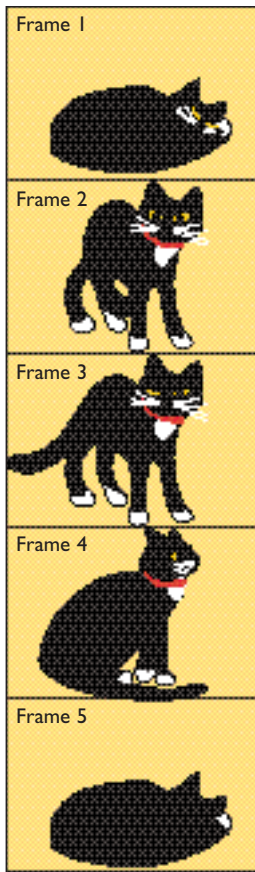


ANIMATE EVERYTHING, AND MAKE IT SING, TOO!

Let's make kitty jump all over the screen, and meow and yawn and burp and maybe even sing a song!

In two or three years, yes. But for now, don't forget that whether you use a bitmap- or a vector-based program to create your animation, in the end it consists of bitmap frames — one for each position of our kitty. Since the objective is to create small files for anybody with any computer to see, think first about how important and relevant this animation is to the whole web site. And if you decide that you must have kitty there — use as few frames as possible.

Also, don't forget that bitmap file sizes depend mainly on three factors: color mode, resolution and dimensions. Sometimes you can make an animation significantly smaller by animating only a portion of an image. To avoid gaps between the animated and non-animated parts of the image, place



them in one data cell without spaces between the images.

The quality of sound, like color, also comes in better or worse. And as with color, for good sound you need a fast computer. Sound quality is measured in bits. 8-bit sound files are small and accessible to almost everyone; while 24-bit sound files are only for a chosen few.

Here is a table of the most commonly used file formats:

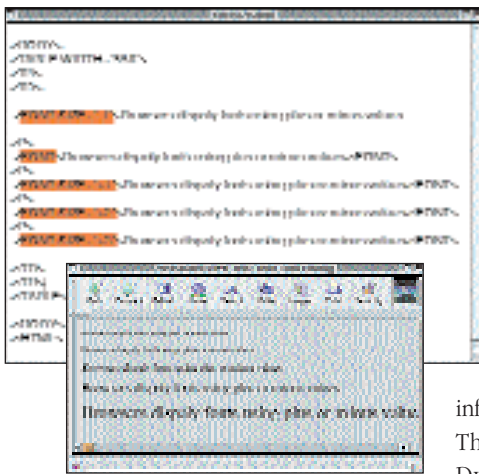
AU	Cross-platform	8-bit
AIFF	Mac only	up to 24-bit
WAV	Windows	up to 24-bit

As you can see, AU format is the safest for the lowest common denominator output, but it supports only 8-bit sound. However if you are a musician and you also want to provide high-end output for visitors, it doesn't hurt to post sound files in all three formats and let viewers choose the most appropriate one for their system.

6

MAKE VISITORS READ YOUR LIFE STORY — IN ITALICS

Reading text off a monitor is much harder on the eye than reading off paper. After all, letters on a monitor are created with glaring transmissive light (except for black, which is the absence of light), not with ink on paper. The glare and the position in which we read makes it difficult to



begin with. Now add lots of small text, and you can be sure nobody will be interested in the facts which you laboured so hard to put into words.

The only reason to build text-intensive sites might be to distribute useful information. For example, The Australian Muscular Dystrophy Association

web site (www.mda.org.au) is the best in the world for info on neuro-muscular disorders. Yes, there's a lot of text there, but the pages are constructed to be printed on any desktop

printer in a very easy manner. And people who go to this site usually need this specific kind of information. So in this case the users' needs justify the means. But I can't envision a user squinting over someone's mile-long mission statement or marketing strategy.

We should also remember that the way text looks in HTML pages depends on preferences set in individual browsers on individual computers. This means that we can only tell it to display fonts utilizing plus or minus values, no matter what point size is set by the viewer. So don't put line breaks in text — on different computers they may fall in the wrong places.

And finally, keep in mind that the overuse of italics is hard enough on the eyes when it's in print, never mind when it's on a monitor!

7

NAME FILES ANY WAY YOU PLEASE AND LINK THEM TO NOWHERE

Another deterrent to readability is finding little icons with broken links which, when clicked, lead to a message stating, "This file cannot be found on this server." A less common explanation for a broken link is simply forgetting to upload files (of course, all graphic files used in HTML layouts have to be uploaded as well).

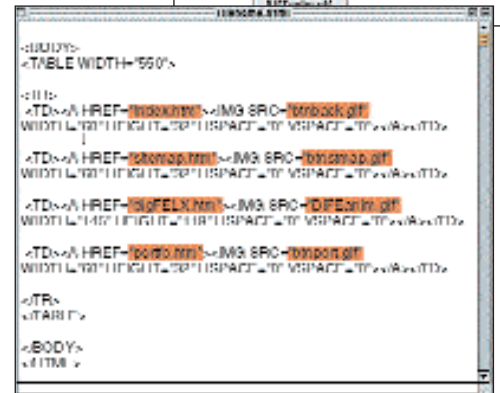
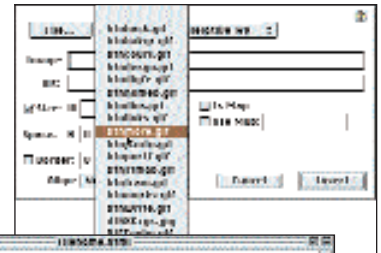
However the most common reason for links which are broken or which lead to nowhere are misnamed files.

Here are some guidelines for naming files properly.

First of all, if you want the site to be accessible to anyone on any platform with any browser installed, stick to the old DOS system of file names with a maximum of eight characters or numbers, and don't use special characters (like slashes, number or percentage signs, bullets, etc.).

Since you will be dealing with a lot of files but only eight characters per file name, you can use capital letters in order to help visually distinguish one from another. Just remember to do the same in the HTML coding.

Always add proper file extensions to file names — .html, or .htm for HTML layout; .gif for GIF; .jpg for JPEG; .pdf for PDF; etc.) — a file without a dot and a proper ex-



tension (also called a suffix) will not be found on any server by any Browser.

Do not use spaces in names — they get changed to “%20” (and I’ll bet you’ve seen a few of those!). As a matter of fact, a space can become corrupted even in file folder names on your own computer! Not long ago, as I was working on a site for a client, I started getting frantic when all my graphics suddenly lost their links. The names of the files were fine, both on the hard drive and in the HTML coding, yet I was getting a message saying they didn’t exist. It turned out to be the use of a space in the name of a folder!

If you upload an unfinished site, it’s better to create a page with an “under construction” sign rather than frustrating a viewer with a “not found” message.



8 CLEVERLY DISGUISE THE LINKS

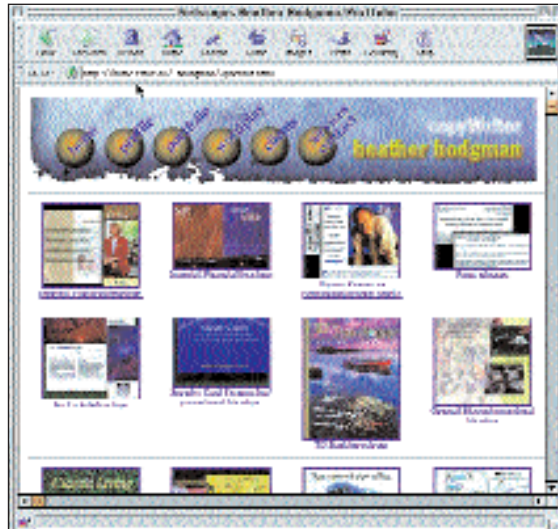
Web sites should be functional. To be functional, links — whether they are buttons or portions of text — need to be easily found and clearly described.

So unless the purpose of your site is to create a hide ‘n seek game specifically designed for a chosen crowd which likes to play, don’t aggravate visitors by making them look for a button to your portfolio — or they may leave the site before they even find it!



9 MAKE VISITORS GO THROUGH EACH AND EVERY PAGE

It is highly unlikely that electronic publications will ever totally replace printed ones (at least not before we’re able to read them while eating, taking a bath, or in



bed just before we fall asleep). But one superior aspect of web publications over printed material is interactive navigation based on the “click here and get there” idea. This, of

course, makes finding what one needs fast and precise.

But have you ever visited web sites where you have to go through ten pages to get where you need to go (not to mention being required to return to a home page through the same ten pages)?

If a web site is small (10-20 pages), a well planned button system could be all it needs to provide easy navigation.

If a web site is big and contains many categories, create a site map. A site map could be simply a written list of pages (with all page names linked to the proper pages), or it could be a visual representation of a web site.

For lengthy portfolios and other galleries, create a catalog page with thumbnails, so a visitor can get to any page randomly.



10. LEAVE YOUR WEB SITE ABANDONED AND NEVER COME BACK TO IT

Yes, there is nothing sadder than the beginning of a good idea that never got finished — especially since digital media is so alive!

A paper-based publication can be revised all you want until it goes on press — but once printed it’s now analog, and frozen forever as ink on paper.

On the other hand, digital publications like web sites can be improved constantly. As a matter of fact, if you want people to come and see them over and over again, there must be something worth coming back for, whether it’s a newsletter that’s updated periodically, or a chat room, or new information posted from time to time. Maintaining it can keep a whole department busy — which is why big companies have a permanent position called Webmaster, a person who looks after a web site. So, either get ready for a long term commitment — or don’t start.

My last word of advice is: Web design’s confinements are far greater than those of printed media. So don’t rely on programs to figure out users’ output.

Learn HTML.

And above all, keep it simple! *

LIDKA SCHUCH IS A PRINCIPAL IN STUDIO L, A TORONTO DIGITAL TRAINING CENTRE AND GRAPHIC DESIGN STUDIO. E-MAIL TO STUDIO_L@ISTAR.CA OR SURF TO STUDIO L AT [HTTP://HOME.ISTAR.CA/~STUDIO_L](http://home.istar.ca/~studio_l).

