

Adding Website Bells and Whistles

For several years now, I have been working on and improving my *Guru's Lair* website that you'll find at www.tinaja.com. Along the way, I've discovered that it is the small things, added little known features, ongoing thorough testing, and the attention to detail that make the crucial differences between an average and a superb site. I have newly discovered non-obvious tricks and techniques you can pull to improve your task as webmaster.

I like to call these improvements *bells and whistles*. But note that some of the obvious bells and whistles everybody else uses often do far more harm than good. Such as cutsey animation that quickly turns obnoxious, humongous and slow images, annoying sounds, distracting glitz, broken counters, browser restrictions, uselessly limiting frames, bandwidth wasting chat, interstitial ads, spammed email, or other "push" advertising. Why? Because an impatient, an insulted, or a bored user is a gone user.

Instead, here, in somewhat random order, is the insider stuff that really seems to work for me...

Get creative with tables— HTML can end up maddeningly infuriating when it comes to small details like setting the exact position of a button, bumping text, forcing indents, or setting the exact vertical spacing between elements. By going to "invisible" tables within tables within tables, many of these problems can be resolved.

A table gets made invisible by setting its border width to zero. Normally, you'll keep a border width of one for your layout, then zero it for your final use. The insider secret is to have lots of *empty* cells in the tables to force positioning and appearance. You'll also have the option of selectively coloring or patterning individual cells.

The downside of tables is that they do have to get done just right, care is needed in their generation, and that run time files do get longer. You should limit the vertical table size to fractional screens only.

Netscape and IE may show tables slightly differently. For instance, IE unacceptably smears parts of my home page.

Use Acrobat instead of HTML— Acrobat .pdf files are now the standard method of distributing tech data on the web. Acrobat gives you precise control over exactly what your user will see. All in a single quick loading file with a wide variety of internal fonts, artwork, and images.

Properly done Acrobat docs average 12K per page and end up more compact than HTML. Yes, Acrobat is able to link, accept data, and run most any other HTML type task. Free Acrobat readers are readily available at www.adobe.com

and countless thousands of other web sites. More details on Acrobat use appear at www.tinaja.com/acrob01.html. A key doc about including HTML features in Acrobat is the Adobe technical note #5150 on the *PDFMark* operator. Get it from www.adobe.com/supportservices/devrelations/technotes.html

Activate byte range retrieval— Most modern servers offer a *byte range retrieval* feature that lets a long Acrobat file show its first page very quickly. Subsequent pages invisibly load in the background. Page 46 can be read out-of-sequence at any time in the process. The first page progressively shows raw text first, then figures, then fancier typography shapes. Which dramatically reduces the *apparent* download time of any longer document.

To use this feature, verify your ISP has activated their byterange flag, make sure you use the optimization "save as" in Acrobat Exchange. Then advise your users to install reader or exchange as a browser plug-in, and *not* as their helper ap. An IE ActiveX patch may also be needed.

More on byte range in www.tinaja.com/acrob01.html and in www.tinaja.com/weblib01.html

Force banners to load last— One of the worst insults you can heap upon your users is to force them to wait around while dozens of large and totally useless images download. Your trick is to get the banners and any other nonessential images to load only *after* all useful info and all legible nav buttons have been presented. Use HTML's obscure LOWSRC command to redraw your background on your initial pass through the browser. Pre-image any essential button art as a *single* pixel *before* the first unnecessary image. This gets super important when a later down-screen image will be needed by the user for a coherent display.

Full details appear in my [BANNLAST.PDF](#)

Mine those newsgroups— Newsgroups do not take lightly to obviously commercial spam. But a rare, tightly targeted and carefully crafted *Announcement*: (Preface your message with *An*:) is usually welcome. Especially when it supplies useful and free stand-alone content.

Newgroup posts could instantly add many thousands of hits to your web site. And find long term converts. But be sure to pick active and appropriate sites which lack name calling, flammers, trolls, and general ineptitude. Two of my favorites for tech announcements are [sci.electronics.design](#) and [sci.electronics.misc](#)

Complete searchable lists of newsgroups are offered by most ISP's. I have an older list up at [NEWSLIST.HTML](#)

Give full mixed text search– Every word in every file type of your site should be fully user searchable by use of a convenient and a conspicuous internal search feature. It is especially important to be able to search *both* Acrobat .pdf files and HTML files simultaneously.

Search engines usually operate by creating an *index* first. Done once a day or as files are added. This backward index lists every word by occurrence and can get quickly accessed. Indexes may increase website size by one-third.

A free PDF *ifilter* plug-in for the *Microsoft Index Server* is at www.adobe.com/prodindex/acrobat/ifilter.html

Insider secrets of getting this plug-in to work appear at [SRCHPDF.HTML](#). One crucial problem that drives installers up the wall is this: Make certain all registry modifications have one and only one null (\$00) between entries and two nulls at the end of the entry list. A second hassle is to be certain that included files (such as those in the example code) are in fact accessible.

I prefer to studiously exclude hyphens in all of my text. This looks much better, is more readable, and helps user searching. More details in my [POSTJUST.PDF](#)

Be search engine aware– Similarly, those external search engines can be your key to targeting new viewers. Be very aggressive in your listings. Use all major and minor search engines. Arrange your home and other pages to be search engine friendly. Avoid dynamic content and make all your keywords early and obvious. But do not try to jockey for a high engine position, since most attempts fail.

Start with *Hotbot* and *Alta Vista*. While it is simple to do your own registrations, several sites offer free or low cost services. Examples at www.tinaja.com/webwb01.html

Provide fast nav buttons– It is real easy to let all the good stuff end up seven pages down on a larger site. Nav that works on a small site fails as the site expands.

Try to reach everything directly from your home page. One way is with "radio" style fast nav buttons. Or use a site map. Many examples appear at www.tinaja.com

Offer on site e-commerce– The easier it gets for people to pay you or buy things from you, the more likely they will actually do so. Impulse buys work best if and when they can click right through. There are all sorts of e-commerce possibilities. Your ISP can outline your options.

The key issue is securing the user's VISA or MC number while it goes over the web. Your simplest e-commerce does only this task. Fancier versions offer shopping carts. Some even do an automatic bank-to-bank transfer. I prefer that secure VISA only route, since the charges may depend on shipping weight and availability.

Don't forget the "What's New?" page– Find some way to give your users a reason to return as a *daily* habit. Try to do this by *continuously* adding new and unique content, older archival library files, reference material, new links, error corrections, and other site improvements.

But there's not much point in improving things if your users do not know about them. Especially on a larger site. So, be sure to give them a "What's New?" button and page. This can simply be a daily updated list of what you have added when. Yes, subtle advertising can also be included. But don't overwhelm them commercially or appear in the

least like spam. Keep your current file short, but preserve older announcements in one or more archives.

Add a bookstore page– The folks at [Amazon Books](#) have an incredible deal. Through their *associates plan*, they pay you to sell their books. Most any book you review or even any referral from your site. No matter what they buy.

Since there's tens of thousands of other associates, you do have to carefully plan how your reviews or other value added will end up unique. But this is a great way your users can support you at no cost to themselves. The typical cash flow ends up about the same as a banner or two, so this is no get-rich-quick scheme. But it is certainly worthwhile.

Practice kaizan– This is Japanese that loosely translates as "continuous small improvements" Far and away, it is all the little things in a web site that count. The working links, the fast loads, the overall attention to detail.

Try to make *daily* improvements in your web site of one kind of another. Adding content, improving nav, cleaning up glitches, reducing errors, making stuff friendlier. View your website as an ongoing *process* rather than a goal.

Watch those title fields!–If you edit one HTML web page, heavily modify it and then save it as another, it's real easy to forget to update the <TITLE> field in the header. With disastrous results for search engines and site descriptions. I have been guilty of this one many times. If your HTML editor does not make renaming easy, use a word processor instead, working directly with the underlying text file.

Use your referral logs– Your ISP has *referral logs* available that can show you exactly which page each viewer has just come *from*. You should demand access to these logs and aggressively make use of them.

First and foremost, the referral log can point to missing and broken links. Especially if the page it goes to results in a 404 error and came from you. Referral logs can show you customers and markets which you never suspected existed. Referral logs reveal what you are doing right and wrong. Engine entries also show you what keywords your viewers are using for site access.

While canned summary reports of referral logs (such as *Webtrends*) certainly are useful, you can do a lot more a lot better by accessing the raw files themselves. Check my files at www.tinaja.com/acrobo1.html for more info.

Give enough redirect time– The HTML *redirect* command is a very useful tool to automatically get from one page to another. Obvious uses are to get you from an older server to a newer one. Or to an improved or updated page. While preserving all of your older links.

But there's a deadly trap and some abuse potential here. *Make sure you provide at least five seconds of redirect time!* Otherwise, your user's back arrow will no longer work. For back goes to redirect goes to back in an endless loop.

Some redirection hints appear in [REDIRECT.HTML](#)

Recommend roller mice– A mouse having a self-scrolling roller on it (*Fellowes*, etc) makes website nav ridiculously faster, easier, and more convenient. Be sure to tell your users how much this simple accessory addition helps.

Set up user forums– A forum is like a newsgroup, except you personally control all access. You *moderate* the forum

by nuking any impolite, excessively long, get-rich quick or porn posts. Forums also have an auto-mail option where subscribing members get each message as it is posted.

The quality of forum info is usually much higher than a newsgroup, and you can target the content tightly to your website. A question and answer format can work well here. Forums often can let you focus more tightly on your user's needs. The easiest and cheapest way to set up a forum is to use the www.dejanews.com/rg_mkgrp.xp service.

Patrol your links – Sites linking to yours can get located by searching on terms unique to your site; by mining your raw referral logs; and by using *link:* on *Alta Vista* or *Links to this Url* on *Hotbot*. Links from unexpected sources often lead to new markets for you. Besides being a superb ego trip, link content and tone show needed site improvements.

Links will also reveal much of your material pirated or stolen by other sites. A few other links may be misleading or inappropriate. Ferinstance, I very strongly object to any link to my site from a cracking/phreaking/theft list. At one time, the term "hacker" meant something entirely different than it is stupidly perceived today. I have no use for all the felon wannabes and the men-in-black on my doorstep that such links often provide.

Usually, a polite removal request is all that you'll need here. The word "please" can be quite effective. Step two is to contact their ISP. I have never needed step three.

Show product photos – Digital cameras and video capture modules are cheap these days, so it pays to offer pictures of everything you are selling. But do not overload your site with unwanted and slow-loading images. Instead, be real generous with little clickable "pix" buttons. Let your user grab only those images they are truly interested in.

Live camera coverage has worked well for some sites. But they will often generate useless traffic.

Try banner rotation – Changing the position of all your ad banners can give you many advantages. Your viewers see a fresh page each time and might be more inclined to click through. Advertisers get equal shots at your more popular locations. And you may create the illusion of having more sponsors than you really do.

Java or other browser-side solutions could get used here. As can a CGI script or the *Include* command available on some servers. But both these slow down the delivery and waste your viewer's time. My preferred solution is to make ten or more different home pages. Then use server side *Visual Basic* or another scheduler to copy the source to the active home page. Perhaps every sixteen minutes or so.

Include includes – While there's *not* any *Include* command in HTML itself, most newer servers allow its use. Such as in .asp files. An include is sort of like a subroutine, inserting common text HTML commands where needed. The usual example is a footer. If needed, you change only one footer in an include file, rather than sloshing through each and every page to make corrections or updates. Often called includes also save server storage space.

A typical include command looks something like...

```
<%--#include file="zorch.inc"-->
```

But do note that includes slow delivery. These are best saved for where they clearly offer other benefits.

Watch those absolute filenames! – It is trivially easy to get an image or a link to stay referenced to some file on your authoring computer, instead of being a relative link on the server. Symptoms are broken links and missing art. Stuff that looks fine to you and awful to everyone else.

Always go over your HTML code for those deadly "file:" entries. It pays to "hide" your authoring code inside some folder whose name often changes. That way, you will not be fooled into viewing an absolute source file.

Tell who you are – The Fortune 500 websites are especially maddening at refusing to tell you who they are and how they can be reached. Even after clicking dozens of slow and useless screens deep into their site. Make certain that your home page clearly and conspicuously reveals your street address, your snailmail address, your phone number, your fax, your hot-linked email, and your site's url.

Naturally, you make all of your prices conspicuous and easily found. This seemingly insignificant detail is probably the most important bell and whistle of them all. ♦

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