

Guidelines for Planning/Designing Web Sites

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- 1. Target 800x600 resolution.** The majority of visitors will be using this resolution. As pricing for monitors and computers continues to drop, it becomes more and more affordable to purchase computers with 17" monitors and computers capable of displaying thousands (if not millions) of colors at resolutions as high as 1280x1024. The maximum viewing area of a web page on monitors set to 800x600 is a rectangle approximately 760 x 420 pixels. This area determines the initial "gulp" of each web page at 800x600 monitor resolution.
- 2. Plan for changes, extensibility and flexibility.** Be aware that web pages often change over time and will require adjustments as these changes are made. Anticipate what some of these changes might be. Some adjustments are minor and easy to accomplish, while some adjustments are minor but difficult to accomplish, and still others are major and difficult to accomplish if the web site has not been designed with changes, extensibility and flexibility in mind.

Use a JavaScript footer or header or similar feature, such as a Component in Adobe GoLive, a Library in Macromedia DreamWeaver, or a Page Template in Freeway. A JavaScript footer/header is a single JavaScript or HTML file that is inserted into web pages where specified (using JavaScript if it is a JavaScript footer/header) when each page is loaded into the browser. JavaScript enables the insertion. When a web page references this external JavaScript file, that page's web server runs the JavaScript code in this file, which in this case inserts HTML code into the page as the page is rendered. To affect a change sitewide, only the JavaScript file needs to be changed (the file name must remain the same) and uploaded again to the web server. This can save a great deal of time when needing to update navigation, copyright, legal information, etc.

A GoLive Component, Macromedia Library and Freeway Template work differently, in that the code is inserted by GoLive, Dreamweaver or Freeway into the page as static HTML, not inserted dynamically as in the case of a JavaScript footer or header. When a Component, Library or Template changes, GoLive, Macromedia or Freeway changes the HTML in the pages which use the Component, Library or Template to reflect the change that has been made. Each page which used the Component, Library or Template, then, must be republished to the web server for the changes to be reflected to web visitors. In this case, changing information can result in the need to upload hundreds of pages again to the server, for a large site. Yet, Components, Libraries and Page Templates automate these changes so that each page doesn't need changed manually. It's much simpler to upload the new pages than to make the changes across an entire site. This saves a great deal of time when needing to update navigation, copyright, legal information, etc, but requires careful uploading of the changed pages, rather than a single JavaScript file.

Assume there will be additions to primary navigation. Primary navigation is probably the part of a web site layout changed most often, and is sometimes the most time-consuming to change. Make your primary navigation extensible by placing it into a frameset, if not into a JavaScript header, GoLive Component, Dreamweaver Library or Freeway Page Template. When using a frameset, only one page (the navigation page) will require changes if the primary navigation changes. Also, leave space where a button or two can be added to your navigation in the event that a new area or two need added. This way, you won't have to

remake all the navigation buttons so they include the new addition(s) requested by a client.

3. **Plan for as little scrolling as reasonably possible given the content of the site.** The initial gulp of each page should contain the “meat” or links to the meat of the page. Anything hidden below the browser window may never be seen or read without the visitor being taken or lead there. In the initial gulp, provide links with anchors or bookmarks to take or lead visitors to areas of interest hidden below the browser window. (Content may also be hidden to the right of the browser window if the page has been designed to be side-scrolling). If content is not of interest, it shouldn't be in the site. Longer articles such as book reviews, for example, can be divided into smaller subhead segments with anchors, and/or spread across several pages for convenience.
4. **Design for readability.** Studies have shown that web sites, as with printed pages, have an optimum column width that makes reading easier. For web sites, this area falls between 350 and 450 pixels. Thus, for pages that will contain more than a few sentences of text, provide for a column between 350 - 450 pixels wide for “body” copy. This is particularly important when publishing a longer piece, such as reviews, news articles, press releases, or other documents several paragraphs or more in length.
5. **Write for the web audience.** Less is more. This is true for web sites as anything else. This does not refer to quantity of content, but the quality of the content. Since reading text on a computer monitor is difficult for long periods of time, concise, clear, organized, direct copy is better for visitors. Write in as few words as possible to convey your point and meaning. Don't use large words when small words will do. Break paragraphs cleanly, aiming for 3-7 sentences per paragraph as a general principle. If a paragraph is longer than 7 sentences, try to separate it into two paragraphs. Be consistent in your use of numbers. If you use numbers (1, 2, 3, etc.) where numbers appear, use them all the time. If you use words for numbers less than 10 and numbers for words greater than 10, stick to that rule. The latter rule is used for writing essays and articles, but the web is so new that you may find it best to use numbers as often as possible instead of words.
6. **Layout/Plan your site in an image-editing application such as Photoshop, Fireworks, PhotoPaint or Canvas.** Mock up your site to the pixel, using layers. Setup graphics such as headers, footers, navigation, margins, advertising, sidebars, etc. in this file, placed exactly where they would appear if the page were loaded into a web browser. Placed thus, use guidelines to divide the layout into “cells” so that portions of the layout can be selected, copied and turned into GIFs or JPEGs for your site. The guidelines assure that each corresponding graphic will be the same size and can be safely inserted into corresponding table cells across your site. This technique is called “slicing.” Each graphic made thus is a “slice” of a web page. Your header, for example, might contain a graphic that does not change in size across your site; only the text or color changes to indicate where a visitor is in the site. This graphic, framed with guidelines, can be “sliced,” or copied from the layout file, made into a GIF or JPEG, and placed into the header cell of pages in your site. Of course, the release of Photoshop 5.5 with ImageReady 2.0 makes image slicing much easier than it once was. Still, I often use the simple old fashioned method because I know it so well and trust it implicitly.
7. **Use tables to restrict pages for the chosen resolution and make all pages conform to those dimensions.** Designing for an 800x600 resolution monitor, the master layout table should be about 750 pixels wide for the initial gulp and as tall as necessary to accommodate the contents of each page. Set the template table using pixel precision, not percentages. Percentages will change as the browser window is enlarged or reduced. Pixel precision will keep the web page the same size, regardless of the size of the browser window. The master table can be creatively organized using

rows and columns to provide a flexible framework in which to place the contents of the web pages. Stretching a cell across rows or columns provides interest for the page and breaks up the boxes of the table. Alignment in these cells — left, right, center, top, bottom, middle — provides options to give the web page variety. Invisible GIFs can be used to force cells to the preferred minimum size (see #6 below).

- 8. Compartmentalize the pages of a web site using tables.** Each cell might be considered a compartment in the page, with stretched cells changing the size and horizontal or vertical relationships of the compartments. Each compartment can hold information, whether image, text or a combination. When web pages are compartmentalized, it is easier to swap out the information in the compartments without disturbing the information in other compartments. If a master table is used as a template for web pages, the consistent placement of information in the table on each page provides consistency across all the pages using the same master table. The site begins to take on an identity of its own with recognizable and predictable features, like body parts.

Use GIFs, JPEGs or small (12 pixels x 12 pixels) transparent GIFs, scaled to the exact pixel size, to keep tables from being reduced horizontally or vertically. There will likely be some areas of your layout that you need to be a certain size at all times. Perhaps your header is a graphic, and will span several rows or columns. This graphic should be made to exactly fit the total of the cells its spanning, else this cell (and the cells around it) may be inadvertently compressed in browsers under certain situations. Or perhaps the cell under the header must be 385 pixels across, no less, spanning a row or two more than the header. To keep this cell at 385 pixels, a small invisible GIF can be stretched in an HTML editor to force this cell to 385 pixels at all times to keep this cell in your layout consistent across your site.

- 9. Avoid embedding tables within tables within tables.** Avoid embedding tables as often as possible. Each table increases the time required to render the web page, and tables inside tables create embedded tables, which often become a problem later when adjustments to the page are required for maintenance or updating. The embedded table will keep its host cell from being reduced any smaller than the embedded table. The embedded table determines the smallest size of the host cell. If a table is embedded in a table which is itself embedded in another table, there are 3 levels of tables that must be rendered by the browser, and 3 levels of tables to be adjusted if adjustments are required later. The complexity for adjusting and rendering the page has tripled. Make the task of maintenance and updating as simple as possible. Avoid embedding tables.
- 10. Make navigation consistent and as simple and clear as possible.** KISS. Keep It Simple, Stupid. Simplify, simplify, simplify. The easier a site is to get around in, the more enjoyable the experience, and visitors won't grow frustrated looking for what they have come for. They will find it immediately. It's why they have visited, after all. Let them have it. Give it to them. They'll hang out if they want to. If they can't find what they're looking for, they'll leave and never return. They'll believe that the site didn't have the information they needed, or that the information is best found somewhere else. So they'll go somewhere else.
- 11. Consider primary navigation to be a miniature table of contents.** Primary navigation might be considered a miniature table of contents for the site, revealing its mysterious contents to visitors so they can decide not only where they want to go in the site but also whether what they're looking for can be found there. It is important to make navigation as clear as possible. While it may be fun thinking up clever monikers or symbols for a site's navigation, clever monikers and/or obscure symbols may be wasted on your visitors, who may not understand what each moniker or symbol means or what they may find if they click on them. Tell visitors in simple language on the button

what's hidden behind it. Fulfill the promise made by the navigation. If symbols are used in the navigation, place clear, simple words or phrases with them in the first few pages or levels of the site to clarify their meaning. Once this has been done and the visitor has been at your site for a while, they won't need the words. They'll understand the symbols. The words can then be successfully removed on 3rd or 4th level pages without confusing visitors.

12. **Place primary navigation for pages at the left or top of the browser window, unless there is a compelling reason to do otherwise.** English is read from left to right, top to bottom. As the worldwide language of international business, English dominates the internet as businesses register domains and publish web sites for a worldwide audience. Visitors expect navigation to be at the left or top of the browser window for convenience. It is where their eyes first fall on the page. Placing primary navigation at the left or top of the page immediately gives visitors the information they need to successfully navigate site and find what they're looking for. This is almost as important as keeping navigation consistent and simple. If a site's design calls for navigation to be elsewhere to enhance the experience and strengthen the metaphor of the site, it is agreeable to break this rule. When breaking this rule, however, it becomes critical to make the navigation simple and clear to avoid confusing visitors.
13. **Organize your work and site into folders.** Realistically, you may not be the only person to ever work on any given web site. You may design the site and then pass the maintenance responsibilities on to another designer, or to the client. While the latter is not recommended, for several reasons, only one of them being inexperience, it is probable that others will work with the site after you have gone on to other sites and other projects. You can make your work, and the work of the person following you, easier by organizing your work and site into folders. Not only will you be able to find the file you need faster after several months away from the site, but the person after you will be able to locate the file he or she needs as well, and won't have to duplicate your efforts.

Create a Working Folder. This folder is your workbench, storage bin, darkroom, closet. Save everything you bring to the site into this folder. Save even your original files, such as high-resolution photos, in this folder, so you can always go back and recreate your work if necessary. Save these materials into folders themselves, such as logos, backgrounds, navigation, subnavigation, downloads, etc. Use the same names as the folders in your site whenever possible so that the files used to create navigation images and the final GIF or JPEG images, for example, can be found in the navigation folder in your Working Folder, and copies of the finished GIF and JPEG images can be found in the navigation folder inside your images folder in your upload folder as well. The images in the working folder are backups in case anything were to happen to the images in the upload folder.

Create an Upload Folder. This is the folder where all your finished files — images, html, cgi, downloadable files, etc. — will reside to be uploaded. This file should contain copies of finished image files (the original finished image files should be saved in the Working Folder as well). It should be organized to mimic your Working Folder, i.e. images, navigation, subnavigation, backgrounds, logos, downloads, etc. When linking to items in this folder, relative links should be used whenever possible so that links aren't broken when these files are uploaded.

14. **Develop a system that tells visitors where they are in the site.** Visitors can quickly become lost without landmarks or road signs, and if they can't find their way back to where they were before, they'll leave the site. The site won't be worth their trouble. Other sites will be easier. Some sites change the color of a navigation button to show visitors they're in that area of the site. The button

will keep the color as long as visitors are in that same area. Some sites coordinate colors between navigation buttons and the areas of a site to orient visitors. An orange button labelled Products might take visitors to a page with orange highlights or orange elements, while a red button labelled Contacts might take them to a page with red highlights or red elements. Other sites use small arrows that point to a navigation button to tell visitors, in effect, “You are here,” like a map in an amusement park. Whatever the system, visitors should never get lost in a web site. They will always need a way to get back to where they were and to other areas of the site.

15. **Be consistent.** Each page in a site should have a similar look and feel, sharing the same experience, created by using the similar elements such as color, layout, navigation, etc. Consistency gives a site its identity. Master tables help develop this consistency. Place primary navigation and secondary navigation consistently across the pages. Place text, logos, images, banners, content, sidebars, asides in the same places on each page. Visitors will look for all these things to be in the same places on each page. If these expectations are not met, visitors will feel frustrated and let down. They’ll feel the site is unfriendly.
16. **Provide concise, meaningful content.** Make links rewarding and purposeful. Give visitors worthwhile and useful information when they click on a link. Make the content as short and simple as possible. Provide only as much information as visitors or the design need on each page, not a word or image more. If users click on a linked photo, provide an enlarged photo or an article which the photo illustrates. If users click on a link, the target of the link must fulfill the promise of the link. It must be important enough to click. Answer the question “Why?” each time you create a link. If the answer to this question is meaningful, the link will be meaningful.
17. **Make external links open in new browser windows.** Many sites have a page for nothing but links to other sites and resources. This tradition of providing links for visitors is dangerous in that visitors may leave your site entirely to visit one of the linked sites. To reduce the risk of losing visitors who may not find their way back to your site, make all links to external sites and resources open in a new window. Visitors can then browse other sites, and when they’re done, they can close the front browser window and be immediately back to your site, where they started.
18. **Use appropriate file formats to keep file sizes as small as possible.** The apparent speed of a web site is determined by the speed of the computer serving the web site, the bandwidth available on the Internet, and the sizes of the images in a web page. Two easy ways to reduce the size of a web page is to save images without any extra data, and to use the proper file format for each image.

Check the option to Exclude Non-Image Data when saving GIF and JPEG images out of Photoshop using ‘Save As’ or ‘Export’ commands. Selecting this option reduces the file size because it eliminates all but the absolute data necessary to render the image. The ratio of savings that result from this can be significant, particularly on smaller files.

Use Photoshop 5.5’s new ‘Save for Web’ feature. This feature can account for 75% savings immediately. A nice function of this feature is that users can preview the file size and how the image will appear, with as many as 4 different settings at a time. For best results with JPEG, use JPEG Medium setting as a starting point. For best results with GIF, use GIF No Dither 32 as a starting point. Adjust accordingly when necessary, and save specific settings used with particular web sites to increase your productivity with the ‘Save for Web’ feature.

Use GIFs for images that require transparency and for images with broad areas of

color, such as logos and simple clipart. Avoid creating GIFs of images that have more than 256 colors and/or frequent horizontal color shifts. GIF compression works from left to right, top to bottom, across an image. Each color the compression scheme encounters as it compresses horizontally across an image reduces the efficiency of the compression scheme, like little speed bumps. Use web safe colors (the 216 colors shared across computing platforms that will not dither in web browsers) whenever possible to increase the quality of images. Some images can be successfully converted to indexed colors using a web safe palette without serious color shifts in the final GIF. Other images will exhibit extensive color shifts and should be converted to GIF using an adaptive palette. When using an adaptive palette, use the lowest possible bit depth that produces an image of acceptable quality. Increasing the bit depth beyond this point needlessly increases the file size and download time for visitors. Make interlaced GIFS so that images are displayed a pixel row at a time as the image downloads. Do not make rollover button images interlaced. Since they're not interlaced, they'll pop into place the first time they're displayed. If they're interlaced, the web page will seem to be slow, as if even the small buttons are so large they take a long time to download and display.

Use JPEGs for photographs and for images that clearly have more than 256 colors, unless transparency is required. JPEGs can be made of CMYK or RGB images. Make sure the image to be saved as a JPEG is an RGB image, not CMYK, or the file size will be 25% larger than necessary, storing a 4th color. Test several JPEG compression settings for best results, then save the settings or write them down to use for images in the future. Make progressive JPEGs so that images appear a little at a time as the image downloads. JPEGs do not support transparency.

19. **Use rollover buttons where appropriate to make the site interactive.** Many of the better web page development software packages make creating JavaScript rollovers very easy. A rollover button is an image that changes when the cursor touches it. This effect is actually created using 2 different images of exactly the same size. The second image is swapped out for the first when the cursor rolls over the area occupied by the first image. Rollovers can also contain a third image, again of the exact same size, that replaces the second when the user clicks on the button. The button doesn't change back until the visitor clicks on another button. In this way, some buttons are "on" as long as a visitor doesn't click on another button to enter another area of the site. Both GIF and JPEG images can be used in these rollovers. It is interesting to note that animated GIFs can also be used in any of the button states for an additional effect. Animated GIFs should be used judiciously in rollovers, as they can be distracting for the visitor.
20. **Preload rollover images for each page on which they appear.** The better web packages allow users to preload images that don't appear when the page first loads. Dreamweaver sets rollover images to preload with a simple checkbox. GoLive uses a separate head action to preload images. Freeway sets rollover preloads with an option in the Action tab of the Inspector Palette. When a page with these rollovers loads, and the rollover images (secondary images) have been set to preload, they are loaded into the browser's cache, waiting to be inserted when the rollovers are activated. Preloading the secondary images makes the rollovers nearly instantaneous. If secondary images are not preloaded, browsers must call for the secondary images as the rollovers that use them are activated. This will cause a delay of a second to several seconds as the secondary image is called and downloaded and then rendered in the rollover for the first time. Avoid this delay. Preload secondary rollover images.
21. **Preload selected images when possible.** As noted above, any of the better web page development software packages that create rollovers also allow web designers and developers to preload images.

This can make sites appear faster since the images have already been downloaded from the server. Loading them from the browser cache is faster than downloading them from the server. When selected images are set to preload, the first page will load completely, then the images that the designer has selected as preload images will be downloaded to cache. If the selected images are relatively small, many users will not even notice that preloads are occurring. If they are large, users will notice that their browsers are still working, but the page is whole. When they visit the page that contains a preloaded image, that image will appear quickly. Preloading images does not hinder visitors from browsing the site.

- 22. Don't use counters. Use stats from the domain host.** Counters are an inaccurate measure of traffic to any given web page. Rather than counting unique visitors, counters count each time a request is made to the server, which includes requests for images. So, if a page has 4 images, the counter will show 5 hits each time that page is loaded (1 for the HTML page, 4 for the images). Many pages have more than 4 images. The counter's information, then, may be bloated as little as 400%. Counters were cool once, in that they were automated and adjusted the count automatically. This was a time when the web was a place for personal web sites and counts could be impressive, for those who didn't understand how the counter worked. Counters played to the ego.

Statistics, on the other hand, are invisible and much more professional. They determine unique visitors, and provide much more useful data such as the most frequently visited page, peak visitation times and days, which browsers (though this is distorted now with the release of IE 5 for Macintosh) are being used, top 10 referring pages, and more. Dozens of pages of stats are often collected. Ask your domain host about how to access stats for your domain. The information in the statistics is much more useful than an inaccurate counter.

- 23. Use forms when possible.** While email links can be set to fill in the subject automatically for responding visitors, the best information that can be gathered is the email address of the sender, and perhaps his or her useful response. While email links gather just general information, forms allow designers and developers to gather specific, targeted information that is likely to be much more useful than just an email address. Forms are much more robust. They can direct the information that has been gathered to the appropriate recipients, using an invisible field. Several forms can use the same CGI script, or one form can be used for several purposes but still use the same CGI script. Forms can also verify that the email address conforms to the conventions for an email address (confirming that the @ symbol characteristic of an email address appears in the entry) and that required fields are not left blank. Many forms capture names, addresses, telephone numbers, email addresses, fax numbers, and other data. Many are used for surveys, or for gateways to download pages to gather information to be used for marketing later.

One simple but powerful free CGI email script is FormMail, by Matt Wright. It can be downloaded from <http://www.worldwidemart.com/scripts>. Complete and thorough instructions for configuring the script is included with the download. Once the form is built, the script can be enabled in less than 30 minutes, depending upon experience.

- 24. Be aware of font issues across Mac and PC platforms.** Typically, fonts for browsing purposes on the PC are about 30% larger than their Macintosh counterparts. This means that a 12-point font on the Mac will appear to be about 16-point on the PC. This can destroy the layout of web pages when viewed on PCs if designers do not account for this difference. Images that have been "sliced" may be separated if type overfills one of the cells in that table to make a single row taller than the sliced image in that row, resulting in white space above or below the image, or both. Unfortunately, with the release of IE 5 for Macintosh, fonts in this browser on the Mac will be displayed like their

PC counterpart, at 16-point, unless users go into the preferences and change them so that type will display at 12-point again. But many won't. Despite this change in IE 5, it is still necessary to test web pages on the PC, and in Explorer and Netscape on both platforms at minimum.

- 25. Use fontsets for a professional appearance.** The better web packages such as GoLive, Dreamweaver and Freeway allow users to quickly specify fontsets in web pages. Fontsets conform to the HTML 3.2 standard, compatible with Microsoft Internet Explorer and Netscape Navigator 3.0 and greater. A fontset is a group of fonts that will be used in a web page where specified when possible. For example, GoLive has a fontset called Arial, which contains Arial, Helvetica, Geneva, Swiss and SunSans-Regular. This fontset specifies that Arial will be used if it is on the visitor's computer. If it isn't available, the next font in the set, Helvetica, will be used. If Helvetica isn't available, the next font in the set, Geneva, will be used. If Geneva isn't available, the next font in the set, Swiss, will be used. If Swiss isn't available, the last font in the set, SunSans-Regular, will be used. If SunSans-Regular isn't available, the default font (usually Times) will be used. Fontsets in Dreamweaver and Freeway work the same way. These fontsets are editable, so designers can specify which fonts to display, and in which order.

It is useful to know which fonts users will have on their systems. Fortunately, most users have Microsoft's truetype fonts on their systems, from having used nearly any Microsoft application, including Windows, Internet Explorer, Outlook Express and Word. These applications install the following fonts on the user's system, but they are also available for download from Microsoft at <http://www.microsoft.com/typography/fontpack/default.htm>:

Andale Mono	Webdings	Trebuchet	Georgia
Verdana	Comic Sans	Arial	Arial Black
Impact	Times New Roman	Courier New	

It is therefore a safe bet to use these fonts, along with the standard Macintosh fonts in your fontsets. GoLive's Arial fontset, then, is a good sans serif set because it uses Arial and Helvetica, standards on the PC and the Mac, respectively.

- 26. Give users something to take away from the site.** We all like free stuff. Especially if its free stuff we can use. Simple freebies that can be given away are desktops and desktop tiles of company logos, product logos, etc. Freebies should be appropriate to the site. A graphic designer, for example, might make templates available that visitors can use in PageMaker, QuarkXPress, Illustrator, Freehand, etc. A web developer, on the other hand, may provide buttons and backgrounds for users and other developers. A more complicated giveaway might involve a form that visitors fill out and submit to receive a free inexpensive promotional item such as a poster, pen, cap, etc. In return for their information or experience with a product, they'll receive something that will advertise that product to others.
- 27. Make your site search engine friendly using meta tags.** Meta tags help search engines index your web site. To make your site friendly to the spiders and crawlers that log the information on your site(s), you should include 2 meta tags in the <head> of all pages of your sites. (Frames and framed pages are a special circumstance...see next section). The first is keywords. List but do not duplicate words and phrases that will help visitors find your sites on the search engines. For example, some keywords used at racingfuels.com are racing, fuel, Koch Performance, Power110, Power100, pre-ignition, detonation, and other words found throughout the site that may bring the site up during a search. Keywords should appear in the text of the page which contain them. If not, some search engines consider the pages spam and will not list them. Before completing your keyword list, test

them by using them at various search engines. For keywords that bring up unrelated sites, do not include those in your final keyword list. Most people will ignore the results of such a search and move on to a new search. Study the keywords used in the sites of your competition, also. See which keywords works for them and improve upon them. The second meta tag is description. This is a simple sentence about your web site. Some search engines only display the first 256 characters of your description.

Sample Meta Tags.

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<meta name="keywords" content="Koch Industries, Performance Fuels, Petroleum Group, Koch Performance Racing Fuels, Power110, Power100, racing fuel, high-performance, classic car, stock car, kart, ATV, snowmobile, boat, jet ski, street rod, muscle car, motorcycle, dyno, dyno test, engine dyno, horsepower, torque band, throttle, pre-ignition, winner, winner's circle, vapor lock, unleaded, leaded, conventional gasoline, federal state regulation, collector, enthusiast, off-road, track, race track, quality, consistency, competition, motor fuel, engine">
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<meta name="description" content="Power110 and Power100 racing fuels are manufactured for quality, consistency and performance for stock cars, karts, ATVs, snowmobiles, boats, jet skis, muscle cars, street rods, classic cars, motorcycles, and other high-performance vehicles.">
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- 28. Exploit frames with meta tags and an embedded page with links.** Traditionally, it is thought that framesets hinder a spider or crawler from indexing your site because there are no links for them to follow. But that's not necessarily true. There are 2 things that can be done to make framesets as search engine friendly as standard pages. First, place keyword and description meta tags in the <head> of each frameset in your site. Second, build a page with links to your other pages in place of the common error message displayed to incompatible browsers. Place links to your other pages in the site in this page/frameset so that, when this page/frameset is displayed to incompatible browsers, users can still browse your pages and spiders and crawlers can still index your site for the search engines. Of course, this page will be hidden from visitors with frame-compatible pages. They'll see the frameset as you had originally intended. Voila! With each frameset enhanced thus, spiders and crawlers can still find the pages in your website as they read the meta tags and follow the links embedded in the frameset error message. Dreamweaver, GoLive and Freeway make it easy to embed this page.

There is also the misconception that pages in a framed site cannot be properly bookmarked because the pages, when bookmarked outside a frameset, are likely missing navigation. This is, likewise, not necessarily true. Pages can be forced to load into a frameset if accessed individually. Actions and behaviors for GoLive, Dreamweaver and Freeway provide this functionality. These actions/behaviors may or may not be included in the initial install. If they aren't, they can be downloaded, usually free of charge, from several web sites catering to each software package.

- 29. Decide on a memorable unique domain for your site and its derivations, and check their availability.** Domains (www.domainname.com/org/net) cost \$35/year for registration, sometimes less now that Network Solutions no longer controls a monopoly on them. The easier a domain is to remember, and the more domains that point to your web site, the easier it will be for visitors to find it and to return. The unique domain, once registered, should be printed on all correspondence and marketing materials to drive visitors to the site. This should represent minimal marketing efforts, and guarantees that people interested in what your site offers will be able to find it. Your domain host can register your domain(s), usually for a fee in addition to setup and hosting.

Check the availability of your unique domain and its derivatives using a WHOIS search. Network Solutions, who held a monopoly in the domain name market until 1999, offers a WHOIS search at www.networksolutions.com. Plan to purchase the available domains promptly because they may not be available for long. It is useful to have all domains point to the same web site. Your domain host can set up these pointers, again for a fee. Such pointers will load the same information as the targeted domain, and cost usually about \$25/year instead of monthly hosting fees.

Use organization names for domains.

Many companies use their company names for their domains, i.e. www.kochind.com, www.boeing.com, www.cessna.com, www.apple.com, www.adobe.com, www.macromedia.com, www.macwichita.org, www.bigdogmotorcycles.com, etc.

Use product names for domains.

Some companies register their product names for domains, i.e. www.tuff-n-dri.com, www.typestyler.com, www.watchdogwaterproofing.com, etc.

Use general categories of product offerings for domains.

Some companies also register a general category domain under which their products fall, i.e. www.racingfuels.com, www.premiumdiesel.com, www.highschooljackets.com, www.classrings.com, www.basementwaterproofing.com, etc.

Use advertising slogans as domains.

Some companies register domains using their advertising slogans, i.e. www.guaranteeddrybasements.com.

Use derivatives of the selected domain name to capture more visitors.

Some products have names that can be spelled in several ways or misunderstood when spoken. Take advantage of the alternative spellings. For example, Koch Materials Company manufactures a basement waterproofing product called TUFF-N-DRI. They own the domain www.tuff-n-dri.com, but also own the domains www.tuffndri.com, www.tuffanddri.com, www.tuff-n-dry.com, www.tuffndry.com and www.tuffanddry.com.

List your successfully registered domain names in a text file with your working folder.

If you have a lot of domains which load the same site, they can be easily forgotten or overlooked. Likewise, some of these domains may have been registered over time with one service, others with another service, and others with yet another service. Some of these services may allow DNS changes if your hosting service moves, but you'll need the password and username to make the DNS changes. If any usernames and passwords are associated with the services that registered the domains, keep them in this text file as well.

- 30. Submit your site to search engines.** In order for search engines to know that your site exists, it is a good idea to submit it to the search engines of your choice. There are many search engines to choose from. Members of the mailing lists that I subscribe to have recommended the following search engines, which are the major search engines:

- Yahoo (www.yahoo.com)
- Google (www.google.com)
- The Open Directory Project (www.dmoz.org)
- AltaVista (www.altavista.com)

- Go Network (www.go.com)
- Lycos (www.lycos.com)
- Excite (www.excite.com)
- Northern Light (www.northernlight.com)

Some companies specialize in submitting sites to search engines and preparing sites to be search engine friendly, and some even guarantee top ranking of some kind. Such companies can be found easily using any of the search engines. Submission services are sometimes expensive.

There are also free and inexpensive alternatives that may meet your needs. You can submit to the search engines of your choice, of course, free of charge. Or you can use a free service to do this. One such free service is scrubtheweb.com. Scrubtheweb submits your site to up to 29 search engines, including Alta Vista, Excite, Lycos, Infoseek, and Google. To submit to other search engines, you'll have to submit your site manually. In some cases, submitting them manually might even provide best results.

To submit to many search engines, whether or not you're using a service, will likely require a list of keywords and a short description. If these haven't been prepared beforehand as you've created your meta tags, you'll need them before submitting your site to any service or any search engine. Place these keywords and description into a text file and keep it with your web site working files for quick and easy updates and reference.

- 31. Check your site's efficiency.** This is easier done than said. Go to either www.gifwizard.com or www.websitegarage.com and enter the URL whose efficiency you'd like to check. Both sites provide a heap of helpful information about how well your site performs, and offer a free feature. The free check at GIFWizard checks 10 pages. The free check at WebSiteGarage checks 1 page. GIFWizard provides a range of categories by percentage about the efficiency of your site. WebSiteGarage provides simple, broad efficiency ratings such as Excellent, Good, Fair, and Poor with links to specific information regarding your site's performance. To check entire web sites with GIFWizard, you will need to pay a fee, which starts out at \$69/year. WebSiteGarage, however, appears to be free, but doesn't appear to check entire web sites either. If you're building a lot of web sites, it may be worthwhile to register with one or both of these services. Try both and decide which you prefer. Incidentally, both sites will also compress your images for you, if you so choose, to increase the efficiency of your site. It is a good rule of thumb, however, to provide the best optimized graphics when you publish your site and not rely on 3rd party services.

- 32. Read some good books.**

Web Design Studio Secrets.

by Deke McClelland, Katrin Eismann, and Terri Stone.

IDG Books

Comes with CD

\$49.99

Discusses in detail, the art of online design as practiced by what the book describes as "15 leading web designers." Covers general techniques and philosophies of navigation, web graphics, tables, dynamic HTML, site management and workflow, database-driven sites, GIF animation, Flash animation and interactivity, video, and site promotion. Valuable information for the beginning and advanced web designer.

HTML Magic.

by Ardith Ibanez and Natalie Zee

Hayden Books

Comes with CD

\$39.99

Describes how to setup descriptive links; pull-down menus; pop-up windows; custom status messages; virtual headers & footers; hidden frames; transform graphics as they download; form input without CGI and more. Especially useful with Adobe PageMill and FileMaker HomePage, but still useful with GoLive, Dreamweaver and Freeway.

Secrets of Successful Web Sites: Project Management for the World Wide Web.

by David Siegel

Hayden Books

\$49.99

Part I: In-depth case studies of Land Rover, Salon, Porsche USA, Women's Wire and more describe their web site projects, from concept, designer/client relations, features and completed site. Part II: Complete project management which discusses web teams, web site value, the importance of good design, business problems and where web sites contribute to solutions, project profiles, do's and don't's on behalf of designers, negotiating business terms, site development, feature development, and more.

Creating Killer Web Sites: The Art of Third Generation Web Sites.

by David Siegel

Hayden Books

\$49.99

Describes differences between 1st generation, 2nd generation and 3rd generation web sites; discusses 3rd generation sites in detail, from front page through site architecture; explains and shows how to create professional quality, compressed images for the web; discusses site layout using tables, indents, offsets, alignments, frames, framesets; discusses rendering type for best results, including the use of dropshadows, transparency, initial caps, captions...all this in only Part I.

Creating Killer Interactive Web Sites.

by Andrew Sather, Ardith Ibañez, Bernie DeChant and Pascal

Hayden Books

\$49.99

Using such web sites as Land Rover, Rollerblade, and Power Bar, the authors take readers through building a commercially branded site which contributes to and enhances the existing marketing efforts, from evaluation of the brand through site strategy and structure through design aesthetics through designing and building interactivity to promotion and site maintenance. Includes tips and tricks about how certain effects were achieved with the sites under study.

33. **Visit some good web sites.** There are thousands of them. Here are a few that I recommend to see what's possible on the web.

www.adobe.com

The publisher of Photoshop, Illustrator and GoLive, Adobe offers tips and techniques for all of its software products. Web designers will find the Photoshop and GoLive tips particularly useful. Some tips are provided as training videos.

www.macromedia.com

The publisher of Dreamweaver, Flash, Freehand and Fireworks, Macromedia offers assorted how-to articles about using its products. Most users will find these articles helpful.

www.softpress.com

The publisher of Freeway, Softpress offers a library of actions for use in Freeway. Also provides a gallery of sites built using Freeway. However, the only how-to articles are those which involve the actions in the actions library.

www.digitalthread.com

Marketed as the digital artist's design and production resource, digitalthread.com offers a gallery showcasing web design, houses a Photoshop Action archive, and rates nearly 240 web design firms. An excellent resource which links to many well-designed and executed sites.

www.designshops.com

A site dedicated to the education, community and business of web design. Site contains searchable listings of more than 2000 design shops with links to their best work, how-to articles on designing effective web sites, articles about web design issues, and product reviews. A must-stop site during your web design travels.

www.colormatters.com

This site is about color. It explains what it is, how it is created, how it affects us, historical color matters. Even contains an area specific to color and web design which discusses differences across platforms and the importance of color symbolism in web design.

www.colorvoodoo.com

This site markets the color voodoo series of ebooks (downloadable in PDF), whose titles include Color Voodoo for the Office, Color Logic for Web Site Design, Color Logic, 50 Symbolic Color Schemes, and A Guide to Color Symbolism. Books can be purchased with a credit card and downloaded. No print versions are available.

www.bratta.com

Some excellent DHTML and scripts for some really cool effects. These will take some time to implement, but, if the effects are not gratuitous, they can be rewarding. Requires some knowledge of implementing scripts and/or the time to learn to implement them.

www.javascript.com

JavaScripts that you can use on your own site. Same caveat as bratta.com above. Fortunately, the scripts include instructions about how to implement them.

www.goliveheaven.com

Focusing on GoLive, this site is not updated very often. However, its limited number of tutorials are excellent for both new and advanced users of GoLive. Here you'll discover how to create rollovers, multiple rollovers, and password protected pages.

www.golivehq.com

Another site focusing on GoLive, this site is updated more frequently than goliveheaven.com and offers not only tutorials for GoLive but also forums and articles about designing with GoLive and web design in general.

www.designsbymark.com

This site offers tips for Photoshop, Illustrator, Flash and search engines; an online store specializing in books about web design; and Mark's own Photoshop5.5F/X CD-ROM. Mark's tutorials are worth exploring, and his CD-ROM looks particularly interesting.

www.crazedesigns.com

An online resource for web designers, Craze Designs features tutorials on Photoshop, Dreamweaver, Flash and HTML.

www.surfstation.lu

A cutting edge site with a gallery of links to other cutting edge sites. Features a site of the week, interviews, and expert advice about the process of web design. Challenges web designers to push their own envelopes and produce their very best.

www.k10k.net

Touted as the "Designer's Lunchbox," k10k.net is a wonderful, cutting edge web design news site. Explore this site and see what it has to offer. Some very nice usage of animated GIFs and getting a lot of information to the top layer. There's more here than meets the eye.

34. Join some good web design mailing lists.

www.blueworld.com

The publisher of Lasso, Blue World hosts several mailing lists, including lists for GoLive, Dreamweaver, InDesign, LiveMotion, FileMaker and other software packages. A recent discussion on the GoLive list involved DHTML pop-up menus. Adobe representatives subscribe to and participate in the GoLive list.

www.softpress.com

SoftPress hosts a Freeway mailing list, one of the most amicable and informative lists of which I've been a member. Even if you don't use Freeway, you should try this list. General web design tips, and tips about using Flash and QuickTime, are passed around nearly as much as Freeway tricks. Members of the SoftPress team are frequent participants in this list.