

CHAPTER 38

WEBSITE MANAGEMENT

Chapter Topics:

Website

Website Management

Content management System

Naming your Website

Information Quality

Document management and archiving

What is a Web site?

A Web site is the collection of Web documents (HTML, pictures, and so forth) that you yourself maintain for people to look at over the Internet.

What is Web site management?

To put it simply, as soon as you make more than one Web page you probably find that there are certain things your pages need to have in common in order to make your readers' navigation easy, and to make their experience pleasant and consistent.

Perhaps you want all your pages to have a certain similar look, with the same logo at the top of each one. Perhaps you want clean navigation between pages, with nice "Next" and "Previous" links to guide your reader through your work. Perhaps you want to show an outline of your entire site, with links to all the different pages, as a kind of live table of contents.

Implementation of these and similar features is exactly the sort of chore which, while tedious for a human being, is easily automated by a computer. You're using a computer to write your individual pages already; why not let your computer do the work of tying them all together for you as well?

We can sort all the pages of the site internally, in a database. Whenever you like, you can ask to publish or, as it is sometimes termed, "render" -- the actual HTML pages for your site. The idea is that if something changes, you can generate a new version of some or all of the HTML pages without effort.

Suppose, for example, that after your whole site has been up on the Web for a while, you decide that a certain logo should appear at the top of every one of your pages. Without a site management tool, you would have to open every single page and insert an `` tag for that logo.

But with WebSite Management, you insert the `` tag once, in one place, and then tell a tool (Frontier) to generate all your pages anew. Frontier sees to it that the `` tag appears in each page; now you just upload the pages in place of those already on the Web and presto, the change is made.

Clearly, having a Web site management tool like Frontier is going to make you more creative on the Web. Without such a tool, a simple change like adding a logo to every page would have made you groan at the thought of the tedious effort involved. With it, it's a snap, and now you're free to think what else you'd like to do to your Web site.

This tool lets your Web site grow and change as easily and swiftly as your ideas do. This is important, since experience shows that when a concept seems like a lot of trouble to

implement, people don't make their Web sites as powerful, useful, and attractive as they want them to be.

Suppose, for example, your site consists of three Web pages: let's call them "Manny," "Moe," and "Jack." Let's say that the way you want navigation to work is that each page should start and end with explicit links to the other two: so, "Manny" will have links that say (and lead to) "Moe" and "Jack," while "Moe" will have links that say "Manny" and "Jack," and so on.

You could implement this by hand; but you might make a mistake, and, much more important, if you add a fourth page, and then a fifth page, the job becomes very daunting.

But it isn't a job that really requires any brains, is it? There's a mathematical formula, as it were, involved here: you simply want every page to contain links to all the other pages and not to itself. That's the kind of thing computers are good at.

But with Website management tools you can do it easily. Website management tools can also help in

- A database. This database is capable of storing anything. Therefore, all the basic material for your entire site -- HTML, pictures, whatever -- can live inside the tool.
- An editor. It can edit text. It can also edit "outlines," a very useful format for structuring HTML, and one which Frontier uses in powerful ways to help you maintain your Web pages. So you not only store your site's material; you can work on it there, too.
- Driving other applications -- including your computer's system. This tool thus acts as a kind of command center for mustering the resources you use as you work on your Web site. So, it doesn't have to be able to do everything itself, because it knows how to tell other applications to do it.

Content Management System CMS

Let me first give you a little background on CMSs.

XML stands for eXtensible Markup Language, and is a subset of SGML (Standardized General Markup Language). XML is very much like HTML, except that in XML you can define your own tags. This ability to produce custom documents comes in very handy when you need to track certain types of data very closely, particularly in the worlds of publishing and ecommerce.

For example, for any given article you publish in an online magazine, you can create tags for author's name, byline (if it's different from the author's name), word length, date of publication, title or headline, story body, keywords, and so on. As you'll see later in this article, breaking your article down into these XML tags or nodes allows the CMS to do useful things with all the articles it holds.

A CMS is used to create, publish, and maintain content on a Website. It usually consists of the following pieces:

- A data backend (XML or database tables) that contains all of your articles, news stories, images, and other content.
- A data display component, usually templates or other pages, onto which your articles, images, etc. are "painted" by the CMS for site visitors.
- A data administration component, usually easy-to-use HTML forms that allow site administrators to create, edit, publish, and delete articles in some kind of secure workflow. The data administration portion of a CMS is usually the most complicated, and where you'll likely spend most of your development time.

Over the past decade, different scripting languages have been used to create CMSs, including Perl/CGI, ASP, TCL, JSP, Python, and PHP. Each of these languages has its own pros and cons, but I'm going to focus on using PHP with XML to build a simple content management system.

Requirements

Building any kind of CMS, whether database- or XML-backed, involves the gathering of information that defines the basic requirements for the project. Although many developers groan at the thought of this kind of exercise, a set of well-defined requirements can make your life a lot easier.

Because this is a fairly simple project, and because you're going to do it for yourself, a simple requirements list will do.

- What kind of requirements do we need to gather? Essentially, requirements fall into three major categories:
- What kind of content will the CMS handle? Furthermore, how is each type of content broken down? (The more complete your understanding of this issue, the easier it'll be to create your XML files.)
- Who will be visiting the site, and what behaviors do these users expect to find? (For example, will they want to browse a hierarchical list of articles, search for articles by keyword, and see links of related articles?)
- What do the site administrators need to do? (For example, log in securely, create content, edit content, publish content, and delete content. If your content management system will have roles for administrative users—such as site admin, editor, writer—then your system becomes more complex).

In the interests of keeping this article from becoming complicated, I will choose very basic requirements for CMS:

- The CMS will handle the management of articles only. Each article will have a:
 1. unique ID
 2. headline
 3. author name
 4. author email
 5. abstract
 6. article body that can contain paragraphs and one level of subheading
 7. status (either “in progress” or “live”)
 8. keyword listing
- Site visitors will be able to view “live” articles listed by author name. They will also be able to perform a search on headline and keywords.
- The site itself will consist of the following pages:
 - A home page that lists five articles published on the site and a search function.
 - An article detail page that displays one article at a time.
 - A search result page that will list all articles by an author, keyword, or string entered into the search engine.

Site administrators get a secure login, a way to add more administrators, and easy screens from which to add new XML files, edit existing files, publish files, and delete files.

Naming the Website

For any Webmaster developing a new site, there's a lot to think about -- design, content, promotion, backend development, and satisfying the client. The problem is that many seemingly unimportant items don't get the attention they deserve, and the site's name is one of these.

Why Does It Matter?

OK, so you know that your site is built around a name. You'll use it as a domain, as a page title, in your logo, and possibly in the design. A name is much more than this, though. Your site or business name will be:

- the way in which people find your site,
- the way they will refer to it and, most importantly
- the thing they'll remember when they leave.

If you don't really believe this, think about it for a moment. You want to buy a book on the Web. You don't go to a search engine and type in "books"; you go to Amazon or Barnes & Noble, and of course when you want Webmaster information, you go to SitePoint. Similarly, when you have a good experience on a site, you might say to your friends "I read a great article on SitePoint", or "I found great book prices at Amazon".

Whatever the name of your site -- and however you promote it -- it's vital to realise that the name is going to be a major part of your success.

What IS A Good Name?

So now you understand the importance of your site's name, how can you ensure that you pick a good one? The first thing you must think of, obviously, is domains. There's no point in having a great name for a site if you don't have the domain, so the Whois databases are the place where you'll do your research.

So, what makes a good domain?

- Good Extension
- Short
- Easy To Spell
- Descriptive
- Keywords

Good Extension

If you believe the spam which arrives in your mailbox every morning, .ws is the new .com, .us is the new .com. .tv is the new .com... But the reality is simple: there *is* no new .com. Whatever develops in the Internet industry, the .com domain will always be synonymous with the top Websites. If you're surfing around looking for a site, and you know its name, 9 out of 10 times you'll try .com.

So, for the Website owner who wants their site to be found, the rule is: if at all possible, get a .com name.

But as many of you will know, it's not always possible to get a good .com name that relates to your site. So what extension should you pick instead? I'd say that .net, .info and country level domains are also viable for a Website, but only in certain circumstances:

You can use a .net for most types of sites, but it works best for technology-related sites. If you can get a short, snappy .net, it's almost as good as a .com, but don't bother with anything that's too long or complex.

Consider .info if your site is informational. For example, if I was looking for the Web host 'HostRocket', I'd go to the .com site, but if I wanted to get more information about using it, I'd try the .info version of the domain (which just happens to be the customer-driven informational site). Don't bother setting up a non-informational site on a .info domain, though: it'll just annoy people.

Country level domains are useful for particular Websites. If you're building a site for a business that's established in a particular country, or you plan to aim for a specific county's audience, then you may be better off with this than a generic .com (although I'd buy them both to be safe). As with .net, it's really not worth buying a country level domain for a worldwide site, unless you can get something very short and memorable.

Short

I've mentioned length before, but it's important to understand why short domains are so good.

Firstly, of course, they're easier to remember. Anyone who has tried learning "Hamlet" quotes will tell you that a word is easier to remember than a phrase. Two word domains are probably fine -- three at the most, but if you have a really long domain it will just be confusing, especially if the words aren't capitalised.

A simple name will also:

- roll off the tongue more easily in conversation,
- look more professional and
- have less chance of being mis-typed by potential visitors.

Information quality

Web site marketing is a very complex subject. A couple of years ago it was simply a matter of posting your web site address to a list of search engines. Hundreds of "Web Promotion" companies continue to offer this type of service. Unfortunately this method of promotion can get your site "black listed" on some of the major search engines

Getting listed in the major search engines should be the first step in any web site marketing program. The top 20 search engines and directories are responsible for 400,000,000 searches a day with most of them resulting in a "click through" to a web site. Tens of thousands of search engines and directories exist on the Internet but 90% of the traffic is generated by the top 20. A high ranking with the top 20 search engines and directories is the most cost effective marketing activity associated with the Internet.

We use the same starting point for a new design or an overhaul of an existing site. We ask clients to pretend they are web surfers trying to find a company like theirs while following this four step process.

- Create three or four key phrases that you imagine someone would use to find your site.
- Create three or four key phrases for each of the above key phrases using synonyms of the key word component found in the initial key phrases from step one
- Write a two or three hundred word description presenting the virtues of your web site
- Edit the (200 -300 word) description for a key word density of 5%.

We use the information provided in the above four step process combined with our detail knowledge base containing the most current characteristics of each of the top search engines.

The knowledge base is continually updated with our experience along with input from two outside consulting companies that specialize in reverse engineering search engine behavior.

What do search engine robots consider while indexing a site? Key words. Each search engine or directory has different factors that influence their indexing process. We consider 17 major factors and several minor ones when we fine tune a web site for top search engine ranking.

- The presence of key words in the URL.
- Key words in the Title and the order of use.
- Key words in the Meta description.
- Key words in the text of the site. The right balance is critical.
- Key words used for link names as part of the navigation scheme.
- Keys words used as alternate text descriptions for graphics.

The search engines and directories want to supply the best and most accurate information to their visitors possible. The better they do this the more visitors will return again and again. More visitors directly equates to more revenue from advertisers

Document management

Document management has been around for some considerable time, and predates the web industry. It probably started some twenty-plus years ago with image management, when we suddenly had the ability to store and scan static images. In doing this, we began removing paper from our business dealings, as we now had valid copies of our paper. But then came a need to route and manipulate those images and documents and get them to the individuals that needed them. This is when the DMS appeared.

At this point, we're still dealing with relatively static documents, generated by the likes of Word or Excel, but we needed to keep them moving forward and dynamic within workflow and version-control processes. So, in its simplest sense, DM can be seen as the management of the complete lifecycle of business documents by a company in the course of its operations. The whole DM concept was largely driven by organizations involved in industries where compliance issues were crucial, such as the financial or pharmaceutical industries. A DMS helped these businesses access their documents more efficiently, and version-control capabilities made them certain they were using the most up-to-date document available.

With the advent of Content Management System CMS, documents are no longer relatively passive entities. Simple DM converges with full-blown business process management, and documents become integrated with other systems and applications. Anne Forster, senior systems consultant with FileNet, pinpoints this essential difference between DM and CM: 'The critical differentiator between the two worlds is primarily the transition from being a passive document store to becoming a full-blown object store. A true CMS now represents any content - it doesn't matter whether it's a paper document, an electronic document, or a reference to an object somewhere else. It treats everything as being a true object. Which means you can build complex relationships between objects, giving you greater dynamics within your repositories?'

With this greater dynamism, comes a world of possibilities. Content - be it text, audio clips, video clips, or images in a database - can now be updated automatically and distributed through multiple channels, from websites and company intranets to handhelds. Content can be created once and reused as often as you want.

One also needs to check the syntax and semantics when going for document management.

What happens in the good old method of paper work is a person is limited by the shortcomings of the paper. With the advent of computers the need today is to digitize and overcome the shortcomings of the old methods. Let us have a look at their features.

Library

- You have to maintain the tracks of each record
- After some time you have to renew it as they may be worn out
- If any thing changes you have to prepare a fresh copy
- Only a limited no of users can use the material
- Only local users can be benefited
- Marketing people cant reach larger area
- Slow process
- Bound to make more mistakes and lack of accuracy
- A user cant search easily for his options
- Not all material and queries can be met

Web based Implementation

- Every subject can be tracked and maintained
- You can easily maintain the record of people visited your site and can follow up them
- Soft copies don't worn out
- You can easily implement changes and save them
- Your resources can be used globally
- Provides facilities such as search engines
- Reaches to a larger market
- Any new enhancement and modification can be easily advertised
- Faster access
- More interactive with capacity to handle queries
- Backups can be used for standby
- Even user gets access to large no of suppliers
- More convenient

Document Archiving

We all have seen the Y2K problem and the loss which it has caused. Many companies lost their information. Many files were corrupted. How to recover them. What if the space provided is less and the no of files are increasing everyday. You should have mechanism so that you can accommodate the new files and data and remove the old ones. But if we want to go back and search something in the old files then these file should be maintained and stored separately somewhere. We need to preserve and protect them. This is achieved by document archiving

We have to consolidate & convert your stacks of old paperwork, records, & other important documents into electronic format, easily viewable through your website, intranet, and/or on CD. The increasing demand for this service stems from many business's needs to heighten document security; save physical storage space; preserve information more efficiently & effectively; have backup copies easily transported or stored in multiple locations, including

secure server sites; reduce the cost, risks, and aggravation of relying solely on fragile paper records to last through time, fire, or floods; have a universally compatible electronic archiving format which makes it significantly easier to find, send, or move a particular document; and to enable the viewing of documents remotely from any computer while maintaining full control of access rights to sensitive information.

The web pages are often stored in a compressed form on a magnetic tape or backup disks so that they can be retrieved later. Web archiving plays a major role and people now can go on for new data while protecting and preserving the old ones.

Summary

Website management provides with guideline a developer needs to know. It tells us the various aspects involved. There are certain requirements to be followed for naming a website which will be used by the search engines. Proper documentation is very important and we have to see what all contents should be included. These files must be regularly updated and archived.

Questions

- What do you mean by website management?
- What is content management?
- How a website must be named?
- What is the importance of document archiving?
- Compare library and web based implementation.

