SEO

Punit Ganshani

Search Engine Optimization is a much-talked about topics these days. SEO helps you reach people, communicate your ideas and promote your web application. Punit Ganshani explores concepts that a web developer needs to understand before he hosts his web site.

One of the most-asked questions by my college mates, three years ago, was – how did Google figure out my web site? Haughtily, I said - you need to be different to be noticed. But that's not completely true. Getting listed on a search engine doesn't require any site to be different. Any simple site with correct strategy and content can be published on 'n' search engines without spending any extra penny on it! Developers, with the help of managed code, can play a pivotal role in increasing the PageRank of a web site.

- Google
- MSN
- Yahoo
- Others

Let's explore what strategies we need to implement, as developers, to get our web site included in the top three search engines (Source: WebSideStory, March 2004).

1. Google
2. MSN
3. Yahoo

Page Design

Page design here does not mean look and feel (L&F) of the page. Every page should have a page title. A page title is first looked by a search engine. It acts as a pre-metadata while searching.

- Majority of search engines (including Google, MSN) put a considerable weight on the page title. While searching, page title is the first on which the match is performed.
- As a user when we save a page, it gets saved by its page title. This title is also displayed in your Favourite bookmarks.
- Search Engine Result Pages (SERP) use the page title as the link to the search result.

Page title should be given as much effort into writing as given behind designing the UI of the page. Ideally it can contain a few keywords (of relevance), the company name (if it is to be branded), the business and the location (city, nation, etc.)

Little effort is required in proper UI design as well. A Search Engine Spider (SES) places important on the content found within the page headings as well. Text within H1, H2, H3 and P tags are also a part of spider's web! Generally, text within H1 tag is same as that of the page header.
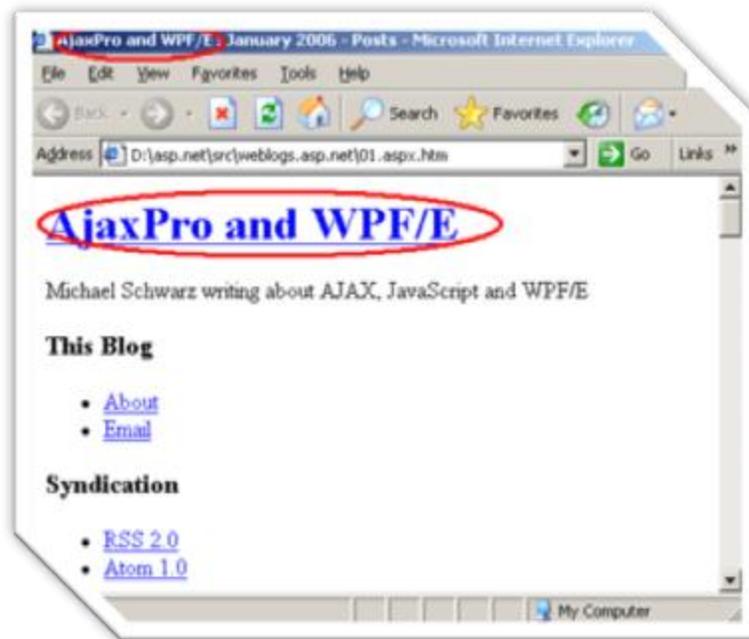

Figure 1: Page Header and H1 Tag

Meta Data

Does our content really count while searching? Yes, it does. Apart from the keywords that we mentioned in the page title, we can add a metadata to each page. A metadata is a set of carefully chosen keywords, and content.

<meta name="keywords" content="C; Journey to C; asp.net; ajax.net; asp.net; Punit; Ganshani; cognizant; MODBUS; author; poet; Nirma; C Divers; President; ASG" />

The above line is generally placed inside the HEAD tag of a page. Keywords are separated by a semi-colon or by a comma (';' or ','). Another important metadata tag is one that defines the content of the page.

<meta name="description" content="Punit; Ganshani, SEO, AJAX.NET, .NET 3.0, ASP.NET, NDoc, FxCop." />

Links: the more the merrier!

Google treats links as one of the important criteria for the PageRank. Navigation from Page X to Page Y is considered as a **vote** (by Page X for Page Y). Google not only considers the sheer volume of votes

received but also the links on the visited page, and the page that requested the navigation. A Cumulative Index (CI) decides the PageRank. Now this has a catch! If a page has a **circular redirection**, it is again a vote! Thus, Google considers it as an important page. This again increases the PageRank – bringing in more search results and more marketable.

Figure 2: Vote (by Page X for Page Y)

Prefer not to have pop-ups using Javascript. The spider is blind to the Javascripts, and all the content in these pop-ups is ignored. If our menu uses a Javascript based menu, spider will find it difficult to traverse to the sub-menus. Regular hyperlinks should not be placed in a menu!

Links inside our web application helps the search engine to categorize pages. If our page is linked from other web sites (which are already on the search engines), the probability of our site getting listed on an engine increases. Let's see how we can get linked from other sites:

- Blogging/Publishing: Posting blogs is now one of easiest and free ways to promote ourselves. Apart from hosting the site, we ought to put in efforts in getting it published. Another easier way is to get some good content published on a famous site. We may become a part of a professional body or an institution since they already have links to many sites.
- Community: Start contributing to various online communities. Put your website as your signature.
- Get partnered: Go for some partnerships with media and your clients.

Smart Programming?

Does the spider fail in case of smart dynamic programming? Is it true that pages that have a Query String or the pages that retrieve information from database are not scanned by search engines? Well, it's untrue! Search engines are smart enough to scan pages with Query Strings (like *?pageId=1234*), and pages that fetch information from database (like forums).

However, not much testing has been done on pages with multiple query strings (like *?PageId=1234&Auth=false&user=guest*). As a preventive measure, it is advisable to pass parameters in session variables. This enhances the security level also.

Forced Inclusion

If we are lucky to attract even one search engine, it becomes easier (or rather assured) to be listed on other search engine sooner or later. If somehow, even after trying all these tweaks, no search engine captures our site then we can explicitly submit our site URL to them. The search engines (after we have submitted our URL to them) keep a watch on the URL. If our site fits in their search criteria, it is included in the search results, else it is discarded.

By focusing on key areas mentioned in this article, one can improve the standing/PageRank with search engines and market on their products and services. However, SEO is an ongoing process that doesn't stop with this small piece of advice. There's lot more to do, lot more to work on to turn dreams into reality!

Punit, author of book Journey to C, is working with Cognizant since past one year. He has authored over 18 whitepapers for national and international journals. He has delivered sessions on C, OOPS, Ajax.Net, ASP.Net, Security, NDoc and Team Building at various junctions.