SEO

Search Engine Optimization

ITS Web Services

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Definitions/Acronyms

- **SEO:** Search Engine Optimization
- **SEF:** Search Engine Friendly
- **SERP:** Search Engine Results Page
- **PR** *(Page Rank)*: Google technology developed at Stanford University for placing importance on pages and Web sites
- **RSS:** Real Simple Syndication
- **CMS:** Content Management System

Definitions/Acronyms

- **Web Crawler** *(aka Spider, Robot)*: A program or automated script which browses the WWW in a methodical, automated manner.
- **Organic results:** Listings on SERPs that were not paid for
- **Sponsored listings:** Listings of paid advertisers on SERPs
- **Keyword/Keyword Phrase:** A specific word or combination of words that a searcher might type into a search field.

Search Engine Optimization

- Most people know they should be doing it
- Not many actually do

Why Not?

- Don't realize how important it is.
- Unsure where to begin.
- Unaware of what tools to use.
- It's a lot of (ongoing) work.
- Often the last step in Web site development (but doesn't have to be).

How important is SEO?

- 90% of Internet users use a search engine in a given session.
- Approximately 94 million adults use the internet on an average day.
- This means approximately **85 MILLION** people use search engines on an average day.
- 57% of users have searched the Internet for school or training info

Search Engine Optimization

If we do not optimize our Web sites and content for search engines, we are doing a disservice to our audience and the University.

Where to Start?

Spider's Eye View

Where to Start?

Spiders are in effect blind

- Can't see images
- Can't see inside documents (sometimes)
- Can't see Macromedia Flash (usually)
- Can't see advanced scripting (usually)
- Can't see streamed content like movies, etc.

SEF Architecture

Semantically Correct Code

- XHTML describes the content, not the presentation
- Structured organization of heading tags, lists, etc.
- Using tables to display tabular data, not as a page layout device

SEF Architecture

CSS Driven Layouts

- Use of cascading style sheets to control the look and layout of the pages
- Allows you to separate content (semantic code) from presentation (CSS)

SEF Architecture

Follow W3C Standards

- XHTML 1.0 or higher
- XML 1.0 or higher
- CSS Level 1 & CSS Level 2
- DOM Level 1 & DOM Level 2
- Standard JavaScript (ECMAScript 262)
- More info at http://www.w3.org/

SEO Friendly Architecture

Together these principles improve not only SEO, but usability and accessibility as well.

Optimizing Your Content

- Use text or text alternatives
- Keywords
- Content relevance (theming)
- Links/linking strategy

Search Engines LOVE Text

- Assume anything that isn't text isn't going to be searchable
- Treat search engine spiders like a disabled user
- Content needs to be and fresh (frequently updated)
- Create keyword rich content

Keywords

How to determine keywords?

- Think about which search terms a user is likely to use when searching for the information your site provides
- Tools to aid in determining keywords
  - Wordtracker (not free)
  - Google AdWords Keyword Tool (free)
- Examine site statistics: What search terms have been used to find your site?

Keywords

Choosing Keywords/Phrases

- Don't be too general
  - Hard to optimize for
  - Lots of competition (think globally)
  - Tend to get the wrong audience
- Don't be too specific
  - Not much competition but not many searches
  - Specific terms sometimes "clog" content

Keywords

Example: med.unc.edu

"Med School" – Too broad

- Alaskans may not want UNC
- Lots of competition – think of all the "med schools" in the world
- Isn't really relevant or helpful to many searchers

Keywords

Example: med.unc.edu

"UNC School of Medicine Department of Cell and Molecular Physiology" – Too specific

- Search terms rarely exceed 3 words
- So specific, one instance on a page is sufficient for this page to be found

Keywords

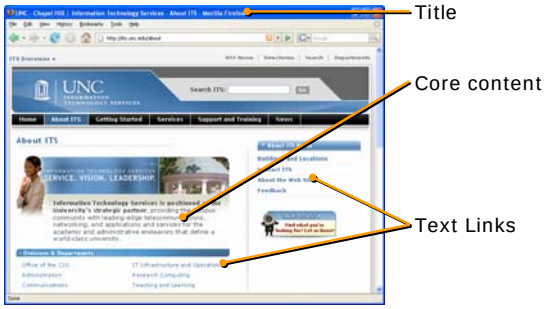
Example: med.unc.edu

UNC Medical School – Just right

- Short – three words
- Specific but encapsulates a general idea
- http://med.unc.edu/ ranks #1 for this phrase

Keywords

Critical page elements



Keywords

Keyword prominence

- How prominent the keywords are on a web page (the more prominent the better)
- Should be placed near the top of the page, in the title `<title>`, headings `<h1>`, etc.
- Use keywords in anchor text (Search Engine Information, not Click Here for search engine information.)

Keywords

Keyword density

- Percentage of content represented by keywords
- Title (`<title>`)should have up to 25% keywords
- Content should have 2-8% keywords
- Tools available to assist in analyzing keyword density
  - http://www.keyworddensity.com/
  - http://www.webconfs.com/keyword-density-checker.php

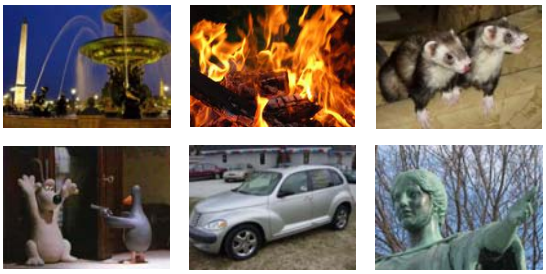
Keywords

Keyword proximity

- How close/closely related are the keywords on the page
- The closer the better: If the search phrase is "search engine friendly":
  - A **search engine friendly** site is an accessible site. (Better)
  - A site that is **friendly** to **search engines** is also accessible. (Not as good)

Content Relevance

Theming:
Keep content on target



Linking Strategies

- Links from outside Web sites, depending on the referrer, convince search engines that your's is a definitive source.
- Do not join automated linking programs
- Make it easy for users of your site to link to you
- RSS/syndicate (e.g. headlines)

SEO and CMS

System-Wide:

- W3C compliant code
- Use auto generated site map
- Deploy Google and Yahoo site maps
- Use search engine friendly URLs

SEO and CMS

Template-Level:

- Reduce template "code clutter"
  - CSS driven layouts
  - Includes for scripts and CSS
- Use text as site navigation (no images, no Flash)
- Ensure links are spider-friendly (no DHTML/JavaScript)

SEO and CMS

Page-Level:

- Effective use of keywords
- Encourage effective meta tags
- Alt tags
- Eliminate spelling errors
- Reduce (better yet prohibit) duplicate content

Common Myths

Meta Tags

- Myth: Adding Meta Tags will increase your site rank.
- Reality:
  - Meta Tags alone won't do it
  - Irrelevant tags may get penalized
  - Relevant keywords and description tags are cached and used as descriptions in SERPs

Common Myths

Keywords

- Myth: Keywords/Keyword density is everything
- Reality:
  - Nothing is “everything”
    - Google’s PageRank: over 200 factors
    - MSN’s Ranknet: over 600 factors
  - Content must be relevant
  - Keyword stuffing and spamming can result in penalties

Common Myths

Domain Names

- Myth: Multiple domain names increase rankings
- Reality:
  - Multiple domain names or “mirrors” are not listed and may hurt ranking
  - Micro-sites or “doorway” pages should have relevant content to avoid penalties

Common Myths

Suggesting a Site

- Myth: Repeatedly submitting a URL will increase ranking
- Reality:
  - Submitting a URL multiple times does not affect rankings
  - Submitting a site is useless if the site is not search engine friendly

Summary

- SEF Architecture
- Update content frequently
- Use keywords in the content
- Use text or text alternatives
- Use keywords to link to pages
- Keep pages on topic
- Generate interest in/links to your site
- Syndicate content

References and More Info

- http://www.w3c.org/
- http://pew.org/
- http://www.seochat.com/
- http://searchenginewatch.com/
- http://www.sempo.org/
- http://www.webconfs.com/
- http://www.cmswatch.com/

Thank You!