Infrastructure Committee Report:
Student Recommendations Regarding Improvements to the SLIS Website

Special Thanks to Dr. Martens and the students in her Fall 2007, 5433 Class.

Introduction

This presentation will offer the members of the Infrastructure committee insights and recommendations on ways to improve the current SLIS Website. These recommendations were solicited from currently enrolled students in the KM/LIS program; specifically from students enrolled in Dr. Martensí Fall 2007, 5433 (Design and Implementation of Web-Based Information Services).

A brief explanation of the way in which Dr. Martens structured her class will aid in understanding later information contained in this report. Dr. Martens offered four texts for the course:


Students were advised that they could choose one of the above four texts to focus on as their specific area of interest for the semester. Small discussion groups were then assigned for the duration of the semester based upon the studentís choice of text. As it turned out, the Krug text received the most interest and, thus, generated four small discussion groups. Battelle, Morville, and Weinberger generated one discussion group each.

The above authors each reflect in their writing a specific area of Web design, namely: Battelle = findability, Krug = usability, Morville = accessibility, and Weinberger = connectivity. As the semester progressed students were asked to compare and contrast the views of the chosen authors with other
assigned readings and a number current issues. Consequently, students became more and more observant/conversant with the various specific areas of Web design and implementation.

As partial fulfillment of the course requirements, students were asked to demonstrate their understanding of the key concepts involved in their chosen book by using those concepts in some way. Dr. Martens left it up to each group to determine the way in which they would demonstrate their particular groupís learning. At some point, some person suggested the possibility of examining the current OU SLIS Website in order to fulfill this aspect of the course requirement. And, as is often the case with this sort of thing, a meek and hesitant suggestion soon garnered an avalanche of interest. Though not every group from the 5433 course chose to participate in this project, more than half the students did contribute.

What follows, then, is respectfully submitted for consideration by the Infrastructure Committee, on behalf of the students from Dr. Martensí Fall 2007, 5433 Design and Implementation of Web-Based Information Services course.

Methodology

In order to gain a more objective opinion of the way in which the OU SLIS Website is presented, students were encouraged to view the SLIS Websites of other schools throughout the country. Individual student observations/discoveries were then brought back to the 5433 course D2L discussion board for discussion and brainstorming. As discussion ensued, various areas of responsibility seemed clear.

The Krug book was the most popular choice among students and, thus generated four discussion groups. Each group was given a designation, Krug 1, Krug 2, Krug 3, and Krug 4. Krug 2 opted for another group project and so is not represented in this presentation.

Krug 1 and Krug 4 collaborated significantly in their efforts. They produced an Excel spreadsheet, and a mock-up Web page. The bulk of todayís presentation will cover this material. The Excel spreadsheet is being sent as a separate attachment. The mock-up Web design URL is
contained in Appendix 1 and was put together by Jennifer Goade of Krug 1 and will be covered by her more extensively later in this presentation.

Krug 3 put together a Blog to discuss the SLIS website and can be located at http://krugstreet.blogspot.com/. I will also include a summary of their suggestions as appendix 2 to this presentation.

Although the Morville group did not officially participate in this effort, one member of their group did put some significant time and effort into considering the SLIS site from the perspective of Morvilleís íAmbient Findability.î His observations are included as appendix 3 to this presentation.

The Battelle group was interested in exploring the ways in which the SLIS site could benefit from different search options. They put together a very clear and thought-provoking presentation that is included as appendix 4 to this presentation.

Presentation:

PowerPoint Slides

Appendix 1: Combined efforts of Krug 1 and Krug 4

OU SLIS Redesign Navigation Mock-Up And Excel Spreadsheet


For Excel Spreadsheet see separate attachment.

Krug 1 is: Michelle Farabough, Jennifer Goade, Ken Lewis, Steven Shelton, and Linda Summers
Krug 4 is: Julia Layman, Joshua Schell, Amy Wharton, and Cindy Yell


To the Committee:

Below is a list of suggestions complied as part of a discussion group for LIS 5433. Our suggestions are based on the principles outlined in Steven Krugís web usability book, íDonít Make me Think.î If we could propose one thing above all, it would be consistency in the design of
the website. We appreciate your
consideration of these suggestions. We are proud to be a part of OU
SLIS, and we think the Website should
reflect the pride of students, faculty, and staff.

Our Suggestions:

1) Use some conventions so that the site isnít quite so confusing. î First, the site name and logo should be
in the upper left hand corner. It should be more set apart so the page
looks less crowded. î The tabs at the
top should be more defined so that it is obvious that they are
clickable. Remove other/redundant tabs. Only
one set is necessary.

2) The site has no visual hierarchy. The job announcement is good, but
it is not part of the main content.
Items such as about SLIS, programs, staff, etc should be the main
content in the center of the page.

3) Edit, edit, edit that text! This is one of Krugís main principles
and it is one that the SLIS Website most
egregiously violates. It is just overall way too busy with unnecessary
text including the mission statement
and the ALA accreditation symbol. All of the pages have too much text.

4) A Search box would be a huge help in navigating this site. It needs
to be obviously available. Users
should not have to find it.

5) Navigation: site map should have main points the same as headings
on home page with verbal, clickable
list of each link for each page; this means the main headings need to
be re-worked and the same on both
pages.

6) Teases and promos on main page should be pictures with links, i.e.
job announcement, staff/OLISSA
announcements, program changes, visiting speakers, pictures of
Bizzellóitís a beautiful placeóletís show
it off.

7) Color/Design that makes the page clear, readable and visually
appealing. One reoccurring theme in our
discussions was the drab appearance of the current website. It is
boring. Please fix it. Some Flash would be
an asset to the site.
8) Please proofread the site—there are many typos that make the site look unprofessional.

9) Please do not make users scroll or click so much to find what they need. It makes us think too much! as Mr. Krug is fond of saying.

Krug 3 is: Wendy Gabrielson, Alexandra Shadid, Rebecca Webber, and Whitney Walker

Appendix 3: Observations on the SLIS Website using Peter Morevilleís ÒAmbient FindabilityÓ
by Ethan Atwood

The Object

(1) The SLIS website: http://www.ou.edu/cas/slis/
Its "Aboutness"

(2) This item is a digital object. It is composed of digital text and images. It includes text in html and pdf files. It covers subjects of interest to faculty, students, and prospective students of OU's School of Library and Information Studies (visit the website for a detailed list). It is an object designed for this population.

* Increasing its Findability *

(3) In a companion essay to Ambient Findability, Morville expands on his cancer.gov findability example. According to Morville, one can increase the findability of a digital object such as ou.edu/cas/slis/ or cancer.gov through the following guidelines:
   {Note, the following example is based on hypothetical search terms which is not ideal}
First, determine the most common phrases and keywords the target audience is using to find the website (Morville 2005, 19). For example, knowing the SLIS abbreviation, I Googled "SLIS OU" and the site was the first match. A prospective student might Google "'library school' Oklahoma," for which the site is also the first match.

Second, take the most common phrases and keywords and "include them in your digital body text, navigation links, page headers and titles, metadata tags, and alternate text for graphic images" (Morville 2005, 19). Assuming, for example, that a common search term for a prospective OU SLIS student is "'library school' Oklahoma," the SLIS website does not include this term in the text of its homepage,
although it appears in links pointing to the page.

Third, try to avoid the use of the following items where possible: "drop-down menus, image maps, frames, dynamic URLs, JavaScript, DHTML, Flash, and other coding approaches that may prevent a search engine spider from crawling your page" (Morville 2005, 19). A good thing about the SLIS website is that it does use few of the aforementioned items, so the majority of the text will be picked up by a search engine. Many of the pages on the SLIS website are in pdf form, but this is not a barrier to finding the object through a search engine. I took a line from one form, "APPLICATION for the Master of Library and Information Studies," and Googled it with the OU SLIS page from which I copied the text returning as the first hit.

Fourth, utilize direct links from the homepage, navigation system, and site map to important pages in order to increase the page popularity ranking of website pages (Morville 2005, 19).

Fifth, improve the "keyword density of the page" (Morville 2005, 19).

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Appendix 4: The Battelle Group,
Proposal for the Search Feature of the University of Oklahoma's School of Library and Information Studies Website.

Presented by: Adam Brennan, Tsai-Ling Han, and Sheri Perkins

Search remains an important tool for information discovery. John Battelle states that search defines our interactions with the Internet (Battelle 2005, 4). The business of search is thriving and further indicates the importance of this function for information seekers. Any decision about the search function of the University of Oklahoma's School of Library and Information Science (SLIS) website is a significant one. After researching the topic, examining competitors and innovators, and
incorporating our user experiences, our group has compiled suggestions for the committee about this feature of the website. We propose that users are given three options from a single search box: general web search, site-specific search, and a vertical or domain-specific search. Two options for site-specific search, Google Custom Search and IBM Omnifind Yahoo! Edition, and one for domain specific search, Rollyo, are reviewed in this proposal.

Google Custom Search Engine

Introduction and Purpose:

The ability to search a website or offer a search portal to other websites has become standard practice on many websites. While many options are available to customize a web page with searching capabilities, Google offers ease, prominence, and access to a powerful set of searching algorithms that has put the name of Google on practically every searcherís tongue. For these reasons and those that follow, utilizing the Google Custom Search Engine is highly recommended for any web page. Google Custom search comes in two varieties, the standard (free) and business (subscription) versions.

Advantages of the Free (standard) Google Custom Search:

- Equips the web page with the same powerful indexes used by Google.com.
- Extremely easy to use: The free Google custom search requires the user to cut and past only a few bits of code to implement the searching features to the SLIS website. In simple terms, no programming experience is necessary to apply the Google Custom Search to the web page.
- User familiarity with both the Google name and its operations.
- Ability to host results of search on own web page.
- Ability to customize searches to direct users to specific pages, either abroad or on SLIS website.
- Simple ìno nonsenseî design to keep web page uncluttered.
No advertisements with results for educational institutions.

Advantages of Google Business (Subscription Service):

- Same as free version.
- Email and phone support.
- Access to XML coding, allowing complete customizability.
- No advertisements with search results regardless of use.

Disadvantages to Google Custom Search:

- Google Privacy policy can allow Google to archive search results for company use.
- Customizability is limited by financial investment.
- No ability to save searches.

Implementation on Web Site:

Implementation of this search feature takes only a few minutes. Sign up at http://www.google.com/coop/cse/ and spend a few moments changing the appearance of the searching tool to match the design of the SLIS web page and to add any specific sites that will be searched. Upkeep on the engine is virtually nothing.

IBM Omnifind Yahoo Edition (OYE)

IBM's Omnifind Yahoo! Edition might be an option for an SLIS site specific search. Primed as an alternative to Google's search appliances, IBM teamed up with Yahoo to provide this free enterprise search application. The framework is IBM's Unstructured Information Management Architecture. IBM uses open-source Apache Lucene software for the search engine. Yahoo, in turn, supplies the user interface (UI) and web search services. In this way, the application allows for intranet and web search through a single interface. General information about the product as well as advantages, disadvantages, and system requirements are considered.

General Information:
The free version can index and search up to half a million documents on an intranet. The 500,000-page limit is a result of licensing restriction rather than a performance issue.

Documents are cached in original format and converted to HTML on demand for viewing.

Administrator interface is used for configuring and checking indexes.

Optional telephone support for an annual cost of $1999 per server

Default search finds pages with all match terms. Query processing supports Internet Query Operators (−, ""), Boolean AND, OR, NOT and parentheses, and metadata field tags for URL, doc-type, title, keyword and description

Gateway to products with more capacity and functionality.

Advantages:

Simple to use with 3-click installation and 1-click start-up.

User organizations can legally run multiple copies of the software, each on a different server. Searching would remain per server, though, not across servers.

Although it is based on Yahoo's UI, the interface can be customized with branding, UI elements, and graphic tools to manipulate its look and feel. The customized UI output (XML/XSTL/HTML, HTML snippets) is embeddable.

Search results are also customizable via the administration interface.

Synonym lists can be imported (from XML) or defined

Relevance ranking may be tweaked according to web link analysis, URL or file path depth, and document modification date.

Spell check function

Indexes over 200 file types, including text, HTML, rtf, Microsoft Word, Excel, PowerPoint,
WordPerfect, etc. (uses Stellent Outside In file converters), up to 50 MB per document

- Crawler does continuous checking, adapting to document change frequency
- Indexes and searches over 30 languages including: Arabic, Czech, Danish, German, Greek, English, Spanish, Finnish, French, Hebrew, Italian, Japanese, Korean, Dutch, Norwegian, Polish, Portuguese, Russian, Swedish, Simplified Chinese, and Traditional Chinese.
- Translates into 15 languages.
- Automated duplicate detection and deletion.
- Index stores stemmed form of words.
- Search suggestions (called "Featured Links" and "Shortcuts") editing via the administrator interface or XML file import.
- Reports include general metrics, crawled URLs, response times, popular queries and no-matches
- Open and extensible, it is possible that third-party developers will start producing add-ons and variants using the Lucene APIs.

Disadvantages:

- Cannot save searches or search history
- Synonym lists are not provided, synonyms must be defined
- Keyword searching only in this edition instead of the semantic search functions available in some of the other IBM products.
- Inability to schedule crawls of file servers; crawls are performed at startup or manually.

Implementation Requirements and Considerations:

- Supported operating systems include Microsoft Windows XP, Windows 2003 Server, and for Red Hat and SUSE Linux.
- Supported browsers are either Internet Explorer 6 or Mozilla Firefox.
However, IBM states that IE7 will be supported before long.

For the maximum 500,000 documents, the minimum hardware specified for is a server with two processors, running at a minimum of 3 GHz, 2 GB of RAM and two 250 GB mirrored hard drives, with at least 80 Gb free. This product will run on personal computers but it is not recommended except for in evaluation, testing or development scenarios.

OYE should not be run on a shared, hosted server environment.

Rollyo (http://rollyo.com/): Roll Your Own Search Engine

Rollyo, which is using Yahooís search technology, is a free tool to make a personalized search engine. It is a very easy way to create your own search engine.

Easy steps to create your own search engine.

1. Click iCreate Searchrollî
2. Give a name (topic) to your search engine and enter up 25 website addresses that you think are the best websites related your topic.
3. Go back to the main webpage, and your own search engine will show on this main page. (You do not need to sign in if you just use your own computer.)

If you want to use your own Rollyo from any browser or computer and share your search engine to other people, you can register and then you can get a web address.

Over-all merits:

Rollyo allows you to target a subject by limiting websites that you think will be the best results. You can add up to 25 websites that considered authorized and the best websites (or blogs or news) to your searching list. Therefore, you can get information within your customized website lists and the result suit you the most.

Once you create your own search engine, you can add your own Rollyo RollBar Bookmarklet to your FireFox explorer, so you can access all your Searchrolls and start searching. You can also select other search engines such as Google or eBay or any other Rollyo search
engine created by others to your searching option, so you can choose one of them that can probably give you the best result.

Disadvantages:

There are limited 25 websites that you can add to your top lists. However, there is no limitation of making your own search engines, which means you can create as many your favorite search engines with different topic or subject as you want. The other disadvantage is you can only add your RollBar Bookmarklet to FireFox web explorer.

Implementation:

This free and useful tool can be a good option and used in our SLIS website. First of all, we can choose up to 25 best websites and blogs/wikis/news (including our own websites) related to our library major to our own Rollyo website, so people can search information about us within the websites that we selected.

In Conclusion:

Obviously, the search applications described could be easily implemented in the redesign of the SLIS website. More importantly, any of these applications would be useful for information seekers. The university's website guidelines state that the home page should leave readers with a positive impact and the impression that warm and friendly people stand ready to serve their needs at the university (Division of Public Affairs n.d., n.p.). Providing the appropriate search technology would support this endeavor. All three options presented have their merits and strengths. While it should be noted that there are far more options than what has been presented here, these three offer quintessentially desired features, and certainly would aptly serve the needs of the community.

References