Proposal of Project & Research Activities

Company:	Snohomish and Island County Public Library System
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URL:	http://www.sno-isle.org

The Snohomish and Island County Library system website presents an excellent candidate for a research-driven overhaul. It is sectionable into an appropriate and manageable size; has numerous calls to action and form functionality; contains redundancies, nonstandard navigation, naming and appearance; and has other issues that research can address.

History

The Snohomish and Island County public library dates back to 1944. Funding for the library primarily comes from property and timber taxes, in 2016 their budget was in excess of 51 million dollars. This library provides services for 713,000+ residents encompassing 2,260 square miles within the Snohomish and Island counties through 21 community libraries, classes, online services, and libraries on wheels. Their library on wheels program serves preschools, day cares, senior facilities, the homebound, and remote communities with books. The mission of the Snohomish Public Library is to be a community doorway to reading, resources, lifelong learning, and a center for people, ideas, and culture. By following key principles such as upholding the First Amendment, promoting literacy and providing collections and services that are responsive to the diverse interests of individuals and communities the hope to accomplish their mission.

The Sno-Isle, as a library system, has goals of supplying books and information to the public in a user-friendly and accessible way. Its business goals are not profit-oriented; rather they seek to make the best use of the resources that they have for their library users.

Objectives

It appears that several different revisions have taken place on the Sno-Isle website over the years, each building upon the detritus of the last and leaving the site with a mismatched design and questionable functionality. The objective of our research is to enhance our understanding of the current structure of the site, the effective structures of competitor's sites, how the current site is navigated by users, and what changes can be made to improve the functionality and overall quality of the site. Taking the time to research these areas and gather the necessary information is an important step towards saving Sno-Isle time and money. Sno-Isle will benefit from these changes in the following ways:

- An effective online FAQ/Help section may reduce time spent by librarians answering simple user questions.
- Users may be more likely to pay fines if there is an online pay option.
- The more satisfied users are with the library, the more likely users would be to make donations.
- Identifying competitor mistakes will help the Sno-Isle site to make an effective and useful redesign.

Methods

As a team, we will be conducting these following four methods to better improve the site for the Snohomish and Island County Public Library:

Competitive Analysis

A competitive analysis is an in-depth examination of multiple other library systems' sites. Analyzing competitor sites can help to show where they are excelling in comparison to the Sno-Isle system, and what can be gleaned from their sites. This may expose holes in the Sno-Isle site, or simply better ways of doing things and why they negatively affect the user experience. Competitive analysis can also be helpful in illustrating specific site layouts or navigation structures that are already in use and that library users may be comfortable with. By understanding the pitfalls of the current site we will be able to figure out the best changes that could be implemented to be in line with the organization's key principles as we'll as help achieve the mission and its goals.

Usability Testing

Usability testing is an evaluation process in which potential users are given specific tasks to complete on the website while under supervision. This technique is helpful for identifying weaknesses in the site and getting perspectives from front end users. We will ask users to perform tasks such as search for a book by genre, download the app from a mobile device, search with misspellings/homophones to find a book, and chat with a librarian. They will not be led along or given any help in doing this. We will observe how much time it takes to perform a

certain task, as well as their satisfaction level and general impressions of the site structure. This test will clearly identify the major changes that must be made in order to improve the user experience as well as identify the learning curve.

Heuristic Evaluation

This is an evaluation method performed with usability experts who evaluate the site's usability according to accepted principles, and is a good source of quick authoritative information and constructive criticism. We will be utilizing Jakob Nielsen's 10 Usability Heuristics for User Interface Design, which are as follows:

Visibility of System Status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

Match Between System and the Real World

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

User Control and Freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

Consistency and Standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

Error Prevention

Better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions, or check for them and present users with a confirmation option before they commit to the action.

Recognition Rather Than Recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Flexibility and Efficiency of Use

Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

Aesthetic and Minimalist Design
Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

Help Users Recognize, Diagnose, and Recover From Errors
Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Help and Documentation
Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Card Sorting
Card sorting is an organization method in which cards will be made for each 'node' or individual page of the site (however because this site is so extensive we will use major navigational pages and not individual book pages), and test users will organize and sort these cards into groups, which will inform the restructuring of the navigation. For this study we will be using a card sorting software to test the users and organize the information. The purpose for this study will be to create an intuitive site infrastructure that is informed by the preferences of the target demographics.

User Profiles:

The users who would visit the libraries website vary greatly across many demographics including age and education.

User	Goals	Tasks
Senior Citizen ● Old ● Tech-illiterate, retired ● High school education	● Look for archives, books, videos ● Locate their library	● Search inventory ● Get library card ● Browse by section ● Look for recent "best sellers"

Students ● Ages vary from grade school to college ● Pretty tech-savvy the older they are ● Attends school in the vicinity	● Locate their library ● Do research on specific topics for school ● Peruse available books by interest	● Find research materials/resources, scientific journals, archives ● Homework help ● Search for books ● Put books on hold ● Find audio books
Parent of Small Child ● Looking for fun kids' library activities/events ● Educate their children ● Has a kid under 8 yrs	● Easily find an appealing, child appropriate library event/activity ● Use a calendar of monthly activities for easy planning ● Find volunteer options.	● Find and browse calendar of library activities for children ● Find times and locations of activities ● Find recommended books by age
Educators ● Middle-aged ● Master's degree in education ● Lives and teaches in Snohomish county	● Look for activities for their students ● Research availability ● Looking for information about setting up field trips	● Find information on educational activities available at the library ● Find resources related to education
Elementary School Aged Child ● 7-12 year old child ● Elementary school education ● Semi-tech literate ● Has limited access to the internet/parental controls	● Play fun/educational games ● Look for age appropriate books ● Find information about age appropriate events and activities	● Navigate to the kids section of the site ● Use the calendar to find information about events and activities ● Search for books

Recruitment & Incentives

This study will require several participants who will be recruited from the Business Information and Technology department of Seattle Central College. As this project is for the ITC 298 class at Seattle Central, the study will pull from among students in the class who will receive a full participation score.

Responsibilities & (Proposed) Schedule

April

4/22/16 - Proposal of Project & Research Activities

4/29/16 - Website Competitive Analysis Report

May

5/06/16 - Heuristic Evaluation for Websites Report

5/13/16 - Card Sorting for Website Information Architecture

5/20/16 - Card Sorting for Website Information Architecture Report

5/27/16 - Usability Testing for Website Kit

June

6/03/16 - Usability Testing for Website Interface

6/09/16 - Usability Testing for Website Interface Report

6/17/16 - Research Activities Final Presentation