The background of the page features an abstract graphic design. It consists of three concentric circles in shades of blue, arranged diagonally from the top right towards the bottom right. Two thin, light blue lines intersect the circles, creating a sense of depth and movement. The overall aesthetic is clean and modern.

MacDonald Designs: The Robert Addison Library Project

User Experience design and Information
Architecture

Initial design considerations and research for the Robert
Addison Library Website and Catalogue. This was initially
written for LIBR555 in December 2009 with minor
revisions in September 2016.

Neil MacDonald
9/12/2016

Table of Contents

Part One	4
Mission Statement	4
Objectives	4
User Needs Analysis.....	5
Stakeholders	5
The Robert Addison Library & The Archives Committee	5
Researchers and Scholars	6
The Parishioners of St. Mark's Anglican Church	6
Interested Members of the Community	6
Competitive Analysis.....	7
Personas.....	12
Stakeholder 1: archives committee member	12
Stakeholder 2: researcher	13
Stakeholder 3: researcher	14
Stakeholder 4: interested community member	15
Questionnaire	16
Site Content	16
Site Inventory.....	17
Task Analysis	17
Locate a title by printer.....	17
Locate a book with engravings and view the engravings	18
Request additional information on a particular title	19
Submit a Visit Request Form to the library.....	20
Subscribe to the RAL's RSS feed to be notified of upcoming events	21
Information Architecture	22
Labels	23
Questionnaire	23
Data Analysis.....	25
Card Sort	26
Participant 1 (individual).....	27
Participant 2 (group of 4).....	27

Participant 3 (group of 2)	28
Participant 4 (individual)	28
Participant 5 (individual)	29
Participant 6 (individual)	29
Data Analysis	30
Navigation	30
Structure	30
Relationships	30
Conclusions	31
Part Two	32
Mission Statement	32
Summary of Part 1	32
Part 2: Pen & Paper Prototypes	34
Expert Evaluation	38
Usability Testing	38
Conclusion	38
Appendices	40
Questionnaire	40
Label Selection Form	42
Card Sort Exercise	43
Visit Request Form	44
Images of Low and High Fidelity Prototypes	45
Bibliography	49

Part One

Mission Statement

The purpose of the Robert Addison Library (RAL) Website and Online Catalogue is to raise awareness of the library and to make the contents of the collection searchable to researchers through the internet.

Objectives

The website has four objectives:

1. To create a complete catalogue of the contents of the Robert Addison Library,
2. To make this catalogue available to scholars and researchers,
3. To create a portal through which members...
 - a. of the community can learn more about the Robert Addison Library and any events being held at the library,
 - b. of the academic community can make informational requests,
4. To raise the profile of the Robert Addison Library.

A complete catalogue of the contents of the Robert Addison Library.

The library was the private property of Robert Addison and was brought to Upper Canada in 1792 when he was sent to the Niagara region as a missionary with the task of establishing an Anglican Church in the region. A short-title catalogue of the library was created in 1967. However, this catalogue is incomplete and only exists in paper form. From 2006 through 2008, the Archives Committee of St. Mark's Anglican Church, which is responsible for maintaining the Robert Addison Library, audited the collection and discovered titles that had not been catalogued in 1967. One of the objectives of this project is to create a new, online catalogue using the 1967 material and the data gathered during the 2006-2008 audit.

Making the catalogue accessible to scholars and researchers.

One purpose of this online catalogue is to allow researchers and scholars to search the titles of the library by various access points. This objective can be accomplished through a combination of a search engine, directory, and browse feature.

Creating a website

The library is of interest to members of St. Marks' and the broader community in Niagara-on-the-Lake. Given the nature of this collection and the value of some items within the collection, the library is not open to the public. The Archives Committee occasionally conducts presentations on the library or specific items discovered in the library for interested members of St. Mark's and the surrounding community. Creating a website where upcoming events can be announced and past events can be detailed would enable members of these communities to appreciate and learn more about the library.

A website would also make the library easier to find on the internet for researchers who may be interested in exploring the catalogue. If a researcher finds something of interest in the catalogue and has questions for the Archives Committee or would like to arrange to come to the library to do further research, questions and requests could be put to the Archives Committee through the website.

Raising the profile of the Robert Addison Library.

The library belongs to St. Mark's Anglican Church. While a special endowment exists to maintain the library, it is dependent for its existence on the continued prosperity of St. Mark's. Anything that can be done to raise the status of the library and help ensure its continued existence is of benefit to the library. Raising awareness of the library through the website and online catalogue may help enhance the library's public profile and ensure its continued existence.

User Needs Analysis

The user needs analysis conducted for the Robert Addison Library consists of:

- Identifying the major stakeholders;
- A competitive analysis of four library web sites;
- The creation of four personas based upon the stakeholders I identified;
- A questionnaire given to the different groups identified among our stakeholders.

The data collected during these processes have informed the design of the website in terms of user's motivations for visiting the site and additional content for the website beyond a catalogue of the contents of the Robert Addison Library. The processes are described in detail below along with the unique conclusions drawn from each process.

Stakeholders

The Robert Addison Library has the following stakeholders:

- The Robert Addison Library and the Archives Committee;
- Researchers and scholars;
- The Parishioners of St. Mark's Anglican Church;
- Members of the community who are interested in local history and the library collection.

The Robert Addison Library & The Archives Committee

Since the Robert Addison Library is an historical library (the collection consists of books belonging to Robert Addison and cannot grow) it is also an archive and as such, there is a responsibility to protect the integrity of the archive: this consideration comes before all others. The reason for this project is the collection itself therefore, the paramount concern of the project is to preserve the collection now and in the future by raising the profile of the library and its relevance to St. Mark's Anglican Church and a broader community of researchers and scholars. Since the Robert Addison Library cannot speak for itself, that

responsibility falls to the Archives Committee, as stewards of the library. Also, as the people responsible for creating and maintaining the RAL website and online catalogue, the Archives Committee will be the primary users of this site.

Researchers and Scholars

The Archives Committee occasionally receives letters of inquiry from researchers asking about individual volumes in the library. It is, in large part, for these stakeholders that the Archives Committee wishes to publish the library's catalogue in an online form; a paper catalogue is sufficient for Committee members to organize the library and retrieve specific volumes at will, but it is largely inaccessible to anyone else. This group of stakeholders may use the site less frequently than the Archives Committee, but enabling their use of the site is among the primary reasons for the creation of the website and online catalogue. For these reasons, the Archives Committee and researchers are the two primary stakeholders in this project.

The Parishioners of St. Mark's Anglican Church

St. Mark's Anglican Church is also a stakeholder in the development of the RAL website and online catalogue. While the church and its parishioners may or may not make much use of the site, the website will be hosted on St. Mark's server and will be linked to the homepage and vice versa. Therefore, it is in the interests of St. Mark's that the RAL website and catalogue reflects well on the church. If this project is a success it has the potential to raise awareness of the Robert Addison Library and the prestige of St. Mark's.

Interested Members of the Community

This group is the most difficult to define, as it consists of people from various walks of life with different interests in the Robert Addison Library. These individuals may live in close proximity (close enough to make a day trip to Niagara-on-the-Lake) to the library or they may live on another continent. Members of the community often express interest in the library and would like to learn more about it. For this reason, links to information on the history of the website as well as a schedule of informative events will be posted on the website's homepage. Since this group of stakeholders is diverse and may have no direct involvement in the library, their needs are not paramount in the design and implementation of the website.

The stakeholder's in this project have been listed above in order of priority; while all user needs are important, the needs of the library, Archives Committee, and researchers take precedence. Bearing this in mind, aspects of the website and online catalogue can be given precedence in the design and implementation of the project. This project is being undertaken by the Archives Committee, all of whom are volunteers, so there are no hard-and-fast time or budgetary constraints. It is preferable to have the website and catalogue online as soon as possible, without compromising quality, but there is no specific deadline for this. It is the desire of the Archives Committee to have the catalogue and related web

pages (visitor request form, site survey, and comments) made accessible first, then non-critical elements of the site can be added as time permits.

Competitive Analysis

I decided to perform a competitive analysis before conducting my user needs assessments in order to gain a better insight into the typical design features of library web sites and online catalogues then, use this data to develop user needs assessments. Following the example of Courage and Baxter,¹ I selected four library web sites and devised two tables for their evaluation. The first table was used to record the layout of the site and the various features and functions available through the web site. The second table was used to evaluate the web sites according to the Jakob Nielsen's 10 heuristics. I selected these four libraries as they represent different aspects of the Robert Addison Library: the Laures Rare Book Database Project & Virtual Library and the UBC Library, Rare Books and Special Collections: Book Collections are both university run rare book libraries and reflect different approaches to displaying the contents of a rare books collection from an academic background. The Morgan Library, a private library in New York City, and the British Library are both famous for their rare book collections and exhibits.

The four web sites I selected are:

- British Library
 - <http://www.bl.uk/>
- Laures Rare Book Database Project & Virtual Library
 - <http://133.12.23.145:8080/AnaServer/Laures10+0+start.any>
- The Morgan Library and Museum
 - <http://www.themorgan.org/home.asp>
- UBC Library, Rare Books and Special Collections: Book Collections
 - <http://www.library.ubc.ca/spcoll/welcome.html>

¹ Courage, C., & Baxter, K. (2005). Understanding your users : A practical guide to user requirements : Methods, tools, and techniques.

Table 1: features and functions

	British Library	Laures Library	The Morgan Library	UBC Rare Books & Special Collections
Navigation System (from homepage)	Search box appears at the top of the page 4 tab directory starts at centre screen	Search boxes across the top of the screen	Global navigation along the top of the screen Search box in the top right corner (discreet)	Global navigation along the top Second row features dropdown menus
Search System (from homepage)	Features about the library are available through the directory and the library holdings are accessible through a search engine	Field search Drop down menu	Keyword search in the following categories: All / collection highlights / exhibitions / Morgan shop	dropdown menus options are standard to all UBC libraries
Catalogue Access Points	Any word / word from author / word from title / publication year / publisher / place of publication / subject / ISBN / ISSN / uniform title / format / subject heading (LC) / notes / content notes / shelfmark / other superseded shelfmark) / type characteristic / report number / system number	Title / author / editor / maker / language / date / publication place / publisher / format / person's name / place name / repository	none	None: the rare books and special collections library is searched through the UBC library catalogue
Use of Images	Yes, thumbnail and full size	Yes, digital images from the books	Yes, thumbnail and full size	No
Pages/directories	Quick links What's on Site highlights Your library	Home Virtual library	Contact / e-news / multimedia / social media / press / site index / visit / what's on / collections / about / support / research / shop	about us / branches / catalogues / journals / e-resources / instruction / services for you / ask us
Collection(s)	British Library Online Gallery Catalogue Records Journal Articles	Library of Sophia University, <i>Kirishitan Bunko</i> キリシタン 文庫	Departments: Drawings & prints / Medieval & Renaissance / Printed books & bindings / Literary & historical / Music manuscripts / Seals & tablets	Important collections listed: Canadian history / life & health sciences / Asian rare books / Canadian literature / children's literature / English language & literature / BC voter's lists / city directories / music / pamphlet / other collections

The following key was used to evaluate the following sites in conjunction with Jakob Nielsen's Ten Heuristics for the web: 0 = poor design; 1 = acceptable; 2 = good. This system allows for a maximum score of 20 points for a web site.

Table 2: comparative analysis based on Jakob Nielsen's Heuristics for the Web

	British Library	Laures Library	The Morgan Library	UBC Rare Books & Special Collections
1 Visibility of system status	Banner displays both the BL logo and section title. Breadcrumbs displayed beneath the banner. 2 points	Banner displays site and page information. No breadcrumbs. 1 point	Banner displays both the Morgan Library logo and section title. No breadcrumbs. 1 point	Banner displays both the UBC logo, Rare Books & Special Collections, plus the section name. No breadcrumbs. 1 point
2 Match between system and the real world	Pages are explained in natural language. Multimedia tutorials explaining more complex features. 2 points	Some technical language is used. Little explanation of the site or individual pages. 0 points	Pages are explained in natural language. Good use of hyperlinks to highlight other features. 2 points	Pages are explained in natural language. Good use of hyperlinks. 2 points
3 user control and freedom	Global navigation bar at the top of every page and breadcrumbs allow for easy exit. 2 points	Global navigation is possible. There are few sections to visit. 1 point	Useful links (Home, site map, contact us, etc.) are at the top and bottom of every page. Global navigation is built into the banner. 2 points	Global navigation is possible. Dropdown menus are difficult to navigate. 1 point
4 Consistency and standards	Consistent throughout 2 points	Consistent throughout 2 points	Consistent throughout 2 points	Consistent throughout 2 points
5 error prevention	Site design doesn't allow for many mistakes. Good use of directories. 2 point	Most navigation is through dropdown menus. 2 points	Site design doesn't allow for many mistakes. 2 points	Site design doesn't allow for many mistakes. 2 points
6 recognition rather than recall	See 1. Headings are clearly marked. 2 points	See 1. 2 points	See 1. Headings are clearly marked. 2 points	See 1. 2 points
7 flexibility and efficiency of use	Different sections of the site are bookmarkable 2 points	Different sections of the site are bookmarkable 2 points	Different sections of the site are bookmarkable 2 points	Difficult to get from one section to another without returning to the home page. 0 points
8 Aesthetics and minimalist design	Minimalist colour scheme, clear lines and bold text. 2 points	Consistent colour and design scheme. Text is too dense. 1 point.	Basic colour scheme (red and white). Text is well spaced and easy to read. 2 points	Minimalist colour scheme, clear lines and bold text. 2 points
9 Help users recognize, diagnose, and recover from errors	Does not correct typos in search boxes. Link to search tips and advanced searching provided. 1 point	Does not correct typos in search boxes. 0 points	Does not correct typos in search boxes. 0 hit response brings additional search features and link to site map. 1 point	Does not correct typos in search boxes. Shares the UBC Library catalogue search engine. 0 points
10 Help and documentation	No visible help feature. Sitemap appears on some, but not all pages. 0 points.	No help, contact or comments section. 0 points	Excellent, very easy to find. 2 points	No visible site map, help features are for UBC library and not site specific. 0 points
Total score	17 points	11 points	18 points	12 points

Figure 1: home page of The British Library

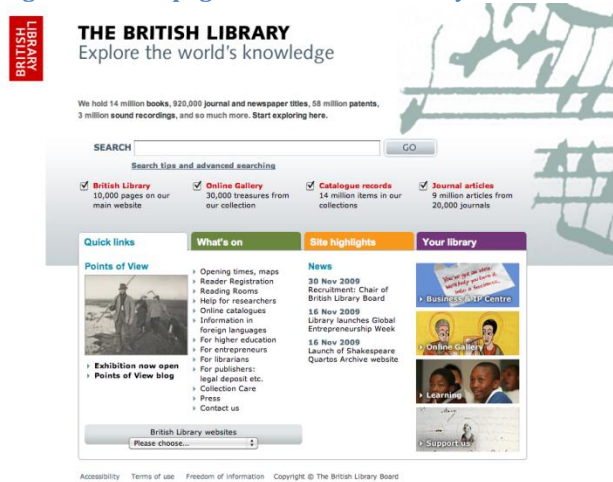


Figure 2: Laures Library, Library of Sophia University

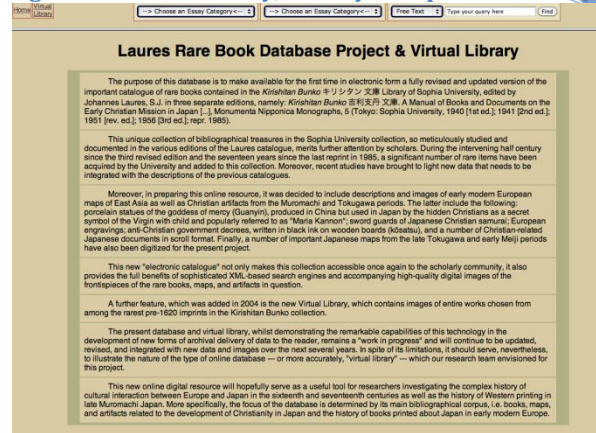


Figure 3: home page of The Morgan Library

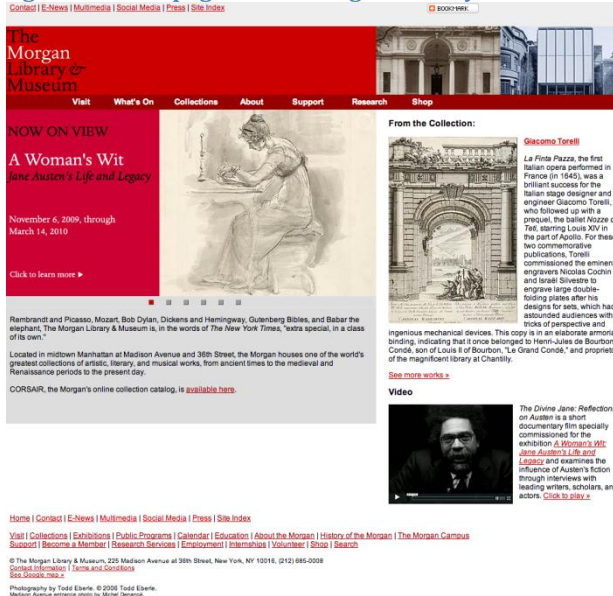


Figure 4: home page of UBC Rare Books & Special Collections



The results of this competitive analysis have emphasized the need to incorporate more than just a library catalogue into the Robert Addison Library website and online catalogue to make it appealing to a wide variety of users and to enhance the user's experience of the site. In the examples provided by the British Library and Morgan Library, the additional information on the history of the collections and events put on by the library were just as interesting as the library holdings.

It is important to have an accurate catalogue of the Robert Addison Library for researchers to use, however most casual visitors to the site will not know what a MARC record is or care about all of the same fields that an archivist or researcher might wish to see. For casual visitors, it is the book itself that they wish to see. Given the condition and value of these books, it is impossible to allow the public to have access to these titles, however the digital reproductions can satisfy the curiosity of most site visitors. To this end,

the British Library and Laures Library provide visitors the opportunity to leaf through digital reproductions of some or all of the rare books in their collections.

The ability to search the entire site was either not included or was downplayed in the design of these four sites. Instead of searching, the site design promoted the use of directories and browsing features.

The British Library, Morgan Library, and UBC Rare Books and Special Collections Library made good use of global navigation with the Morgan Library placing helpful features (site map, help, contact, etc.) at both the top and bottom of each web page. The consistent use of these help and navigation aids cannot be underestimated in the usability of the web site. The Laures Library, which lacked these specific features, was noticeably more difficult to use and navigate.


No points were subtracted for not including the ability to save search results and combine search sets, as this is a rare feature on most websites. However, the inability to save search sets means that users are often forced to go back and begin an entirely new search if they are unsatisfied with the results of their previous attempt(s). This requires the user to do more work and increases the chance of making mistakes: unless the user has recorded her search criteria, she may repeat herself. Also, some searches may yield good results that additional searches will not produce, thus the user loses some results. This feature may be too technically challenging to include in the search function of the Robert Addison Library catalogue, but it is desirable.

Lastly, each section of the website should have a modified banner indicating both the name of the site and section. Breadcrumbs can be placed beneath this banner to aid in navigation and error correction in the event that a user makes a mistake and wishes to go back to an earlier page to follow a different path through the site.

Personas

The following four personas were developed to aid in the conducting of task analysis and user-based design. The four personas are based upon some of the stakeholders identified earlier and include an archives committee member, two researchers, and a community member. While no major discoveries were made during the creation of these personas, they were useful conceptual tools and keeping them in mind helped during the writing of questionnaires, surveys, card sorts, and task analyses.


Stakeholder 1: archives committee member

Name: Harold Lloyd	Age: 71	
Address: Niagara-on-the-Lake, ON	Occupation: semi-retired architect	
Hobbies & Interests: history, local history, genealogy, art, literature, travel, and bee keeping		
Notable Quotes: “I’m quite comfortable with new technology and am excited by the prospect of getting the RAL online and accessible to a broader community.” “If I don’t do it, it probably won’t get done.”		
Description: Harold is a semi-retired architect whose buildings can be found in towns and cities across Canada and the U.S.A. During his career, he designed several private libraries and one public library in conjunction with the design firm Emil Jannings & Co. Harold transitioned into semi-retirement at age 60, moved to Niagara-on-the-Lake, and joined the Archives Committee in the same year. He was among the many individuals responsible for the creation of the library in the St. Mark’s Parish Hall which now houses the Robert Addison Library collection. Although semi-retired, Harold manages to do an average of three small jobs per year (mostly renovations). “I like to keep busy,” he says. “It’s important for me to stay active: mentally, physically and within the community.” A regular attendee at the Archives Committee meetings on Tuesday mornings, Harold also spends time with his wife Beatrice and their collie Freddy. Having bought his first IBM computer in the mid-1980s, Harold has been using computers and the internet for work and pleasure for a quarter century. “I’m quite comfortable with new technology and am excited by the prospect of getting the RAL online and accessible to a broader community.” Harold has given numerous presentations during his career and occasionally gives presentations/lectures on the RAL to members of the local community and anyone who is interested. When discussing his activities, he often hears people remark that they would have liked to attend one of his lectures had they known about it. Harold would like to use the RAL website to make announcements on upcoming lectures and as a repository for his past lectures. His general attitude is “if I don’t do it, it probably won’t get done.”		

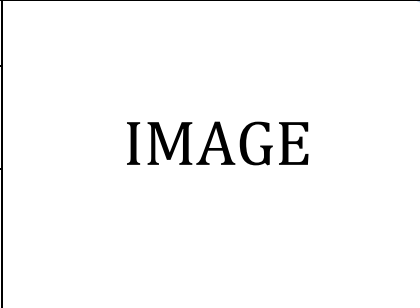
Stakeholder 2: researcher

Name: Louise Brooks	Age: 28	IMAGE
Address: Halifax, NS	Occupation: graduate student	
Hobbies & Interests: Pilates, travel, photography, cycling, early Canadian history, and early cinema.		
Notable Quotes: “If a webpage takes more than 10 seconds to load I’ve already opened another tab.”		Comfort with Technology: an early adopter who always likes to play with the latest gadgets.
Description: Louise is a PhD student at Dalhousie University whose thesis is on the role of early missionaries in establishing communities throughout Eastern and Upper Canada. Her goal upon graduation is to become a history professor at a small arts university in the Maritimes.		
<p>When she’s not in the library studying, she can often be found at the gym, in her Pilates class, or cycling around the streets of Halifax. She’s a digital native who grew up playing educational games on her family’s Commodore 64. She began using Google in her undergraduate degree at the age of 18 and still turns to Google to find resources before going to her university’s library website: “if a webpage takes more than 10 seconds to load I’ve already opened another tab.”</p> <p>When it comes to her academic work, Louise is a perfectionist who leaves no stone unresearched. She is quite happy spending an entire day working at a library carol or reading through original sources in an archive, but time and money restrict her ability to travel to every archive through-out the country. She is pleased that some archives are going digital with their collections, but wishes that more would do so, soon.</p> <p>She has come across references to Robert Addison in her research and would like to know what books he brought with him to Canada as it would provide a window into the intellectual life of an educated, middle-class, English missionary in the 18th Century. Unfortunately, she has not been able to secure funding to visit Niagara-on-the-Lake to tour the RAL.</p>		

Stakeholder 3: researcher

Name: Carl T. Dreyer	Age: 39	
Address: Oxford, England	Occupation: university professor	
Hobbies & Interests: chess, cricket, darts, rare books, English literature, psychedelic rock		
Notable Quotes: “It’s not enough to just retrieve information; I want to be able to converse with and about the information.”		Comfort with Technology: a devotee of social software – quite comfortable with new technology and concepts.
<p>Description: Carl is a professor at Oxford and is conducting research on English printers from the 16th through 18th Centuries. He is quite industrious and can be demanding of his students, but he occasionally treats his graduate students to a quick pint and game of darts at one of the campus pubs in the evening.</p> <p>Carl discovered social networking tools, such as Facebook and Twitter in early 2008 and has become fanatical about their use for education and research. He promotes the use of web 2.0 tools to all of his students and anyone who will listen. “It’s not enough to just retrieve information; I want to be able to converse with and about the information.” He considers himself an expert online searcher, though his skills are not as refined as he believes.</p> <p>While searching Wing numbers, he came across a reference to St. Mark’s library (a.k.a. the Robert Addison Library) as holding some books from his research area. He would like to learn more about the library, which books it has, their provenance, and how they ended up in Canada.</p>		

Stakeholder 4: interested community member

Name: Janet Gaynor	Age: 56	
Address: Niagara-on-the-Lake, ON	Occupation: high school English teacher	
Hobbies & Interests: cats, local history, rare books, hiking, mushroom picking, reading a mystery novel while drinking a glass of Bailey's in the evening.		
Notable Quotes: "I get lost easily on many websites."		Comfort with Technology: she's often intimidated by technology and wishes she could use a ball of string to navigate her way through the internet, as Theseus did in the labyrinth.

Description: Janet is a high school teacher in Niagara Falls, ON but lives with her husband David and their two cats (Tristan and Isolde) in a new subdivision on the outskirts of Niagara-on-the-Lake.

While walking through town one weekend, Janet discovered St. Mark's and the Robert Addison Library. She would like to know more about the library, but doesn't have time to get involved with the Archives Committee as her work keeps her too busy. She is aware of some lectures that have been put on by the Archives Committee, but has always found out too late or been unable to attend because of a scheduling conflict.

Janet has been using computers at work since the late 1990s but has never been comfortable with Windows-based PCs. She and her husband recently bought an iMac and she is learning her way around the internet with Safari. "I want to be able to use a computer to find what I need – easily. I've never been able to create an internal map of where I am online, so I get lost easily on many websites."

On her last vacation, Janet and David went to Dublin, Ireland and saw the book of Kells at Trinity College. Since their trip, Janet has been interested in learning more about rare books.

Questionnaire

“Only librarians like to search, everyone else likes to find” – Roy Tennant (Stephenson, 2009).

Archivists & researchers represent major users and will want to have advanced search features when viewing the catalogue. Other users will not want to use all of the advanced search features. Casual users, such as the persona Janet Gaynor, may prefer to browse the collection to see what is available therefore, the catalogue should also include directory and browse options for searching.

I submitted a survey to four interested parties to determine their preferences for searching the site, these parties are: an archivist, a researcher, a member of the Archives Committee, and a member of the public with an interest in literature. Given a choice of searching the catalogue by fields, directories, or browsing, three of the four respondents prefer to search by fields, with the researcher selecting directories. However, when searching the rest of the site, two participants prefer to use directories: field searching and browsing are each preferred by one respondent. Also, only the archivist is interested in searching the catalogue using the entire range of search fields provided in the questionnaire. The other participants are satisfied with basic fields, such as title, author, subject, and date.

From this data, I can confirm that users prefer different search methods for different types of information and in order to create an effective website different search methods should be given priority in particular areas of the site.

Site Content

From the data gathered to this point, I determined that the web site's primary focus should remain the library catalogue, but additional features of the site can be displayed just as prominently on the site's homepage. The ability to browse digital reproductions of book title pages as well as any illustrations, engravings, and maps from the collection should be displayed on the site's homepage. It may be that many visitors to the site, such as the persona of Janet Gaynor, are interested in the books and wish to see select titles rather than study MARC records. For these users, the ability to view the books is of more interest and value than the catalogue.

Access to a list of events, both past and upcoming, should also be displayed on the homepage. The ability to participate in library events and learn about the books in the collection is of keen interest to many of the site's stakeholders.

A history of the Robert Addison Library should also be accessible through the homepage, as some visitors may come across the site by chance while browsing the web and an “about us” section will help orient them to the site.

Finally, the site should include a number of different help features which are arranged and displayed in an intuitive manner, such as a site map, a frequently asked questions section, and information on contacting the library.

Site Inventory

After conducting a user needs analysis, I have decided to include the following functions and features in the Robert Addison Library website and online catalogue:

- Access to the library catalogue;
- A history of the Robert Addison Library;
- An events page;
- Support for browsing digital copies of the title pages and images from the books in the library;
- Visitor request forms (the library is closed to the public, so researchers who wish to examine a book in person must arrange an appointment);
- Help features;
 - A comment/query section to ask questions of the Archives Committee;
 - An FAQ section;
 - A site survey, to elicit user feedback;
 - A site map.

Task Analysis

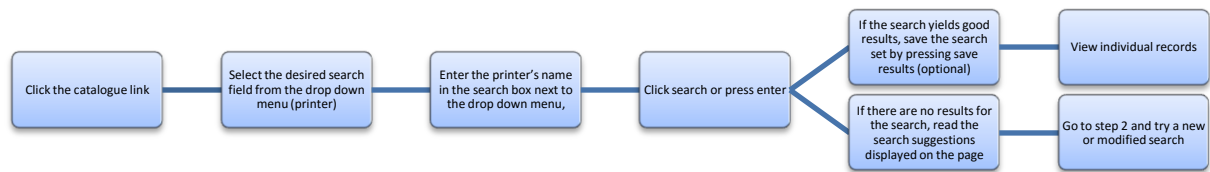
Based upon the results of the user data I collected, I selected the following five tasks as being representative of the main tasks site visitors would wish to perform for the task analysis of the Robert Addison Library website and online catalogue.

1. Locate a title by printer
2. Locate a book with engravings and view the engravings
3. Request additional information on a particular title
4. Submit a request to visit the library
5. Subscribe to the RAL's RSS feed to be notified of upcoming events

What follows is a breakdown of each task into its component activities as illustrated by a list and diagram. For each example, it is assumed that the user is beginning from the homepage unless otherwise specified.

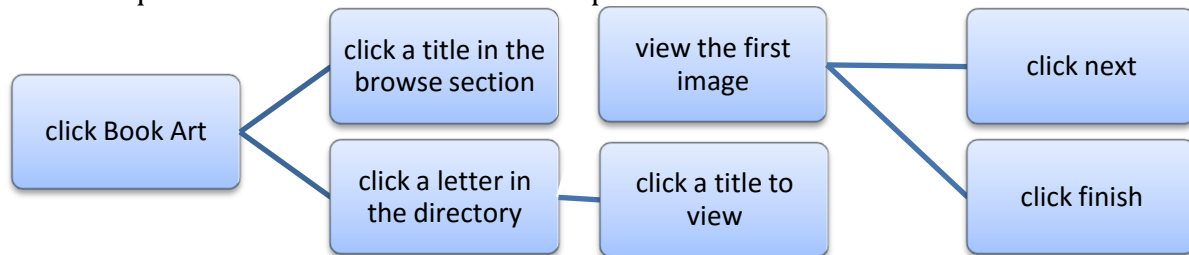
Locate a title by printer

1. Click the catalogue link,
2. Select the desired search field from the drop down menu (printer),
3. Enter the printer's name in the search box next to the drop down menu,
4. Click search or press enter,
5. If the search yields good results, save the search set by pressing save results (optional),
6. View individual records,
7. If there are no results for the search, read the search suggestions displayed on the page,
8. Go to step 2 and try a new or modified search.



Locate a book with engravings and view the engravings

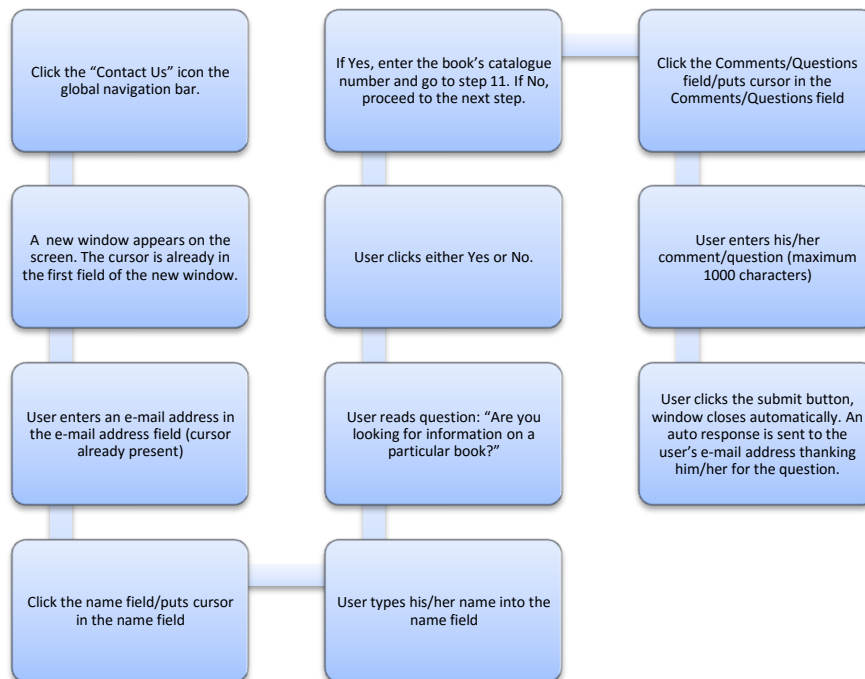
1. Click the Book Art icon on the global navigation panel,
2. Click one of the prominent titles in the browse section or,
3. Select a letter (A-Z) to see a list of titles in the catalogue featuring book art,
 - a. Click one of the titles in the list,
4. View the first image in the series,
5. Click next to view the next image in the series (repeat as often as desired/until the end of the series),
6. Click finish to return to step two and view a different title.
7. Request additional information on a particular title



Request additional information on a particular title

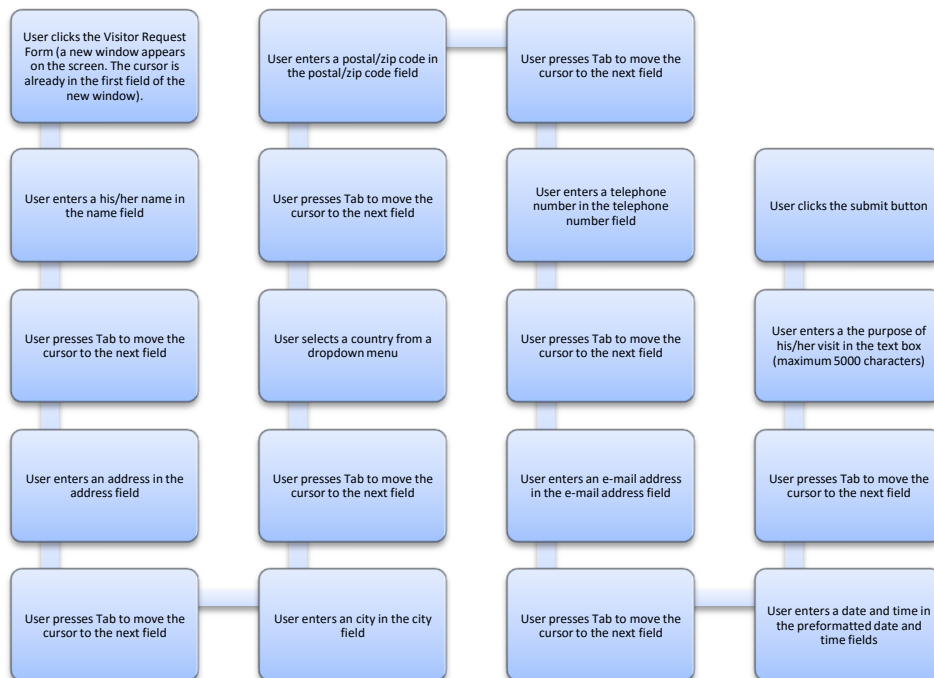
(The user starts from an item page in the catalogue.)

1. Click the "Contact Us" icon the global navigation bar.
2. A new window appears on the screen. The cursor is already in the first field of the new window.
3. User enters an e-mail address in the e-mail address field (cursor already present)
4. Click the name field/puts cursor in the name field
5. User types his/her name into the name field
6. User reads question: "Are you looking for information on a particular book?"
7. User clicks either Yes or No.
8. If Yes, enter the book's catalogue number and go to step 11. If No, proceed to the next step.
9. Click the Comments/Questions field/puts cursor in the Comments/Questions field
10. User enters his/her comment/question (maximum 1000 characters)
11. User clicks the submit button, window closes automatically. An auto response is sent to the user's e-mail address thanking him/her for the question.



Submit a Visit Request Form to the library

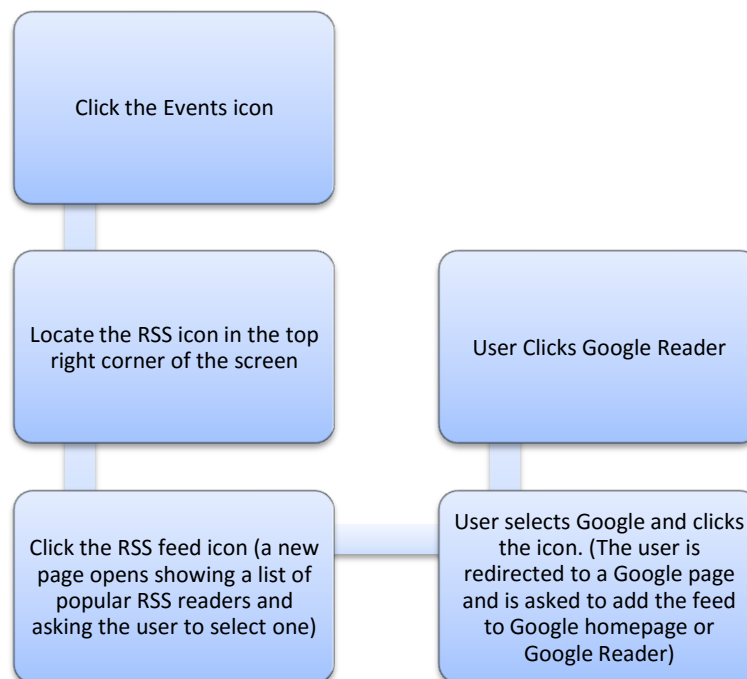
1. Click the Visitor Request Form (a new window appears on the screen. The cursor is already in the first field of the new window).
2. User enters a his/her name in the name field (cursor already present)
3. User presses Tab to move the cursor to the next field
4. User enters an address in the address field
5. User presses Tab to move the cursor to the next field
6. User enters an city in the city field
7. User presses Tab to move the cursor to the next field
8. User selects a country from a dropdown menu
9. User presses Tab to move the cursor to the next field
10. User enters a postal/zip code in the postal/zip code field
11. User presses Tab to move the cursor to the next field
12. User enters a telephone number in the telephone number field
13. User presses Tab to move the cursor to the next field
14. User enters an e-mail address in the e-mail address field
15. User presses Tab to move the cursor to the next field
16. User enters a date and time in the preformatted date and time fields
17. User presses Tab to move the cursor to the next field
18. User enters a the purpose of his/her visit in the text box (maximum 5000 characters)
19. User clicks the submit button



Subscribe to the RAL's RSS feed to be notified of upcoming events

(This assumes that the user already has a RSS reader set-up. I use Google Reader for this example).

1. Click the Events icon.
2. Locate the RSS icon in the top right corner of the screen.
3. Click the RSS feed icon (a new page opens showing a list of popular RSS readers and asking the user to select one).
4. User selects Google and clicks the icon (the user is redirected to a Google page and is asked to add the feed to Google homepage or Google Reader).
5. User Clicks Google Reader.

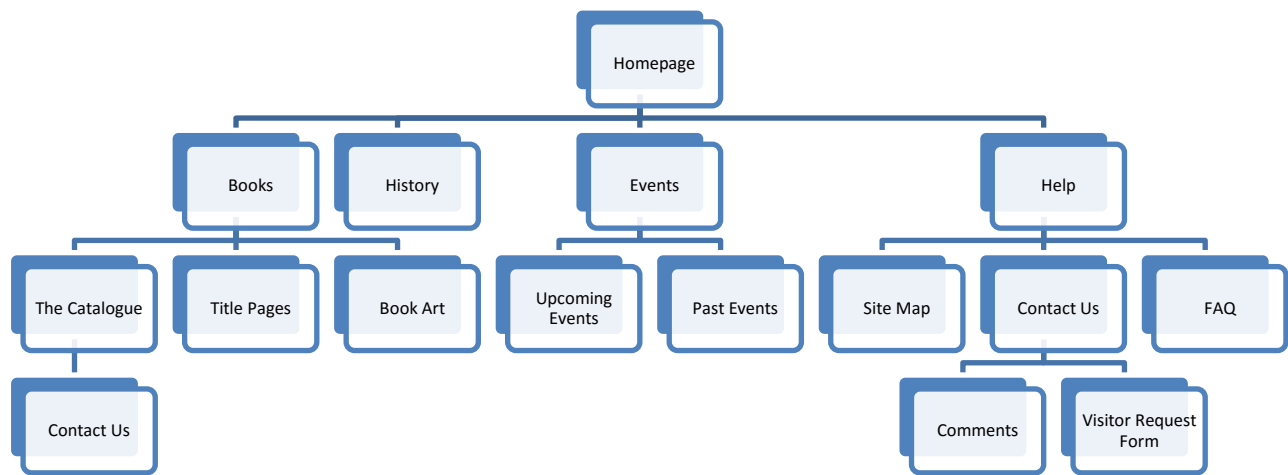


Information Architecture

The site will consist of three main sections: the catalogue (including digital images), an about section (library history and events), and a help section where users can get help, make requests, and leave feedback.

The Robert Addison Library website and catalogue will have both global and local navigation. Global navigation will be present and consistent on every page of the site. This information will be located across the top of the screen and will be incorporated into the site banner. The following four navigation choices: Books, History, Events, and Help will comprise the global navigation choices.

Once a user of the site selects one of the global navigation options from the homepage and is directed to the relevant page, a local navigation bar on the left side of the screen will appear. Local navigation will consistently appear on the left side of the screen to take into account different screen sizes and dimensions among users: depending on screen resolution, the right side of a page does not always appear on-screen. The following hierarchical diagram provides an overview of the website. The second row represents global navigation, while local navigation is represented by subordinate rows.



The Help section (and all subordinate pages) are functional in that they assist users with specific tasks, such as completing a Visitor Request Form or requesting additional information through the Contact Us section. The History and Events sections are topical in that they are not interactive and only provide information. The catalogue is a hybrid of functional and topical: the catalogue itself is searchable and provides a feature through a link to Contact Us by which users can request additional information on a particular title. The Title Pages and Book Art links are only searchable by browsing or using a directory and are more topical than functional in nature.

Labels

Questionnaire

Participants were asked to complete a form (Appendix) which had one or two sentence descriptions for each of the functions or features of the website. After reading the form, participants were asked to provide a one or two word description for each of the functions or features on the form. These descriptions were then used as part of my label selection process. Labels were selected on the basis of:

- Brevity,
- Clarity,
- Pre-established associations/conventions (e.g. FAQ),
- Distinctness (there are no two labels that could be confused), and
- Intuitiveness.

The participants for this questionnaire included a different group of individuals from the original needs assessment and some participants offered more than one suggestion per feature. From the list of potential labels collected through our questionnaire, a list of second round labels were selected.

Table 3: Label Questionnaire with Responses

	Description Used	Suggested Labels
1.	Frequently Ask Questions	FAQ
2.	A visual depiction of the overall website.	Site Map
3.	A collection of digital images of the title page of each book.	Title Pages x 3 Title Page Gallery Cover Images Book Covers
4.	Digital images of illustrations, maps, and engravings taken from books in the library.	Images x 2 Digital Images Image Gallery Book Art Book Images
5.	The list of books held by the Robert Addison Library.	Book Holdings Catalogue x 2 Library Catalogue Book List Our Books
6.	Information on the history of Robert Addison and his library.	History x 3 About x 2 Library History
7.	A list of upcoming events at the Robert Addison Library.	Upcoming Events x 5 Events
8.	A list of past events at the Robert Addison Library.	Past Events x 4 Events Archive x 2
9.	An online form that site users can complete if they wish to visit the Robert Addison Library. Required fields include: name, contact info., possible dates and times for a visit, and purpose of a visit.	Visitor Information Visiting? X 2 Schedule Visit Visit Us Visit Request Form
10.	A page of the website where site users can leave comments, feedback, or simply record their name and reason for visiting the site.	Feedback Guestbook x 2 Comments x 2 Visitor's Book
11.	A page where site visitors are asked specific questions about their visit to the site: how they heard of it, why they are here, what they think of the design, etc.	Visitor's Questions Feedback Questionnaire Give Us Feedback Site Survey Visitor's Feedback
12.	An online form where site users can ask specific questions about the Robert Addison Library.	For More Info. Contact Us Contact Form Questions Ask Ask Me!

Additional Suggestions: labels 10 & 11 (Feedback and Guest Book) should be one page.

Data Analysis

Only six participants were selected to complete the survey. Nevertheless, the feedback from this small participant pool proved to be eye opening and highly useful. The participants displayed no agreement on some label areas and showed consensus in others. While some labels, such as 3 through 5 are conceptually difficult and naturally produce a variety of suggestions, “contact us” would seem to be an obvious choice for label 12 and yet each participant responded differently. Labels 6 through 8 produced the most consensus. This data reinforces the need for clear, intuitive, and unambiguous labeling for navigation.

These labels were then evaluated against the personas I created earlier to see if they were comprehensible and intuitive. The labels I selected are:

1. FAQ (for Frequently Asked Questions)
2. Site Map
3. Title Pages
4. Book Art
5. Catalogue
6. History
7. Upcoming Events
8. Past Events
9. Visitor Request Form
10. Comments
11. Site Survey
12. Contact Us

Labels 1 and 2 were chosen without testing as they are well established conventions and using a different label, regardless of how ingenious it may be, would likely result in confusion. “Contact Us” was selected for label 12 for the same reason: as the adage goes, “It’s sometimes better to be consistent than right.” Label 9 employs a three word descriptor, however it is the clearest of the label suggestions received.

Card Sort

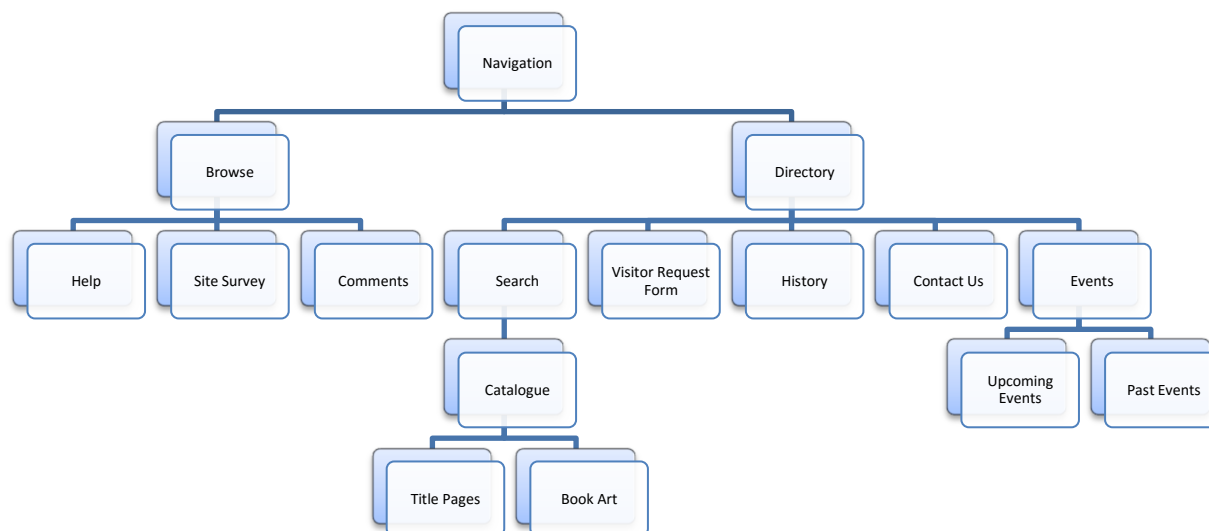
The labels I selected based on the results of my questionnaire and survey were put on cards and given to participants (individuals and/or groups). These participants were asked to perform one card sort based on two criteria: the first was to determine the organization of labels with regard to navigation and the second was to determine hierarchical relationships. Three navigation cards were created: search, browse, and directory. Participants were asked to place each label card under one of the navigation cards. While arranging the cards under navigation headings, users were instructed to place cards in hierarchies. Participants were instructed to show hierarchical relationships by overlapping cards. Although, some cards could conceivably be placed under more than one navigation heading or in more than one hierarchical relationship, there were no duplicate cards provided. This forced participants to make a decision as to the “best” or most intuitive location for each card. The results of these tests are displayed in the following 6 diagrams.

The three navigation choices were defined as:

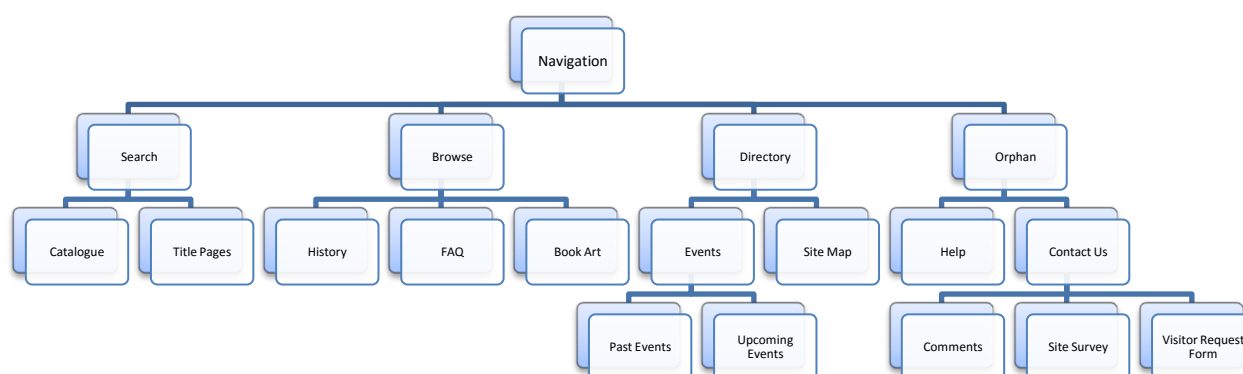
- Search – the ability to do keyword or field searches.
- Browse – naturally navigating from one page to the next using content-based hyperlinks.
- Directory – An alphabetical list of site features and functions.

Participants were told that each label could either be the name of a page with content or a meta-label which organized related labels into a hierarchy, but do not contain any other content. It was left to participants to decide which labels were meta-labels or content labels. Participants were also told the nature of the website and given some information as to the meaning of individual labels (e.g. catalogue refers to the library’s collection of books and history refers to the history of the library).

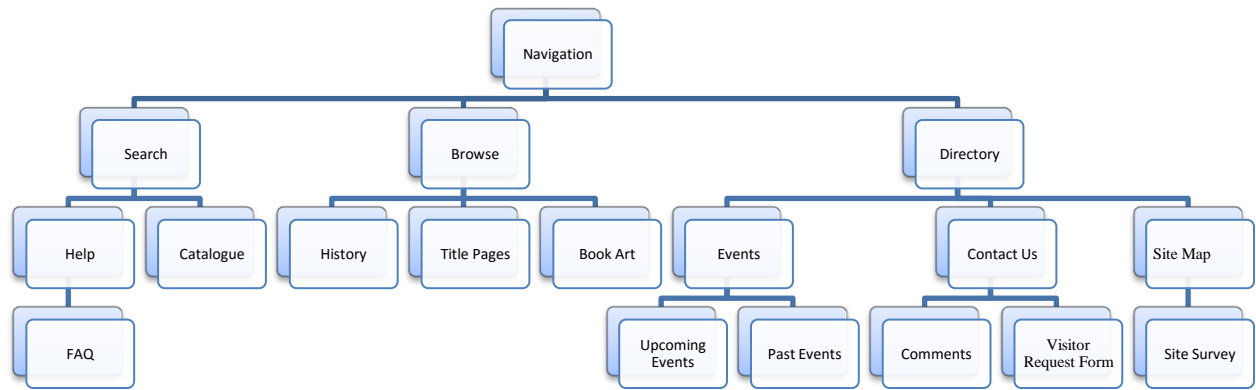
Participant 1 (individual)



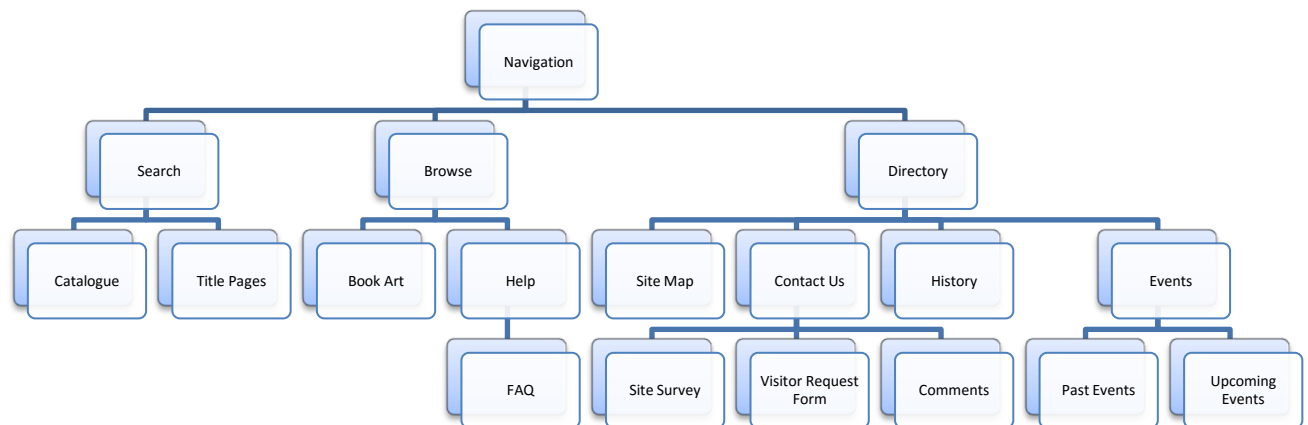
Participant 2 (group of 4)



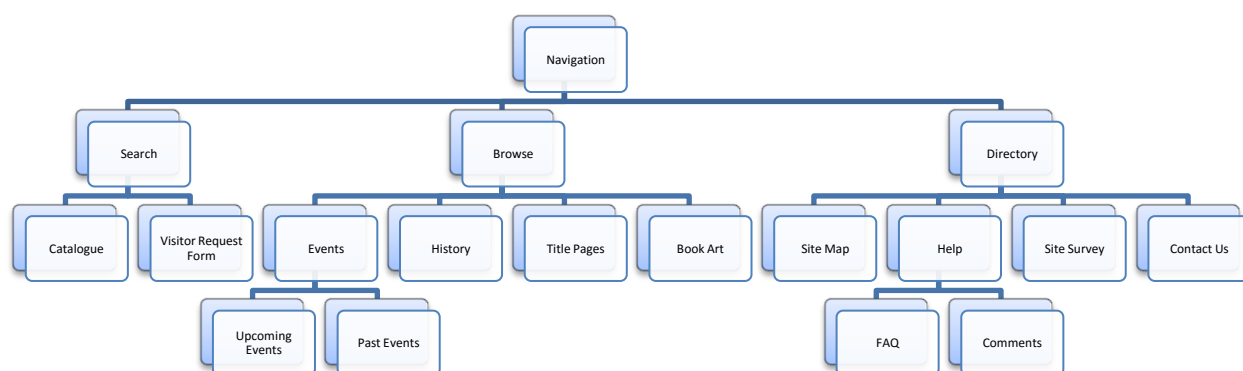
Participant 3 (group of 2)



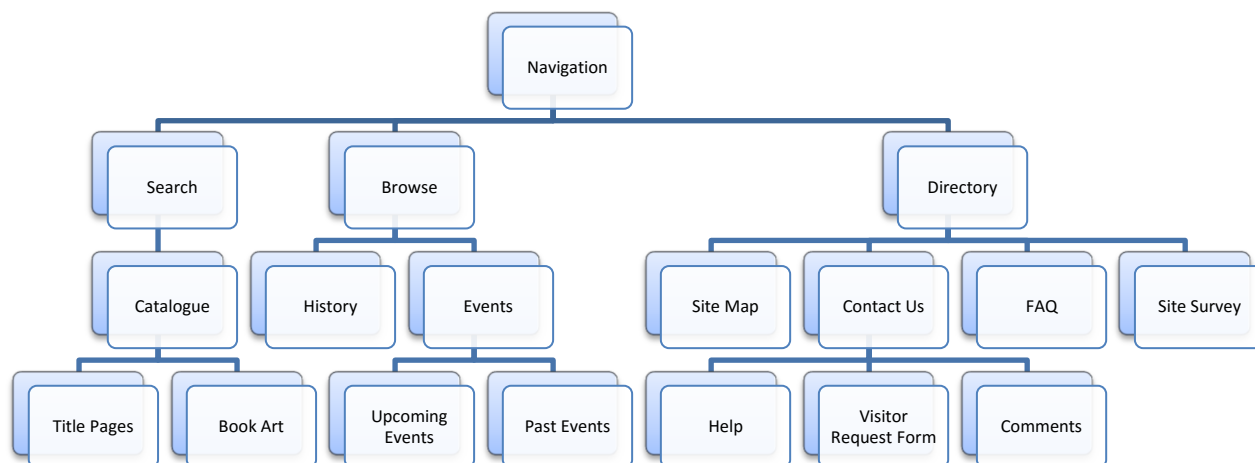
Participant 4 (individual)



Participant 5 (individual)



Participant 6 (individual)



Data Analysis

Some trends emerged as a result of performing the card sort. These trends have been organized into the following groups: navigation, structure, and relationships.

Navigation

Most significantly, search was used almost exclusively for the catalogue. Every participant put the catalogue under search and only participants 3 and 5 added help and visitor request form to search. Four of six participants hierarchically ranked title pages under catalogue and two of six ranked book art beneath catalogue. In the other instances, title page and book art were placed under browse. This indicates that users want to be able to find specific books using a search function and then flip through or browse individual title pages and/or images from books in the collection.

All participants restricted the use of browse to what I term static content pages. These pages, such as history, book art, and events, tend to be rich in content but do not change based on interaction with a user.

The directory proved to be the most popular method of navigating a web site, participant 1 even placed the search feature in a subordinate position to the directory. Participants 1, 3, and 4 commented that using a directory is their preferred methods of site navigation. Only the members of participant 2 expressed a dislike of directories.

From these observations, I have concluded that people have intuitive preferences for navigating a website based upon the type of information they are seeking. When seeking a specific title from a catalogue, using a search engine is the most efficient method. When seeking or viewing content rich, static pages, users prefer to browse a website and when looking for help or for interactive tools, users prefer to use a directory.

Structure

Five of the six participants arranged the cards with the same number of hierarchical levels. Furthermore, all participants struck the same balanced breadth and depth in the arrangement of the label cards.

Relationships

Consistent groups of labels appear throughout the card sorts. Although, there is no template that matches all participants, certain clusters of labels, such as help, comment, FAQ, etc. do appear in each card sort. Participant 2 went so far as to create an orphan group of labels that should be displayed together on each page irrespective of navigation. A similar cluster of labels appears under directories in the other card sorts.

Despite the small sample size used for this exercise, specific trends were identifiable with only six participants. If this exercise repeated with a larger sample group, I believe the above mentioned trends would become more distinct.

Conclusions

Preliminary Design

The preliminary design work for the Robert Addison Library website and online catalogue consisted of performing:

- Identifying stakeholders,
- Performing a competitive analysis of similar websites,
- Creating personas,
- Determining the content of the website,
- Collecting user response data, and
- Developing the website's information architecture.

Future Research and Design

Much research and design work has yet to be completed before the Robert Addison Library website and online catalogue will be complete. This consists of creating and testing various mock-ups of the site and redesigning the original prototypes based upon user feedback. Once a design has been selected, the lengthy task of content or data entry will begin.

Though this website is ambitious, with proper planning and design, it is possible given the resources of the Archives Committee.

Part Two

Mission Statement

The purpose of the Robert Addison Library Website and Online Catalogue is to raise awareness of the library and to make the contents of the collection searchable to researchers through the internet.

Summary of Part 1

The Robert Addison Library (RAL) Web Catalogue, Design Project Part 1, laid the groundwork for the creation of a website and online catalogue for this private library located in Niagara-on-the-Lake, Ontario. Part 1 consisted of a user needs analysis, task analysis, and the development of the information architecture for the RAL website and online catalogue.

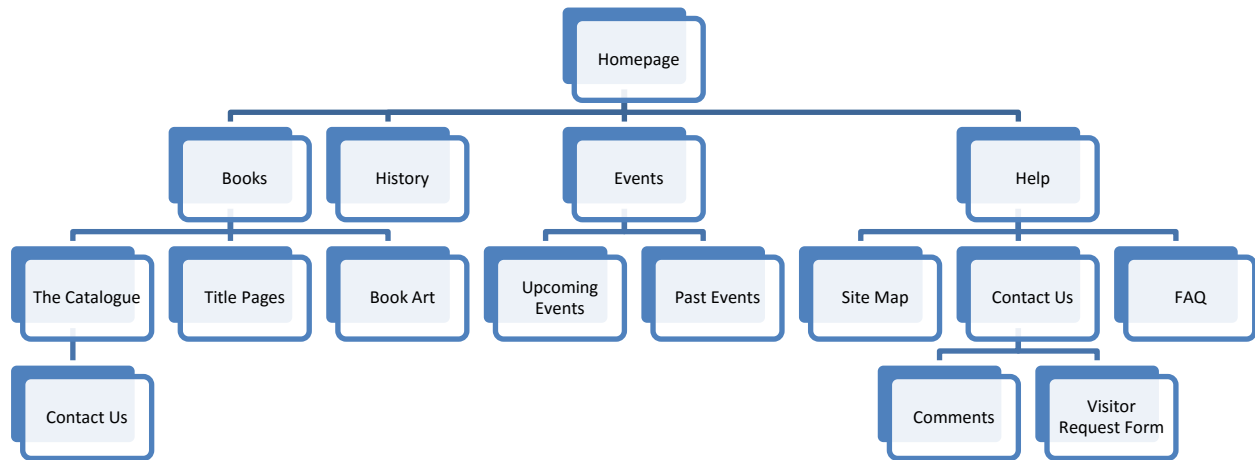
The user needs analysis consisted of:

- identifying the stakeholders of the RAL website and online catalogue,
- the creation of four personae to reflect four different types of users
 - a semi-retired architect (a member of the archives committee),
 - a graduate student (academic interest),
 - a university professor (professional interest),
 - and a high-school English teacher (casual interest),
- a competitive analysis focusing on four online web catalogues,
- the development of site content,
- and a site survey.

This was followed by a task analysis which involved mapping out the steps involved in performing five common tasks user are likely to perform while visiting the RAL website and online catalogue. A questionnaire was also given to four participants (an archivist, a member of the archives committee, a librarian, and an interested member of the public) to determine which possible features are of interest to these users and what priority they should be given in the design and creation of the website.

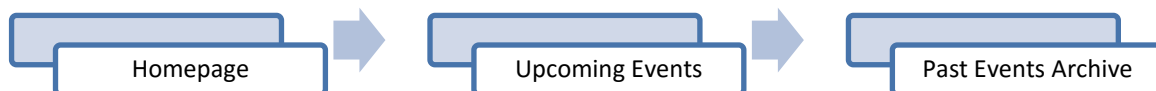
The design of the information architecture involved selecting labels for the website, which was done through another questionnaire and a card sort to determine optimal navigation methods for the different sections of the website. This design formed the basis of the lo- and hi-fidelity mock-ups of the website in part 2 of this project and can be seen in below (figure 1

Figure 5: The information architecture of the RAL website and online catalogue



The format of the prototypes developed in this section closely follow the map displayed above with the exception of the Events section: in keeping with the principle that a good and efficient design seeks to minimize the number of steps users must go through to complete a given task, I decided to move the Upcoming Events section onto the Events page and create an archive of past events on a page beneath that. The revised events section appears in figure 2.

Figure 6: Events



During the card sorting exercise, most users expressed an aversion to using search as a means of navigating a site. Directories and browsing were considered preferable. Keeping this in mind while designing the site, I limited the search feature to the online catalogue and included faceted searching and browsing features to the catalogue to provide a more enjoyable and inviting user experience. The remaining portions of the RAL website are navigable by using either a directory or by browsing.

Part 2: Pen & Paper Prototypes

In designing the pen and paper prototypes, I followed the ten usability heuristics of Jakob Nielsen and Chapter 17 – Search of the U.S. Department of Health and Human Services' Research-Based Web Design and Usability Guidelines. What follows are annotated images of the low fidelity (lo-fi) prototype for the RAL website and online catalogue with references to appropriate heuristics, guidelines or other design principles.

Figure 7: Home page prototype #1

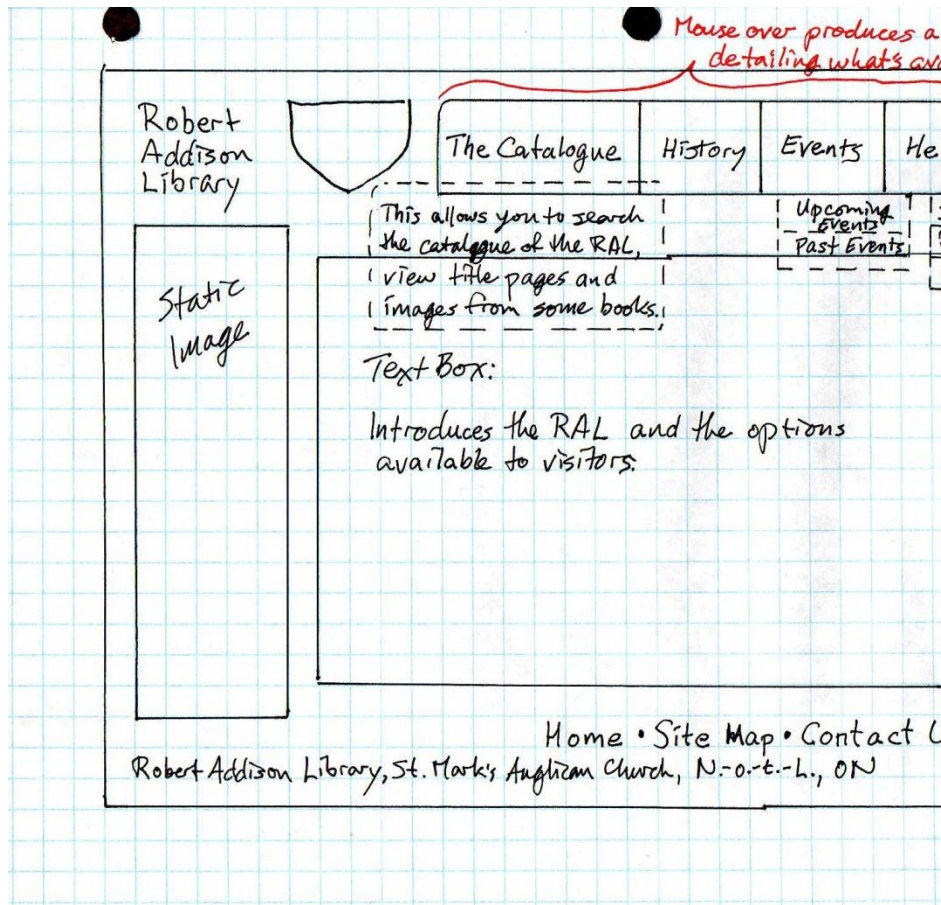
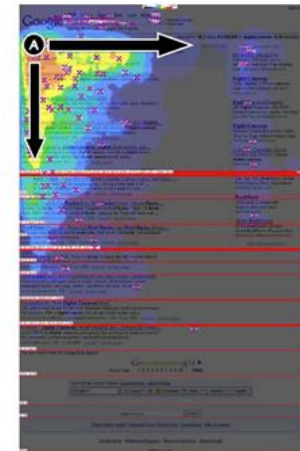


Figure 8: A display of eye movement across a webpage



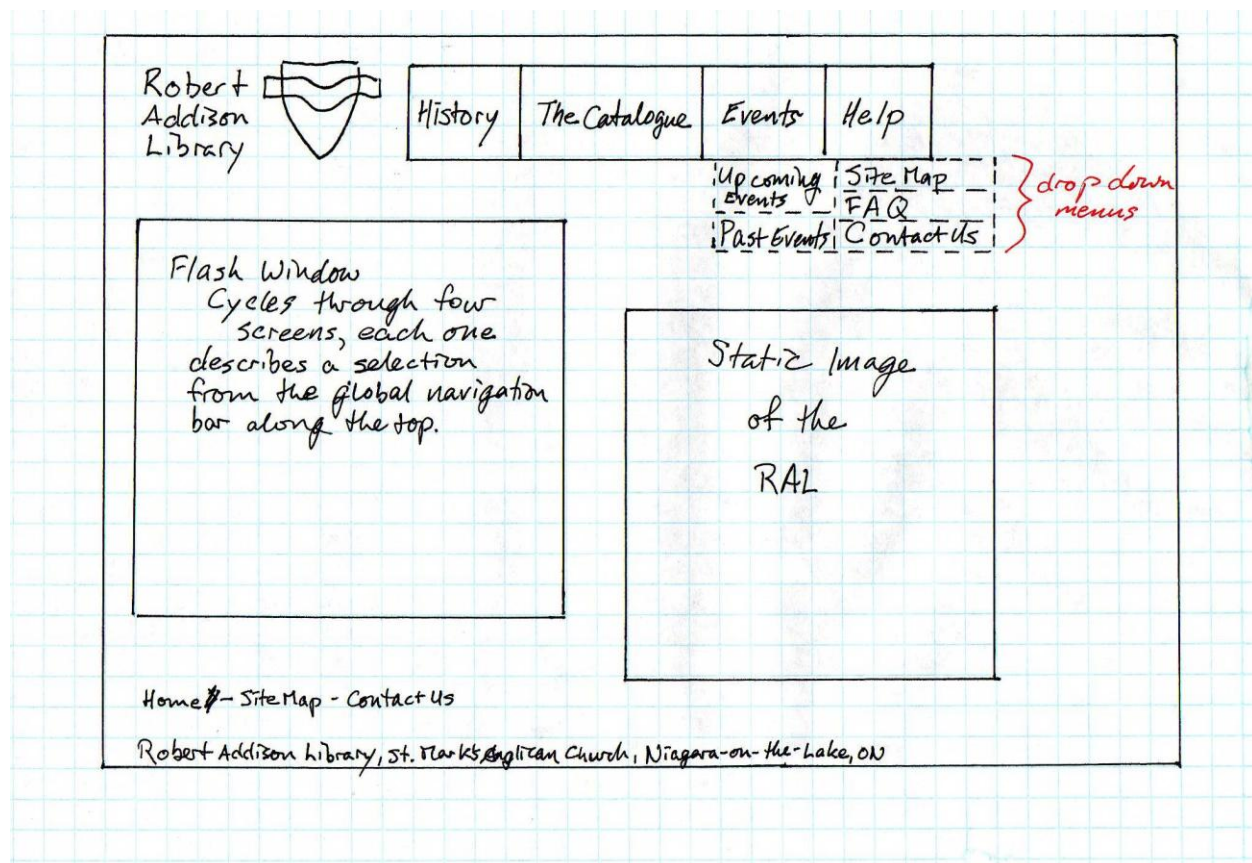
(Hearst, 2009)

This is the first of two initial prototypes of the homepage for the RAL website and online catalogue. I chose to use a consistent arrangement along the top of the page for every page in this website. The placement of the library's name in the top left corner of the site, next to the coat of arms for St. Mark's Anglican Church is based upon the findings of a 2001 usability study using eye tracking software, by Jakob Nielsen, described in the book *Search User Interfaces* by Marti Hearst: users looked to the top left corner of the screen first and then their eyes moved across and down the screen. This is an important factor when considering where on the page to place a corporate logo or any other pertinent information. Given that I can expect user's eyes to begin scanning the page from the top left corner, it makes sense to place the website's name and logo in that area.

I elected to place the global navigation bar across the top of the page and included it on the home page for two reasons: firstly, it has become a custom in web design to place the global navigation bar along the top of the screen and placing it elsewhere is likely to

feel counter-intuitive to users. Secondly, as Morville and Rosenfeld discuss in their book *Information Architecture for the World Wide Web*, many websites do not include a global navigation feature on their homepage. "It's often not possible to identify the global navigation system from the main page of a web site. The main page is sometimes the sole exception to the omnipresence of the global navigation bar" (Morville and Rosenfeld, 2007, p.123). I personally find it disorienting when I visit an information rich homepage and do not see a global navigation bar (I do not find this to be the case on splash pages which simply list the site credits and display an "enter" button). Following Nielsen's fourth heuristic: consistency and standards (Nielsen, 2001) I kept the site name, crest, and global navigation bar the same across every page of the website.

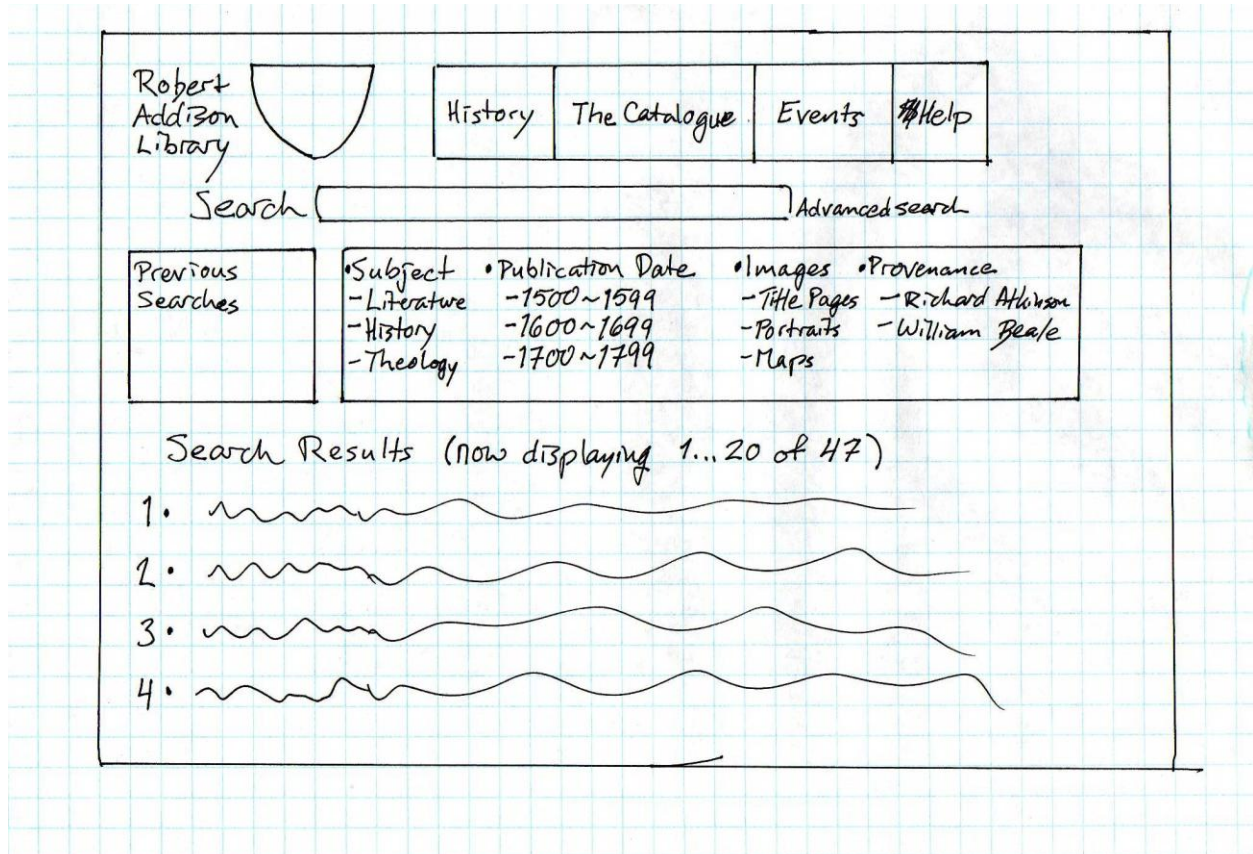
Figure 9: Home page prototype #2



This alternate design for the homepage replaced the static image and introduction to the RAL website with a flash media box which cycles through descriptions of the four main selections from the global navigation bar and what can be found by selecting each option. This idea is based upon a similar design for the Morgan Library's homepage (see figure 3). One benefit to this design (beyond aesthetics) is that the flash media box replaces the need for cumbersome and distracting scope notes which were incorporated into the design of the global navigation bar on the previous page.

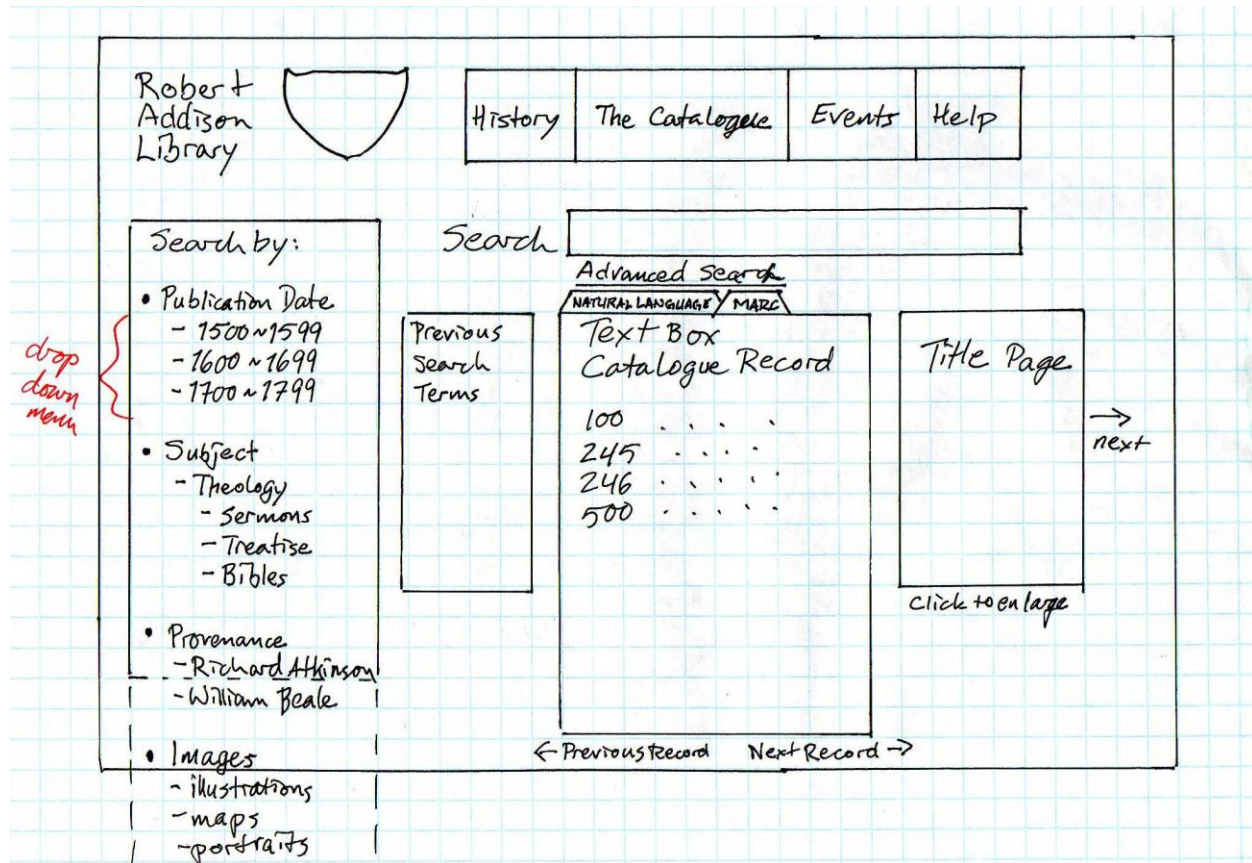
In designing the global navigation bar, I chose not to add the homepage as an option. I consider it likely that most users will not wish to return to the homepage once they have begun using the website however, if any user wishes to return to the homepage, that option is made possible by a second, rather basic navigation bar located at the bottom of every page.

Figure 10: Search results



Given the nature of the RAL catalogue (finite, not growing, and eclectic – as many personal libraries are) a conventional or Google-like search interface is not the best choice: users must understand that there are very distinct limits to this collection and search within those boundaries. In order to facilitate this, I decided to incorporate a faceted search system into the design of the RAL online catalogue. You will note that the facets are located between the search box and the search results on this page. In figure 11, you will notice that I placed the facets along the left side of the page. In his article “Front end concerns when implementing faceted search – Part 1,” Daniel Tunkelang points out the placement of the facets along the left or right side of the screen may result in their being ignored by users who suffer from banner blindness (automatically ignoring sections of the screen where one has become accustomed to seeing ads), but placing the facets above the results forces users to slow down and consider the facets and their own search before rushing to the results. It is Tunkelang’s belief that moment of reflection can improve user’s search habits.

Figure 11: Viewing the catalogue



In this lo-fi rendering, I placed the facets along the left of the screen where it seemed intuitive however, I went with the facets beneath and parallel to the global navigation bar in the high fidelity (hi-fi) prototype. During the user needs assessment performed in part one, I learned that users wished to be able to alternate between a MARC format record and a natural language record, therefore, I presented this option in the prototype. Also, given that this catalogue is being designed for users with different backgrounds, providing both a technical and non-technical record seems like the best way to satisfy all users. In order to display the alternate record format, users can simply select the tab of their choice. Results should default to the natural language tab when first displayed: users who know what a MARC record is will understand the meaning of the tab and select it if they wish to view the record that way, while users unfamiliar with MARC will automatically see the record in a comprehensible format. Previous terms are displayed in a text box next to the record in order to assist users in refining their searches [recognition rather than recall (Nielsen, 2001)].

Local navigation options (i.e. previous record and next image) are displayed around the record for users to see and use as desired. All additional lo- and hi-fi prototype images are in the appendix.

Expert Evaluation

Prior to commencing the hi-fi prototype, I consulted Ayad Sinawi (a designer at “Travel + Leisure Magazine”) on my design. We discussed the relative merits of different page layouts and on his recommendation, I opted to place the facets beneath the global navigation bar as opposed to the side of the screen. Also, it is his belief that the flash media window is a more effective means of introducing users to the site than a static text box. With his recommendations in mind, I commenced the design and construction of the hi-fi prototype.

Usability Testing

After completing the hi-fi prototype, I tested it myself to make sure that a sufficient number of links worked and that pages display properly. Once I was satisfied that the mock-up worked sufficiently, I found a volunteer to perform seven tasks using the mock-up. The first task began at the homepage and each successive task began where the last task concluded. These tasks were:

- view a record in the catalogue;
- to select a book from the late 1600s from the facets;
- select an event from the events archive;
- go to the history page, return to the homepage;
- look at the FAQs;
- find the visitor request form;
- locate contact information for the RAL.

The participant (having been briefed as to the nature of the website) had no difficulty navigating the website or completing the tasks assigned to her. One question the participant did ask is: “Why is the visitor request form buried in the contact section, shouldn’t it be visible from the homepage?” My response is that we (the archives committee) do not want to encourage casual visitors who simply want to view the books out of curiosity and therefore the visitor request form was buried under two layers on the assumption that researchers and those who are more than simply curious will find the correct form without much difficulty.

Additional participants could not be found, so I concluded the usability testing after having tested the system on only two participants including myself. Given that this website is not overly complex, I do not believe that the website should provide much challenge to users with regard to navigation or search.

Conclusion

As a result of the extensive research and user needs analyses conducted in part 1 of this study, the design of the lo- and hi-fi prototypes went more smoothly than expected. Having a clear understanding of who the users of this resource are, their needs, the site inventory, and clearly defined labels and architecture greatly facilitated the construction of the website. The largest challenges during the development stage were determining which

layout or presentation worked best for both the information and most importantly, the users.

The greatest technical challenge which I foresee in the completion of this project is in the development of the interface between the backend catalogue and the frontend web interface.

Appendices

Questionnaire

Robert Addison Library Website and Online Catalogue Questionnaire

The Robert Addison Library was the private property of Robert Addison and was brought to Upper Canada in 1792 when he was sent to the Niagara region as a missionary with the task of establishing an Anglican Church in the region. A short-title catalogue of the 1,500 books in the library was created in 1967, however this catalogue only exists in paper form.

The purpose of the Robert Addison Library's website and online catalogue project is to create a website that will raise awareness of this private library and allow researchers to search the contents of the library catalogue. This project is currently in the design phase and could benefit from a user needs analysis. The Archives Committee of St. Mark's Anglican Church, Niagara-on-the-Lake, and I would greatly appreciate your taking the time to answer this brief questionnaire.

The design of the Robert Addison Library's website and online catalogue is an ongoing project that is also being done as a project for LIBR 555: Information Design I, at the School of Library, Archival and Information Studies, University of British Columbia.

No personally identifiable information will be collected through this questionnaire. The results of the questionnaire will be used in a project for LIBR 555: Information Design I and for the design of an actual website and online catalogue and for the Robert Addison Library.

Neil MacDonald,
Member of the Archives Committee of St. Mark's Anglican Church
MLIS candidate, SLAIS, UBC

1. How often do you expect to search the Robert Addison Library catalogue over the next year?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less than than once a year week	once a year	2-6 times a year	7-11 times a year	once a month	once a week	more once a

2. What is the purpose of your visit to the Robert Addison Library website and online catalogue (check all that apply)?

- ☐ academic research
Please specify your area of research_____.
- ☐ personal research/interest.
Please specify your area of research_____.
- ☐ to learn about the library
- ☐ check on upcoming events
- ☐ curiosity
- ☐ other, please specify _____.

3. By which fields would you like to be able to search the catalogue (check all that apply)?

- ☐ Title
- ☐ Author
- ☐ Subject
- ☐ RAL catalogue number
- ☐ Printer/publisher
- ☐ Place of printing
- ☐ Date of publication
- ☐ Printing method (e.g. quarto, octavo, etc.)
- ☐ Wing number
- ☐ Provenance
- ☐ Illustrations
- ☐ Other, please specify _____.

4. Please rank the following website features by importance (1 being most important and 9 being least important).

- ___ Information about the Robert Addison Library
- ___ The catalogue of the Robert Addison Library
- ___ Query submission form (if you have a question about a title that cannot be answered by the catalogue record)
- ___ Appointment form (if you would like to visit the library to conduct further research)
- ___ Guestbook
- ___ Upcoming events
- ___ Information on past events (including presentation notes, PowerPoint slide shows, etc.)
- ___ Site map
- ___ Other, please specify _____.

5. Please rank the following methods of navigation for the Robert Addison Library catalogue (1 being most important and 3 being least important).

- ___ Search by field
- ___ Directory search
- ___ Browse

6. Please rank the following methods of navigation for the Robert Addison Library website (1 being most important and 3 being least important).

- ___ Search by field
- ___ Directory search
- ___ Browse

Thank-you for taking the time to assist the Robert Addison Library's website and online catalogue development team.

Label Selection Form

The Robert Addison Library is a private library that was brought from England to Canada in the late 18th Century by Reverend Robert Addison, when he was charged with becoming the first Anglican minister of Niagara. It is one of the oldest extant libraries in Upper Canada. Among the collection of approximately 1,500 books are many rare first editions by enlightenment era philosophers and theologians.

The Robert Addison Library was partially catalogued in the 1970s but remains to this day an incomplete, paper-based catalogue. It is the goal of the Archives Committee to create an online catalogue of the library contents so that academics, researchers, and historians can search the library catalogue and study the library materials.

Please write a one or two word descriptor for each sentence in the column marked "Label."

	Description	Label
1.	Frequently Ask Questions	FAQ
2.	A visual depiction of the overall website.	Site Map
3.	A collection of digital images of the title page of each book.	
4.	Digital images of illustrations, maps, and engravings taken from books in the library.	
5.	The list of books held by the Robert Addison Library.	
6.	Information on the history of Robert Addison and his library.	
7.	A list of upcoming events at the Robert Addison Library.	
8.	A list of past events at the Robert Addison Library.	
9.	An online form that site users can complete if they wish to visit the Robert Addison Library. Required fields include: name, contact info., possible dates and times for a visit, and purpose of a visit.	
10.	A page of the website where site users can leave comments, feedback, or simply record their name and reason for visiting the site.	
11.	A page where site visitors are asked specific questions about their visit to the site: how they heard of it, why they are here, what they think of the design, etc.	
12.	An online form where site users can ask specific questions about the Robert Addison Library.	

When viewing catalogue records on the Robert Addison Library website, how would you prefer to see each record displayed (please circle one):

- A. natural language fields (i.e. main title, sub-title, author, date of publication, etc.);
- B. MARC fields (i.e. 100, 245, 246, 500, etc.);
- C. Combined natural language and MARC fields;
- D. The ability to toggle between A and B.

Card Sort Exercise

Cards

1. Book Art	2. Browse	3. Catalogue	4. Comments
5. Contact Us	6. Directory	7. Events	8. FAQ
9. Help	10. History	11. Past Events	12. Search
13. Site Map	14. Site Survey	15. Title Pages	16. Upcoming Events
17. Visit Request Form			

Visit Request Form

St. Mark's Anglican Church
P.O. Box 582
41 Byron Street
Niagara-on-the-Lake
Ontario, L0S 1J0
905-468-3123

Thank-you for your interest in the Robert Addison Library. Please fill in and submit this form. A member of the Archives Committee will respond to your request within one week. The Archives Committee makes every effort to assist researchers who are interested in the Library and/or items in its holdings. However, in the interests of the books, the library is not open to the public and we reserve the right to decline requests to visit the library.

Name: _____

Address: _____

City: _____

Country: _____ Postal/Zip Code: _____

Telephone No.: _____

E-mail address: _____

Intended Date & Time of Visit: [YYYY/MM/DD] 00:00 AM / PM

Purpose of Visit (please be as specific as possible):

Maximum 5000 characters.

Images of Low and High Fidelity Prototypes

Image 1: Home page design 1

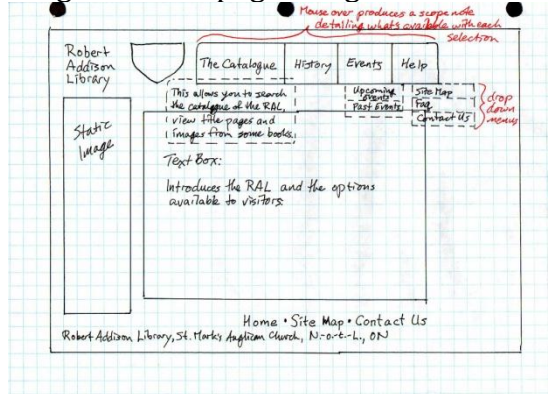


Image 2: Homepage design 2

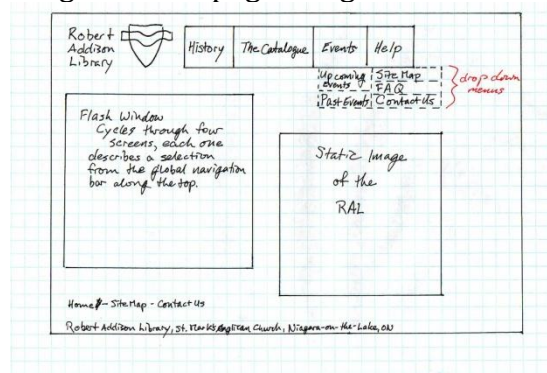


Image 3: Search results

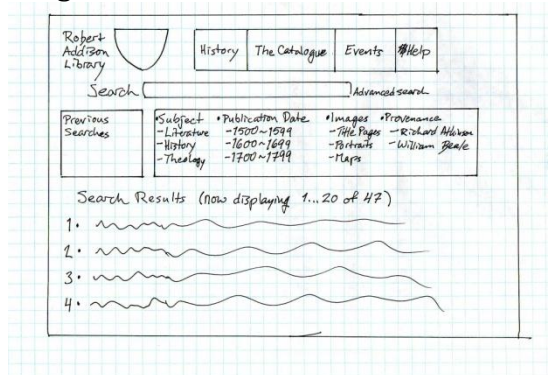


Image 4: The catalogue

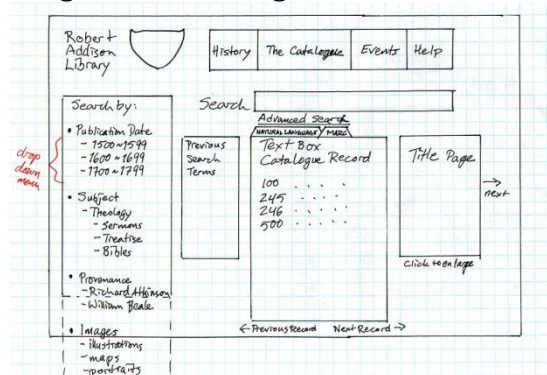


Image 5: History

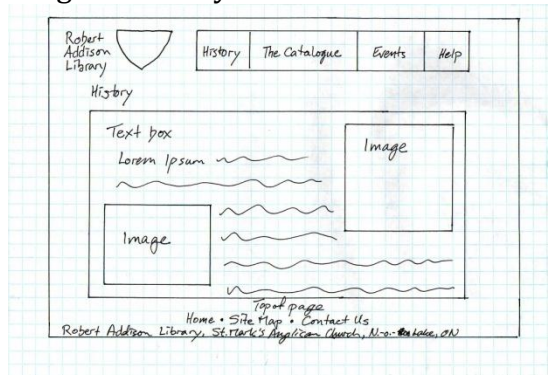


Image 6: Upcoming events

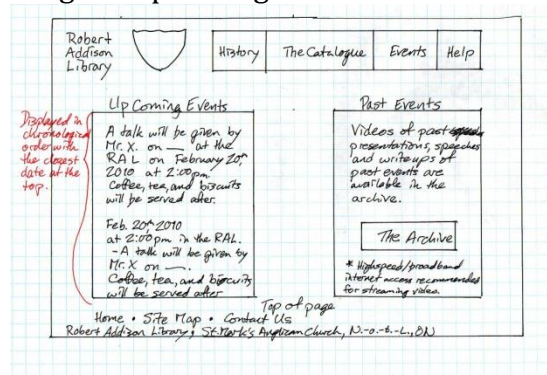


Image 7: Past Events Archive

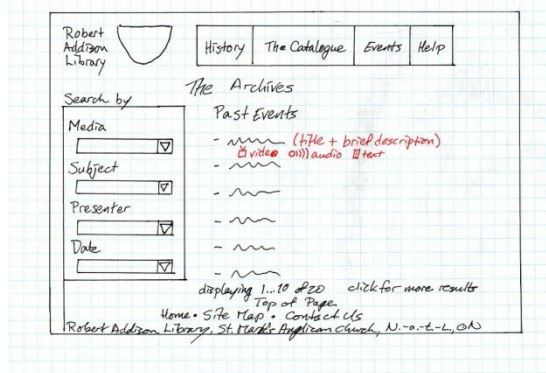


Image 8: Site map

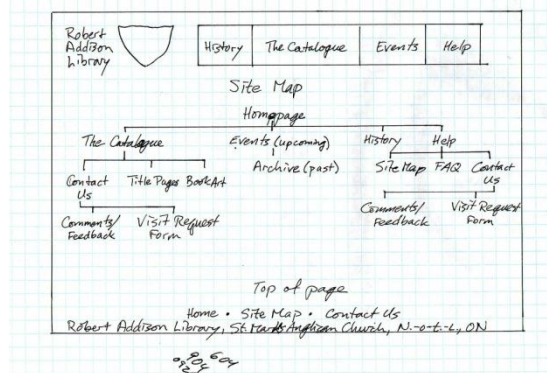


Image 9: FAQ

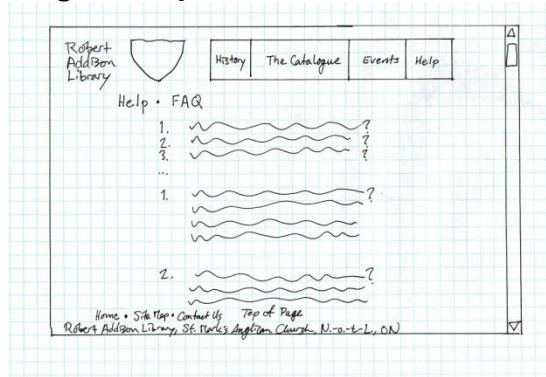


Image 10: Contact us

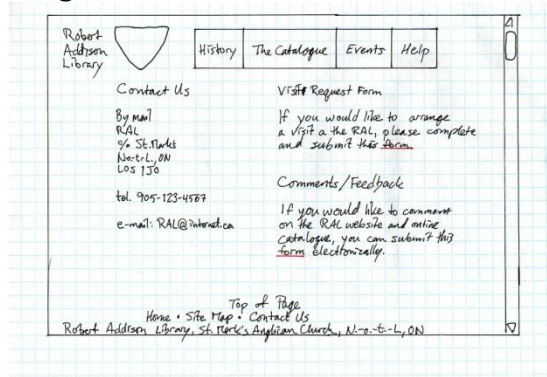


Image 11: Hi-fi prototype – home page



Image 12: Hi-fi prototype – history



Image 13: Hi-fi prototype – catalogue display

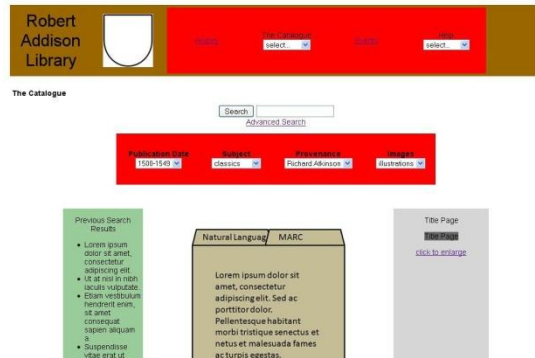


Image 14: Hi-fi prototype – title page display

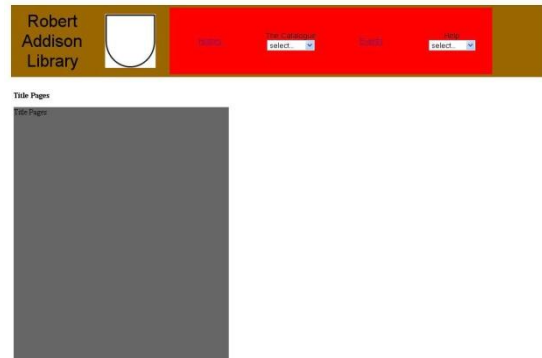


Image 15: Hi-fi prototype – book art display

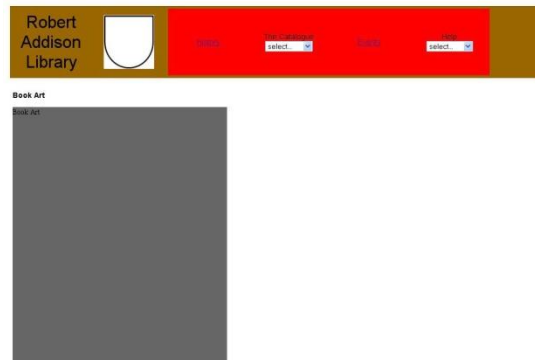


Image 16: Hi-fi prototype – events

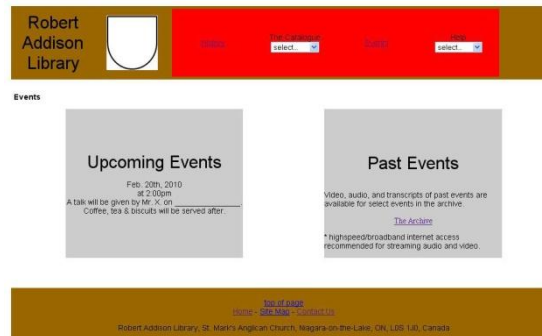


Image 17: Hi-fi prototype – past events archive

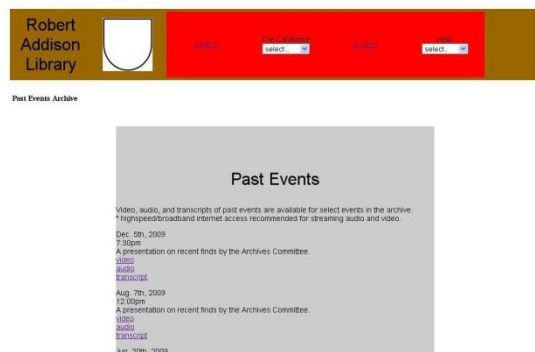



Image 18: Hi-fi prototype – FAQ



Image 20: Hi-fi prototype – visit request form

Robert
Addison
Library



Visit Request Form

Robert Addison Library
c/o St. Mark's Anglican Church
Nagaitoon-the-Lake, ON
L2L 1J5
Canada

Thank-you for your interest in the Robert Addison Library. Please fill in and submit this form. A member of the Archives Committee will respond to your request within one week. The Archives Committee makes every effort to assist researchers who are interested in the Library and/or items in its holdings. However, in the interests of the books, the library is not open to the public and we reserve the right to decline requests to visit the library.


Name: _____
 Address: _____
 City: _____
 Country: _____
 Postal/Zip Code: _____
 Telephone No.: _____
 Email Address: _____

Preferred Date & Time of Visit: (YYYYMMDD) 00:00 AM / PM

Purpose of Visit (please be as specific as possible)

Maximum 5000 characters:

Robert
Addison
Library



Comments **Feedback**

Robert Addison Library
c/o St. Mary's Anglican Church
Niagara-on-the-Lake, ON
L2Y 1A2
Canada

Your feedback can help us improve the Robert Addison Library website and online catalogue. Please feel free to leave any comments or feedback in the text box below.

Maximum 5000 characters:

[Home Page](#)

Home - About Us - Contact Us

Bibliography

- Brinck, T., Gergle, D., & Wood, S. D. (2002). *Designing web sites that work : Usability for the web* (1st ed.). San Francisco: Morgan Kaufmann Publishers.
- Courage, C., & Baxter, K. (2005). *Understanding your users : A practical guide to user requirements : Methods, tools, and techniques*. San Francisco, CA: Morgan Kaufmann Publishers.
- Dix, A. J. (1998). *Human-computer interaction* (2nd ed.). London ; New York: Prentice Hall Europe.
- Hearst, M. A. (2009). Chapter 1: The design of search user interfaces. *Search user interfaces* (1st ed.,) Cambridge University Press. Retrieved on Nov 13 from http://searchuserinterfaces.com/book/sui_ch1_design.html
- Morville, P., and Rosenfeld, L. (2007). *Information architecture for the world wide web* (3rd ed.). Sebastopol, CA: O'Reilly.
- Nielsen, J. (2001). *Ten usability heuristics*. Heuristics for user interface design. [Class handout]. Retrieved from http://www.useit.com/papers/heuristics/heuristic_list.html
- Stephenson, S. 2009. *Why do people search?* [Class handout]. Vancouver, BC: University of British Columbia, LIBR 557.
- Tunkelang, D. (2009). Front end concerns when implementing faceted search - part 1. [except from the book *Faceted search*]. Last accessed on Dec 2, 2009 from http://www.uie.com/articles/faceted_search2/