Computer Science Website
Usability Study – Winter 2007

Investigator:
Janna-Lynn Weber

Introduction

The computer science website has recently been completely redesigned from the ground up. Starting with a new content management system and a completely new layout the website was intended to bring a breath of fresh air into the school of computer science (CS). As with many new websites at the University of Windsor it has recently been the subject of a usability study. Beginning the very first week of classed in the winter semester, the web services group at information services technology invited computer science students to participate in a lab study using the Morae software suite. The majority of the participants were computer science undergrads and as such the tasks were designed for that target audience. We choose to use these audience members based mainly on availability at the time of recruitment.

The study was set up to record initial reaction to the new website as well as determining the usability of the navigation and content. A secondary goal of the study was to discover a better understanding of what students want on a website and how to help the website evolve over time. All participants were asked to verbalize their thoughts while they completed a series of tasks on the website. These tasks were designed to represent the some goals of the website from an undergraduate student level. Before the study many students claimed not to use the CS website very often and usually only as a bridge to another page. The overarching goal of the new website is to allow information quickly pass from the school to the students. However, unlike most departmental websites at the university, computer science also strives to promote the faculty and their current research to the academic community.

The scenario questions targeted the following areas of the website:

- Computer Science Graduate Program (Areas of research and How to apply)
- Student Highlights and Information
- News and Events

- Downloads and MSDNAA

- Program and Course Information

- Academic Counseling

- Professor information

- Extra Opportunities

Results

Over the course of the testing sessions, 14 students participated in the usability study. These participants consisted of mostly computer science undergrad students, 1 computer science graduate student and 3 non computer science students. The test took about 20 - 30 minutes to complete. Unfortunately, one of the video files has become corrupt and subsequently cannot be included in the results.

The computer that the participants where working with was set up at a resolution of 1024 by 768. It was equipped with Internet Explorer (version 6) and Firefox (version 2.0). The other browsers were not included because of compatibility issues with the Morae software. Many of the participants chose to use Firefox over Internet Explorer at a ratio of 9 to 4.

The following sets of charts demonstrate the strengths and weaknesses of the new computer science website as well as where people are clicking and how they are accessing the website. Please note that for tables 2 and 3 the maximum for each is 13 based on the 13 participants.
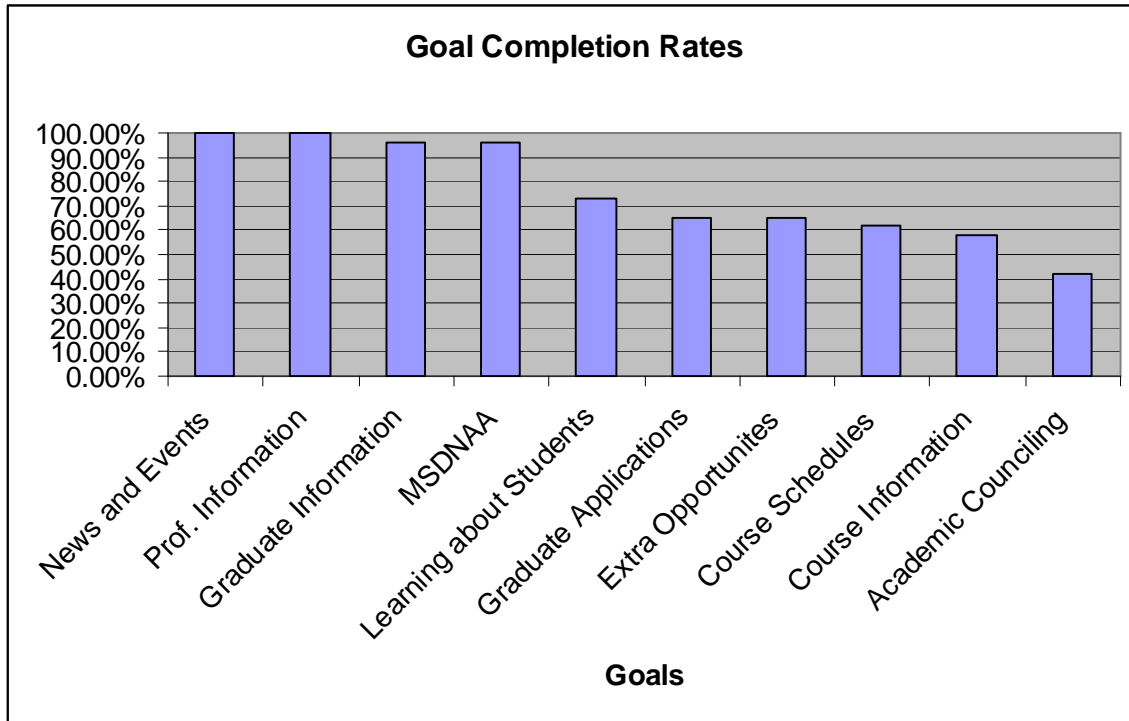
Goal Completion Rates

Table 1 – For each of the goals, the participants were given a score out of 2 to indicate the completeness of the tasks during the session.
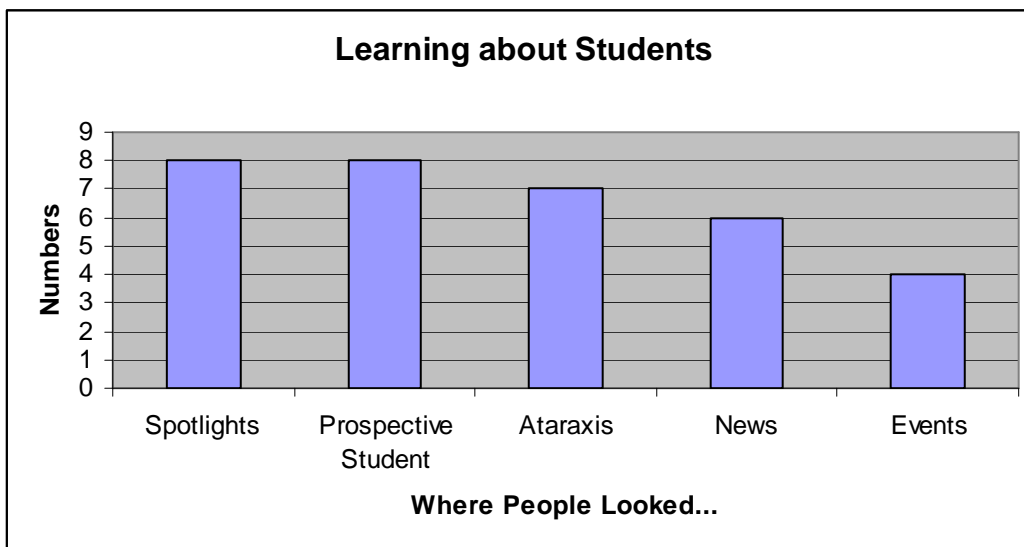

Learning about Students

Table 2 – When asked to learn about the computer science students theses are the various areas where people looked to find information. Some participants looked at many areas of the website while some looked at only one or none.
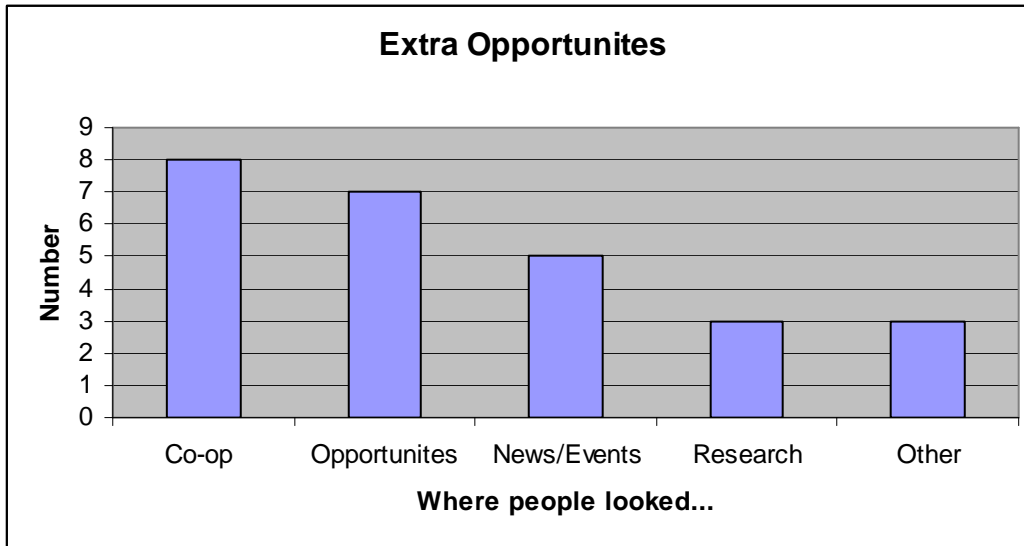
Extra Opportunites

```
Number
9 ┤
8 ┤ █
7 ┤ █      █
6 ┤ █      █
5 ┤ █      █      █
4 ┤ █      █      █
3 ┤ █      █      █      █      █
2 ┤ █      █      █      █      █
1 ┤ █      █      █      █      █
0 ┴────────────────────────────────
   Co-op  Opportunites News/Events Research  Other
              Where people looked...
```

Table 3 – When asked about the extra opportunities that the faculty of computer science provides these are the main areas that the participants looked in.

Observations and Recommendations

Below are the observations and recommendations based on the previous mentioned goals of the new CS website.

Homepage First Impression

- Observations
  - Many participants noted and improvement over the old website in layout and colors.
  - Many participants commented on the navigation being more in the middle and found it confusing when the menu moved back to the left.
  - Navigation icons ">" seem like they are indicating fly out menus, which many are used to on the main Windsor website.
  - Many participants commented that the banner was too big, or they simply ignored it.
  - Many participants claimed that the flash was "not that useful" and "distracting"

- o Once the participants had navigated away from the main page some had difficulty getting back to the start without using the back button.
- Recommendations
  - o Consider reducing the size of the main banner and improving the quality of the faculty and staff pictures.
  - o Swap the navigation menu with the school news column.
  - o (previous suggestion) Consider removing the webmail link from the bottom navigation menu.
  - o (previous suggestion) Simplify, consider joining the past and current events link into just events.
  - o (previous suggestion) The contact us in the bottom navigation should direct the user to the following page http://www3.cs.uwindsor.ca/mi_141 .
  - o Remove the "Login in" from the bottom navigation.

Computer Science Graduate Program (Areas of research and How to apply)
- Observations
  - o There were very few problems finding some information regarding the graduate program at a master level. Finding research areas and who to contact was the first thing that most students were able to do.
  - o The PhD information was easy for people to understand and they were able to easily find the forms they needed to apply.
  - o For the master program many clicked on forms, fees, and deadlines for information on when and how to apply but none of links have content yet.
- Recommendations
  - o Page doesn't fit properly; due to the HR on the landing page the banner has errors.

- o The web address at the bottom of the landing page isn't clickable, and they possibly could be aligned better.

Student Highlights and Information

- Observations
  - o Many participants cited "spotlights" first as the place to gather information about current students. They then followed to news and or events to see what had been happening in the department recently.
  - o Some participants thought that we should be showcasing our students and who we are in the prospective student area.
  - o A few participants cited the message board as a good place to learn about the current students.

- Recommendations
  - o Make a section in the prospective student area for spotlights and a section with ways to contact current students including the student reps and the Ataraxis board.

News and Events
- Observations
  - o Most participants had no trouble at all locating the news and events sections of the website.
  - o When looking at the homepage the *School News* was often overlooked until they were specifically looking for it.
- Recommendations
  - o Add an RSS to the news and events listings.
 - o Consider changing the location of the school news closer to the middle.

Downloads and MSDNAA
- Observations
  - o Most participants easily found the download site and complemented the ease of use of that page in particular.
- Recommendations

Program and Course Information
- Observations
  - o Many participants had a lot of trouble with this task, partially because some of the content was missing or wrong.
  - o In the undergrad section, many of the program links are circular and go to misleading information.
  - o When looking for what courses the participants were supposed to be taking the program requirements were difficult to find at best.

- o Some participants were able to find the course offerings from the main page but were still disappointed that the course times and location were not listed with the course.
- Recommendations
    - o Use the content from the current academic calendar, (and keep it up to date) for program requirements and suggested course sequencing.
    - o Include the course times with the course offerings
    - o Include a link to the course offerings from the undergrad section.
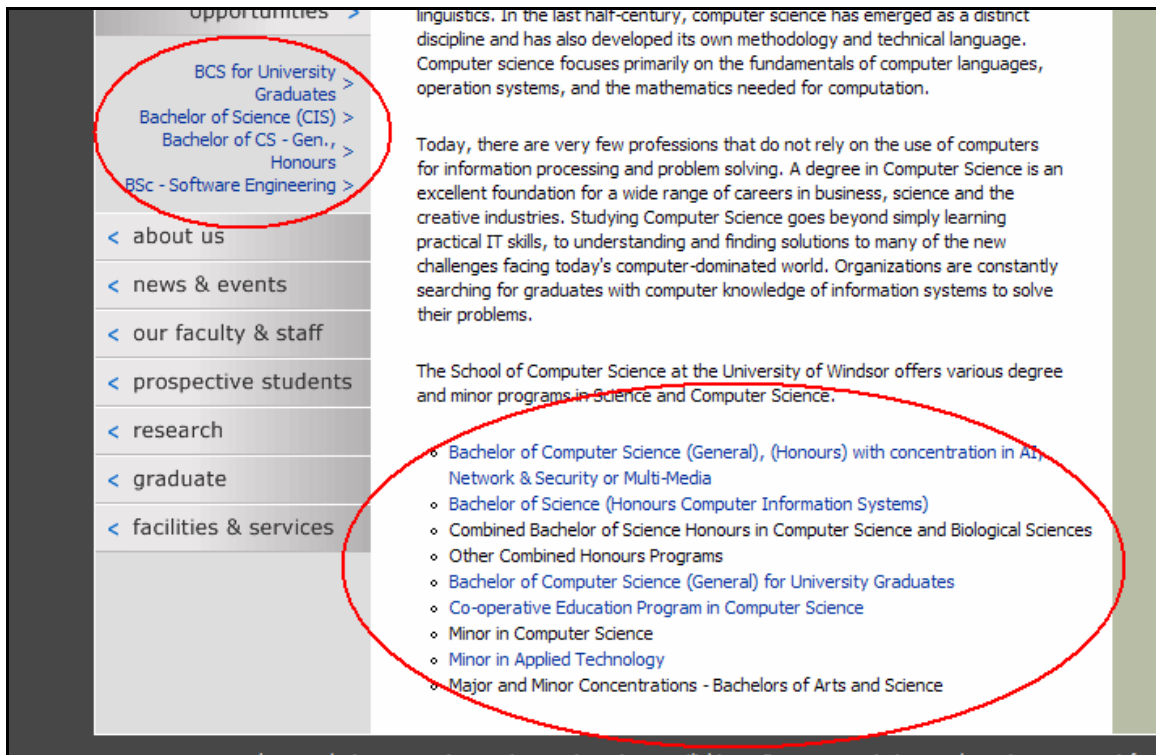
Both red circles contain similarly named links that go to different areas of the web, with very different information. More importantly they were still missing the information that the participants wanted

Academic Counseling

- Observations
    - o Many participants took two approaches to this task.
        - ▪ The first looked for academic counseling under the undergrad category, to which some found the counseling section and some

overlooked it because they were looking for the word academic or advisor.

- The second set decided to look under the faculty and staff listing to see who are the academic advisors are or to find the secretary's phone number to schedule an appointment.

- o Both sets of participants were satisfied with what they had found.
- Recommendations
  - o On the faculty listing page, show which professors are academic counselors and link to the counseling page.
  - o Consider changing the link from "counseling" to "academic counseling".
  - o Consider adding a link to the counseling page on the services page.

Professor information

- Observations
  - o Many participants found the faculty listing page without problem.
  - o Some participants were confuse as to why some profs had a "real page" that matched the rest of the CS website and why some were using their personal homepage.
  - o When directed to Dr. Boulos' page many participants found it to be empty and neglected to click on the new table of contents that had been generated.
- Recommendations
  - o Heavily encourage all faculty members to use the CS website CMS and add a full page to their landing page.
  - o Consider slightly changing the color of the new table of contents on the Profs webpage simply because this will a completely new table of content compared to any other page.

Extra Opportunities

- Observations
    - Many of the participants knew where to find some extra opportunities but they also had varying ideas of what these opportunities could be.
    - Most of the current undergrad student table of content is geared towards extra opportunities but was often not the first place that the student would look.
    - Many participants went to the news and events to look for seminars they could attend. They also tried research to find Profs in similar fields of interest to see if they could contact them. At this point, neither of these strategies was very successful due to lack of content.
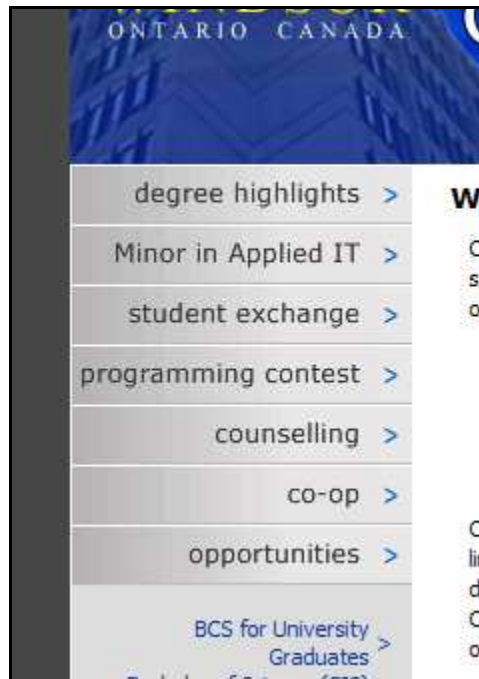

- Recommendations
   - Consider adding some of these opportunities to the prospective student menu.

Additional Observations, Comments and Future Request

In addition to these specific areas, comments were gathered regarding layout, as well as the search and site map functionality.

- The search result items are very close together to the point where they all blend together. There is no date listed on any of the entries but sort by date is a given functionality.
- The "Minor in Applied IT" is the only major link that has capitals.
- Include more testimonials from students (in progress)
- When viewed in Internet explorer (v. 6.0.2900), crashed on at least 3 occasions.
- PDF and other documents must always have some warning to the user before they click and open them.
- For future consideration: the pagination of the documents on various parts of the website was never tested during this study and should be watched carefully.
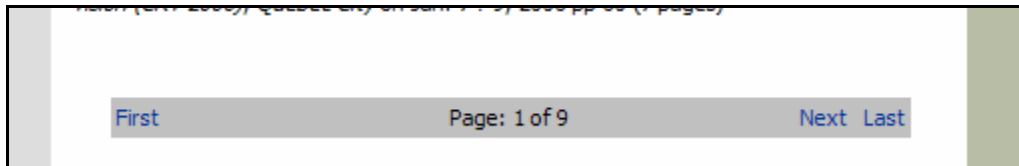
- Ensure that links are underlined and colored blue. If text is not a link do not underline it, it creates unnecessary accessibility problems.
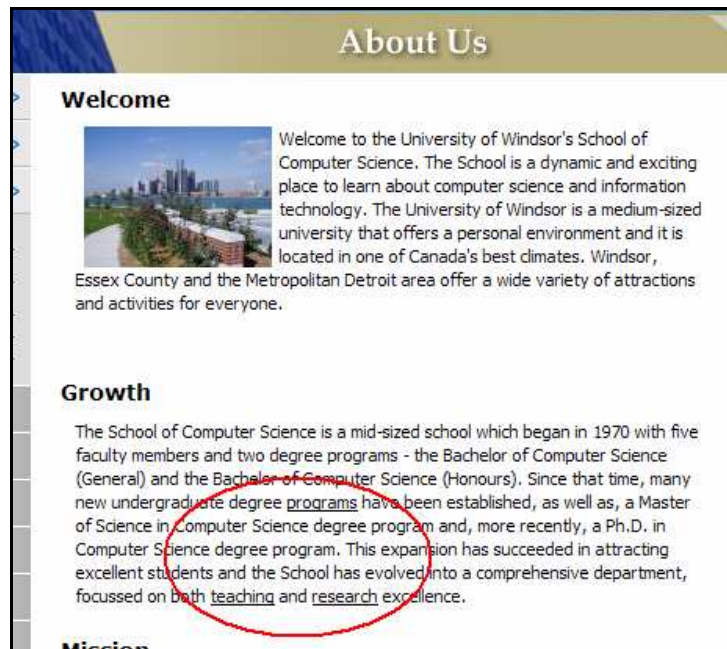
Conclusions

Many participants had mixed reviews to the website. While they noticed the improvement to the look and feel, the lack of content and unfamiliar navigation proved very difficult at times. Many felt that the website was not complete but was on the right track. Overall the website has improved in many areas including navigation. Many of the areas were not complete so the participants would indicate what they expected to be there usually with great success. Carefully adding more content and taking into consideration the recommendations outlined in this report the new computer science website will grow into a great website.

This study focused on the acceptance of the new website as well as the usability of the navigation and content. However, the study did not touch on accessibility and it is recommended to review the website from this view point.

Finally, the recommendations outlined here should be reviewed and implemented on the new computer science website. At which time the website committee can explore their options on further usability and accessibility evaluations of the website.