
Variations2: Website Usability Study

<http://www.dml.indiana.edu/>

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1.0 Executive Summary

The following study analyzed the usability of the informational website for Variations2: The Indiana University Digital Library Music Project (currently under development).

During the month of July 2003, usability testing of the Variations2 website was conducted with five subjects. The purpose of this study was to identify usability problems with the website and to determine users' levels of satisfaction with the site. Participants performed five different tasks during a 60-minute session in the SLIS (School of Library and Information Science) usability lab at Indiana University. The tests resulted in these findings:

Positive Aspects about Variations2 website:

1. The current site is easy for users to find.
2. The aesthetic is very professional.
3. The color scheme was very well received.
4. The graphics on the site were well received.

Major Improvement areas for the Variations2 website:

1. Users seem to have some problems navigating the site. The link names on the navigation menu are confusing.
2. Some of the features of the site are not very visible and were hard to find.
3. The site lacks search functionality.
4. A user who is unfamiliar with the Variations2 project has trouble understanding the purpose of the site and the Variations2 project.
5. The Screenshots section is not consistent with the rest of the site.

Based on the usability problems identified in this test, the usability team recommends:

1. Renaming the link names on the navigation menu and reordering the links on the menu so the most commonly used links are at the top
2. Making the dynamic parts of the user screenshot tab (and other features) more obvious to the user.
3. The addition of a search box to the final site.
4. Clarification of what the Variations2 project is. Such an explanation must be geared towards someone who has never heard of Variations2 and does not have much technical background.
5. The addition of a side navigation bar to the screenshots pages to make them consistent with the rest of the site.

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3.0 Purpose and Intent

3.1 Purpose

The Variations2 website is the primary informational site for Indiana University's Digital Music Library. The site aims to give the student and scholarly community information about the Variations2 digital music library project as well as events and personalities associated with Variations2.

The testing of Variations2 measured the usability of the website by establishing benchmarks for performing specific information-seeking tasks and gathering feedback provided by the study's participants. This study examined how effectively and efficiently a typical user is able to perform information seeking tasks on the website and what level of satisfaction the user experiences from using the site. The data collected from the usability test of Variations2 will be used to improve the navigation of the site and give user feedback to the client.

3.2 Objectives

The testing was conducted with the following in mind:

- Can users quickly and easily navigate the website to accomplish given tasks?
- Is the website easy to understand and intuitive?
- Do users like the look and feel of the website?

3.3 Intended Audience

The intended users of the Variations2 website include the Indiana University community, specifically researchers, students and music librarians. In addition, other user groups include other research communities (university and otherwise) and perhaps other groups that are given access to the software in the future. During the month of July 2003, usability testing of the Variations2 website was conducted with 5 subjects. Participants performed five different tasks during a 60-minute session in the SLIS usability lab at Indiana University.

4.0 Method

4.1 Test Subject Profiles

The test 5 participants were recruited from the Bloomington area. They were each friends of members of the testing team. They all felt they were quite comfortable with the Internet, and all reported they use the Internet quite often. Four out of five reported they have used computers for 11 or more years and the fifth person reported having used computers for between 6 and 10 years. The five test subjects had varying levels of familiarity with Variations2. All of the users were between the ages of 16 and 35 and 4 out of the 5 participants were female. The subjects included a combination of students and those who have finished school and work in a computer related field. More details concerning the test subjects are shown in Appendix A.

4.2 Tasks

Each of the five users was given five tasks to complete. The first task for each of the users was to find the current Variations2 website. The remaining four tasks were given in a random order. The specific tasks are as follows:

1. A colleague of yours tells you about a digital music library project called Variations2 being developed at Indiana University. Find the website for this project.
2. You have just learned about Variations2 and realize that it is a music search engine much like Napster was. Looking back in the last several years, you remember that the Court ruled against Napster for breaking copyright infringements. You are curious about how Variations2 compares to Napster from a copyright point of view. Find out from the Variations2 website the date that the court made this decision against Napster.
3. You went to a conference in Ft. Lauderdale, FL from April 5th to April 10th and sat in on a presentation by Mark Notess and Margaret Swan. You would like to go back and review the presentation. On the Variations2 website, find the paper. What is the title of the paper?
4. The Variations2 project sounds like it would be useful for you to find a piece of music you have been looking for. You only know the key the music is played in and the publisher of the music. According to the screen shots of the Variations2 software which search tab will let you search by these criteria?
5. You are interested in learning more about the conferences associated with the Variations2 project. What is the next upcoming conference?

Task 2 originally asked about the types of music not protected by copyright. It was changed because the answer was found in two separate documents on the website. Task 5 originally asked when the software would be finished. The members of the testing team could not find an optimal path for this question and thus Task 5 was also replaced with a new task.

Test subjects were asked to think aloud while they performed their tasks. Tasks were timed, and the number of clicks and scrolls were also noted. In addition to completing the tasks, users filled out a demographic and satisfaction questionnaire. The test subjects were then interviewed and asked direct questions about the website. During the interview, users were also asked about a second navigation menu and were asked to compare the two. More details of the testing procedure are found in Appendix B and Appendix C.

The usability team tried to do several things to reduce bias in the tasks performed. First, we set the home page to www.apple.com, so that the user could use the search engine of his or her choice to find Variations2. If the home page for the browser had been www.iub.edu, the users might have just searched from there and not thought about what search engine they normally would use. Second, between each usability test, we made it a point to clear the cache of the browser so a user could not benefit because of a page being in the cache from a

previous test. On one of the tests, this step was forgotten, which may have affected our results from that test. Also, it turns out that Internet Explorer saves text that has been typed in text boxes. Unfortunately, we did not realize that this would happen. During one of the tests, a person started typing Variations2 into a text field to search, and Internet Explorer displayed it from a previous search as the user was typing it. Finally, between tasks, we tried to always take the user back to the home page. There were several occasions in which we forgot to do this and there was one time when the user actually performed the task in fewer clicks than the optimal path because they didn't start from the home page. Known problems, recommendations for solutions and their significance are discussed in the Results and Recommendations section of this report.

5.0 Results

The previously stated benchmarks were measured by the following criteria:

- At least 80% of the users being able to achieve at least 80% of each task.
- At least 80% of the users rating the site with above average satisfaction ratings. This is defined as 5 or above on a satisfaction scale ranging from 1 to 7.

5.1 Effectiveness

The first benchmark dealt with effectiveness by requiring at least 80% of the users to achieve at least 80% completeness of each task. Table Y below summarizes the effectiveness for each user. Effectiveness was measured as the ability for the user to complete the task correctly. If a task was not completed the team estimated what percentage of the task was finished.

This benchmark was achieved. For the chosen tasks, the site was effective because 100% of the users achieved at least 80% of the tasks.

Table A – Task Achievement

	Task 1	Task 2	Task 3	Task 4	Task 5
User 1	100	100	100	100	100
User 2	100	100	100	60	100
User 3	100	100	100	60	100
User 4	100	100	100	100	100
User 5	100	80	100	100	100
Median	100	96	100	84	100
Expert	100	100	100	100	100
High	100	100	100	100	100
Median	100	100	100	100	100
Low	100	80	100	60	100
Range	0	20	0	40	0

5.2 Satisfaction

The second benchmark for this usability study dealt with user satisfaction. The benchmark required at least 80% of the users to rate the site with above average satisfaction ratings on the post-test questionnaire. This is defined as a rating of 5 or above on a satisfaction scale ranging from 1 to 7. Table 6 summarizes the average satisfaction level among all users for each question. Based on these findings, the benchmark for user satisfaction was reached in only half of the areas surveyed. The lowest scores dealt with questions regarding the terms used on the navigation buttons, the language used throughout the site and the options for moving within the site. Verbatim user feedback is included in the Findings and Recommendations section.

Table B – Post-Test Questionnaire Results:

Questions	Answer Options										
		1	2	3	4	5	6	7	N/A	Ave.	
The options for moving within the site were	unhelpful		◆		◆ ◆		◆ ◆			helpful	4.4
Returning to the Homepage was	difficult				◆		◆	◆		easy ◆	6.0
The terms used on the buttons	ambiguous		◆ ◆		◆	◆	◆			precise	3.8

were											
The language used throughout the site was	confusing		◆			◆	◆ ◆			clear ◆	4.75
The way information was organized throughout the site was	confusing			◆		◆	◆ ◆ ◆			clear	5.2
Your expectations for where the information was located on the site were	not met			◆	◆	◆	◆ ◆			met	4.8
The text size on each screen was	difficult to read						◆ ◆	◆ ◆ ◆		easy to read	6.6
The use of graphics, color, and animation on the site was	distracting				◆		◆	◆ ◆		appropriate ◆	6.0
The need for help was	frequent			◆		◆	◆	◆		infrequent ◆	5.25
Finding help was	difficult			◆		◆		◆	◆ ◆	easy	5.0
Overall experience in using the site was	frustrating		◆		◆		◆ ◆	◆		enjoyable	5.0

6.0 Findings and Recommendations

Significance was determined by looking at the impact and frequency of occurrences. A summary of our recommendations is contained in Table C.

Table C – Summary of Results and Recommendations

Observation	Recommendation	Significance
The blue “advanced tab” navigation above the software screenshot blended into it and did not appear to be “clickable”. See Screenshot C and D in Appendix F.	Separate the button away from the screenshots and make it look more like a “clickable” button.	High
The wording on the site make it difficult for the users to understand the project if they were not already familiar with it.	Edit the descriptions to be more simple and direct.	High
Search capabilities did not exist on the site but all of the users mentioned their desire to use such a function.	Add a search box to every page of the site.	High
The left-hand side navigation is missing on the screenshots pages, and the top navigation/graphics do not match the rest of the site. There is also no way to get back to the homepage from the screenshots pages.	Adapt the layout and navigation of the site to the screenshots pages.	Medium
The organization of the left navigation was often confusing due to unclear labeling and overlapping options - there was not a clear division among the different options.	Evaluate the categories and choose more precise descriptions. The results might be the combination of some options.	Medium
The left navigation arrangement focused on project information and history rather than the software and purpose of the project. Several users commented on their interest in having the links regarding the software in the beginning.	Move the navigation options directly concerning the software closer to the top of the list.	Medium
The contrast was not sufficient to make the navigation options stand out. See Screenshot B in Appendix F.	Increase contrast on Navigation Menu.	Medium
It was not apparent to the users that the navigation options on the homepage were the same as the left-hand navigation options on the rest of the site.	Add breaks to the navigation on the homepage to make the navigation more “clickable”.****	Medium
There were too many left-hand navigation options on each page, forcing the user to scroll down to see all of them.	Adapt the new collapsible navigation and use Roll Over Java Script to show submenus of sections other than the current section.	Medium

6.1 Observation One: The Lack of a Search Function.

The lack of a search function on the site prevented users from finding specific information quickly. After reading a task, users often looked for the search function first, before looking at the categories. This is reflected in the comments of some of the users: “I will see if there is a search feature...but... (looks around the page, does not see a search feature).” Another user says, “Was there a search?” and another, “It would be nice if there was a search.” These user comments were made after the user read the task but did not immediately see a quick way to get the answer. When asked directly, one participant commented, “If I can’t find info quickly, I will use a search.”

Users also commented that having a search function on the page made them feel more secure and in control of their experience with the web page. One user commented: “There’s something about having a search box that makes you feel like it’s gonna be ok.”

When shown a second version of Variations2, users reacted positively to the addition of a Google search function to the site. One user reacted, “Whoa!! And it has a Google search?” and another said, “... I noticed (the search box) first thing.” When asked why they liked the search function, a user stated, “For something specific, I want a search box so I can get right to it.”

Interpretation

The lack of a search function caused the users to work harder to find information. The users often immediately looked for a search function when presented with an information-seeking task. Multiple users requested or asked about a search function multiple times. A search function makes users feel more secure by giving them more control over how they access the information on a site. In addition, users felt that they were saving time by using a search function. Users responded very positively to the addition of the Google search to the second version of the site with new navigation.

Recommendations

The Google search was well received and it is recommended that it be included in the final version of the Variations2 site.

6.2 Observation Two: Unclear Labeling of Navigation Categories

There was some user confusion over the labeling of certain categories in the left-side navigation bar. One commented, “I’ve been to a conference and I want to find out their stuff. I’m confused, do I choose documents or do I choose Research Areas. I’m guessing “Research Areas”. Another mentioned the labeling of the _News_ section; _Why is there a section “News” under “News” which used to be “Current News” and is now “News”?

That's confusing. Another participant after reading the categories said, "Current News" and "Archives", how do I know what is going to be in an archive versus current?

There was another issue with the categories "Papers and Presentations" vs. "Working Documents". Some participants were confused by this and did not understand the distinction. One individual stated, "All right, what is the difference between 'Papers' and 'Working Documents'?" Because they sure look the same to me. One participant asked the test moderator, "What is 'Working Documents'?"

Interpretation

The users felt that the distinctions between the "Papers and Presentations" vs. "Working Documents" categories were unclear and that they were unsure of where to go to locate the information required by the task. It also became apparent during the post-test debriefing interviews that the participants felt that they would have needed to use a search function less if the categories had been clearer. They expressed a preference for finding the link to the information in a navigational category, saying they would search only if they could not find the information quickly and easily.

Recommendations

The categories should be further clarified and refined if possible. Furthermore, the addition of a search function will allow users to comfortably find information they are seeking without working too hard to understand the categories and subcategories.

6.3 Observation Three: User Screenshot Search Tab Dynamics

Users were often unaware that some of the dynamic links, buttons, tabs and other objects on the site were in fact "clickable". The user screenshot search tab is the most extreme example of this problem.

Out of all the tasks, the users had the most difficulty getting to the advanced search of the user screenshots. All users had difficulty with the blue tab that is located at the top of the screenshot. Although the tab does say, "click here to move to the next tab," users had great difficulty making note of this. Most users did not see the writing and became frustrated. Two users did not complete this task.

One user stated during the debriefing, "I thought the tab was 'just part of it' (the screenshot). Another user, when asked about the tab movement said, "It moves...Probably because this is complicated enough I didn't think of

needing more fields to look through.” Another participant was unsure of the nature of the screenshots; “I didn’t know what that meant. I wasn’t even sure that was clickable. This looks like a screenshot to me, so is that really clickable, or is that part of the screen shot?”

In addition, some of the participants also mentioned that there was “something not quite right” about the presentation of the screenshots on the webpage. A user suggested that it was “a layout problem, the way the screen shots are presented.” Another user mentioned “I don’t like it when pages are longer than the screen. So you have to scroll down to see everything that’s on here, that’s not very nice.”

Interpretation

Participants were confused by the screenshots because they did not feel that they were given the standard visual cues that would enable them to understand the functional capabilities of the screenshots. Because those cues were absent, the users assumed (at first) that the screenshots did not have any dynamic functions. They saw a static screenshot and assuming it did not ‘do anything,’ went to a different page to try to find the answer to the task they had been given. Not all of the participants completed this task.

Recommendations

When asked, the participants themselves recommended a “more clickable look” using “web-style buttons.” It is also recommended that the tab on the user screenshots be made to look more three-dimensional and clickable. Current convention concerning what types of items are clickable on a web page should be used (underlining of links, definition, buttons) in order to make these dynamic options more intuitive to the user.

6.4 Observation Four: Overview Wording

One participant really had a hard time understanding what the project was and what the purpose of the website was. Upon seeing the first page, she said, “Wo, wo, wo, this is all like Techno babble. This is not for your average music lover. This is for some techno head.” She later said again about the home page, “This looks to me like the people who created it, think you already know what this is. It’s not made for a first time user.” She added, “So What I want to know is what’s included in this website. What can I find? What kinds of resources are there?” When she realized that there was software associated with the site she said, “Again, I felt like there was some assumption being made like I know what’s in the software.” She later added, “Is this software that I have to buy, is it software I download, is it included somewhere here on the site. There’s just really no, no information.” Again, later the user expressed her frustration in not knowing what Variations2 is, “I

have to guess what this is.” And finally, “I’m still not clear on what variations2 is doing.”

Interpretation

The Home page and Overview page use a lot of technical words that the average person will not understand. This is fine for a more technical oriented researcher coming to learn about the research that has been done on the Variations2 project. This may also be fine for the music student who has used Variations in their music class since they already have some idea of what Variations is about. For those who neither have the technical background, nor the experience with Variations, they can easily get lost and confused.

Only one user mentioned this point. However, she was also the only test subject not affiliated with Indiana University. Several others mentioned that they knew about the Variations software in the library. It could be that the other participants knew enough about Variations to not be as confused.

Recommendations

On the Home page and the Overview page, place a simple explanation that is geared towards someone who has never heard of Variations2 and does not have much technical background. The more technical terms could be used deeper in the site.

6.5 Observation Five: Navigation

At the request of our client, we tested the navigation for the Variations2 site and also a second version of the navigation. We will discuss the first site as Variations2 and the second as the alternate site.

Variations2

Variations2 has a dark blue bar running down the side in the navigation with all of the categories displayed upfront. There was some division among the participants in how they viewed the navigation for the Variations2 site. As one participant stated, “There’s just so much stuff going on in this navigation side,” referring to the links in the navigation bar. However, other users liked being able to see all the information in the navigation bar at once.

Alternate Site

The alternate site does not have the blue bar running down the side of the navigation and only the top level categories are displayed upfront. The navigation has nested categories and the subcategories are not displayed

upfront. This provoked a divided response as well. Some users liked the “cleaner” look, “...something about the display, definitely that I like.”

Others did not like the functioning of the navigation; “If the navigation is going to be set up this way... and you are going to be using these little triangles, like maybe have a triangle that points to the right next to the overview, or something or maybe over on the left-hand side or something, just to cue you in that this is where you are. I don’t think there is enough visual distinction.” The users did not like that all of the categories were not listed upfront.

Recommendations For Final Site Navigation

On the whole, users liked the color schemes of both of the sites’ navigation. They had difficulty choosing between them. It may help to slightly lighten the blue in the first site and combine the two navigational ideas.

- Lighten the blue in the side bar a little.
- Make a menu with many categories, but not as many as the first navigation.
- When displaying the top-level category, use a rollover to show what is under it.
- Some users suggested putting the Variations2 software information up higher in the navigation bar menu because that is what will be most important to the users.

6.6 Lower Significance (additional recommendations) Navigation

- Link the Variations2 logo as a home button
- Breadcrumb navigation on screenshot pages is too hard to see in yellow. The color should be changed.
- Add additional explanation or description to the screenshot pages
- Add visual cues to help with the function of the screenshots
- The “Download this user guide” link confuses the user to think that the user guide can help them navigate the Variations2 informational website.
- Enhance the homepage to have a more clickable/button feel
 - Distinguish the navigation on the homepage by making buttons.
 - One user commented, “You don’t notice that these are links until you put your mouse over them.”
- Text lines should be shortened because the length of the lines makes the user work too hard to read the text.
 - “The line length is too long, the line length of the text.”
- Move the search box to the top right-hand corner so it is visible when a user first enters the site.
- Add additional text and explanation to pages that currently have little content.

- Users mentioned that they felt like they reached a dead end and were on the wrong path even though they were on the correct path.

7.0 Conclusion

The goal of the testing, as stated at the beginning of this report, was to examine how effectively and efficiently a typical user is able to perform information seeking tasks on the website and what level of satisfaction the user experiences from using the site. The testing was conducted with the following objectives in mind:

- Can users quickly and easily navigate the website to accomplish given tasks?
- Is the website easy to understand and intuitive?
- Do users like the look and feel of the website?

The purpose of the Variations2 website is to provide information about the Variations2 digital music library project as well as events and personalities associated with it. Search functions that are vital to this purpose were conspicuously absent in the first tested version of the software but were added in an alternate version. However, even without the search function, the users were generally able find the necessary information to complete the tasks.

The test results showed that in addition to the search function, two other main areas needed improvement. The category names, proved to be a bit confusing due to some perceived overlap by the users and some items that were meant to be links were either difficult to see or it was not clear to the user that they were clickable. The inability to communicate to the user that items were functional and not static limited the usefulness of the website.

Overall, the site was easy to find, professional looking and attractive. However, some improvements can be made to increase functionality, namely, the addition of a search box, clarification of the project, calling attention to the dynamic parts of the site to address their function, and standardizing the screenshots page with a side navigation bar to make the page more consistent.

Appendix A – Pre-Test Questionnaire

Questions	Answer Options				
1. What is your age (in years)?	16-25 ◆ ◆ ◆	26-35 ◆ ◆	36-45	46-55	56 or higher
2. Please indicate your gender.	Male ◆		Female ◆ ◆ ◆ ◆		
3. What is the highest level of education you have completed?	High School ◆	Bachelors Degree ◆ ◆ Senior		Masters/PhD. ◆	
4. What is your occupation?	<i>Graphic Designer/Web Designer</i> <i>Student</i> <i>Programmer</i> <i>Student</i> <i>Computer Support Specialist</i>				
5. Is English your native language?	Yes ◆ ◆ ◆ ◆		No ◆		
6. How long have you been using computers?	1-5 years	6-10 years ◆		11 or more years ◆ ◆ ◆ ◆	
7. How comfortable are you with using the Internet?	Uncomfortable	1 2 3 4 5 6 7 ◆ ◆ ◆ ◆ ◆			Comfortable
8. How often do you use the Internet to find information?	Rarely	1 2 3 4 5 6 7 ◆ ◆ ◆ ◆ ◆			Often
9. How familiar are you with the Variations2 Digital Music Library	Not familiar	1 2 3 4 5 6 7 ◆ ◆ ◆ ◆			Familiar

Project at IU?		◆	
10. Have you ever visited the website for Variations2?	Yes	◆	No ◆ ◆ ◆ ◆

Appendix B - Testing Procedure Overview

Preliminary Stage

- The moderator escorts the user into the usability lab, introduces the other team members and explains the setup of the lab.
- The moderator escorts the user to a separate desk away from testing workstation.
- The door is closed between the usability lab and the observation room.
- The moderator reads the script describing the testing purpose and procedures to the user.
- The user completes the pre-questionnaire while seated at the desk.

Task Performance Stage

- The moderator escorts the user to testing workstation where the cameras and microphone are located.
- The observers begin the process of video recording. This recording includes sound and a composite view with picture-in-picture image of the on-screen view and the face of the user.
- The moderator reads the script with instructions on how the tasks should be performed explaining the user's rights and the usability team's obligations to privacy.
- The moderator gives the 3 ring binder with the tasks to the user.
- The user proceeds through each task.
- Once all the tasks were completed, the moderator escorts the user back to the separate desk to complete a post-questionnaire.

Post-testing Stage

- The user completes the post-questionnaire.
- The moderator interviews the user and questions them about specific critical points noted time during the tasks.
- The observers stop the video recording as the moderator thanks the user and escorts him/her out of the usability lab.
- Team members thank the user for participating and offer some complimentary cookies.

Appendix C – Detailed Testing Procedure

Preliminary Stage

Moderator escorts the user into the usability lab and introduces the other team members. Moderator escorts the user to a separate desk away from testing workstation. Door is closed between the usability lab and the observation room. Moderator reads the following script and hands printed copy to user to follow along.

Thank you for agreeing to participate in a usability test of the Variations2 website. The website has been designed to assist individuals to find news and information about the Variations2 project. We need to assess the quality of the content, the ease of use, and the design. That is how you will help us today.

In a few minutes, I will have fill out a questionnaire. You will be asked to answer some questions to find out about your:

- Age Range
- Gender
- Highest level of education
- Your experience using the Internet
- Your comfort level using computers
- The type of computer you prefer
- Your familiarity with the Variations2
- And whether or not you have visited the Variations2 website in the past

Always remember that all information and data collected during this test will be held in the strictest confidentiality. No one other than myself, the members of our usability team, and our faculty advisor will know your identity and your responses. All data about you will be destroyed.

If at any time during the test you want to leave, please feel free to leave – no questions asked.

Moderator hands user the pre-questionnaire and continues reading the script.

Here is the pre-questionnaire. When you have completed the questionnaire, please tell me and we will proceed to the next phase of the text.

Moderator waits until user finishes questionnaire then collects it.

Task Performance Stage

Moderator escorts user to testing workstation where cameras and microphone are located. Observers begin video recording process. Recorded picture includes sound and composite view with picture-in-picture image of the on-screen view and the face of the user.

Please take a seat in front of the computer terminal.

Shortly, you will be asked to perform five tasks. This session is to evaluate the website and not to test your abilities. Usability testing is intended to test a website, not the person using it. So relax and do your best. Your responses are valuable to us. I will be sitting in the room when you are performing the tasks.

Next to the computer keyboard you will find a closed notebook. In the notebook are five tasks we will be asking you to perform. When you are ready to perform the tasks, open the notebook. Each task will be sequentially numbered and printed on separate pages. When you have completed a task, say out loud that you are done, and flip the page to continue on to the next task. When you have completed the final task, close the notebook and tell us you are finished.

As you perform each task, please describe your thoughts and expectations. For example, if you move your mouse to follow a link, please describe why you chose that link and what you think it might lead to.

As you are working on the tasks, I might remind you to think aloud by asking a question. If you have comments about the look and organization of the website, please feel free to say them too.

After you have completed the test, you will be asked to fill out a final questionnaire. These questions will ask you for your opinion on the layout, appearance, organization, and your impressions of your performance on the website.

Thank you for your help.

Moderator gives user the 3 ring binder with one task on each page. User proceeds through each task. Moderator asks neutral questions as necessary to remind the user to explain his or her thoughts and actions. Once all the tasks appear to be finished, moderator asks user:

Are you finished with your tasks?

Post-testing Stage

When user acknowledges completion, moderator escorts user back to the separate desk to complete post-questionnaire. Observers stop the process of video recording. Moderator gives user post-questionnaire.

When you have completed the questionnaire please tell me.

Moderator collects questionnaire when complete. The moderator escorts the user back to the computer to conduct a debriefing interview. Video taping of this interview starts. Moderator asks the user several general and critical incident questions.

Thanks for participating in this usability test.

Moderator escorts user out of the usability lab. Team members thank user for participating and offer some complimentary cookies.

Appendix D – Task Completion Time (minutes: seconds)

	Task 1	Task 2	Task 3	Task 4	Task 5
User 1	0:25	1:16	1:12	1:38	0:30
User 2	0:35	2:30	0:50	2:41	1:04
User 3	0:33	3:12	0:20	3:16	0:04
User 4	0:19	0:28	0:44	1:05	0:45
User 5	0:15	3:00	1:05	0:45	0:32
Median	0:25	2:30	0:50	1:38	0:32
Average	0:25	2:05	0:50	1:53	0:35
Standard Deviation	0.006	0.049	0.014	0.044	0.015

Appendix E – Task Click Count

	Task 1	Task 2	Task 3	Task 4	Task 5
User 1	4	7	5	6	1
User 2	4	6	5	8	2
User 3	4	20	6	16	1
User 4	4	4*	3	7	3
User 5	4	7	6	8	1
Optimal	4	5	2	5	1
Median	4	7	5	8	1
Average	4	9	5	9	2
Standard Deviation	0	6	1	4	1

*User had fewer clicks than optimal because we forgot to start them back at the home page on this task.

Appendix F – Variations2 Screenshots

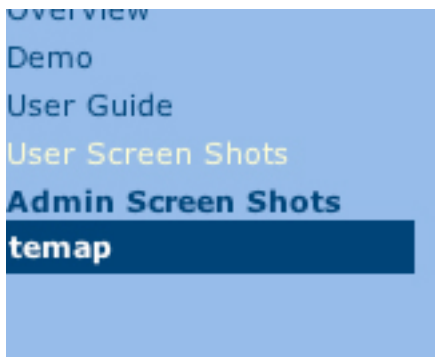
Screenshot A



This material is based upon work supported by the National Science Foundation under Grant No. 9909068. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

This screen shot illustrates the difficulty for the user to determine what is “clickable” on the page.

Screenshot B



Screen shot B illustrates the contract issues in regards to the left navigation on the site.

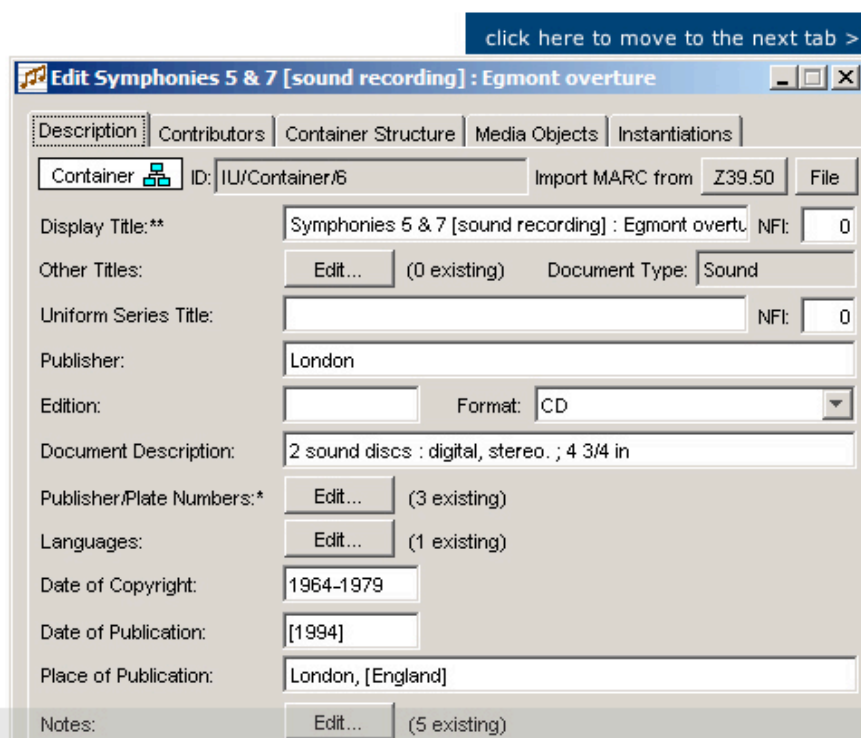
Screenshot C



[Contributor Record](#) | [Work Record](#) | [Container Record](#)

Container Record Window - Description Tab

The description tab in the container record...



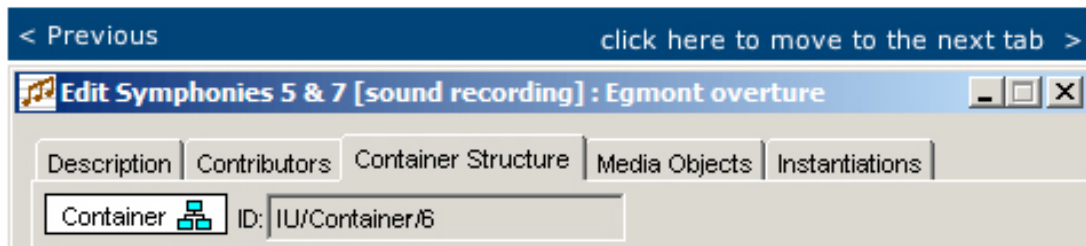
The screenshot pages are lacking the consistent left navigation and top graphics standard on the rest of the site's pages.

Screenshot D

[Contributor Record](#) | [Work Record](#) | [Container Record](#)

Container Record Window - Container Structu

The container structure tab for sound recording in the container record...



The blue button located above the screenshot blends into the image and is hard for the user to distinguish as a “clickable” button. It looks like part of the screen shot at first glance.

Appendix G – Pre-Test Questionnaire

(Please circle only one answer for each question)

Questions	Answer Options								
1. What is your age (in years)?	16-25	26-35	36-45	46-55	56 or higher				
2. Please indicate your gender.	Male			Female					
3. What is the highest level of education you have completed?	_____ (Please fill in)								
4. What is your occupation?	Student	Professor		Librarian					
5. Is English your native language?	Yes			No					
6. How long have you been using computers?	1-5 years	6-10 years		11 or more years					
7. How comfortable are you with using the Internet?	Uncomfortable	1	2	3	4	5	6	7	Comfortable
8. How often do you use the Internet to find information?	Rarely	1	2	3	4	5	6	7	Often
9. How familiar are you with the Variations2 Digital Music Library Project at IU?	Not familiar	1	2	3	4	5	6	7	Familiar
10. Have you ever visited the website for Variations2?	Yes			No					

Appendix H – Post-Test Questionnaire

(Please circle only one answer for each question)

Questions	Answer options		
The options for moving within the site were	unhelpful	1 2 3 4 5 6 7 N/A	helpful
Returning to the Homepage was	difficult	1 2 3 4 5 6 7 N/A	easy
The terms used on the buttons were	ambiguous	1 2 3 4 5 6 7 N/A	precise
The language used throughout the site was	confusing	1 2 3 4 5 6 7 N/A	clear
The way information was organized throughout the site was	confusing	1 2 3 4 5 6 7 N/A	clear
Your expectations for where the information was located on the site were	not met	1 2 3 4 5 6 7 N/A	met
The text size on each screen was	difficult to read	1 2 3 4 5 6 7 N/A	easy to read
The use of graphics, color, and animation on the site was	distracting	1 2 3 4 5 6 7 N/A	appropriate
The need for help was	frequent	1 2 3 4 5 6 7 N/A	infrequent
Finding help was	difficult	1 2 3 4 5 6 7 N/A	easy
Overall experience in using the site was	frustrating	1 2 3 4 5 6 7 N/A	enjoyable
The likelihood that you would recommend this website to other people is	low	1 2 3 4 5 6 7 N/A	high

Appendix I – Tasks with Optimal Paths and Answers

1. A colleague of yours tells you about a digital music library project called Variations2 being developed at Indiana University. Find the website for this project.
 - Optimal Path
 - i. Go to www.google.com or www.iu.edu
 - ii. Type in variations2
 - iii. Click search
 - iv. Click on first link
 - Answer:
 - i. <http://www.dml.indiana.edu/>

2. You have just learned about Variations2 and realize that it is a music search engine much like Napster was. Looking back in the last several years, you remember that the Court ruled against Napster for breaking copyright infringements. You are curious about how Variations2 compares to Napster from a copyright point of view. Find out from the Variations2 website the date that the court made this decision against Napster.
 - Optimal Path
 - i. Click on any link on front page
 - ii. Click on Copyright link under Research Areas
 - iii. Scroll
 - iv. Click on “A&M Records, Inc. v. Napster, Inc.: Implications for the Digital Music Library”
 - v. Scroll down to section I. It’s the first date in the first paragraph.
 - Answer:
 - i. 12 February 2001

3. You went to a conference in Ft. Lauderdale, FL from April 5th to April 10th and sat in on a presentation by Mark Notess and Margaret Swan. You would like to go back and review the presentation. On the Variations2 website, find the paper. What is the title of the paper?
 - Optimal Path
 - i. Click on Documents on front page
 - Answer
 - i. *“Predicting User Satisfaction from Subject Satisfaction”*

4. The Variations2 project sounds like it would be useful for you to find a piece of music you have been looking for. You only know the key the music is played in and the publisher of the music. According to the screen shots of the Variations2 software which search tab will let you search by these criteria?
 - Optimal Path
 - i. Click on Software on front page
 - ii. Scroll
 - iii. Click on User Screen Shots
 - iv. Click on Search
 - v. Click on "Click here to move to next tab"
 - Answer
 - i. The Advanced Tab

5. You are interested in learning more about the conferences associated with the Variations2 project. What is the next upcoming conference?
 - Optimal Path
 - i. Click on News on Front Page
 - Answer
 - i. ISMIR 2003 : International Symposium on Music Information Retrieval, Oct. 26-30, 2003

Appendix J – User Notes and Comments

Test Subject # 1

(1:15) “Wo, wo, wo, this is all like Techno babble.
This is not for your average music lover. This is for some techno head.”

“I’ve been to a conference and I want to find out their stuff. I’m confused, do I choose documents or do I choose Research Areas. I’m guessing Research Areas.”

(6:53) “I didn’t know what that meant. I wasn’t even sure that was clickable. This looks like a screen shot to me, so is that really clickable, or is that part of the screen shot?” (Speaking about tab Search page Screen shot section)

“So, I know already that there is a conference, so my guess is News. You know, something like that I would sorta expect to see on a home page”.

(11:54) “This looks to me like the people who created it think you already know what this is. It’s not made for a first time user. So, I’m very clear that this is Variations2, that’s very large.” “So What I want to know is what’s included in this website. What can I find. What kind of resources are there?”

“And things that are hot, so like if there’s an upcoming conference, if there’s something that has just been added to this site, if there’s some cool thing I can do on this website that I can’t find anywhere else, I want to know up front.”

(12:30) “All of this gobbledygook on the ... you know this big paragraph here in serif, my eye just kinda slides off of it, and it’s like I say ok, this is not for me.”

“I was impressed that the um, variations2 was the first word in the title.”

“What I want to know is what will this site do for me?”

(14:30) “For something specific, I want a search box so I can get right to it.”

“I don’t want to have to leave this environment, I don’t want to have see some screen in front of me... Any time there is a PDF, all of sudden I’ve got this thing in my face. That interrupts my experience. It also creates this lag time.”

(16:25) “Again, when I’m looking for something specific I want a search box?”

“If I’m looking for that particular piece of information it’s difficult to read, because I’m looking for an author, actually a couple of authors, and there is all this information in there when it was published, and when it was presented etc, etc.”

(17:20) “Again, I felt like there was some assumption being made like I know what’s in the software.”

(17:45) “I was irritated by this continual, ‘Download the user guide’, ‘Download the user guide’”
You know, again, I don’t even know what this site is about, and why do I need a user guide? To the site? To something the site is offering?”

(18:12) “Is this software that I have to buy, is it software I download, is it included somewhere here on the site. There’s just really no, no information.”

(18:30)“Let’s go to overview and there’s nothing there (laughs)... so that’s not very helpful?”

“News would be where I expect to see the newest content. That’s where I would expect to see the hot stuff.”

(20:10)“Still not clear why we’ve got this variations² user guide every where.”

(20:25)“It’s not clear to me that that paragraph goes to with that heading” (user guide section on News Page)

“There’s just so much stuff going on in this navigation side.”

“Oh no, those are awful. Those are cheesy music notes, but that’s personal taste.”

I’m not clear why archives is a lighter shade of grey.

(23:05)It’s difficult to tell what’s clickable and what’s not.

“(Laughs) Was that put on there just to torture me?” (Link to user guide)

(23:40)“Why is there a section news under news which used to be current news and is now news? That’s confusing.”

(23:50)“If the navigation is going to be set up this way... and you are going to be using these little triangles, like maybe have a triangle that points to the right next to overview, or something or maybe over on the left-hand side or something, just to cue you in that this is where you are. I don’t think there is enough visual distinction.”

(24:40)“Oh my God, I got a search box. How did that happen? Wait, do I only get that in software? Does that mean it only search within software? And why is there no text in Overview? That is just very disconcerting.”

(Sarcastically) “And there’s the user guide.”

(25:10)“Ok, so the site map is not accessible from the front page, I don’t know why that is. That might be useful.”

(25:45)“Alright, what is the difference between papers and working documents? Because they sure look the same to me?”

(26:20)(Speaking about new navigation menu) “Ok, so we have like this multiple color scheme going on or else’s I am going blind or something. So it looks like these are like a dark gray, this is some sort bluish teal or something. This is a light grey. “

“I don’t know what these things are supposed to indicate, but these are very similar.”

(26:50)“I think it would help to have more space between each one of these”(new menu)

(27:30)(New navigation menu) “This is definitely cleaner. But it’s still confusing. It also allows you to get more information higher up... It would be nice if you could see what’s in the sections if you have a, you know, rollover thing or something, something to indicate what’s in the section before I have to click on it. That way I don’t have to go two clicks in. Let see where are we here, three clicks in, right because of the home page. That makes no sense either. You know maybe even if you have it on the home page what’s in the different sections, that helps too. It just reduces the number of clicks.”

(28:30)“Huh, I did not know these were clickable, the bread crumbs.”

"It could be more consistent, like this (software) versus your documents section. I'm not sure why this site map is this huge long thing. I'm not sure why it's not two columns or something like that."

"As if there aren't enough links"(user guide)

"Sometimes the photo is in the center, sometimes on the right, sometimes underneath."

(30:20)"It's soothing (color). I don't know what it has to do with IU. It's not IU at all."

(30:50)"This is totally different. Why do we not have Navigation here (screen shots)"?

"The line length is too long, the line length of the text."

(32:21)"I'm not really sure what it does"(the website).

"I'm looking at this screenshot and I'm all intrigued. Because I would love to be able to pull up scores and print them off, which I'm sure violates copyright."

(33:45)"I want to know what this is" (clicking on demo and laughing.)

"There's the fucking user guide which I don't care about."

(34:00)"I have to guess what this is"(variations2).

(Great for video!!!!)

"Why is this a different typeface right here? (points to search window basic tab).

(35:30) I'm sure I could think of more (suggestions) if I knew what this site was about.

(35:55) I don't know what research areas means. Who are the people doing research... and why is it and how is it connected to Variations2"?

(36:50)"What is the difference between satellite sites and related links. Why is related links under 'About the project'"?

(37:00)"Advisory boards and Personnel, I mean, people's moms look at that. I don't care about that".

"I don't understand why documents is separate from research areas. Documents might even fall within news".

(37:25)"Current News and Archives, how do I know what is going to be in an archive versus current."

(38:45)"I'm still not clear on what variations2 is doing."

"When I see networking, I don't know if that means computer networking like setting up a network system, or if that means personal network, what that means."

-Admin interface screen shot has no explanation. What is a container record?

-The link at the bottom of the page to home page is not a link.

Test Subject # 2

(1:15) "Ooh, I like that" (when seeing the home page for the first time)

"It would be nice if there was a search."

"Once again, this would be nice to have a search within the website."

"The search was fine, it was the top thing on the list."

"When I'm using a web page in general, I don't feel this pressure like oh I need to find something really specific and I need to find it right now. If I was at home, I just kinda float around the website and get used to it and then maybe have something more specific to look for."

-She would put search at the top or one of the options on the side.

"I don't like it when pages are longer than the screen (talking about screen shots)... So you have to scroll down to see everything that's on here, that's not very nice."

She notices there is no navigation bar on Screen shots page.

"Can you get from home page from here? ... No." (Screen Shots)

(19:08) (perfect video shot for tabs on screen shots) "It moves"

"Probably because this is complicated enough I didn't think of needing more fields to look through" (when asked about why didn't see the tab movement)

"Looking at a picture of a screen that would be on a different system ... is weird."

"I love this picture, that's good." Note at top right of page.

(21:00) "These links over here. Well I can read them but maybe they could be a little bit darker in color. There's not much contrast between light yellow and light blue. This could be maybe a little bit darker blue... or maybe bold font just so it's a little easier to read. It's pretty small, the same thing up here." (Navigational menu and breadcrumbs on screen shots)

(23:30) "Wo!! And it has a goggle search?"

(25:30) "This is nice. There is a lot less to read."

(25:40) "These are cool" notes in bottom left hand corner."

(26:00) "I liked the color choices, but it's just harder to read."

(28:00) "It might be neat if it had a link to variations itself."

Test Subject # 3

(30:00) "It looks a lot better" (Seeing the new site)

"This page is pretty empty" (Software Overview page)

(42:20) -Ignored Picture

(42:50) "I just didn't notice it" (when asked about tab link on screen shot)

(46:20) "I didn't really put together that these 5 categories were the same as these 5 categories."

(47:00) "I like the color patterns a lot."

"It's theoretically nice because it saves space, but I don't like it. The colors I don't like as much as the other one. White is just too bland. Also it's kinda nice to be able to see everything at once if you can."

(49:35) "And the Search, ... Search is good."

(49:55) "I was kinda looking for it before." (Search)

("When I click on software, it looks like I go to a page with nothing.")

(50:55) "That's what I felt. Dead end. Dead end. That's what I felt."

(51:00) -He likes the look and feel.

(51:35) "Maybe if you could distinguish these a little more that these are separate things and that they are links." "You don't notice that these are links until you put your mouse over them."

(Home page)

Test Subject # 4

Task 1-> Find Variations2:

- User opens browser, chooses IE.
- "Since I know it is an Indiana University thing, I will just go to the website" (IU website)
- enters www.iub.edu
- Searches in search box on IU home page for Variations2.
- Selects 1st result for Variations2
- Task complete. (old site located)

Task 2-> Find title of Notess and Swan Paper:

- Moderator takes user to test site for variations2. (site is not up yet)
- "I am looking for a paper, so it is probably in documents"
- User clicks on "documents" in the navigation side bar.
- Scrolls through documents page
- (1:45) "I will see if there is a search feature.....but.. (looks around page, does not see a search feature)
- user scans/scrolls through documents page (up and down)
- "it looks like it's this one here"
- finds and reads title
- user thinks they are done.
- Opens PDF file to 'see if it works' (it works)
- Task complete
- (3:00) User commented that they would have liked a search box to find the article more quickly.

Task 3-> Find (in Variations2) the date that the court made the Napster decision.

- User clicks 'copyright' in the left navbar, "just to see".
- Scans down page
- Finds napster case
- Opens PDF
- User went to 'copyright' link because "I knew it was a copyright issue with napster"
- User found date
- This was the expected result for user.
- "I don't know if I would have gotten there from the front (main/home) page" (as easily).

Task 4 -> Upcoming Variations2 conference?:

- user goes to main/home page

- clicks on 'information about the project'
- went to 'info about project' because user wanted to see if 'anything new' was going on.
- Also stated that the user could have gone to 'news' or 'events'
- Did not see anything in the 'about the project link' after scrolling and scanning.
- Clicked on 'current news' from the left navbar.
- Scanned the page, found the conference.
- "because it doesn't have a 'upcoming conference, I assumed that it is under news"
- ("because it is upcoming")
- (5:00) talks about menu names

Task 5-> Screen shot/ search tab question:

- "Asking me for screenshots, so I am assuming they are user screen shots"
- clicks on user screen shots link in the left navbar
- looks at page says "let me actually just go to overview"
- overview page has no content.
- In the left navbar, clicks on Variations2 user guide.
- Closes user guide window quickly
- Clicks 'screen shots' again
- Goes to the 'basic search tab'
- Re-reads out loud part of the question
- Says-"key and the publisher?...."
- Looks at the basic tab.
- Finds-'advanced tab' (green tab on top of screen shot)
- Clicks advanced tab
- Finds key and publisher fields
- Task complete.
- Comments
 - Moderator: "why did you click on the user guide? You seemed a little confused...."
 - User: "I went to the screen shots and at first I didn't see this (gesturing with mouse) click for larger version. I thought , that's not helpful."
 - But, when I did click on it (the screen shot thumbnail) I realized it was dynamic....I didn't initially understand what I could do with it..."
 - (8:40)Moderator "was green tab at the top intuitive at first?"
 - User "no, it wasn't intuitive, I assumed that this info was somewhere on here(gesturing over page)then I saw it up here"
 - Clicks on tab
 - User expected that if the tab was a hyperlink, it would change color. "and it didn't, so I wasn't sure what I was clicking"
 - 'but then I saw the pointer finger thing (cursor changed) over the link / tab and I knew that I could use it"
 - "it made sense, but I wasn't drawn there initially.

General Impressions->on the Variations2 test site (blue nav bar)

- (16:15)very nice
- clean-liked the color scheme
- looks professional
- liked headings for categories in the navbar
- 1st test site navigation was easier (blue nav bar) to read than the second site (white)
- likes color change rollover

Info hard or easy to find?

- Fairly intuitive
- (17:50)Natural inclination to look for a search box. (no box on first site)

- Did not find location of info difficult, even without a search
- (18:00)If categories were clearer:
 - Would use categories instead of a search box
 - The more clear the category, the more use the navigation categories will get

Site appearance:

- User thought site was clear and consistent (pretty much)
- (18:35)Colors are great

User's recommendations-> (blue navbar site)

- Screenshots:
 - (18:50)'something not quite right'
 - 'usually there's something that can be done'
 - it is a layout problem, the way the screen shots are presented.
 - Found screen shots to be 'just fine'
 - No visual cues to help with the function of the screen shots.

New Navigation (White site)->

- User clicks through new/ alternate navigation site
- Told to look around, give feedback
- 'something about the display, definitely that I like'
- appearance and presentation -> user likes
- (13:40)search box -> "there's something about having a search box that makes you feel like it's gonna be ok"
- "noticed (the search box) first thing"
- (14:00 or so)thinks that like of the site is just visual, but really likes it, "just seems lighter in general"
- "no blue bar down the side"
- music note graphics are "ok" but not as professional.
- Detractions?
 - Likes dynamic element of the navigation, but sees how it could cause problems for users and self, "not having all the categories listed".

Test Subject # 5

Task 1-> Find Variations2:

- Went to IU home page. (tape starts at the search results, the beginning is cut off.)
- Clicks first result on the search result page
- User says "I used IU because she knew Variations2 was affiliated with IU" (usually she searches with Google.
- Comments 'task was easy'.

Task 2-> Find Napster article:

- Moderator shows user new site. (home /main page)
- (00:54)"Looks Great"
- User clicks on "documents from homepage navigation"
 - Thought there might be an official document relation to copyright.
 - Uncertain of choice
 - (2:24)"Was there a search?" asks user while scrolling documents page.
- Clicks to go back to the main page (back button)
- Clicks on 'documents' again on the home page.
- Mouse over the left navbar (links change)
- "this menu has more information...so I will look at it."
- Scans menu for a few seconds, clicks on "copyright"
- Finds article
- Opens PDF.

- Asks if she is done.
- Scrolls through article, zooms out on the PDF
- Does not actually find the date.
- Task not completely finished.

Task 3-> Find the upcoming conference:

- (starts out) on 'copyright page'
- User-> "its upcoming so....."
- Clicks on "news" from left navbar.
- "if it didn't say upcoming, I would have probably looked in another area".
- Reads/scans page.
- Finds text on conference.
- Task complete.

Task 4 -> Screenshots:

- User asks question, "I am supposed to use the site, not the Variations2 software, right?"
- Sees user screen shots in the left navbar. Clicks.
- Re-reads the question
- Clicks on basic search screenshot on 'user screenshots page'
- Scrolls.
- Reads fields out loud
- Does not see search tab.
- Expects publisher to be on basic search tab.
- Comments "key is here".
 - (user is looking for key and publisher.)
- Goes back (back button) to the screenshots page.
- Repeats part of the question about the search tab. "Search tab...should be in here.....".
- Clicks on basic search screenshot again.
- Scrolls up and down page
- Clicks small navigation (yellow at the top of the screenshots)
- (8:40)"I hope this can show where I am....It would be helpful...I don't want to click again if I'm there."
- Place in site seems unclear to user.
- Sees tab. (suddenly catches the users eye)
- Clicks tab.
- Comments on tab labeling
 - (how advanced search shows tabs with 'previous' and 'next shot'.
- (9:35)User did not expect the tab to be clickable.
 - "I thought the tab was 'just part of it (the screenshot)".
- Tab hard to notice.
- Finds publisher field.
- Task complete.
- User states that when screen shots are on a page
 - Usually you can just scroll down and see each of them.
- (10:34)Likes this setup better than scrolling, but finds it unclear. Not visible.
- (11:00)To make the tabs look clickable, user suggests the use of a 'web-style button'

Task 5-> Find the Swan and Notess paper:

- Rereads and interprets question –"looking for a PDF file, right?"
- (12:18)Wants more color contrast in advanced screen shot tab.
- (starts search from advanced screenshot tab)
- goes back to screenshot main page
 - But mentions that there is no main link in the navigation from the screenshot main page.
- Goes back to screen shot (basic tab) comments on yellow navigation at the top.

- (12:50)States that it is not visible enough., not enough contrast.
- Goes back to screenshot main page (back button)
- (13:20)Looks a left navbar: asks “What is working documents?”
- Clicks on ‘papers and presentations” from the left navbar.
 - User thinks this means documents in development, but is not quite sure.
- Scans page- finds PDF
- Opens PDF
- Task complete.
- Says documents are easy to find.
 - Have clear labels
- Working documents label does not make sense to the user.
- Moderator asks, “is the text difficult to read or hard to find?”
- User:-> no:
 - (15:20)Clear division
 - Not hard to find, just scroll down.
 - Likes top navigation, (she knows where she is)
 - (16:30)When user clicks on ‘documents’ link, expects a document page first, not papers and presentations.

User’s recommendations-> (blue navbar site)

- User thinks that other users of Variations2 will want the software information higher up on the navigation bar, because it is what is most important to them. (most valuable information)
- Search tab->can’t tell if the search tab is clickable.
 - Recommends that the tab be changed.
 - Use the most traditional way, ‘web style button”.
 - Tab didn’t make sense, find another way to do it (represent the same concept)

New Navigation (White site)->

- (23:00)Page needs a more clickable look
 - Page is too flat. (needs more dimension and depth to it)
- Likes the music note graphics
 - (23:50)“So cute!”
 - Graphics not too much, just enough.
- (24:00)Search box-> likes to have a search box.. Can go directly (to information).
 - If cant find info quickly, will use a search.
- (26:30)Likes old navigation (blue site).
 - Clear categorization, (more info at once)
 - Likes categories of the blue site with the search capabilities of the new site.
- Appearance-> User had no real preference between the tow. Old site (blue site) is a little more clear, more obvious division.
- “If there are not too many sub menus for the menu....”
 - Can go directly to the stuff (information)
 - Not too much clicking and work.