Deep Blue: A Usability Assessment

Assignment #3
Personas and Scenarios

by

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February 2, 2006

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SI 622

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1. Executive Summary

Deep Blue (http://deepblue.lib.umich.edu/index.jsp) is a digital repository initiative designed to house the University of Michigan's intellectual property. Deep Blue provides a permanent, safe, and accessible environment for university affiliates to store, index, preserve, and redistribute a vast array of digital information including journal articles, datasets, audio and video files, images, and course-related materials. University groups are able to form Deep Blue communities and are able to create a collection of shared information. Deposited information is assigned a permanent URL and is freely accessible to the world. Deep Blue is committed to ensuring the lasting preservation of these digital files by embracing technologies that will enable transferability and compatibility over time and across systems.

The project began in August 2004 with the adoption of D-Space, open-source software developed by a partnership between MIT and HP. The two-year pilot phase of the program is nearing completion. Currently, there is one active community of users, but Deep Blue hopes to unveil its service to the greater university through a widespread marketing campaign later this year. Deep Blue staff members are currently pitching the service to select university departments and have nearly a dozen collections nearing release in Spring 2006. In preparation, Deep Blue has requested a usability assessment of its service.

2. Personas

The personas presented in this study are created to be used in the evaluation of Deep Blue. They are based on the interviews with Jake Glenn (SI student specializing in LIS), Lian Jian (PhD student at SI), Sharon Mahoney (academic secretary), Paul Resnick (professor) and Jim Ottaviani (Deep Blue project coordinator) and characteristics of the types of people represented by these personas. The interview with Jim Ottaviani is conducted jointly with one of my group members, Jodi Tyron.

Since all of the personas are affiliated with the University of Michigan, it is assumed that they all live in Ann Arbor, MI area.

We will later decide which persona is primary and which ones are secondary, affected or exclusionary by evaluating all the personas created by all group members.

Note that all images are obtained by Google image search.

2.1. The Eager Librarian

Name:	Jack Rogers
Gender:	Male
Age:	24
Education:	B.A. in philosophy
Occupation:	Master's Student
Marital Status:	Single
Income:	Less than $15,000
Country of Origin:	United States
Race:	White

Summary:

Jack is a young graduate student at the University of Michigan, Ann Arbor, pursuing a master's degree in Library and Information Science. He has a BA in philosophy from University of Wisconsin. He plans to work in a major academic library once his degree is completed. Jack was born in California and lived there until he was ten years old. Before coming to Ann Arbor, Jack has also lived in Wisconsin, where he went to high school and college. He lives in downtown Ann Arbor and doesn't own a car. When not working or going to classes, Jack can be found reading, playing his own music or tinkering with electronics. His latest project is getting all kinds of weird sounds from an old Casio keyboard by modifying its ports and connecting it to his computer.

Jack's academic and personal work has always involved literature surveys and libraries. Currently, he works as a part time library associate and does a variety of tasks assigned to him by his supervisor including managing the website of the AAEL, cataloging, etc. As a part of his internship, he is participating in Deep Blue project by helping in creation of metadata. He spends some amount of his time at the reference desk helping library patrons search for scholarly articles and he really likes to help people. He is a big fan of the "institutional repository" concept and he especially wants to be able to do subject based browsing.

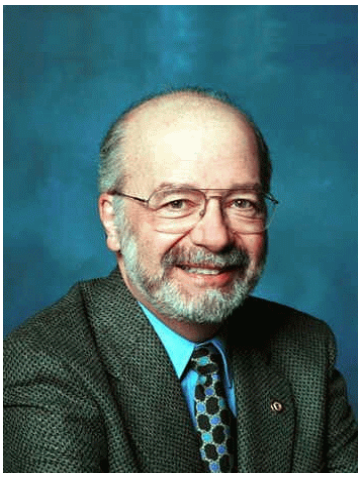
Goals:

- Correcting the metadata associated with some collection of documents currently that are not in Deep Blue and transferring them into the repository

- ***Enhancing the browsing system. He thinks that structuring everything in terms of communities limits how you browse the documents.***

2.2. The Retiring Professor

Name:	John Newman
Gender:	Male
Age:	68
Education:	PhD in Electrical Engineering
Occupation:	Professor, EECS
Marital Status:	Married
Income:	More than $120,000
Country of Origin:	United States
Race:	Caucasian



Summary:

John is a 68-year-old professor who is about to retire. He has taught at the University of Michigan since 1969 at the Electrical Engineering and Computer Science Department. His typical day is a mixture of teaching and research. He is also involved in managerial side of running the department. He was the chairman of Electrical Engineering Department for the last 14 years. Since he decided to retire, he started delegating his responsibilities.

He was born and grew in Ann Arbor. His undergraduate and graduate degrees were earned from MIT. Although he always lived and worked in Ann Arbor after getting his PhD, his research and professional activities have taken him to many countries of the world. He has written more than 150 technical articles on many subjects. Currently, he is working on a book entitled *Solid-State Electronics: Principles, Applications and Case Studies*, which he is planning to complete in 2006.

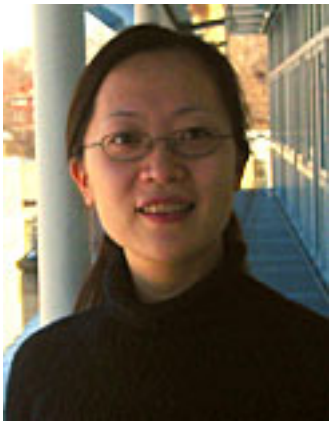
After retirement, he is planning to go to long vacations with his wife Mary, a retired nurse. They own a big townhouse and have three children together, two daughters and a son, all of which have graduated from college. Her eldest daughter is expecting her first child. John is planning to spend lots of time with his grandchild. He even bought a child seat for his 2004 model Lexus LS sedan.

Goals:

- Gather all his research and teaching materials together and make it available for other researchers at the university. He keeps up with technology but might need help from his assistant in actually realizing this.
- Encourage the continuing development of professors in his field after his field.

2.3. The Ambitious PhD Candidate

Name:	Hua Yang
Gender:	Female
Age:	32
Education:	MS in mechanical and electronic engineering
Occupation:	PhD Candidate
Marital Status:	Married
Income:	Less than $25,000
Country of Origin:	China
Race:	Asian



Summary:

Hua is a young and energetic PhD candidate in Mechanical Engineering Department at the University of Michigan, Ann Arbor. Her background is in mechanical and electrical engineering. She is studying mechatronics – the interesting combination of mechanical engineering, electronic engineering, and software engineering. She thinks the significantly low female presence in the field is an important problem. She is a bright and ambitious researcher and she wants to pursue an academic career in the United States. She already has authored and coauthored five academic papers. She is actively using University of Michigan's journal subscriptions for her research.

In the mornings, Hua sometimes attends seminar classes. In the afternoons, she usually works at the mechatronics research lab. She also works from home most nights. Although she saw a computer the first time in collage, she is an advanced computer and Internet user. She frequently uses Mathematica, Stata, and Latek for her research. She also knows a little bit MySQL and does some programming. She is always connected to the Internet when she is using her computer. She communicates with her family in China using instant messenger and Skype.

Hua lives in North Campus family housing. She walks to her office. She has a 98 model Toyota Corolla that she uses mostly for grocery shopping at the weekends. She is married to Zhu, a PhD candidate at Computer Science department without children. She is planning to give birth to her first child by the time she finishes her PhD.

Goals:

- Find credible sources
- Efficient federated search over specific topic
- Find Up to date resources

3. Scenarios

3.1. Scenario 1: Jack Deposits a Document

Jack starts his day working in the library. His current task assigned to him by his supervisor is depositing a Word document for College of Engineering. After completing all the necessary metadata creation, Jack decides that it's time to deposit the documents he is working on into Deep Blue. He goes to main page of Deep Blue. He already knows the URL, which is http://deepblue.lib.umich.edu/. He types the URL into the address bar of his browser and the main page of Deep Blue shows up.

He clicks on "Deposit/Edit Items". Only authorized users – affiliated with the University of Michigan - can deposit or edit items. Since he is using other web-based applications by the university, he automatically logs in because the cookies are enabled in his browser. He takes a second to check if the user information is correct. Then he clicks on "Start a New Deposit" button. The first step is selecting which collection to deposit. Jack knows that the document belongs to College of Engineering collection. So he chooses "College of Engineering" from the pull down menu.

Second step is describing the document, which is done in two steps. In the first description screen, Jack enters answers some questions about the item. The system asks him if the item has more than one title, if it is previously issued (if not the system assigns a new item number), and if it consists of multiple files. Jack answers these questions as the item has only one title; it is new and consists of only one file. Then he continues with the second description screen. Now he needs to enter the metadata he prepared. The richer the metadata, the more "findable" the item will be, so he takes the time to fill in as many fields as are applicable to the item although only title and date are required. He realizes that this second description screen is different from the one that came up when he deposited a report for UM Transportation Institute. Third, the upload screen comes up. Using a file upload dialog box, he selects the Word document on his hard drive, checks the input box for the correct file and clicks on "Next" button to proceed. Next step is verification. He checks all the information he entered presented in a table. He is happy since all the information is correct. Once again he clicks on "Next". After actually uploading the document, Jack needs to accept Deep Blue's license agreement. Finally the document is deposited in Deep Blue.

Jack knows that the document will go through the College of Engineering workflow. Some collections require the deposit to go through editing or review steps, while others may immediately accept the deposit. He will receive e-mail notification as soon as the item has become a part of the collection, or if for some reason there is a problem with his deposit. Now that he has deposited his document, Jack happily works on other tasks.

3.2. Scenario 2: Hua discovers Deep Blue

Hua needs to find papers about the evaluation of mechanical beam-switching systems for her research. As usual, she is working in her office at the Mechatronics research lab. She first searches for paper on Google when she doesn't know the author or title. Her homepage is set to Google already. So, she opens a browser window and types "Evaluation of mechanical beam-switching" in the search box and presses enter. She quickly skims the results returned by Google.

She notices that the fourth hit is titled "Deep Blue at the University of Michigan: Item 2027.42/940". She clicks on the link curiously thinking that she has never heard about Deep Blue. The page loads and she realizes that this is a report by UM Transportation Institute that she can use in her research. She clicks on "View/Open" link. The PDF file loads. There she has the paper but what exactly is Deep Blue?

She looks at the navigation bar at the left of the page and notices "About Deep Blue" link. She clicks on the link, a new page pops-up. She doesn't like pages popping up in a new window but she goes on reading because she is so curious. She learns that the University Library provides this service free to UM affiliates as part of the UM scholarly community. She decides to tell fellow PhD students about this amazing resource she discovered and she starts reading the report she downloaded.

Appendix A: Interview Questions

Personal

Name:
Age:
Gender:
How would you describe yourself?
How would you describe your personality?
Residence:
- Country of Origin:
- Native Language:
- Where have you lived during your life?
  - Which of these places was your favorite? Why?

Marital Status:
- Single
- Married
- Divorced

Children:
- How Many?
- Ages?

Education:
- What degrees/majors? Advanced degrees? GPA?
- Where did you attend school?
- How did your education prepare you for your current position?
- Do you speak any foreign languages? Which ones?

Favorite Quote:
What kind of car do you drive? What do you wish you drove?
Housing-Type:
Religious Affiliation:
What do you do for leisure?
- Books, Movies, TV, hobbies, etc.

Tell me about your personal goals.

Computer Use

- How familiar are you with computers? (10 pt scale)
  - Tell me a frustrating experience you've had.
  - Tell me when you have the most success.
  - What kind of computer do you use?
  - Tell me about your electronic gadgets?
  - Tell me about the programs you are familiar with?
- Tell me about your internet use? Hours per weekday? Weekend?
  - Home:
  - Work:
  - When did you start using the internet?
  - What kind of connection? Which browser?
  - What do you use the web for at work?

What do you use the web for at home?
How many email accounts do you actively use?
How often do you check those accounts?
Do you use any of the following web based applications from the university? Which features do you find to be easy to use? Which features were the most challenging to learn?
CTools
Webmail
MFILE
Wolverine Access
MIRLYN
Electronic Reserves
Other library/university services?
Do you use any social networking software? Which features do you find to be easy to use? Which features were the most challenging to learn?
Instant Messager
Facebook
Friendster
Myspace
Yahoo 360
Other?
Please describe the frequency with which you use the following web-based journal storage applications? (Split by job/personal use and Hours per week/month?)
Proquest
Lexis Nexis
JSTOR
NetLibrary
When researching for a literature review, what resources do you use? Walk me through the steps of your search? (If they list electronic databases, have him rank them, what appeals? Are they licensed or open to the public? Would you pay for features? Which ones?)

What do you think about Deep Blue (http://deepblue.lib.umich.edu/index.jsp) ?
Do you think it is a good idea?

Career
What kind of job do you have?
Favorite part of your job?
Least favorite part of your job?
Income:
Have you published articles? How many? Where are those articles now? (Do you use Deep Blue? What else?)
Tell me about the roles you generally take when you're working in a group?
Tell me about your career goals?