

Project Cover Sheet

Project	MTagger Usability Evaluation <i>Guerilla Test of the MTagger Pop-up Tagging Window</i> The tagging window contains the form for submitting tags, titles, and descriptions for items both inside and outside the University of Michigan's resources.
Committee & Members	Usability Working Group Suzanne Chapman (chair), David Carter, Michael Creech, Shevon Desai, Karen Downing, Anne Karle-Zenith, Molly Kleinman, Shana Kimball, Ken Varnum (stakeholder) Matt Schultz, Jacob Solomon (student interns)
Report Info	Report Author(s): Matt Schultz and Jacob Solomon Contact Information: ul-usability@umich.edu Report Date: June 2008; Last Revised: June 2008
Objectives	The goal for this test was to determine if the Tagging window should incorporate the flexibility to navigate to the user's personal MTagger account after applying tags to a webpage.
Methodology	Method – Informal “Guerilla” test Usability Interns planned and designed user tasks, scenario and paper prototypes to simulate the incorporation of the new feature, performed guerilla test with prototypes, collected data and discussed findings. Date of study: May 2008
Results & Analysis	Users predominantly prefer to save tags and continue surfing the Web, but also appreciate the option to be able to re-direct to their MTagger account and can envision instances of doing so. In addition, virtually all users were highly satisfied with the terminology and aesthetics employed to carry out their actions.
Recommendations	This report recommends implementing the flexibility for users to choose to save their tags and continue browsing, as well as having the option to save their tags and navigate to their personal account. In addition some attempt should be made to technically achieve the terminology and action button scheme deployed in the prototypes.

Table of Contents

Executive Summary.....	2
Introduction.....	2
Methodology.....	3
Results.....	4
Discussion.....	4
Appendix A.....	6
Appendix B.....	7



Executive Summary

The Usability Working Group at the University of Michigan has chosen MTagger, the recently implemented online social bookmarking tool (<http://www.lib.umich.edu/mtagger/>), as its Summer 2008 university digital resource to be evaluated. The goal of evaluating MTagger is to optimize its usability, functionality and aesthetics both for on-campus students, faculty and staff, as well as those outside of the university that find its features helpful for their various purposes.

The purpose of this report is to share the findings of a recent guerilla usability test that was performed on the tagging window, and forge some clear recommendations for re-tooling this particular feature. Currently this feature does not possess the flexibility to save the user's tags and re-direct to their personal MTagger account. This was an option that was recognized by the UWG, after performing an exhaustive heuristic evaluation, as being of potential high-value.

After testing 21 voluntary subjects ranging in age from 18 to 60, and from a variety of backgrounds, the following findings and recommendations were conclusive:

- 1.) Despite the addition of flexibility in being able to navigate to MTagger, users prefer to save their tags and continue browsing; this action should remain the default upon the user pressing "Enter"
- 2.) Though not the preferred action, nearly all users expressed appreciation for the added flexibility and desired to retain the option.
- 3.) The terminology employed on the action buttons was clear and understandable; even those users with no previous experience with "tagging" found the language and actions self-evident and in line with their experience and expectations.

The designers and maintainers of MTagger should consider implementing a feature that grants users the flexibility to navigate away from the webpage they have just tagged and to their personal MTagger account where they can view and edit their newly added resource(s). Due to the high satisfaction with the prototype mock-ups used for testing (see Appendix A), it is recommended that this implementation employ similar layout and terminology should it be technically feasible.



Introduction

There are currently two main ways to tag web resources using MTagger. Many library web pages have a tag cloud at the bottom of the page that includes a link to "Tag this page." There is also an "MTag from anywhere" bookmarklet that can be installed in the user's browser that will let them tag any web page. Both methods result in the display of

the MTagger tagging window. For the purposes of this test we decided to concentrate on the latter because it involves navigating away from the library website.

After applying user-defined tags to any given webpage, the user is currently restricted to clicking a “Done” button that bookmarks their page in MTagger and closes the pop-up window, leaving the user to continue browsing the Web. The Usability Working Group, having performed an exhaustive heuristic evaluation on MTagger, desired to know if users might prefer or appreciate the flexibility to navigate away from their webpage to view and edit their newly bookmarked resource(s).



Methodology

After discussing the findings of previous cognitive and heuristic evaluations, the UWG determined that the usability interns should meet, discuss and design paper prototypes to deploy for a guerilla test on the tagging window.

A scenario was developed that involved walking the user through a brief introduction to both MTagger and the concept of “tagging”, as well as clarification of the process of embedding the “MTag from any webpage” feature in the bookmarks bar of their browser. The user would then be shown a very brief online article, and asked to think of some descriptive words they might apply to this article as tags. At this point the testers would show the user a paper prototype of the tag application window that is displayed when they click on the embedded bookmark label, and asked them to write in the descriptive words that came to mind. They would then be asked to choose one of two action buttons to apply their newly added tags: 1) Save and close window or 2) Save and go to MTagger.

Over the course of one week the usability interns approached 21 individuals both on and off the U-M campus, paying close attention to the ratio between men and women and the range of ages, seeking both to be even and broad in scope. Users were assessed for their age, level of education/occupation, familiarity with “tagging”, and gender. Data collection tables (see Appendix B) were constructed and used to record the descriptive words chosen for the article, which action button was chosen, whether the user’s expectations were met, and whether the other option should be retained.

Two variations of the test were presented to participants. Half of the participants performed the test using a mockup in which the “Save and close window” button was displayed to left of the “Save and go to MTagger” button. This was counterbalanced by the other group, who were shown the buttons in the reverse positions. This counterbalancing was used to control for the effect of biased presentation of options; since it could be perceived that the option to the left is the more likely or important option.



Results

The responses to the prompt to choose between closing the window or going to MTagger were aggregated and plotted along a binomial distribution, reflective of the fixed, two choice structure of the study. This revealed a trend suggesting that users were more likely to choose to continue browsing than to go to MTagger ($p < .1$). A Fisher's exact test was performed to test for the effect of the biased presentation on participant choice. No significant effect was revealed ($p > .1$), indicating that neither form of bias influenced participant's decisions to choose either option.

	Save and go to MTagger	Save and close window
Group A (Save and go to MTagger on left; Save and close window on right)	2	8
Group B (Save and close window on left; Save and go to MTagger on right)	5	5

After being presented with the screenshot compliant with the chosen option, 19 out of 21 participants indicated that the screen presented was consistent with their expectations. This significant proportion ($p < .01$) demonstrates that the wording on the buttons themselves was well understood by participants.

Likewise, 16 out of the 21 participants, also a significant proportion ($p < .01$), expressed that they would potentially want to select the alternative option in other circumstances.

No relationship was found between previous familiarity with tagging and preference for browsing or viewing MTagger.



Discussion

The study was an attempt to gauge user reaction to being presented with two options for leaving the MTagger popup window, as well as their preference and expectations for these options. We hoped to gather data which would examine the necessity and desirability of providing both the option to continue browsing after saving a tag and the option to go to MTagger directly from the popup window. We also hoped to demonstrate which of these two options would be preferred, and collected data which was intended to reveal the effect of user demographics and experience with tagging in relationship to the preferences and attitudes expressed in the testing about MTagger.

As expected, users were more inclined to close the window and continue browsing than to go to MTagger. This proved to be true regardless of which form of bias the user was given. Users overlooked biasing and made the choice to keep browsing out of preference for the expected consequence. Based on this finding, it is our recommendation that future iterations of the MTagger popup window should continue to provide users the option to close the window and continue browsing from the point at which they initially engaged MTagger. Furthermore, it is our recommendation that this action is considered the default action at the end of a tagging event, and that the button signifying this action be placed in a position nearer the top and left in relation to any other potential buttons signifying the end of the tagging event. Additionally, this action should be engaged when the user presses the “Enter” key to end the tagging event.

The data also clearly demonstrate that users comprehended the usefulness of both options and could envision circumstances in which they would select the alternative button. The significant proportion of participants who expressed this attitude lends support to our recommendation that both options be incorporated into the MTagger interface. Although closing the window was the preferred choice, that preference could only be classified as a statistical trend, falling short of statistical significance. This suggests that an important minority does prefer the ability to see MTagger directly after tagging an item. Furthermore, nothing in the data indicates that providing this option would hinder usability in any way for any segment of the user population. Users were not more likely to choose one option or the other in correlation with their own familiarity with tagging. Novice users approached this decision the same way experienced users did, suggesting that this option is likely to increase learnability because novice users immediately imitate expert decision making patterns. Based on these findings, we recommend that both options be implemented into the MTagger interface following an evaluation of the technical issues associated with such an implementation.

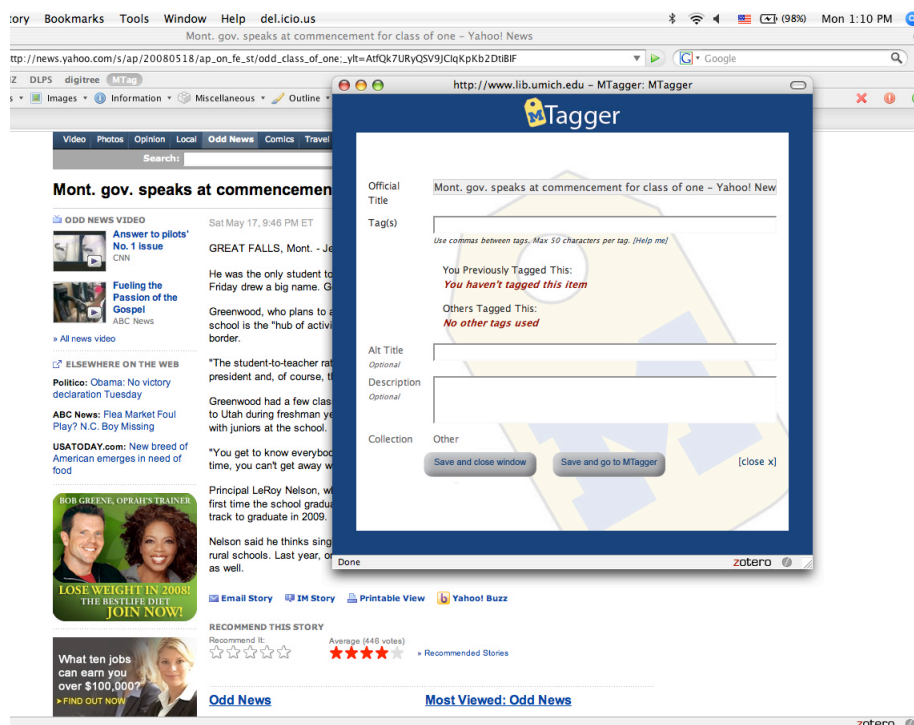
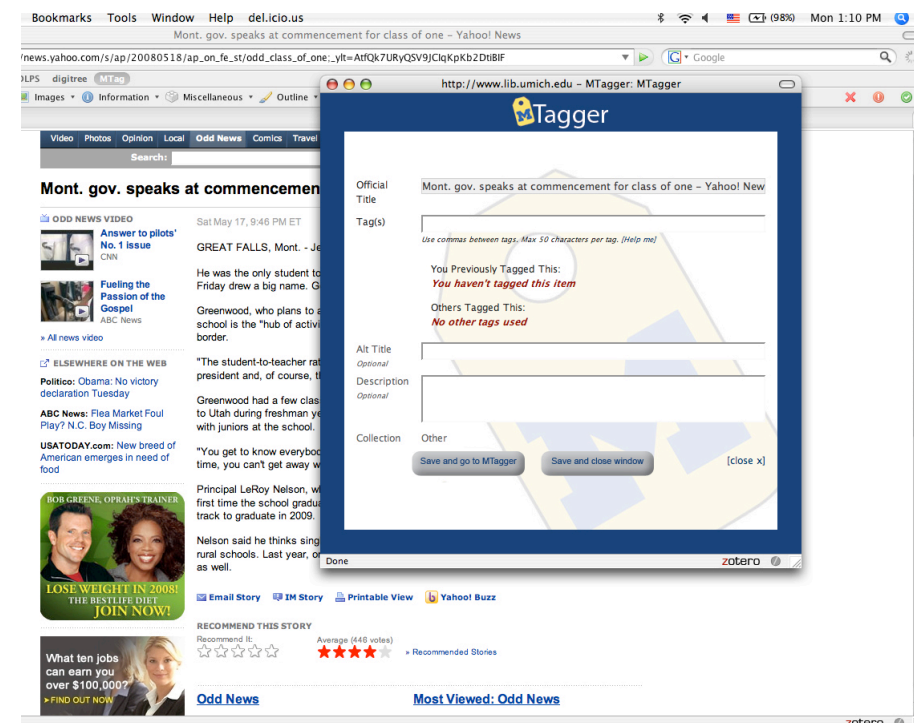
Finally, the astonishingly high proportion of participants who expressed satisfaction that the screen at which they arrived after selecting one of the two options shows that the buttons themselves, including the overlaid text, were highly effective navigation aids. User expectations were nearly perfectly satisfied by what they saw after selecting one of the buttons. We recommend that these button, and in particular their language, be used in future iterations of the MTagger interface.

Summary of recommendations

- Provide users with the option to either close the window and continue browsing, or close the window and go to MTagger.
- Make the option to save and close the window the default option.
- Use the terms “Save and close window” and “Save and go to MTagger” as navigation aids for buttons in the popup window.



Appendix A



Users were shown one of these screens and asked to write in tags, then choose which button they would click on after filling in their tags.



Appendix B

**Guerilla Test 1: MTag Webpage Redirect-A
Data Collection Sheet**

User	Keyword	Proceed to MTagger (X)	Keep Browsing (X)	Expectations Met (Y/N)	Other option? (Y/N)
1	Small, long-term, low-key, low-key		X	Y	Y
2	Small, long-term, low-key, low-key		X	Y	Y
3	Small, long-term, low-key, low-key		X	Y	N
4	Small, long-term, low-key, low-key		X	Y	Y
5	Small, long-term, low-key, low-key		X	Y	Y
6	Small, long-term, low-key, low-key	X		Y	Y
7	Small, long-term, low-key, low-key		X	Y	Y
8	Small, long-term, low-key, low-key		X	Y	Y
9	Small, long-term, low-key, low-key		X	Y	Y
10	Small, long-term, low-key, low-key	X		Y	Y
11	Small, long-term, low-key, low-key		X	Y	Y

Guerilla Test 1: MTag Webpage Redirect-B

**Redirect-B
Data Collection Sheet**

User	Keyword	Keep Browsing (X)	Proceed to MTagger (X)	Expectations Met (Y/N)	Other Option? (Y/N)
User 1	Montana, Commencement, School	X		Yes	Yes
User 2	Graduation, Single, High School		X	Yes	No
User 3	Montana, Rural schools, Single, elementary, declining enrollment		X	No Go to all tags	Y
User 4	Commencement, School, Montana, Great Falls, Montana		X	Yes	Yes
User 5	Commencement, School, graduation, Graduate	X		Yes	N
User 6	Greenwood, Single-member, District, DSU	X	X	Yes	Yes
User 7	Opheim High School, Rural, graduation, Class size	X		Yes	Yes
User 8	Rural, education, State, government	X		Yes	Yes
User 9	graduation, Spencer, Class of 2000		X	Yes	Yes
User 10	education, individual, achievement	X		Yes	Y

**Guerilla Test 1: MTag Webpage Redirect-A
User Profile**