

# Project Cover Sheet

Project	<b>Policies Database Usability Evaluation</b> <i>Guerilla Testing</i> The Policies Database is a soon to be released system by which a new policy is filed, approved, stored and made available as appropriate to both public and staff. The guerilla test, which is a variant of a usability test, helped to generate recommendations for the system's interface and also verify the results of the heuristic evaluation.
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Report Info	Report Author(s): Saurabh Koparkar Contact Information: lws-usability@ctools.umich.edu Report Date: June 2008; Last Revised: July 2008
Objectives	The goal for this evaluation was to reveal a set of issues pertaining to the usability, functionality and aesthetics of the Policies Database, and to facilitate prioritizing further benchmarks.
Methodology	Method – Guerilla Test Dates of study: June 2008
Results & Analysis	Four significant issues were identified related to terminology, iconography and navigation, and recommendations for improving the same were made.
Recommendations	<ul style="list-style-type: none"><li>• Change label terminology for most of the navigation links.</li><li>• Copy the global navigation links to the top, as well as keep them on the bottom of the screen.</li></ul>

**Table of Contents**

Executive Summary ..... 3  
Introduction..... 4  
Methodology ..... 5  
Issues and Recommendations ..... 7  
Summary..... 14  
Appendix A: Guerrilla Test Script..... 15  
Appendix B: Guerrilla Test Tabulated Results..... 19

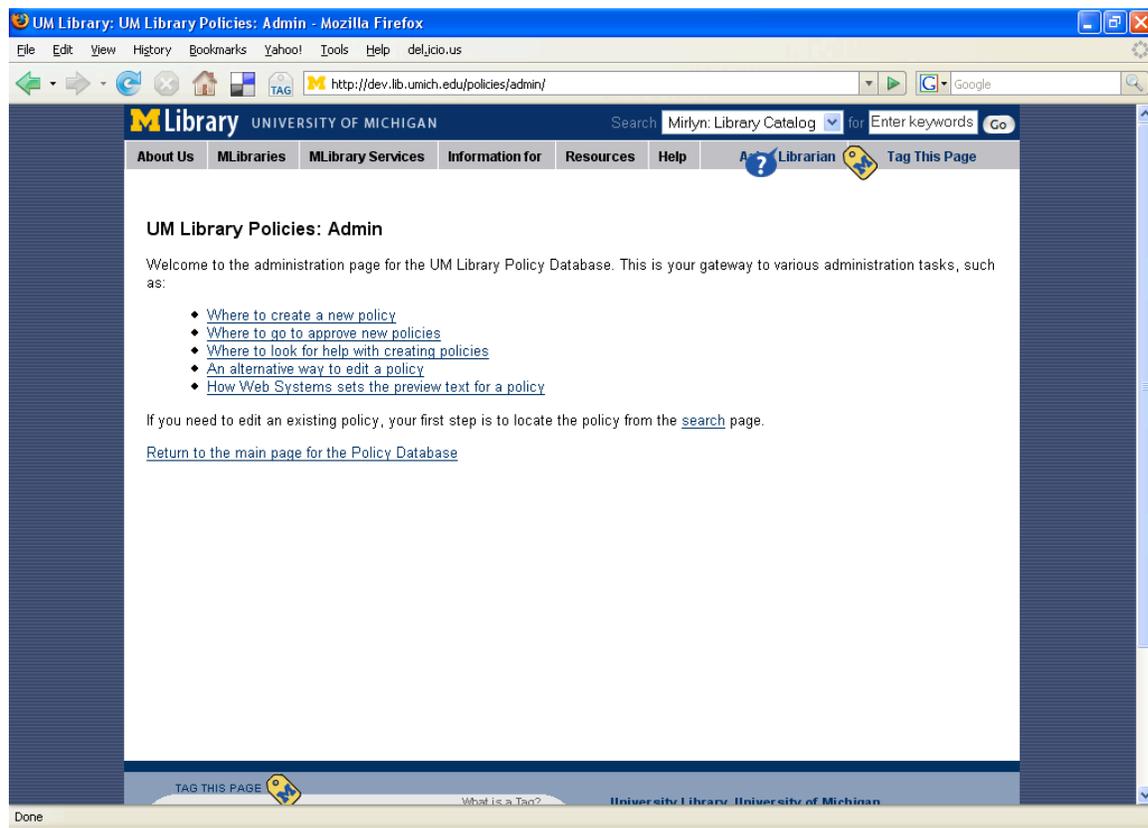
## Executive Summary

The system chosen to be evaluated is the University of Michigan Library Policies Database administrative user interface that the library staff will use. The goal of evaluating this system was to improve its usability and make it more user friendly to the library staff, the primary user group for this system. The purpose of this report is to describe in detail the usability evaluation of the policies database, including identification of usability issues and recommendations for improving these issues and problems. The report starts with an introduction to the Policies Database system followed by the methodology that was used to carry out this evaluation. Next, the major usability problems are discussed in detail along with recommendations for those problems followed by a summary of the complete evaluation project.

The main themes that emerged from this usability exercise were related to terminology and navigation schemes used in this system interface. The recommendations made should prove useful in making the database easier to understand and interact with, leading to an optimized system. The recommendations made can be listed as follows:

1. Certain label terms for input fields and navigation links on the administrative web page, submission template and the template for updating the policy preview text were considered inappropriate and new label terms have been recommended.
2. The current navigation scheme is functional but its placement on the web page needs to be changed to enhance visibility. Recommendations for a more appropriate placement have been made.

## Introduction



*Figure 1: UM Library Policies Database administrative page*

The UM Library Policies Database is a proposed system by which a new policy is filed, stored and made available to both public and staff. The originating body (a person or a group) writes the proposed policy and sends it to the appropriate approving authority (a person or group). The authority reviews and approves the policy. The policy is entered into the policy database using a Web-based template. The database automatically generates a standard confirmation email to the person chosen as the main contact on the template. The main contact is the person who gives the final green signal to publish the policy after the policy is checked in the online database for typos and errors.

The policies database is managed by Library Web Systems and the database resides on the staff website and permits read-only access to all library staff. Policies are pushed to library web pages as appropriate for access by the general public. The database is searchable online by the fields of the policy template such as policy title, date, originating body, keyword in title, etc. The screenshot in Figure 1 shows the UM Library Policies Database administrative web page. The administrative page is a gateway for staff to perform various administrative tasks such as submitting a policy, editing a submitted policy, approving a policy and setting the preview text for a policy.

## Methodology

The UM Library Policies Database is a system that will be used by library staff. The database consists of a data entry template to enter policy data. The system needs to be usable in order to allow users to perform the user tasks and functions. In order to evaluate the usability of the database, a heuristic evaluation using Jakob Nielsen’s ten usability heuristics was performed. This exercise produced a list of prominent usability issues/problems in the database system. This list of problems was used to create tests for the users of the system who in this case are the library staff. Given below are the usability problems that were derived from the heuristic evaluation:

1. The terminology used in some of the labels and links in the interface can be modified to make it more user-centric and easier to understand.
2. Use of icons for navigation, home page, search function, etc would increase the success of the system. The system does not use icons currently. Icons help in recognition of familiar objects and actions which makes the interface more usable.
3. The system consists of a horizontal web link navigation scheme which is placed at the bottom of the web page. Yet, this navigation scheme can be made more prominent and visible by placing it on the top of the web page.

The testing method that was used is called ‘Guerilla Testing.’ These tests are similar to usability tests but shorter in duration and do not necessarily require a computer for the users to perform the test. The guerrilla test is a question-answer type test with a short number of questions and generally a context is provided to the testers to better understand the background behind the testing being done. The guerrilla test created for the policies database was a four-page paper-based test. Four sections had questions related to the usability problems that have been described above. (See Appendix A.) The staff/users were provided a context for every usability issue by using a screen shot of the web-based interface in which the issue was present. Testers had to enter their answers in a tabular format. The test required no more than seven minutes to complete.

The first section of the test consisted of testing the labels that were used for the input fields and web links in the web-based template for entering and modifying policies. A table was created for this test which had the following columns:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Yes / No</i>	<i>Can you suggest a term for this label?</i>
---------------------------	-----------------------------	-----------------	---

The first column was a list of current labels that could be renamed. The second column was a list of suggested new label terms. The third column indicated whether the tester liked the suggested label term. The fourth column allowed the testers to provide their own suggestions for new labels or add comments.

The second section of the test was about finding out the testers’ opinions regarding which navigation scheme they preferred and if they preferred icons with or

without text over plain text for navigation links. This test was carried out using simple yes/no type questions.

A total of eight testers took the test. The testers were current working staff at the UM Library. Some of the testers were aware of the details of the policies database while some were not and had to be briefed about the database functionality. For better clarity in understanding the system, a few testers were also shown the online development database on a computer. After the tests were conducted, the test data were tabulated in a spreadsheet to simplify the gleaning of major themes and findings. Based on these findings and prominent ideas, recommendations for the redesign of the user interface of the policies database were generated.

## Issues and Recommendations

### Issue #1

**Policies Submission**

Logged in as: koparkar  
\* marks required fields

**Basic Information**

Title\*

Originating Body/Unit

Approved  Yes  No

Approved by Select the individual with approving power below

Approved On (YYYY-MM-DD) 2008 06 09

Document Upload Browse...

Display on Front Page Do not display on the front page

Staff Notes

**Scope**

Public Access\*  Yes  No

Affected Populations Select the population affected by this policy

Policy Context

**Contact** [add contact]

Title	Name	Email
Main Contact*		

Figure 2: Policies Database submission template

The UM Library policies database has a web-based template to input data about a policy in order to submit it. The URL for this template (on the library’s development server) is: <http://dev.lib.umich.edu/policies/admin/new.php>. There are four labels in this policy submission form that are considered for replacement with better labels that are potentially more user-friendly.

Label 1:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
Originating Body/Unit	Policy Originating Body	None of the testers liked this suggested term.
	Division of Policy Origination	None of the testers liked this suggested term.

**Recommendation #1.1**

This label is used for a drop-down menu dialogue box to let the user choose the body or unit that originates a policy. None of the testers thought that this current label needed to be changed as it was self-explanatory. Two testers suggested a new label ‘Body/Unit Originating Policy’ which was definitely more easy to understand and user-friendly. Thus a good recommendation for this current label would be ‘**Body/Unit Originating Policy**’.

Label 2:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
Document Upload	Policy Document Upload (.pdf / .html)	Only one tester out of eight thought that this suggested label was appropriate.
	Upload Policy (.pdf / .html) document	All but one tester considered this label to be appropriate.

**Recommendation #1.2**

The current label did not tell the user that only HTML or PDF documents could be uploaded to the database. The testers thought that the second choice for the suggested label was most appropriate. Thus a good recommendation for this current label would be ‘**Document Upload (.pdf / .html)**’.

Label 3:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
Display on Front Page	Display this policy on Library Policies Front Page?	Six out of eight testers thought that this suggested label was appropriate.
	Policy Display on Front Page	None of the testers considered this label to be appropriate.

**Recommendation #1.3**

This label is used for a drop-down menu input field to let the user choose whether a policy is available for the public to view or not on the Policies Database front page. A majority of the testers thought that the first suggested label ‘Display this policy on

Library Policies Front Page?’ was more clearly understood than the current label or even the second suggested label, ‘Policy Display on Front Page’. A few testers also suggested that they would like to use the word ‘public’ in the new label. Considering these suggestions, the new label that can be recommended would be **‘Display this policy for public view on Library Policies front page?’**

Label 4:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
Policy Context	Policy Scope	Five out of eight testers thought that this suggested label was appropriate.
	Policy Realm	None of the testers considered this label to be appropriate.

#### **Recommendation # 1.4**

The ‘Policy Context’ label describes the realm or scope in which the policy applies such as an individual or library unit/body. The current label was misleading to most testers and a majority of them considered the first suggested label ‘Policy Scope’ to be more appropriate. One tester felt that the current label was appropriate and need not be changed. A few testers also had trouble understanding the exact purpose that this label and input field served; they felt the input field was redundant with ‘Originating Body/Unit’. Considering all these opinions, the best recommendation for changing this label would be **‘Policy Scope’** as it is simpler to understand.

An alternative option would be to move this label/field to under the ‘Body/Unit Originating Policy’ field. Only those who would like to make the context different from the unit the policy is created in would need this field, and it would be easier to understand being closer together on the screen.

Issue #2

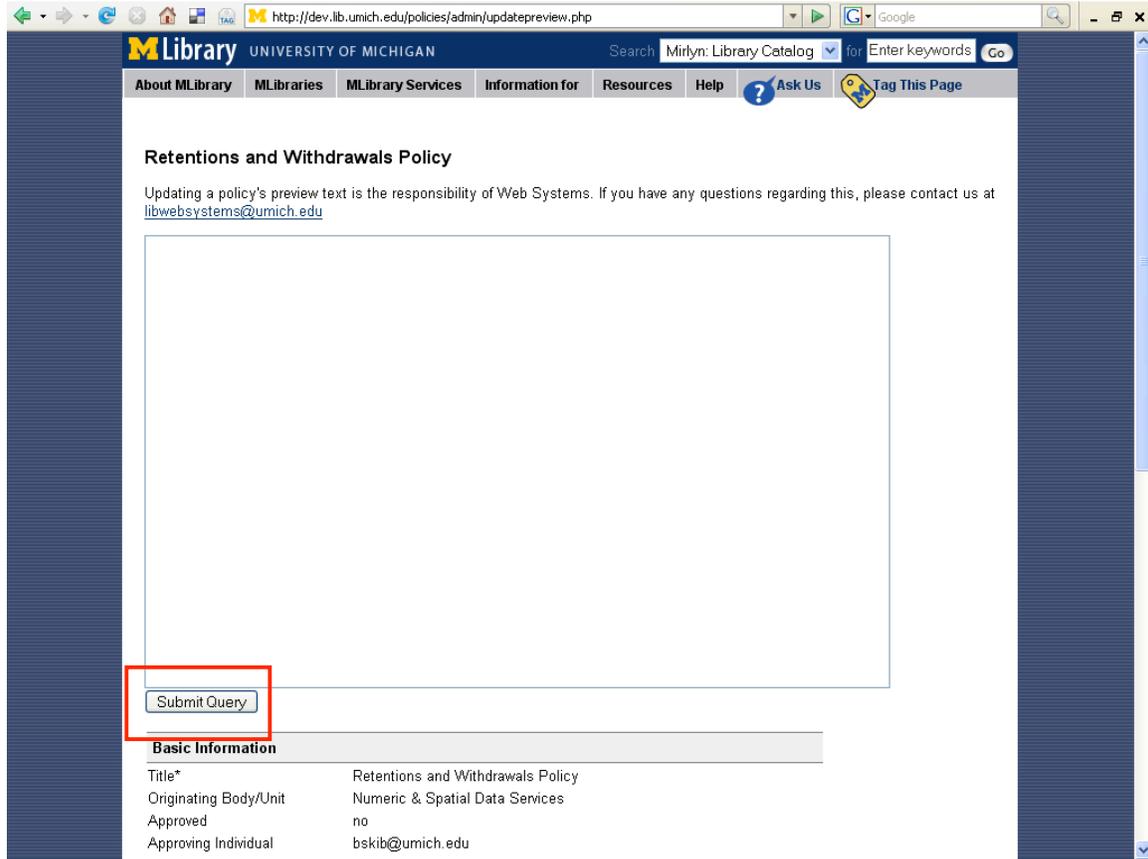


Figure 3: Update preview text template

When a policy is posted to the Policy Database, the database sends a message to Library Web Systems, who ensure that a suitable preview has been extracted from the submission. This preview text can also be edited by the staff. Figure 3 shows the web page template to update the preview text. The URL for this web page is: <http://dev.lib.umich.edu/policies/admin/updatepreview.php>. The label for the button shown in the rectangle in the above Figure 3 is misleading to the users.

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
Submit Query	Submit Preview Text	Six out of eight testers liked the suggested term.

Recommendation #2

All the testers were confused and misled by the label ‘Submit Query’ that would submit the changes made to the preview text in the template shown in Figure 3. A majority of the testers thought that the suggested label ‘**Submit Preview Text**’ would be a good

recommendation to change the current label. One tester suggested another label-- ‘**Confirm preview text is correct**’-- which could be a good optional recommendation.

### Issue #3

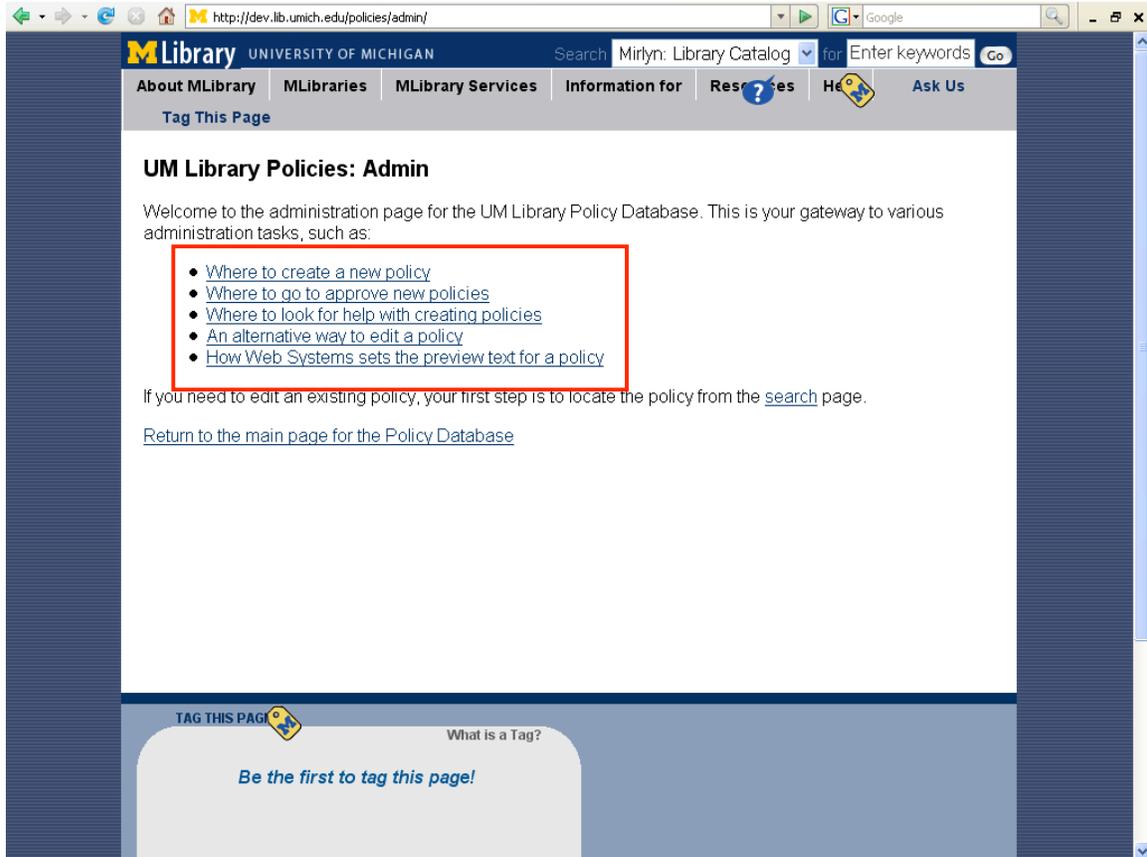


Figure 4: UM Library Policies Database administrative page

The administrative page of the Policies Database is a gateway to various administration tasks like submitting a new policy, approving a policy, finding help with submitting policies, editing a policy and updating the preview text for a policy. The URL for this page is <http://dev.lib.umich.edu/policies/admin/>. The labels for the links shown in a rectangle in Figure 4 were considered unclear and too wordy. These links were tested to see if the testers thought that the suggested new labels were appropriate or not.

Label 1:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
Where to create a new policy	Create a new policy	Five out of eight testers liked the suggested term.

**Recommendation #3.1**

This label was used for the link that would display the policy submission template to the user. The current label was not appropriate and a majority of the testers thought that the suggested label was better and clearer than the current label. Some testers suggested the label ‘Submit a policy’ as a replacement that sounded more proper than ‘Create a new policy’. Thus the recommendation for this label is ‘**Submit a policy**’.

Label 2:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
Where to go to approve new policies	Approve new policies	All eight testers found this suggested term more appropriate.

**Recommendation #3.2**

This label was used for the link that would display the policy approval template. The current label is too wordy. A better label for this function would be ‘**Approve new policies**’.

Label 3:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
An alternative way to edit a policy	Edit a policy	All eight testers found the suggested term more appropriate.

**Recommendation #3.3**

This label was used for the link that would display the template for editing a submitted policy. The current label is incorrect because there is no second way to edit a policy besides this method. The proper label for this function would be ‘**Edit a policy**’.

Label 4:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Tester Comments</i>
How web systems sets the preview text for the policy	Set the preview text for the policy	All eight testers found the suggested term better.

### Recommendation #3.4

This label was used for the link that would display the template for editing policy preview text. The current label is somewhat wordy. A better label, as suggested by one user, was ‘Set the text the public will see’.

### Issue #4

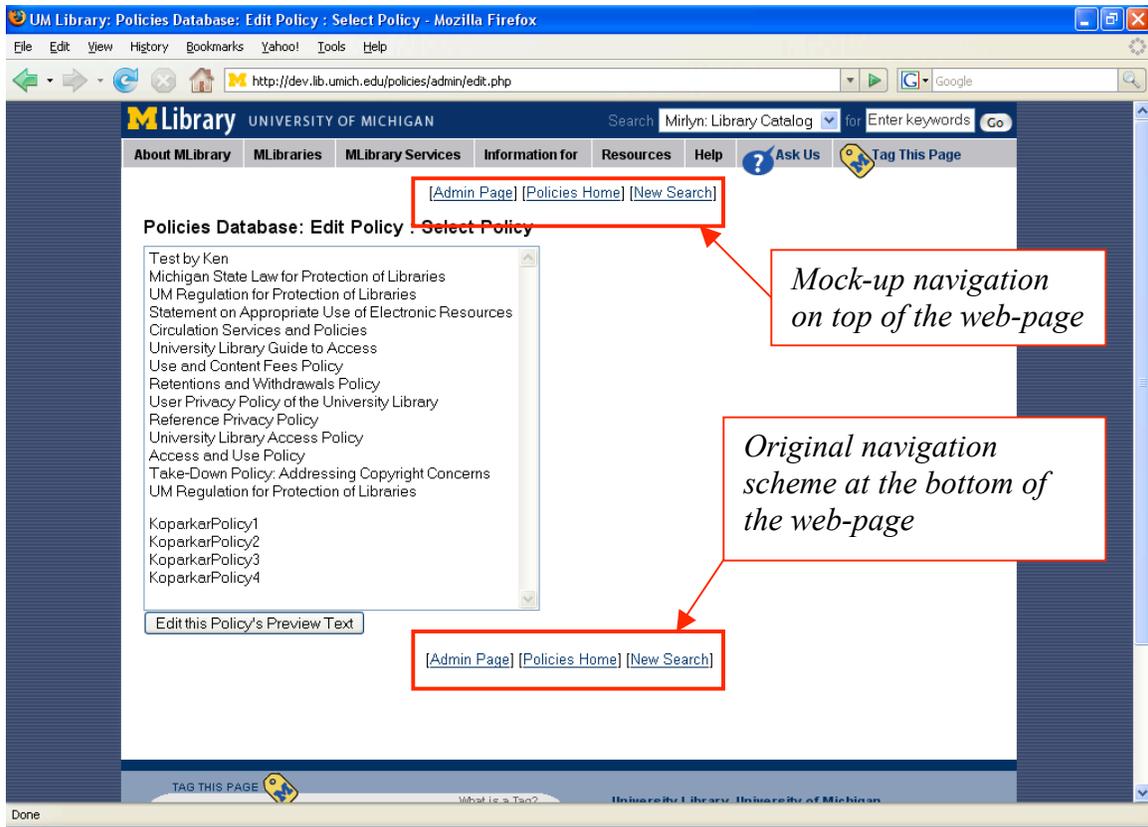


Figure 5: Policies Database navigation links

The web page shown in Figure 5 has a bottom navigation scheme in the form of web links. Since the navigation scheme is at the bottom of every web page, it is not easily visible because of the presence of a vertical scrollbar on most web pages. The testers were asked if they preferred a top navigation scheme over a bottom navigation scheme. The testers were also asked if they would prefer icons and text instead of just text links as a navigation scheme for better recognition.

### Recommendation #4

All eight testers preferred a top navigation scheme over a bottom scheme. A couple testers also suggested having navigation links at the top and the bottom of the web page.

None of the testers wanted icons with or without text to replace the current textual navigation scheme. The testers thought that text-only links were easier to read and understand than understanding and recognizing new icons. Hence it is recommended that the navigation scheme should remain text-only.

## Summary

The UM Library Policies database is a well designed system with certain usability issues. None of the usability problems are critical nor they do not affect the database's usefulness in an adverse way. The major usability issues that have emerged after performing a heuristic evaluation and guerrilla testing of the web interface are related to current terminology being used. The recommendations made in this report are concerned with improving the label terms and this would definitely increase the usefulness of the database making it more user-centric and simple to work with. Better labeling would make the interaction with the system easy to understand and perform. The navigation scheme needs to be addressed in a way that includes changing the placement of navigation links on web pages and making them easily accessible and findable for the users. Incorporating these changes in the system would certainly add to its success in a significant way.

## Appendix A: Guerrilla Test Script

### Labels Test 1:

*Overview:* The Policies Database is a soon to be released system by which a new policy is filed, approved, stored and made available as appropriate to both public and staff.

The screenshot shows a web browser window displaying the 'Policies Submission' form on the MLibrary website. The form is divided into several sections: 'Basic Information', 'Scope', and 'Contact'. In the 'Basic Information' section, the 'Originating Body/Unit' and 'Document Upload' fields are highlighted with red boxes. In the 'Scope' section, the 'Policy Context' dropdown menu is also highlighted with a red box. The 'Contact' section includes a table with columns for 'Title', 'Name', and 'Email', and a 'Main Contact\*' label.

### Instructions:

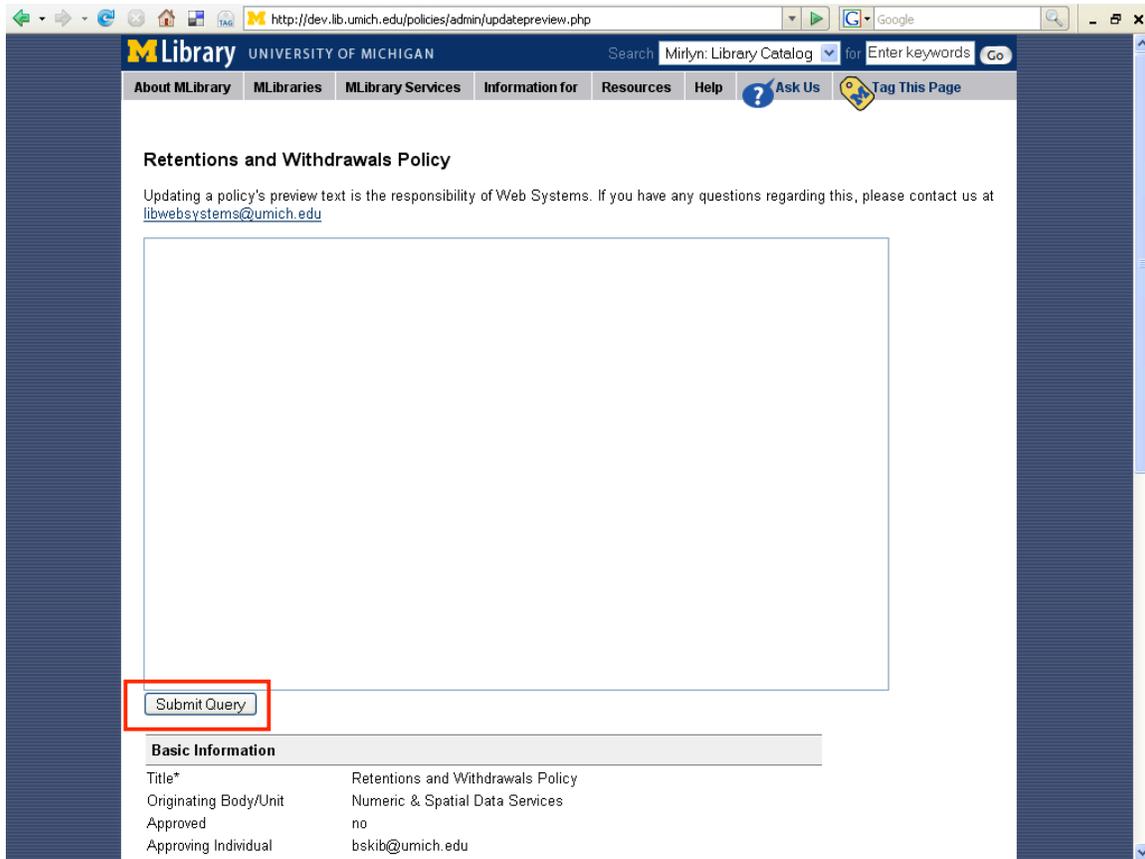
Please indicate the appropriateness of the suggested new label term to replace the current label term:

<i><b>Current label term</b></i>	<i><b>Suggested label term</b></i>	<i><b>Yes / No</b></i>	<i><b>Can you suggest a term for this label?</b></i>
Originating Body/Unit	Policy Originating Body		
	Division of Policy Origination		
Document Upload	Policy Document Upload (.pdf / .html)		
	Upload Policy (.pdf)		

	/ .html) document		
Display on Front Page	Display this policy on Library Policies Front Page?		
	Policy Display on Front Page		
Policy Context	Policy Scope		
	Policy Realm		

**Label Test 2:**

*Overview:* When a policy is posted to the Policy Database, the database sends a message to Library Web Systems, who ensure that a suitable preview has been extracted from the submission. This preview text can also be edited by the staff.



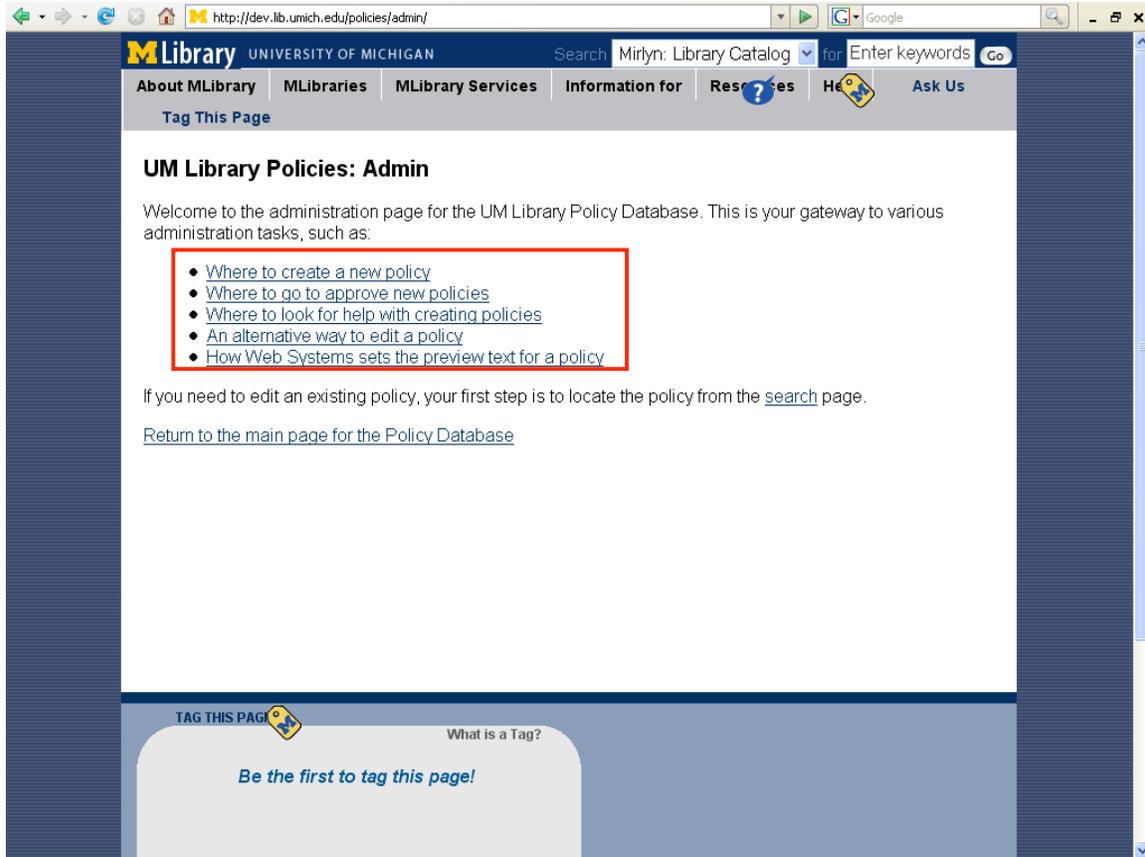
*Instructions:*

Please indicate the appropriateness of the suggested new label term to replace the current label term:

<b><i>Current label term</i></b>	<b><i>Suggested label term</i></b>	<b><i>Yes / No</i></b>	<b><i>Can you suggest a term for this label?</i></b>
----------------------------------	------------------------------------	------------------------	--

Submit Query	Submit Preview Text		
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**Labels Test 3:**



*Instructions:*

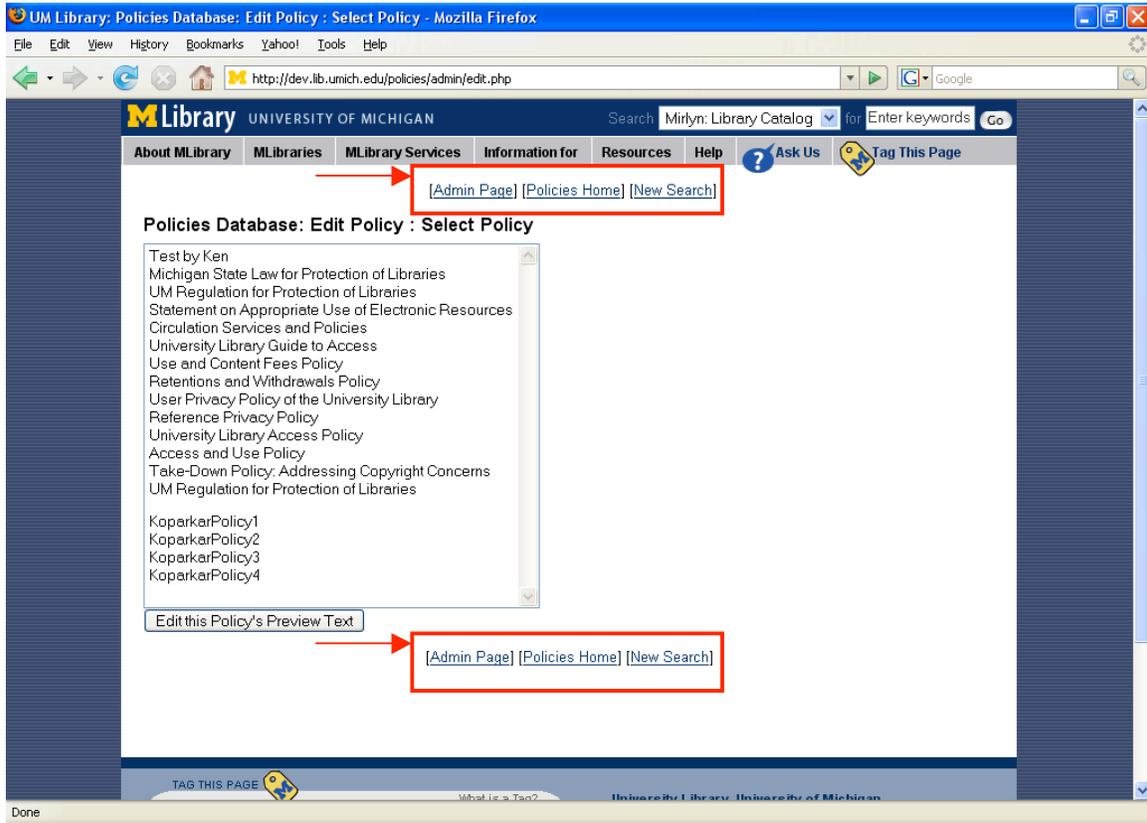
Please indicate the appropriateness of the suggested new label term to replace the current label term:

<i>Current label term</i>	<i>Suggested label term</i>	<i>Yes / No</i>	<i>Can you suggest a term for this label?</i>
Where to create a new policy	Create a new policy		
Where to go to approve new policies	Approve new policies		
An alternative way to edit a policy	Edit a policy		
How web systems sets the preview text for the policy	Set the preview text for the policy		

### Navigation Scheme Test:

*Instructions:*

Please select the best placement - top or bottom - for the navigation links shown in a rectangle in the figure below:



### Iconography Test:

*Question:*

Do you think that using icons and text both for the navigation links shown in red border above would be helpful? (Circle one):

Yes

No

## Appendix B: Guerrilla Test Tabulated Results

### Labels test

Current label	Suggested label	Tester #	Liked suggested label?	New term / Comments
Originating Body/Unit	Policy Originating Body	1	no	Term - unit originating policy
		2	no	Term - body/unit originating policy
		3	no	Term - originating department
		4	no	
		5	no	
		6	no	Term - policy originating group
		7	no	
		8	no	Term - originating unit
	Division of Policy Origination	1	no	
		2	no	
		3	no	
		4	no	
		5	no	
		6	no	
		7	no	
8		no		
Document Upload	Policy Document Upload (.pdf / .html)	1	no	
		2	no	
		3	no	
		4	no	
		5	yes	
		6	no	
		7	no	Term - document upload .pdf/.html
	8	no		
	Upload Policy (.pdf / .html) document	1	yes	
		2	yes	
		3	yes	
		4	yes	
		5	yes	
		6	yes	

Web Systems | Policies Database – Guerilla Testing

		7	no	Term - document upload .pdf/.html
		8	yes	
Display on Front Page	Display this policy on Library Policies Front Page?	1	yes	
		2	no	Term - location of display
		3	yes	
		4	yes	
		5	yes	Comment - include 'public'
		6	yes	
		7	yes	
		8	no	Comment - make public ... no use of front page word
Policy Context	Policy Display on Front Page	1	no	
		2	no	
		3	no	
		4	no	
		5	no	
		6	no	
		7	no	
		8	no	
	Policy Scope	1	yes	
		2	yes	Comment - menu options should be changed
		3	yes	Comment - drop this category?
		4	yes	
		5	no	
		6	no	Comment – redundant, means nothing to me
		7	yes	
		8	no	Comment - keep 'context'
Policy Realm	1	no		
	2	no		
	3	no		
	4	no		
	5	no		
	6	no		
	7	no		
	8	no		
Submit Query	Submit Preview Text	1	no	Term - confirm preview text is correct
		2	yes	
		3	yes	

Web Systems | Policies Database – Guerilla Testing

		4	yes	
		5	no	
		6	yes	
		7	yes	
		8	yes	
Where to create a new policy	Create a new policy	1	yes	
		2	yes	
		3	yes	
		4	yes	
		5	no	Term - submit policy
		6	no	Term - submit policy
		7	yes	
		8	no	Term - submit a new policy
Where to go to approve new policies	Approve new policies	1	yes	
		2	yes	
		3	yes	
		4	yes	
		5	yes	
		6	yes	
		7	yes	
		8	yes	
An alternative way to edit a policy	Edit a policy	1	yes	
		2	yes	
		3	yes	
		4	yes	
		5	yes	
		6	yes	
		7	yes	
		8	yes	
How web systems sets the preview text for the policy	Set the preview text for the policy	1	yes	Term - set the text the public will see
		2	yes	
		3	yes	
		4	yes	
		5	yes	
		6	yes	
		7	yes	
		8	yes	

**Navigation scheme and iconography test**

<b>Tester #</b>	<b>Navigation scheme preferred</b>	<b>Icons and text?</b>
1	top	no
2	top	no
3	top	no
4	top	no
5	top or both	no
6	top	no
7	top	no
8	top	no