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Policies Database - Heuristic Evaluation

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Project Cover Sheet

Project	**Policies Database Usability Evaluation** *Heuristic Evaluation* 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 heuristic evaluation was an exhaustive evaluation of this system's interface features to determine a broad range of issues related to usability.
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Objectives	The goal for these evaluations was to reveal a preliminary set of issues pertaining to the usability, functionality and aesthetics of the Policies Database, and to facilitate prioritizing further benchmarks.
Methodology	Method – Heuristic Evaluation Dates of study: June 2008
Results & Analysis	Six significant issues were identified related to terminology, iconography and navigation as well as others.
Recommendations	Perform "guerilla" tests to evaluate issues pertaining to terminology and navigation.

Introduction

The usability evaluation of the policies database system (http://dev.lib.umich.edu/policies/admin/) was performed using Jakob Nielsen's discount usability heuristics. The goals of performing this evaluation are two-fold:

- Find usability problems in the user interface design as an iterative design problem.
- The results of the heuristic evaluation are available fairly soon after the evaluation session and hence this method is not time-consuming and requires minimal resources to get an overview of the usability problems in an interface of a system.

Executive Summary

The following findings were made from the heuristic evaluation exercise. The findings have been listed in order of importance and priority:

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. (See Table 1.)

2. The browser back button/icon does not work for the system. This shortcoming could be removed or a back button should be provided wherever necessary to allow the users to undo their actions and thus avoid errors or wrong results.

3. The basic search function to search for policies requires the users to enter a whole word within the title of a policy that is to be searched. This requirement should be clearly stated on the search function web page to prevent errors being made by users.

4. 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.

5. The system consists of a horizontal web link navigation scheme which is functional. Yet, this navigation scheme can be made more prominent and visible by placing it on the top of the web page (see Figure 1). Using icons for navigation would also improve the usability of the interface.

6. The help section is useful but can be made more user-centric by using appropriate titles and sections to help users find what they are looking for faster.

Heuristic Evaluation (using Nielsen's usability heuristics)

1. Visibility of system status:

The web browser's progress bar shows the processing which is an indication of the system status when a policy is created and policies are edited. When a new policy is submitted, the message '*Policy named '<policy name>' was submitted successfully*' is displayed. When a policy is updated, the message 'Policy *named '<policy name>' was updated successfully*' is displayed.

When a new policy is approved, that policy is no longer shown in the table of policies to be approved.

When the preview text query is submitted and upon successful submission, 'Update successful' message is displayed.

2. Match between system and real-world:

Some terms in the interface can be changed to make them more user-centric:

Current term	*Type*	*Suggested term*
Originating Body/Unit	Label	Policy Originating Body
Document Upload	Label	Policy Document Upload (.pdf / .html)
Display on Front Page	Label	Policy Front Page Display
Policy Context	Label	Policy Scope
Submit Query	Label	Submit Preview Text
Where to create a new policy	Link	Create a new policy
Where to go to approve new policies	Link	Approve new policies
An alternative way to edit a policy	Link	Edit a policy
How web systems sets the preview text for the policy	Link	Set the preview text for the policy

Table 1. Terms in interface.

The interface translates the real-world metaphors to system metaphors in a proper way. Overall, the color scheme of the policies database system is normal and functional. The colors used do not appear to be shocking and intimidating.

3. User control and freedom:

'Cancel' button is present on the policy creation form web page which allows the user to exit from the page anytime.

The policy creation form web page has some input values set to default which helps the user.

The policies database web pages have home page links present wherever necessary.

The browser back button is not useful in this system. There is no back button provided on the web pages to allow the user to go back to the previous web page.

4. Consistency and standards:

In the new policies creation web page form, required input fields are marked with a * sign which is a standard convention.

The interface has a consistent horizontal navigation scheme that is placed on the bottom of the web pages. Yet, the system could use a more prominent navigation scheme which can be placed on the top of the web pages which would make it more visible.

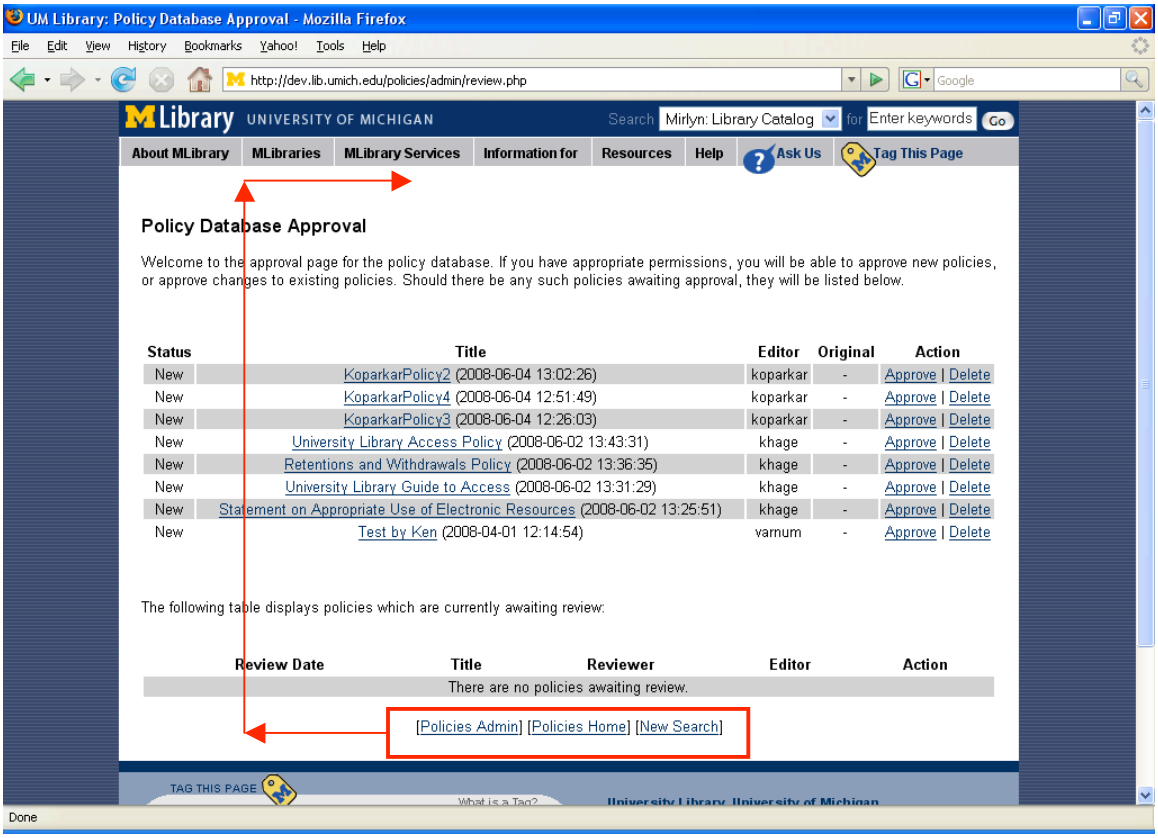

Figure 1: Navigation links on approval page.

5. Error Prevention:

The interface contains error prevention mechanisms such as specifying YYYY-MM-DD for inputting dates which would limit the choices for user input to a specific format.

Specifying the mandatory input fields using a * sign prevents the user from forgetting to input such required values.

The basic search function requires the user to enter the exact title words of a policy. This requirement should be clearly stated on the search function web page to prevent errors being made by users.

6. Recognition than recall:

The interface completely lacks icons. The use of icons improves recognition of the objects and actions and makes them more visible. Icons for navigation links such as

Policies Home Page and Policy Search would help recognition and make the interface more usable.

Use of minor color coding would also help retention of interface objects in mind. For example, using color to denote a * which indicates a required input field would make the asterisk sign more visible on the web page.

7. Flexibility and efficiency of use:

The system does not contain any shortcuts to certain web pages. There is no mechanism to allow users to tailor frequent actions. Though the system lacks such shortcuts, they do not seem to be necessary for the success of the system since the system has well defined functions.

8. Aesthetic and minimalist design:

None of the interface dialogues contain irrelevant or unnecessary information and so the interface design can be said to be minimalist and useful.

9. Help users recognize, diagnose and recover from errors:

No error message is provided to the user if a policy is submitted without inputting values for the required data fields while submitting a policy. Upon submission of such a policy the following status message is displayed: 'A policy with the name "xxx" already exists. The submission has been canceled. Click here to resume editing.' This status message is inappropriate because it is displayed very late in the submission process and hence the user has to perform the whole submission process again.

10. Help and documentation:

The system provides help documentation on creating, editing and approving policies that is sufficient and useful to the user. The help web page could be made easier to read and understand by structuring it into sections such as 'Editing policies', 'Approving Policies', and 'Changing the preview text of a policy'.