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Help I'm Lost!:

How Wayne State Developed a Library Mapping System Without Breaking the Bank

Project Overview

The Wayne State Library System launched its library mapping application in February 2010, designed to help locate materials in the five WSU libraries. The system works within the catalog to show the location of materials, as well as provides a web form for use at the reference desk. Developed using PHP and MySql, it requires only minimal effort to update using a unique call number overlay mechanism. In addition to mapping shelved materials, the system provides information for any of the over three-hundred collections held by the WSU Libraries. Patrons can do more than just locate a book on a shelf; such as learn where to locate reserve items, how to access closed collections, or get driving maps to extension center libraries.

The article includes a discussion of the technology reviewed and chosen during development, an overview of the system architecture, and lessons learned during development.

How to Use Map It! @ WSULS

There are two ways to access the system, either via the two WSULS catalogs (Millennium "Classic" and Encore), or a form designed for use at the reference desk. In this sense, the application can be accessed in two tiers, the catalog tier, and the form tier. Demonstration links are available in the column to the right.

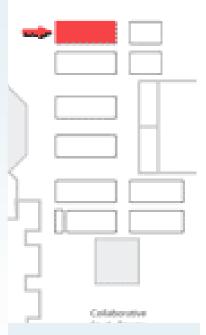
Catalog Mapping

The mapping system is primarily used from the catalog, and is accessed by clicking the explore icon on the search results page, and then the "Floor Maps" icon. The system will then harvest the catalog data, and display the map or content.

Reference Form

The reference form provides a simple method to find the location of a call number in any of the libraries, primarily at the reference desk. Users simply select a library, enter a call number, and a map of the call number range is dynamically created and displayed to the





Speaker Information

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Catalog Mapping Example: http://bit.ly/cKMdtg

Demonstration Links

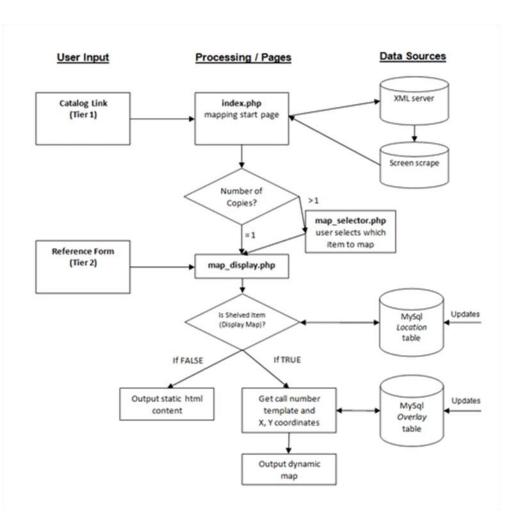
Reference Form Example http://www.lib.wayne.edu/forms/ maps/map_callnumber.php

Brief video on system use: http://bit.ly/9kOoxu

Article published in Code4Lib: http://journal.code4lib.org/

System Architecture

The system was designed using a tiered access model, as both methods use the same display code, but the catalog requires additional data gathering. The graphic represents the overall architecture, with the top area representing access from the catalog, and the bottom the reference form and content display functionality. Briefly, the catalog link forwards the OCLC number to the index.php page, which queries the catalog and, if necessary, asks which item to map with the map_selector.php page. Once the library and call number data is obtained, the system forwards the call number and library to the map display.php page, where the location is checked for which type of content to display, and finally the map or content is displayed. In the case of the reference form, the form forwards the library and call number to the map_display.php page directly, and the system displays the map.



Results and Lessons Learned

Initial results have been positive. Usage is steadily increasing as the system gains more notice by patrons and staff, and growth will likely continue as other resources are integrated into the system. It is important to note the application's dependence on staff to keep the ranges and location content updated. By collaborating with the WSULS Access Services early in the process, the system is now used during large material shifts, and is updated as a normal part of their collection shifting workflow. Without having a simple means to manage the content, the data could quickly grow stale, and send patrons to the wrong location.

Overall, the system is a useful addition to the library catalog, and the ability to create maps for patrons is a welcome addition at the reference desk. Future enhancements under consideration involve using the system for other applications, such as reserving study spaces. Additionally, as mobile GPS technology becomes more accessible, the system could provide a platform for experimenting with location awareness – and be able to point to specific item locations. The system is being considered for release as an open source application, based on demand and the work involved in refactoring the code to work as a standalone application. While there is not a timeframe for a possible release, updates about the availability of the application will be posted to the library website at http://www.lib.wayne.edu/maps/updates/.