

Enhancing ChemEd DL with a WikiHyperGlossary

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Introduction

The goal of this project is to create a WikiHyperGlossary (WHG) for the Chemical Education Digital Library (ChemEd DL). The design we base this project on automates the markup of digital text documents and web pages by linking words within the document to semantically useful content in ChemEd DL.

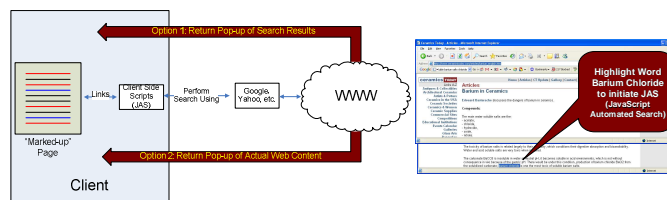
Application Overview

- Submitted documents are marked up with links to records associated with the terms of a glossary database.
- The content of the record fields may be textual or multimedia
- Through AJAX (Asynchronous JavaScript and XML) this content is returned to the requesting document embedded in a JavaScript overlay.
- Some record fields can be collaboratively developed over the internet (wiki-fields).
- A second type of link is embedded in the document which hyperlinks every word or sequence of words to a search engine through a JavaScript Automated Search (JAS) process.

JavaScript Automated Search (JAS)

Highlighting any word or sequence of words in the document submits them to a search engine through a JavaScript Automated Search (JAS) process.

- Option 1 returns the search result
- Option 2 returns the first hit



Client Side Editing and MyWHG

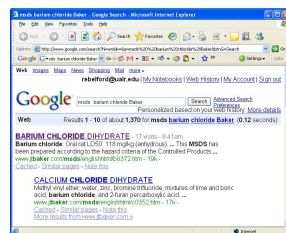
- Client side interface allows control over content document is connected to
- Allows multilingual functionality
- Allows choice of multimedia digital objects
- Allows control of the nature of JAS



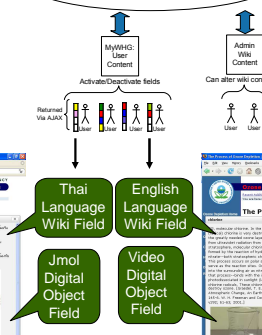
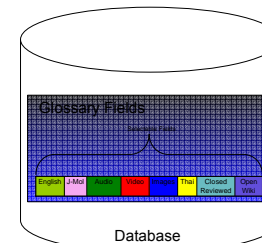
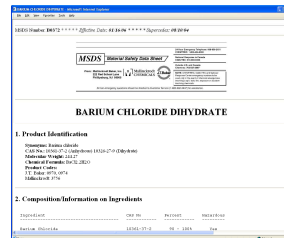
Document Before Submission to WHG



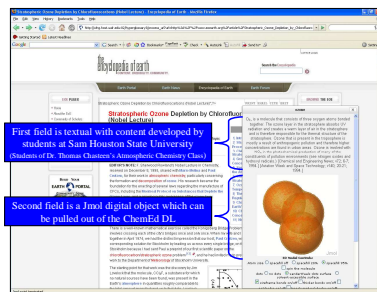
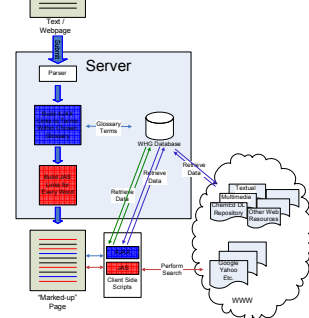
Option 1: Bring up Search Result (note how words MSDS and Baker were added to highlighted string)



Option 2: Bring up First "Hit" of Search (directly opens the first link on left)



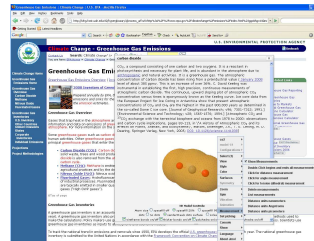
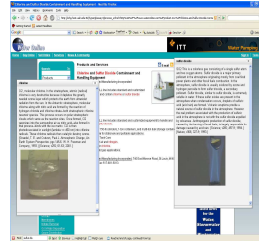
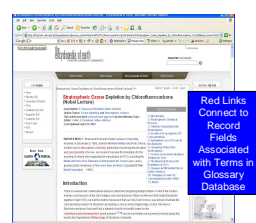
Two Users Access Different Content for the Same Page



Multiple Terms can be Displayed within Requesting Document

Digital Objects can be Manipulated within Requesting Document

Document After Submission to WHG



Acknowledgements



This project is sponsored by the NSF National Science Digital Library program.



Our partnership with ChemEd DL helps make this project possible.



We thank the MidSouth Bioinformatics Center for their technical support.