WP3: Discovery

Grant description

Work Package 3: Discovery

In LD4P2, Pathway to Implementation, the Stanford and Cornell teams demonstrated a number of novel and promising user interface approaches, including linked-data-powered knowledge panels, new browse approaches, and semantic search. We have also gained considerable understanding of data sources that have an appropriate quantity and quality of data related to entities in metadata to drive these user interfaces. Pulling data from sources like Wikidata, Discogs and the Library of Congress has allowed us new methods of navigation across library resources through the incorporation of context not previously available alongside a resource's bibliographic description. The project team has built proofs-of-concept for Discogs metadata reuse as a means of description enhancement for under-described sound recordings, enhanced subject-related search based on faceting Wikidata topical metadata and has developed user navigation that leverages the Library of Congress Classification system. Further, we are currently in the early stages of developing a recommendation engine based on Open Syllabus Project data and more. The aforementioned efforts are merely a sample of that which the development team has undertaken to enhance discovery as part of the current grant; these developments have been designed and assessed through multiple rounds of user studies, which will inform our approach for further development.

In the next phase, we will create production-ready iterations of the proofs-of-concept understood to be successful based on feedback from user studies during LD4P2. Our goal is to ensure that development undertaken to leverage semantics within and beyond traditional library data can be implemented within the open-source discovery environment, Blacklight. Working in collaboration with library staff focusing on the patron discovery experience, we will deploy selected new features in our production Blacklight environments. Further, we will continue to design and test around data currently described in the MARC standard but will also experiment with data libraries current classify as non-MARC, e.g.: digital collections, geospatial resources and more. By engaging with discovery environments for resources beyond those traditionally stored in an ILS, we will better understand the extensibility of this development to the diverse types of resources described by libraries.

The project team will work with the Blacklight community through a combination of reference implementations and workshops to disseminate approaches and encourage both community code development and deployment. The result will be better contextualization of persons, organizations, places and other entities in our user interfaces. We will also expand on the work started in LD4P2 about appropriately incorporating linked data into library services, and work to identify what external data sources can and should be enriched through library data contributions. Software will be contributed back to the community Blacklight codebase, and we will continue to work with Wikidata as the most promising service that provides the data necessary to interlink between library and non-library resources, leveraging the contributions of both the professional library community and the volunteer Wikidata community.

Research "track"

DASH! (Discovery Across Subject Headings)

This phase explored the use of linked data sources to provide additional context to and relationships for authors and subjects. We generated prototypes for integrating information into knowledge panels as well as into dedicated author and subject pages.

- Data analysis
- DASH! subject headings index
- Original design brainstorming/subject page design (Astrid Usong)
- Usability results (includes screenshots of prototype that was used in test)
- Pre-production process and feedback
    - April presentation to user representatives: PDF / Slides
    - August presentation to user representatives: PDF / Slides
    - Mockups for additional feedback
    - Feedback from user representatives
- Production work
    - Knowledge panels and author/subject pages
    - Overview of catalog indices as related to this work
- Lessons learned
- Demo video
- Code:
    - For experimental prototype: https://github.com/ld4p/blacklight-cornell/tree/dashExperiment.
    - Production work in repo: https://github.com/cul-it/blacklight-cornell/

BANG! (Bibliographic Associations Newly GUI'ed)

In this phase, we are analyzing relationships between works and instances and how we can use information about these relationships from data sources like ShareVDE generated BIBFRAME and the Library of Congress Hubs to bring in information about related items into the catalog.

- Preliminary data analysis
- Analysis of selected data sources (report)
    - Final report
    - Google Doc
- Scripts for data analysis
- First prototype version screenshots (BANG! prototype screenshots.pdf)
- Usability Report
- Demo video
- Lessons learned
- Code
    - For experimental prototype used in usability testing/demo video: https://github.com/LD4P/blacklight-cornell/tree/bangdemo

BAMWOW! (Browsing Across Music With Obtainable Wikidata)

In this phase we explored how one can improve the library catalog browse experience for music recording items through the addition of information from Wikidata.

- Meeting notes: initial meeting, meeting with Wikidata group, post prototype meeting notes
- Examples of musical recording catalog items used for development and design
- Prototype screenshots (PDF)
- Usability Report
- Demo video
- Lessons learned
- Code
    - For experimental prototype version used in usability testing: https://github.com/LD4P/blacklight-cornell/tree/bamwow
    - For experimental prototype used in the demo video: https://github.com/LD4P/blacklight-cornell/tree/bamwowdemo

Production work

- **Discogs**
- **Knowledge panels and author/subject pages**