Use Case 3.4: Authority tool for more accurate data entry

Example story: As a librarian I want my student catalogers to be guided through selection of vocabulary terms to improve both their accuracy and speed. Furthermore, I want to data entry tool to auto-configure the vocabulary terms based on knowledge of the ontology and vocabulary we have decided to use for our project.

This use case addresses the need to improve data creation accuracy. In current systems with controlled vocabularies expressed as simple strings there are frequent errors in entry. In linked data systems URIs from controlled vocabularies are used to avoid some of the problems of simple strings but applications need ways for users to efficiently and accurately select terms. Typeahead lookup to improve reduces user effort /time while also improving data quality on entry and curation.

Out of scope: n/a

Potential Demonstrations

A. Intelligent term expansions / suggestions based on LD show up as type-ahead in a search box

B. Possibilities based on linked data show as suggestions on a zero-results search page

Data Sources

- vocabularies with appropriate description

Ontology Requirements

- nothing new

Engineering Work

- Within the Hydra framework used at Stanford and Cornell a key element of implementing this is likely an extension of the "Questioning Authority" gem

Who will do what?

- Stanford -- wants to do this, has been done with Freebase, can pull together in a test instance of SearchWorks. A real use case in Hydra-based IR where people are putting in strings when should be putting in URIs (e.g., cross-source descriptions of pictures of cars that should be URIs of make and model)

Discussion

- Darren -- need a triple store with ontology data and a REST api build on top of that; might be some Solr indexing of the ontology data; and needs a client to interact with the REST api using any language you like; has architecture examples if interested
- autocomplete should return at least a flat string of ontology terms and from there you can use it directly or use that to suggest further options -- up or down the hierarchy
- Jonathan Kennedy has built semantic search for the Blink project that addresses authorities