XCRI Query Webservice Demonstrator

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Why a Demonstrator?

- satisfy JISC requirement
- prove, or at least demonstrate, usefulness of XCRI data standard
- create a platform on which people can experiment with XCRI data
- instantiate an API so that other developers can begin to explore integration ideas

Functional Goals

- XPath queries embedded in URLs
- ‘FLOWR’ XQuery syntax as ‘stored-procedures’
- easy import of XCRI documents
- easy management of ‘collections’

Design Approach

- make course info an addressable resource
- build a simple ReST service (no SOAP)
- try to implement the ‘XPath in URL’ idea
- code to Java interfaces
- build for “normal users, developers and machines”*
- use an XML database (nodes, not docs)

* Tom Coates : http://www.plasticbag.org/files/native/native_to_a_web_of_data.pdf

Development Decisions

- KISS - plain Java servlets/JSPs
- Berkley DBXML from Sleepycat Software
- WebDAV for importing documents

Delivered so far....

- working XPath/XQuery tool for XCRI data
- working query web service
- separation of design and implementation - is this worthwhile for this particular project?
- sources, API docs, documentation wiki, UML
- test deployment at LondonMet

Next steps?

- indexing for performance
- update/insert/delete services
- defined & named, standard queries
- SOAP/XML RPC APIs?
- inter-repository referrals (like LDAP)?

Outstanding Issues

- query output format - <xcri:any>?
- source doc management
- indexing for performance - tightly coupled to implementation?

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