

Harvard University Faculty of Arts and Sciences

Course Catalog

Creating this website has certainly been a challenging and rewarding experience. You'll quickly realize that I did not meet all of the goals of the project, unfortunately, and that gives me no pleasure. I am very disappointed that it did not get completely implemented by the due date. Yet, I do not regret working by myself ultimately despite this. I wouldn't change that decision because I learned more during this recent process than the entire's semester's experience. It is not until you begin to think in the language, solving problems, visualizing solutions, that you truly gain a grasp of it. Though I never quite had all of that "fun" that was mentioned frequently, I am grateful for this experience.

Sites and Content

I set out to do a version of the course catalog that is XQUERY based using the BASEX server. Databases were my first love, technologically speaking, so I just felt very comfortable with that type of approach. The XML generated from the queries were filter.xml files that were then transformed by XSLT.

The website is essentially three views; a *Search/Welcome* page, a *search results* page that can be further filtered by the (intended) facets on the side-bar and a *course detail* page. The links on the facets send parameters to the original search query. **Browsing** would mainly be through the search form and links with parameters to pages.

I utilized a common.xsl and practiced "DRY" principles whenever possible.

Searching should be with the form field and the added or removed parameters from the facet links. There is no grouping.

A positive that I can mention is that the website is **mobile**-ready. There is a top menu that appears when the screen is phone-sized that replaces the side menu with the search facets. I would suggest that it's attractive and consistent too. I'd like to thank my unknown friends that created the actual Harvard Course Catalog that contributed copy, graphics, and inspired the design choices.

My course detail **PDF** page never quite rendered, but it's uploaded for your examination regardless.

To **Deploy** the application, one would:

1. Copy the folder of **course files** to a BASEX server
2. Create a database within BASEX
3. Copy the xq folder to the root of the BASEX server
4. Copy the final_project to a cocoon installation.
5. Start Apache, Tomcat, BASEX servers
6. Navigate to http://localhost:8080/cocoon/final_project/index.html

XML Technology Implementation and Extraordinary Distinction

I am very proud of my choice to be adventurous and attempt an XQUERY-based website. Even though the website is not complete, one could examine it (I hope) and gather the extent of my grasp of the technology and the amount of attention I paid to details in implementing and recreating what was demonstrated in class.

Lessons Learned

Apparently one can't just import a piece of .xsl code and place it in a div like I planned to do with the search facets. For a few (departments, faculty, course groups) I created queries to generate links dynamically, but when I tried to load them in the sidebar they did not appear. Also even though I am clearly sending parameters between pages, the parameters are not reaching the actual queries. Just for demonstration's sake I have hard-coded several values into the queries for the parameters. I suspect that it is one step that I am missing in my sitemap, but I could not decipher what exactly was needed in time. With a few more days to get help with my obstacles I know I would have had been able to complete it, but it wasn't in the cards.