Final Project
ECT 360, Prof. Robin Burke
Fall 2005
Due: 11/21/2005

Objective:
Create a small-scale XML application. You may work in teams of up to 3 people for this assignment.

Requirements overview:
In this assignment, you will do the following:

- Define an XML application using either a DTD or an XML Schema.
- Write an XML document using your language.
- Create three XSLT stylesheets that output XHTML or create two XSLT spreadsheets and one AJAX application.
- Create three CSS stylesheets that control the display of your HTML.

Milestones:
9/19: Select your team partners (or decide to work solo)
9/26: Select a domain for your application
10/10: Sample document selection and analysis
10/24: Draft schema or DTD
11/7: Web page mockups
11/21: Final project submission

Specific requirements:
(More specific assignment handouts will be provided for Milestones 3-6)

Application
Your application will involve the management of semi-structured data consisting of numerous objects with similar structure. See the hints section for ideas. You may not use books as an application since we will be using this for our homework. Your domain can be either narrative or transactional in nature. I will be looking for thoroughness in the representation of content, so you should be prepared to gather example documents and analyze them carefully.

Schema / DTD
You may decide whether to use an XML Schema or a DTD to define your application. Your choice must be appropriate for the domain that you choose. A DTD should be appropriately parameterized and a schema should use appropriate data types.

XML document
Your document will contain 10 - 25 examples of the object in question and conform to your schema or DTD. If your data items are simple, you should plan to have the larger number. Your examples should demonstrate the flexibility of your application, including complex and exceptional cases.

Transform #1: Overview listing
The first XSLT stylesheet will generate an XHTML document that is a listing of the contents of your document, including all objects and their most important properties.

Transform #2: Single-item
The second stylesheet will generate an XHTML document for a single item in the inventory, selected by a XSLT parameter value. This rendering will contain all of the objects details.
Transform #3: Summary

The third stylesheet will generate an XHTML document that is a summary of the contents – perhaps an outline or a tabulation. The exact form is up to you.

OR

AJAX Application

An alternative to the third stylesheet is an AJAX (Active JavaScript And Xml) application. The application will be an XHTML web page that uses XmlHttpRequest to load your XML document from a web server and then allows dynamic user interaction with the document's contents.

CSS

The rendering of all of the XHTML documents will be controlled by separate CSS stylesheets.

A complete project will therefore consist of ten or eleven components as shown in the graphic below: 1 schema or DTD, 1 conforming XML document, 3 XSLT stylesheets and their 3 XHTML output files or 2 stylesheets and their outputs plus one AJAX application, and 3 CSS stylesheets.

Hints and Notes:

• Possible domains for your application: CTI/DePaul courses, movies, restaurants, stocks / investments, recipes, recordings, musical groups, apartments for rent, video games, sports teams / players, TV shows, celebrities, cars, etc. Work-related applications are fine, but remember that your work will be evaluated based on the criteria of this course, which may be different from your employer's.

• You may use online or other sources for the content of your document. If you do, you must include a credits element in your document containing the URLs pointing to the source of your data. The contents of this element must be rendered as links (<a> elements) in your XHTML pages.

• You may not use page designs, XML schema, or stylesheets that your team did not develop.

• You may use XML Spy or another XML editor to manage your documents, schemas and stylesheets.