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**University of Michigan
School of Information**

SI 640 DIGITAL LIBRARIES AND ARCHIVES

METS AND PREMIS ANALYSIS (20%)

This assignment entails deconstructing, annotating, and augmenting a Metadata Encoding and Transmission Standard (METS) record for one item located in the Online Archive of California (OAC). The purpose of the assignment is to learn how the elements of a simple METS record work together and demonstrate how preservation metadata derived from the PReservation Metadata Implementation Strategies (PREMIS) can be used to document changes to the item over time. The assignment involves searching in OAC for a set of items that contain rich METS records, saving the record locally, annotating that METS record to describe the major components of the METS record and track those components to the METS standard itself, and adding additional data to the METS record drawn from the PREMIS data dictionary (2.0) and appropriate documentation. The net result of the assignment is a demonstration of the capability to “read” METS and PREMIS records, explain them, and change them in meaningful ways.

Preparation

1. Identify up to four candidate objects from the Online Archive of California. Each object should have descriptive metadata associated with it and have a digital image associated with the metadata.
2. Expose and save the METS record for each of your objects. If you find an object in OAC, say:

<http://www.oac.cdlib.org/ark:/13030/kt3489q8ff/?brand=oac4>

and change the URL, like so, by adding “mets/” to the URL in the appropriate spot.

<http://www.oac.cdlib.org/mets/ark:/13030/kt3489q8ff/?brand=oac4>

You will be redirected to the “METS” file. METS is in quotes because these are slightly “denormalized” for performance and cannot be validated as METS. The structMaps have also been re-arranged in some cases and may not match the declared profiles.

3. Save the images to your desktop and name them in some meaningful way.

Activities

1. Compare the METS record for your item with the METS Schema 1.9, with the METS Primer, and with other documentation on the METS website. The goal of this first step is to get comfortable with the METS tags, to figure out which parts of the METS schema are included in the OAC record and which might be missing.
2. Annotate the METS record to explain the elements of the record that might be important for the preservation tracking of the item over time. You may use the MS Word comment feature or insert comments in the record itself (using a different color/font, etc to distinguish your comments from the record itself).

3. Create a scenario relating to the change of the item you are analyzing. The scenario can be made up or based on some aspect of preservation modifications that we have discussed in class.
4. Map your scenario to the four elements of the PREMIS scheme (object, event, agent, rights), augmenting your scenario as appropriate to account for the four elements.
5. Evaluate the METS record and your scenario and make some decisions about where in the METS record your changes will be lodged. Take your lead on this issue from the documentation provided on integrating PREMIS into METS. There is no single right answer, but you must decide how to add PREMIS to METS and then describe your conclusions in your report.
6. You may choose to create a rough PREMIS XML record using the automated PREMIS to METS Toolbox from the Florida Center for Library Automation. You may also code your PREMIS contributions by hand.
7. Add PREMIS information to the METS record for your OAC item. Attached is an example of PREMIS in METS. It is just one example of very many possibilities.
8. Annotate your METS record to show where and how you integrated PREMIS elements into the METS record.

Reporting

1. Submit a single, annotated and upgraded METS/PREMIS document to CTools for one item of your choice from OAC.
2. Submit your individual report to CTools. Include in the report the following information:
 - URL to item used in your exercise
 - URL to METS record for the item used in your exercise
 - A version of the image that is part of the item. You can include a screen shot of the item in the context of its metadata, if doing so would be useful.
 - A narrative of the scenario of preservation action that leads to your decision to add PREMIS information to your METS record for the object. Include in your narrative a description of the object of the activity, the event, the agent, and the rights of the agent to act.
 - Description of choices made about integrating PREMIS into METS. Your description should be cast in the context of the debate on integration that is discussed in the articles and white papers either listed in the resources directly or included in other articles or presentations linked through the home pages for PREMIS and METS. Include full citations.

Collaboration and Grading

- You may work collaboratively with fellow students on this project in any way you wish, formally or informally. The point of the exercise is to learn how to read and modify PREMIS and METS records and to think through the issues of integrating the two metadata standards.
- Each student will turn in his or her own report and METS/PREMIS record. The record will use as the base file the METS record from the item chosen in from the Online Archive of California. The item must be one of the items initially identified and submitted for the assignment, unless with permission of the instructor, you change your item.
- Each student will be graded individually and confidentially for the assignment.
- Grading is based on the quality of the report, including the analysis of choices, and the relative accuracy and completeness of the METS record.
- The assignment is worth 20 percent of your final course grade.

Deadline: The METS record and report are due in CTools on **November 16, 2010 at 5:00 pm.**

Resources

The following are links to websites with relevant documentation and potentially useful articles or white papers. Items marked with [CTools] are also available on the course website under resources/assignments/METS Record.

METS:

- Standards Homepage: <http://www.loc.gov/standards/mets/>
- METS Example Documents: <http://www.loc.gov/standards/mets/mets-examples.html>
- METS Overview Article: Gartner, Richard . (2002). METS: Metadata Encoding and Transmission Standard. *JISC Techwatch Report* TSW 02-05. Retrieved October 23, 2010, from http://www.jisc.ac.uk/uploaded_documents/tsw_02-05.pdf. [CTools]
- METS Schema and Documentation: <http://www.loc.gov/standards/mets/mets-schemadocs.html>

PREMIS:

- Standards Homepage: <http://www.loc.gov/standards/premis/>
- PREMIS Data Dictionary, version 2.0 (2008). <http://www.loc.gov/premis/v2/premis-2-0.pdf>
- PREMIS Documentation (introduction and supporting materials) [CTools]
- Article: Caplan, Priscilla (2009). *Understanding PREMIS: an overview of the PREMIS Data Dictionary for Preservation Metadata*. Washington, DC: Library of Congress. <http://www.loc.gov/standards/premis/understanding-premis.pdf> [CTools]

PREMIS in METS:

- Overview: <http://www.loc.gov/standards/premis/premis-mets.html>
- Article: Guenther, Rebecca S. (2008) "Battle of the Buzzwords Flexibility vs. Interoperability When Implementing PREMIS in METS," *D-Lib Magazine* 14 (7/8). <http://www.dlib.org/dlib/july08/guenther/07guenther.html> [CTools]
- White Paper: Vermaaten, Sally (2010). "A Checklist for Documenting PREMIS-METS Decisions in a METS Profile." OCLC. http://www.loc.gov/standards/premis/premis_mets_checklist.pdf [CTools]
- Guidelines for Using PREMIS with METS for Exchange, 17 Sept. 2008. <http://www.loc.gov/standards/premis/guidelines-premismets.pdf> [CTools]
 - Toolbox: PREMIS in METS Toolbox. <http://pim.fcla.edu/>