XML Process Documentation

ArtBlok 2010 E. Hennepin
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Tesia Kosmalski
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Previous XML Experience

I had very little experience with XML before this module. The experience I did have was a 50-field deep product malfunction form maintained with XML by a business analyst at a previous client. The mark up helped accommodate the needs of 10 different user groups. This mostly meant keeping the form short as possible for users only required to complete 15 to 20 of those fields. I assumed XML was classic used mostly for niche industries or by electrical engineers turned business analysts. Only recently did the epiphany break that I just haven't been in environments sophisticated enough to have structured authoring solutions.

Starting with XML

I decided to start with the LinkedIn Learnings courses after reading the XML documentation examples from last years' students. Like most of the LinkedIn tutorials, it had a clean design and a practical tone. Sections 1-4 were digestible for me. The sections beyond that though were a stretch. So I took what I learned through section 4 and started setting up some tags. As I was playing with possible XML trees and pondering an ethos-driven approach, I realized a few things. I was going to need a visual to help me put XML together. I also needed a solid foundation for the XML if it was going to be an example for single-source publishing.

The book chapter, “Semantics and Classification Systems,” by J.D. Applen and Rudy McDaniel, gave me some helpful advice. The authors detail the classification system story for the International Classification of Diseases. The ICD had various audiences and contexts to accommodate in their information architecture. In the case of the tuberculosis entry, two audiences had different needs for the same type of data. One saw it as isolated, another in a greater context. “One way of structuring the ICD to make it more dynamic and useful would be to include a category for the material surroundings of the patient who might acquire a certain disease.” (Applen and McDaniel, 2009). I attempted to make a few tags with this in mind. In the case of ‘Events’ I added the <participatingartists> element and in ‘Residents’ I added <participatingevents>. These were ultimately taken out of the first version of the XML, Events_XML.xml and Residents_XML.xml but are worth looking at in the future.

Continuing with XML

After that exercise, I started copying and pasting a great deal with the w3schools.com tutorials. I talked with my client and looked at their spreadsheets of artists to understand how they labeled everything and turned those into tags. However, I hadn’t returned soon enough to the LinkedIn Learnings tutorials to understand that there are a few ways to connect residents and events. XLST or XPath can apparently connect different elements that I was trying to connect and classify correctly. Even though content and form are decoupled, content can still be traversed with the help of additional XML resources. I also want to understand if there is a best practice for integrating images or multi-media assets into the XML Tree.

References

Applen, JD and McDaniel, R. (2009). Semantics and Classification Systems. *The Rhetorical Nature of XML: Constructing Knowledge in Networked Environments* (p.95-129). New York and London: Routledge.

LavaCon Conference Podcast Series. (2018). LavaCon Keynote Karen McGrane on Content in a Zombie Apocalypse [Podcast]. Retrieved from https://soundcloud.com/user-10737889/lavacon-keynote-karen-mcgrane-on-content-in-a-zombie-apocalypse/

Appendix / Glossary

Hierarchies of elements/XML Tree/Information Structure

XML documents have a hierarchical structure and can conceptually be interpreted as a tree structure, called an XML tree. XML documents must contain a root element (one that is the parent of all other elements). All elements in an XML document can contain sub elements, text and attributes. The tree represented by an XML document starts at the root element and branches to the lowest level of elements. Although there is no consensus on the terminology used on XML Trees, at least two standard terminologies have been released by the W3C.

Metadata

A set of data that describes and gives information about other data.

Model & Element models

Such an element node has a type p, an ordered list of children c_i, and a set of attributes, which are pairs of attribute names a_i and attribute values A_i

Root Element

Each XML document has exactly one single root element. It encloses all the other elements and is therefore the sole parent element to all the other elements. ROOT elements are also called document elements. In HTML, the root element is the <html> element.

XLST

Language for transforming XML documents into other XML documents, or other formats such as HTML for web pages, plain text or XSL Formatting Objects, which may subsequently be converted to other formats, such as PDF, PostScript and PNG.

XML Schema

Describes the structure of an XML document. The XML Schema language is also referred to as XML Schema Definition (XSD).