Ten Unique Ideas, Facts and Uses for XML

We always hear that XML has all kinds of flexibility. Thought I would explore and see what unusual things have been done with it. Many Application Programming Interfaces (APIs) have been developed that software developers use to process XML data, and several schema systems exist to aid in the definition of XML-based languages. Hundreds of XML-based languages have been developed, including RSS ATOM SOAP and XHTML. XML-based formats have become the default for most office-productivity tools, including Open Office, Microsoft Office and Iwork (Apple).

Here is my list of unusual “stuff” about XML:

(1) XML supports the direct use of almost any UNICODE character in element names, attributes, comments, character data, and processing instructions (other than the ones that have special symbolic meaning in XML itself, such as the less-than sign, "<"). Therefore, you can create an XML document, even though it includes both Chinese and Cyrillic characters.

(2) The purpose of GolfML is to provide a XML-based file format for the exchange of golf-related data. There are numerous golf scorecard programs and online web sites that allow golfers to browse course information, print scorecards, keep track of scores, and analyze statistics, or view a Google Earth fly-over of each hole. Most programs or web sites use proprietary data representation and only few of them allow for data exchange of course descriptions such as scorecard, hole par, length and handicap strokes. If available, data import or export is often performed in site- or application-specific proprietary format.

(3) Using XML to Create an Online Course Catalog. XML isn’t by itself usable for web pages. It’s really not designed for that at all. XML is really a way to organize data and then let machines take over to read that organized data and do wonderful things with it. XML by itself is not enough. We need more. We really need something to style that and to present it in a particular format and that’s where XSL (e**X**tensible **S**tylesheet **L**anguage: A style sheet standard from the W3C that is used to convert an XML document into many formats for publishing and printing.) XSL is similar to the Cascading Style Sheets (CSS)) in HTML comes in. So, XML plus XML gives us really what we want because we’ve got something called XSLT (E**x**tensible **S**tylesheet **L**anguage **T**ransformations) is a declarative, XML-based language used for the transzformation of XML documents. The original document is not changed; rather, a new document is created based on the content of an existing one.[which will transform XML into virtually anything, So, from this paring of XML and XSL, driven by an XSLT processor, we can output files such as HTML, CSP, TXT, PDF, whatever you can dream up and whatever you can do with the right XSL.

(4) With most websites that use XML, the web designers and content developers might not even know that XML is there. This is because there is generally a CMS or **C**ontent **M**anagement **S**ystem that sits in front of the XML to make it easier for the content writers to write their web content without worrying about how to write HTML or design web pages.

(5) When an XSLT stylesheet converts one XML document into another, the ability to add unique ID values to elements in the result document can make the result document much more useful to applications that use it. Adding unique IDs can, for example, turn each element into the unique target of a link. **XSLT** (**E**xtensible **S**tylesheet **L**anguage **T**ransformations) is an XML-based language used for the transformation of XML documents. The original document is not changed; rather, a new document is created based on the content of an existing one. The new document may be serialized (output) by the processor in standard XML syntax or in another format, such asHTML or plain text. XSLT is most often used to convert data between different XML schemas or to convert XML data into WebPages or PDF documents.

(6) LANDXML is for Land Development Civil, Survey Professionals. The organization has 755 members representing 664 organizations located in 41 countries. A big usage system is the U.S. Federal Highway Administration's Interactive Highway Safety Design Model (IHSDM) . LANDXML is also used by the U.S. Federal Aviation Administration (FAA) and the U.S. National Geodetic Survey. But it is not just a US thing; several users in Australia depend on it.

(7) Manipulate and play with XML Data files in the same way as you do with MS Access. When you create a database in MS Access, even if it is empty, it takes a lot of space just for structure. Right ? Why waste this much space just for structure when you can store information about at least a hundred members of your site in the same space. When you store data as XML, it is stored in the form of a simple text file with the extension .XML, along with a few tags.

(8) Document Type Definitions (DTDs) are an outgrowth of XML's heritage in the Standardized General Markup Language (SGML). SGML was always intended for narrative-style documents: books, reports, technical manuals, brochures, Web pages, and the like. DTDs were designed to serve the needs of these sorts of documents, and indeed they serve them very well. DTDs let you state very simply and straightforwardly that every book must have one or more authors, that every song has exactly one title, that every `PERSON` element has an `ID` attribute, and so forth. Indeed for narrative documents that are intended for human beings to read from start to finish, that are more or less composed of words in a row, there's really no need for anything beyond a DTD. However, XML has gone well beyond the uses envisioned for SGML. XML is being used for object serialization, stock trading, remote procedure calls, vector graphics, and many more things that look nothing like traditional narrative documents; and it is in these new arenas that DTDs are showing some limits.

(9) LANDXML is for Land Development Civil, Survey Professionals. The organization has 755 members representing 664 organizations located in 41 countries. A big usage system is the U.S. Federal Highway Administration's Interactive Highway Safety Design Model (IHSDM) . LANDXML is also used by the U.S. Federal Aviation Administration (FAA) and the U.S. National Geodetic Survey. But it is not just a US thing; several users in Australia depend on it.

(10) XML is a conspiracy, but not Microsoft's. In fact, XML was produced by a group of markup language experts organized by Sun Microsystems to develop a form of the

venerable ISO standard, SGML, for use on the Web. It's true that Microsoft was a major participant in the XML effort, but so were a number of other large companies (Sun, Hewlett-Packard, Netscape, Adobe, and Fuji Xerox) as well as key SGML vendors and systems integrators (ArborText, Inso, SoftQuad, Grif, Texcel, and Isogen), representatives of the academic community (NCSA and the Text Encoding Initiative), early adopters (DataChannel and Vignette), and one of the world's leading SGML experts, James Clark, who is technical lead for the W3C's SGML activity. The amazing thing about XML is that all of these people and organizations set aside personal and corporate agendas to cooperate in the construction of a genuinely open standard, driven entirely by user needs.