

GLOSSARY FOR XML SCHEMA

Created By Cordell Vail

1	Angle Brackets	Constructs for delineating markups. Angle Brackets <> are the basic tag symbol. Markup text is contained within the angle brackets
3	Atomic type	In the XML Schema Language it describes one or more characters.
3	Atomic type	A simple type that contains values that are indivisible (ie: <size>10</size>)
1	Attribute	A named value or relationship that exists for some or all instances of some entity and is directly associated with that instance. In XML it is a way to attach extra information to an element. Attributes often provide information that is not a part of the data. Attributes are handy in HTML but in XML it is best to avoid them. Use child elements if the information is a part of the data. The name of the attribute must follow the same naming rules as for elements (ie: start with _ or letter, no spaces and is case sensitive) The attribute text must be inside the Angle Brackets for the Element Start tag (ie: <email href=jsmith@wsipc.org/> and you can use the contraction in place of the end tag. In this example email is the element name and the start tag, href=jsmith@wsipc.org is the attribute text and / is the end tag or contraction in place of the end tag.) Attribute name assigns a generic identifier. Attribute type sets the type of the element. to Simple or Complex.
2	Attribute Disadvantages	<p>Attributes cannot contain multiple values (child elements can)</p> <p>Attributes are not easily expandable (for future changes)</p> <p>Attributes cannot describe structures (child elements can)</p> <p>Attributes are more difficult to manipulate by program code</p> <p>Attribute values are not easy to test against a DTD – which is used to define the legal elements of an XML document</p> <p>EXCEPTION: Attributes are best used to assign ID references to elements. Use it for metadata (data about the data) and store the data itself in elements</p>
2	Attribute Values	XML elements can have attributes in name/value pairs just like in HTML. In XML the attribute value must always be quoted. (ie: <note date="12/11/2002"></note>)
	B2B	Business To Business: Financial information exchanged over the Internet. XML is going to be the main language for exchanging financial information between businesses over the Internet.

	Bookends	In XML some Start and End Tags can be referred to as bookends or the start and finish markers for an entire XML fragment as a part of the larger document. They mark the beginning and ending of regions in the document.
	Boolean	The type of an expression with two possible values, "true" and "false" (or 1 and 0). Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT.
1	Boundries	Markup tags that shows where text starts in one place and ends in another
	Browsers	Netscape 6.0 and Explorer 5.0 support XML. The browser will check the XML syntax for a well formed document but it can not validate the data. That takes an XML editor like XMLSpy
	Case Sensitive	XML markup is case sensitive. So <name> and <Name> are two different Start Tags.
	CDATA	A CDATA section of XML is like a comment section. It is ignored by the parser. You make a CDATA element as follows <![CDATA["some information"]]> An example where you would use this is if you were going to put some programming code in the XML document. You can not use the string "]]>" in a CDATA section so therefore nested CDATA sections are not allowed. There also can be no spades or line breaks inside the "]]>" string
1	Character Data	The basic information in the XML document. It is everything contained outside the angle brackets or outside the element. It is the actual data being transferred or worked with between parties.
	Child Element (sub element)	Any element that is nested under the root element (sub element) is a child element of the root element. In this example all of the elements except <Type> are child elements <pre><Type> <Car> <Make> </Make> <Model> </Model> </Car> </Type></pre>
	cHTML	A Japanese cut down version of HTML to be used on mobil phone coding
	Code	
3	Collapsible elements	When there are children in an element the browser puts a + or a - in front of it so it can be collapsed or expanded to make reading the document easier.
	Complex Type	An elements type that allows the element to have child elements or attributes. May also have character content. Complex types may be either named or anonymous. Named types can be used by multiple element and attribute declaratinos. They are always defined globally and are required to have a name that is unique among the data types (both simple and complex) in a schema. There are 4 different congnt types that are described as complea: simple, element-only, mixed and empty. Attributes can never have complex types; they always have simple types. This is because attributes cnot themselves have children attributes.

1	Comment	In XML a comment is contained inside an element and starts with the Exclamation mark. (ie: <!-- This is a comment -->
	Component Declaration	Components can be declared (or defined) as LOCAL components or GLOBAL components
	Components of XML Document	
	Components of XML Schema	element, attribute, simple type, complex type, notation, named model group, attribute group, identity constraint
2	compressed syntax	Element without content (ie: <email href=jsmith@wsipc.org/> would be the same as <email href="jsmith@wsipc.org">jsmith@wsipc.org</email>) (Note: The / at the end of the first statement is called a contraction.)
1	Constructs	An angle bracket is a construct. Constructs are used for delineating markups.(ie: <name>)
1	Containment	The nesting of elements to take into account the content.
1	Content	the data in an element between the start and end tags
	Content Type	There are three Element Content Types: Mixed, Simple and Empty. SIMPLE: An element that has no other elements inside it. MIXED: An element that has other elements nested inside it EMPTY: an element that contains only informational data that is not a part of the actual content data of the document. An example would be <prod id="33-657" media="paper"></prod> This data tells what to do with the document but does not transfer that data to the user as a display item or control item.
	Contraction	When you have an attribute in an element and at the end you just use the / rather than the end tag it is a contraction. You can only use a contraction at the end if the element has no content.
3	CR / LF	At the end of each line there is an automatic line feed that is invisible to the user in XML. In HTML it would be displayed as or <P>
3	CSS	Cascading Style Sheet: A style sheet language for HTML but will work with XML as well. It lacks the ability to reorganize text and its support for printing is limited. (Therefore XSL was developed to work specifically with XML style sheets instead of CSS) CSS formatting looks very much like C language.
3	Data Islands	XML data data stored inside an HTML script.
3	Data Type Derivation	XML Schema allows data types to be derived from other data types. A complex type can also be derived from another type either simple or complex. It can either restrict or extend the other type. The derivation of types from other types forms a type definition Hierarchy.

	Data Types	Data types can be either named or anonymous. Named types are always defined globally (at the top level of a schema document) and are required to have a unique name. Anonymous types must not have names. They are always defined entirely within an element or attribute (locally) declaration, and may only be used once, by that declaration.
2	Declaration	XML DOCUMENT DECLARATION: The start of every XML text document must start with a standard declaration or prologue. (ie: <code><? xml version = " 1.0" ?></code> The declaration or prologue can also have attributes in it. (ie: <code><?xml version="1.0" encoding="ISO-8850-1"?></code> XML SCHEMA DECLARATION: Used for components that can appear in the source XML document. If an element is declared in an XML Schema, it can then be verified or validated.
3	Derive Types	XML Schema allows you to derive a new complex type from an existing simple or complex type. While it is always possible to make a copy of an existing type and modify it to suit your needs, using type derivation lets you do <u>subsetting, Safe extensions, Type Substitution, and Reuse</u>
3	DocBook	An XML vocabulary developed and maintained by OASIS, the Organization for the Advancement of Structured Information Standards. It was designed for technical documents and, more specifically, documents related to computer software and hardware.
1	Document	Normally a document would be considered a sequence of words partitioned into paragraphs, sections, and chapters. In XML a document is more general than that. It is the basic unit of XML information, composed of elements and other markup in an orderly package. It can contain text such as a story but it doesn't have to. It might consist of a database of numbers, or some abstract structure representing a graphical image or a mathematical equation. The power of XML is in its much wider definition of what a document is and its transportability between otherwise incompatible computer systems. A document is not the same as a file. A file is a package of data treated as a contiguous unit by the computer's operating system. XML uses special markup to integrate the contents of different files to create a single entity, which is a logical structure. By keeping a document independent of the restrictions of a file, XML facilitates a linked web of document parts that can reside anywhere.
3	Document Models	
3	DOM	Document Object Model. DOM is an object-based API for XML parsers. DOM grew out of an attempt to unify the object models of Netscape Navigator 3 and Internet Explorer 3. DOM supports both XML and HTML documents. Level 1 DOM only supports well formed documents (and that is all most browsers will run) Level 2 adds support for styling, events, document traversal and namespaces. Level 3 is under development. Most parsers support DOM.
	DTD	Document Type Definition: The purpose of DTD is to define the legal building blocks of an XML document. It defines the document structure with a list of legal elements. DTD is not an XML Schema, but it is another way to describe an XML document. An XML Schema is an XML based alternative to DTD.

3	DTD use limitations	Syntax is inflexible. Content models and attribute list declarations are difficult to read and understand. Patterns for data in elements and attributes can't be specified.
1	Editors	An application such as Notepad used to display and modify XML code
	Element	An element is a complete statement in the document starting with a start tag inside angle brackets which is the markup text, then character data ended by the end tag which is also markup text enclosed in angle brackets starting with a forward slash /. (ie: <start tag markup text>character data</end tag markup text>) Each element has a name and content. The name is the markup text in the start and end tags. The content is the character data located between the start and end tag. However the content can be just blank. (ie: <name></name>) Every XML element has an element type
	Element Content	Is the data between the start tag and end tag that is outside the Angle brackets (ie: <name>element content</name>)
	Element Name	The markup text inside the start and end tags. Element naming should follow these rules: Names can contain letters, numbers, and other characters Names must not start with a number or punctuation character but can start with an underline <_name> Names must not start with the letters xml or XML or Xml.. Names cannot contain spaces but can use underline for example you could use <last_name> Names are case sensitive <name> and <Name> are not the same name Names should be descriptive There are no reserved words that can not be used in names as long as you don't start with xml It is best to avoid the dash and period in a name because some applications may think they are symbols or command characters. For example if it tries to subtract 1-2 in <time1-2> There is not limit to the length a name can be but don't exaggerate None English characters are allowed but browsers may not be able to display them You should not use the colon : in a name because that indicates it is a namespace.
	Empty Content	Empty content allows neither character data nor child elements. Elements with empty content often have values in attributes. In some cases, they may not even have attributes; their presence alone is meaningful (ie: - this indicates a new row standing alone by itself)
	End Tag	The ending marker of an element. Has the same name as the Start Tag but starts with a forward slash / (IE </name>)

	Escape Sequence	<p>text starting with an ampersand (&) to allow you to put characters in XML or HTML code that are reserved tags (ie: & would be the escape sequence to insert an ampersand & in the code as a part of the actual text and not as a tag or command sequence)</p> <p>(NOTE: < and & are strictly illegal outside of an escape sequence in XML. Apostrophes, quotation marks and greater than signs are legal but it is a good habit to replace them all with an escape sequence.) These are the escape sequences for XML:</p> <p>&lt; < Less than &gt; > Greater than &amp; & Ampersand &apos; ' Apostrophe &quot; " Quote Mark</p>
2	Extensible	The Extensible in XML stands for "capable of being extended"
	Extension	A way to modify a complex type by adding an extension. This allows the complex type to be defined in an XML Schema and then extended for use by other components.
2	File	A file is a package of data treated as a contiguous unit by the computer's operating system. XML uses special markup to integrate the contents of different files to create a single entity, which is a logical structure. A document is not the same as a file. By keeping a document independent of the restrictions of a file, XML facilitates a linked web of document parts that can reside anywhere.
3	FO	Formatting Objects in XSL. FO is similar to CSS (Cascading Style Sheets)
	Fragment	(see XML Fragment)
1	Generic Coding	The original markup which started by use as macros. This is markup where a generic identifier (GI) or tag is attached to each text element, and formatting rules are further associated with tags. The code is visible to the user unlike Procedural Markup and can easily be modified (ie: <p></p>). It is therefore applying code or tag to data rather than call for external formatting. This coding led to the creation of SGML
1	GIF	Short for Graphics Interchange Format, another of the graphics formats supported by the Web. Unlike JPG, the GIF format is a lossless compression technique and it supports only 256 colors. GIF is better than JPG for images with only a few distinct colors, such as line drawings, black and white images and small text that is only a few pixels high. With an animation editor, GIF images can be put together for animated images. GIF also supports transparency, where the background color can be set to transparent in order to let the color on the underlying Web page to show through. The compression algorithm used in the GIF format is owned by Unisys, and companies that use the algorithm are supposed to license the use from Unisys. Unisys announced in 1995 that it would require people to pay licensing fees in order to use GIF. This does not mean that anyone who creates or uses a GIF image has to pay for it. Authors writing programs that output GIF images are subject to licensing fees.

2	Global Components	Global components appear at the top level of a schema document and they are always named. Their names must be unique within their component type, within the entire schema.
1	HTML	Hypertext Markup Language: A set of tags following the rules of SGML but does not enforce structure and is not struct with syntax. A procedural markup language.
1	Hyperlink	It is a reference (link) from some point in one hypertext document to (some point in) another document or another place in the same document. A browser usually displays a hyperlink in some distinguishing way, e.g. in a different color, font or style. When the user activates the link (e.g. by clicking on it with the mouse) the browser will display the target of the link. See also HYPERTEXT
1	Hypertext	A term coined by Ted Nelson around 1965 for a collection of documents (or "nodes") containing cross-references or "links" which, with the aid of an interactive browser program, allow the reader to move easily from one document to another. See also HYPERLINK
2	Instance	
	Internal Subset for DTD	A part of an XML document that can contain entity declarations. Can not use conditional sections and parameter entities can only hold complete complete declarations, not fragments. Used in a DTD When the parser reads the DTD, it reads the internal subset first.
1	JPG or JPEG	Short for Joint Photographic Experts Group, the original name of the committee that wrote the standard. one of the image file formats supported on the Web. JPG is a lossy compression technique that is designed to compress color and grayscale continuous-tone images. The information that is discarded in the compression is information that the human eye cannot detect. JPG images support 16 million colors and are best suited for photographs and complex graphics. The user typically has to compromise on either the quality of the image or the size of the file. JPG does not work well on line drawings, lettering or simple graphics because there is not a lot of the image that can be thrown out in the lossy process, so the image loses clarity and sharpness. JPG is A procedural markup language.
3	List Type	A simp type that has values that are whitespace-seperated lists of atomic values, such as <code><AvailableSizes>10 large 2 </AvailableSizes></code>
3	Local Components of a Schema	Scoped to the definition or declaration that contains them. Element and attribute declarations can be local, which means their scope is the complex type in which they are declared
1	Markup	The code embedded within a document that stores information for electronic processing. A mrkup is information added to data for descriptive or informational purposes. It is informatino added to a document that enhances its meaning in certain wasys, in that it identifies the parts and how they relate to each other. Symbols used in XML to to give procedure & Structure and interpret the data. In computerised document preparation, a method of adding information to the text indicating the logical components of a document, or instructions for layout of the text on the page or other information which can be interpreted by some automatic system. Markup is the data about the character data or metadata

	Mark-up (typesetting)	Traditional publishing annotations in a document. Usually hand written to give the typesetter layout instructions about how to format the document to be printed (NOTE: Spelled with a hyphen mark-up)
	Markup (electronic)	Special codes imbeded in a document electronically (or in the code) to format the docuemnts text (ie type style, font size, boldness, text location etc) (NOTE: Spelled with out a hyphen markup)
	Markup (XML)	In computerised document preparation, a method of adding information to the text indicating the logical components of a document, or instructions for layout of the text on the page or other information which can be interpreted by some automatic system. The code embedded within a document that stores information for electronic processing. Symbols used in XML to to give procedure & Structure and interpret the data. Markup is the code embedded within a document. Markup is the data about the character data or metadata (See Procedural Markup)
	Markup Symbols	A tag in a document
1	Markup Language	A set of symbols that can be placed in the text of a document to demarcate and label the parts of that document. A specific set of markups designed for a specific application.
1	Markup Text	In an XML document, the data within the angle brackets or tag ie: <markup text>.
3	Matching on Attributes	
3	Matching with a Condition	
3	Matching Test and Funcions	
1	metadata	Markup text that is the data about the character data
3	MathML	Mathematics Marku Language: A markup language used to encode mathematical equations.
3	Model groups	
2	MSXML	Microsoft XML Schema Processor developed by Micorsoft Corporation is a part of MSXML. It only performs lax validation. This means that it reports any errors in elements and attributes for whichx it has declarations, but does not report errors when it cannot find a declaration.
	Name Conflicts	The same element name can not be used twice. Therefore you can use namespacing to avoid name conflicts. (ie <name> and <a:name>
	Namespace	XML Namespaces provide a method to avoid element name conflicts. (ie: <name> and <aa:name> are now unique tags. (NOTE: this is the reason you should not use the colon : character in a normal name. It then becomes a part of the namespace convention.) Namespace is also known as a prefix

Nesting	<p>Every XML document must have a start tag that is the root or main tag. All other elements are children of that root element. Elements are then nested in a tree hierarchy under the root element. To nest elements under the root would be to make them all have correct start tags and end tags within in the hierarchy. In this example <Type> is the root and the other elements are nested under it.</p> <pre><Type> <Car> <Make> </Make> <Model> </Model> </Car> </Type></pre>
OEB	Open eBook A markup language used for eBooks see www.openebook.org
Parse or Parser	The parser is a software component that decodes XML files on behalf of the application. Parsers effectively shield developers from the intricacies of the XML syntax. A parser is a computer program that breaks down text into recognized strings of characters for further analysis. An algorithm or program to determine the syntactic structure of a sentence or string of symbols in some language. A parser normally takes as input a sequence of tokens output by a lexical analyser. It may produce some kind of abstract syntax tree as output. For XML we use XML Spy
PDF	Portable Document Format, the Adobe Acrobat file format. It is a procedural markup language.
PNG	Short for Portable Network Graphics, the third graphics standard supported by the Web (though not supported by all browsers). PNG was developed as a patent-free answer to the GIF format but is also an improvement on the GIF technique. An image in a lossless PNG file can be 5%-25% more compressed than a GIF file of the same image. PNG builds on the idea of transparency in GIF images and allows the control of the degree of transparency, known as opacity. Saving, restoring and re-saving a PNG image will not degrade its quality. PNG does not support animation like GIF does. A procedural markup language.
Prefix or namespace	A prefix on the front of a name seperated by a colon : will make two identical element names unique. (ie: <name> and <a:name> where a: is the prefix or name space
2 Presentation	Markup tages used to describe how a document shold look when prepared for viewing by a human. Normally the presentation markup is not in the XML document but in the stylesheet. HTML is a markup language that mixes style information (ie: <i> for italic text) with markup structure (ie: <p> for start paragraph). It is best to not include style markup in XML documents.
1 Procedural Markup	Gives the output device codes or commands about the document format. This type of markup does not record structure visable to the user but imbeds the markup in the document data itself (example would be GIF, RTF, HTML, SGML, TIF, JPG) (see generic coding)

1	Procedural Processing	Markup languages such as HTML and RTF do Procedural Processing of data. (BUT WHT IS IS ????????) XML can do procedural processing but the real intent of XML is its ability to sturcture data.
1	Procedure and Structure	Procedure tells you to start the paragraph here. Structure sets up the data base or document structure. XML enforces structure and allows for procedural processing. (See SGML).
1	Process Tag	
	Processing	Event based processing represents serial access to XML. Tree-based processing represents random acces so the program can jump around in the document.
1	Processors	
	Prologue	The start of every XML text document must start with a standard declaration or prologue. (ie: <?xml version=" 1.0" ?> The declaration or prologue can also have attributes in it. (ie: <?xml version="1.0" encoding="ISO-8850-1"?>
??	Qualified Name (Qname or Raw Name)	A name given to a element name that has a namesapce prefix, where the namespace prefix represents a URI such as http://www.seattletimes.com. You can add an xmlns attribute to a tag element prefix to make it a qualified name associated with a namespace. (ie: xmlns:namespace-prefis="namespace")
	Qyabtufuer	A part of the sturcture in regular expression of the SCHEMA LANGUAGE that is between the atoms.
	Quote Marks	Attribute values must always be enclosed in quotes, but either a single or a double quote can be used. If the attribute value itself contains double quotes, it is necessary to use single quotes to include it. (ie: <employee name='George "Shorty" Mandler'>
	Relationships	Elements are related as parents and children. This is accomplished by having a root element (the parent) and child or sub elements. This is accomplished by nesting.
	Restricting or Restriction	A way to modify a complex type by adding a restriction. This allows the complex type to be defined in an XML Schema and then restricted for use by other components.
	Root Element	Every XML document must have a single tag pair to define the root element. All other elements are children of that root element. Elements are then nested in a tree hierarchy under the root element. Therefore the root element is also called the Parent if there are child elements nested under it.
	RSS	Rich Site Summary is yet another XML-based markup language designed specifically to list Web sites on portals.
	RTF	A Microsoft Markup Language (Rich Text Format) A procedural markup language.
	SAX	(Simple API for XML) SAX is an event -based API. Operates at a lower level than DOM. Gives you more control than DOM. Is almost always more efficient than DOM but requires much more work than DOM to use.

Schema	<p>The word schema means a diagram, plan, or framework. In XML, it refers to a document that describes an XML document. It is an alternative to DTDs. One of the most common uses for schemas is to verify that an XML document is valid according to a defined set of rules. The schema document is an XML document written using the XSD or XML Schema Definition Language to describe another XML document. Schemas contain declarations and definitions. You do not make up your own elements but are written using the XML Standards put forth by the W3C. An application is necessary to validate an XML document against a Schema. DTD is an alternative to an XML Schema. . The XML Schema standards describe a way to validate an XML document through a model.</p>
Schema Purpose	<p>DATA VALIDATION The structure of elements and attributes The order of elements The data values of attributes and elements, based on ranges, enumerations, and a pattern matching.</p> <p>A CONTRACT WITH TRADING PARTNERS The rules for documents in schemas can be legally binding contracts</p> <p>SYSTEM DOCUMENTATION Schemas can provide documentation about the data in an XML instance.</p> <p>AUGMENTATION OF DATA Schema processing can also add to the instance. It inserts default and fixed values for elements and attributes, and normalizes white space according to the data type</p> <p>APPLICATION INFORMATION Schemas provide a way for additional information about the data to be supplied to the application when processing a particular type of document</p>
Schema Declaration	
Schema Definition	<p>Used internally in an XML Schema to define such components as data types and model groups. An XML Schema Definition is the formal expression of a schema.</p>
Schema Languages	<p>XSD (XML Schema Definition), DTD, SOX, and DDML. (Note: DTD is not a Schema Language but a type of Schema itself)</p>

1 SGML
 Standard Generalized Markup Language: (NOTE: the G,M and L actually stand for Goldfarb, Mosher, and Lorie, the three inventors of SGML at IBM) A generic markup language for representing documents. SGML is an International Standard that describes the relationship between a document's content and its structure. SGML allows document-based information to be shared and re-used across applications and computer platforms in an open, vendor-neutral format. SGML is sometimes compared to SQL, in that it enables companies to structure information in documents in an open fashion, so that it can be accessed or re-used by any SGML-aware application across multiple platforms. SGML is markup with descriptions for PROCEDURES and STRUCTURE.

SGML is defined in "ISO 8879:1986 Information processing -- Text and office systems. SGML is an ISO standard produced by JTC 1/SC 18 and amended by "Amendment 1:1988". It is a procedural markup language.

3 SGV	Scalable Vector Graphics Language: A markup language used to draw resizable line art.
Sibling or sister elements	<p>Any element that is nested under the root element is a sub element (child element) of the root element. The <Make> and Model> elements in this example would also be called siblings or sister elements because they are nested equally.</p> <pre><Type> <Car> <Make> </Make> <Model> </Model> </Car> </Type></pre>
Simple Element	An element that has no attributes or child elements for content.
Simple Type	Elements that have been assigned simple types have character data content, but no child elements or attributes. There are 44 simple types built into the XML Schema Recommendation (ie: strings, numbers, date and time values, etc etc) There are 3 varieties of simple types: atomic types, List types and Union types.

	Sister Elements	<p>Any element that is nested under the root element is a sub element (child element) of the root element. The <Make> and Model> elements in this example would also be called sister (or sibling) elements because they are nested equally.</p> <pre><Type> <Car> <Make> </Make> <Model> </Model> </Car> </Type></pre>
1	Special Charicters	<p>Characters that can not be used in character data of XML without a special escape sequence. Sometimes thses special characters are called "reserved words" in a language. Examples of such characters would be <> & " etc. To put these characters in the character data you would use the escape sequesce (ie: <name>Cordell & Janice</name> would produce Cordell & Janice</p>
1	Start Tag	<p>The beginning marker of an element. Has the same name as the End tag but with no / ie <name></p>
1	Structure and Procedure	<p>Procedure tells you to start the paragraph here. Structure sets up the data base or document structure. XML enforces structure and allows for procedural processing. (See SGML).</p>
1	Structure Tag	
2	Style Information	<p>Markeup tages used to describe how a document shold look when prepared for viewing by a human. Normally the presentation markup is not in the XML document but in the stylesheet. For example HTML is a markup language that mixes style information (ie: <i> for italic text) with markup structure (ie: <p> for start paragraph). It is best to not include style markup in XML documents but put it in the stylesheet.</p>
2	Stylesheet	<p>XSL style sheets are used to transform XML documents into other formats like HTML. The style sheet is a well-formed XML document written in XML syntax. A document used to convert an XML document into a usable format. Style Sheets can be read by XML editors like XML Spy (www.xmlspy.com), Xalan (www.mcp.com),</p>
2	Stylesheet Element	
3	Stylesheet Template Elements	<p>Style sheet list of templates.</p>

Sub Element (child element)	<p>Any element that is nested under the root element is a sub element (child element) of the root element. In this example all of the elements except <Type> are child elements. The <Make> and <Model> elements would also be called siblings or sister elements because they are nested equally.</p> <pre> <Type> <Car> <Make> </Make> <Model> </Model> </Car> </Type> </pre>
Syndicated content	
1 Syntax	The rules and standards by which the XML markup is displayed
1 Tag	<p>An SGML, HTML, or XML token representing the beginning (start tag: "<p ...>") or end (end tag: "</p>") of an element. In normal SGML syntax (and always in XML), a tag starts with a "<" and ends with an ">". In HTML jargon, the term "tag" is often used for an "element". In XML it is a symbol to denote procedures in the document. Tags are the markup. Angle Brackets <> are the basic tag symbol and tags or markup are contained within the angle brackets. In XML there are two tags per element, start tag and end tag.</p>
1 TIF	<p>Tagged Image File Format: A file format used for still-image bitmaps, stored in tagged fields. Application programs can use the tags to accept or ignore fields, depending on their capabilities. While TIFF was designed to be extensible, it lacked a core of useful functionality, so that most useful functions (e.g. lossless 24-bit colour) requires nonstandard, often redundant, extensions. The incompatibility of extensions has led some to expand "TIFF" as "Thousands of Incompatible File Formats". A procedural markup language.</p>
3 Transformations	
2 Tree	
2 Tree-based processing	Event based processing represents serial access to XML. Tree-based processing represents random access so the program can jump around in the document.
3 Type Definition Hierarchy (see data type)	The derivation of types from other types forms a type definition Hierarchy.

1	UNICODE	Unicode is the standard character set for XML. Using UNICODE XML can support languages from Scandinavian runic characters to Chinese Han ideographs. It is a 16-bit character set standard, designed and maintained by the non-profit consortium Unicode Inc. Originally Unicode was designed to be universal, unique, and uniform, i.e., the code was to cover all major modern written languages (universal), each character was to have exactly one encoding (unique), and each character was to be represented by a fixed width in bits (uniform). Parallel to the development of Unicode an ISO/IEC standard was being worked on that put a large emphasis on being compatible with existing character codes such as ASCII or ISO Latin 1. To avoid having two competing 16-bit standards, in 1992 the two teams compromised to define a common character code standard, known both as Unicode and BMP. Since the merger the character codes are the same but the two standards are not identical. The ISO/IEC standard covers only coding while Unicode includes additional specifications that help implementation. Unicode is not a glyph encoding. The same char
	Union Type (XML Schema Language)	A simple type that may have values that are either atomic values or list values. What differentiates them is that the set of valid values, or "value space," for th type is the union of the value spaces of two or more other simple types. (ie minExclusive value="2" maxExclusive value="18". A union type allows a value to conform to any one of several different simple types.
	URI	Uniform Resource Identifiers: A URI is a string of characters which identifies an Internet Resource. The most common URI is the Uniform Resource Locator (URL) which identifies an Internet domain address. Anogther, not so common type of URI is the Universal Resource Name (URN). Example of a URI would be: <table xmlns="http://www.we.org/TR/html4/">
	Validation	The process through which an application uses a DTD or XML Schema to verify an XML document.
	Validated	
	Verified	
1	W3C	The World WSide Web Consortium. Began working in the middle 1990's to overcome existing non-standard and /or proprietary formats and make a language flexible as SGML and skmple like HTML. Some of the tenets guiding the philosophy behind their effort include: application specific markup languages, unambiguous structured, separation of data and presentation layers, simple, built in error checking.
1	WAP	Wireless Application Protocol: It is written in XML. Therefor you could say XML was the mother of WAP
	WebClip	PalPilot's subset of HTML see www.palmos.com
1	Well Formed Document	In XML a well formed document is a document that conforms to the XML syntax rules. That means that there are no syntax errors in the markup. It does not mean that the data in the document is valid. Validation of the data is a completely different process. Valid XML documents are "Well Formed" and also conform to the rules of a DTD or other validation tool.

1	White Space	In XML the white space in the text is not truncated like it is in HTML. If you put character data in an element like this: Hel lo it will be displayed as Hel lo
1	WML	Wireless Markup Language: a language used to markup Internet applications for handheld devices like mobile phones. It is written in XML. Therefore you could say XML was the mother of WML. More information can be found at www.wapforum.org
1	XHTML	The subset version of HTML in XML to be used on small screens like mobile phones and palm pilots
	XLS	
1	XML	Extensible Markup Language: An initiative from the W3C defining an "extremely simple" dialect of SGML suitable for use on the World-Wide Web. XML is a bridge between SGML and HTML. It is not a markup language itself. Rather it defines rules for creating markup languages or a standard for developing markup languages. XML enforces structure and allows for procedural processing. Can serve to manipulate information primarily for human consumption or Software consumption. It is important to note that XML WAS NOT DESIGNED TO DO ANYTHING. It does not display documents. XML is about describing information. XML was created to structure, store and to send information only. One of the reasons XML was created was to be an independent tool to allow cross platform transfer of data.
2	XML Browser	HTML browsers are hardcoded and know what elements mean. XML browsers cannot be hardcoded. It needs to be told how to style the elements because you define them.
1	XML document	a text document made up of character data and markup.
3	XML for human consumption	Procedural Languages such as HTML, RTF, GIF
3	XML for software consumption	
1	XML Fragment	A section of the code in an XML document that lies between a START tag and an END tag. It can be one element or an element with many children. It is a subset of the entire XML document.
2	XML Schemas	(see Schema) XML Schemas are used to verify that an XML document is valid according to a defined set of rules
2	XML Schema Language	XML Schema is a full-featured language for describing the structure of XML documents. However, it cannot express everything there is to know about an instance or the data it contains. The XML Schema's regular expression language is very similar to that of Perl programming language. Regular expressions are made up of branches, which are in turn made up of pieces. Each piece consists of one atom and an optional qualifier.
1	XML Standards	Standards put forth by the W3C at http://www.w3.org
2	XML Stylesheets	(see Stylesheet)

3	Xpaths	Xpaths is the syntax for XML paths in a style sheet. Xpaths can either be relative or absolute. Absolute paths start with the "/" character at the beginning of the document. XML Paths start from the root of the document and list all the elements along the way. Elements are separated by the "/" character. (ie: <title>XSL -- First Step in learning XML </title>): /article/articleinfo/title . The / points to the immediate children of a node. To select all the descendants from a node, use the "/" sequence. /article //title selects all the titles in the article.
3	XSDL	XML Schema Definition Language: Used to refer to the language that is used to create schema definitions in XML. It is the markup language that uses elements in the Schema. A Schema Document is used to refer to an XML document that is written in XSDL, with a schema element as its root. The extension "xsd" is used in the file identifiers of such documents. A schema definition may consist of one or more schema documents.
3	XSLT	Extensible Stylesheet Language for Transformation. A W3C standard for transforming XML documents into other XML documents or other formats. It is a subset of the more general stylesheet language XSL. It produces XML as its output format. This was conceived as part of XSL but has been found to have wider applications. Explorer is the only browser that supports XSLT and that is very limited. Get more information at www.msdn.microsoft.com/xml
3	XSLT Stylesheet	
3	XSLT Transformation	
3	XSV	XML Schema validator is written and maintained by the Language Technology Group at the University of Edinburgh. It is not a general-purpose XML parser. Its sole purpose is to validate schemas and instances. XSLT is a powerful transformation mechanism.

