

XML Development: A Foundation Course for IT Professionals

A Two Day Training Course

Course Aims:

This course is intended as a practical foundation for IT professionals (developers, analysts or managers) who need to understand the fundamentals of XML and its related technologies in order to develop (or manage the development of) applications for the Windows platform (browser or non-browser).

Based on a mix of lectures and practical work, it provides a contextual overview of the XML development environment by creating a clear understanding of:

Course Outline:

- The XML Format - Elements and Attributes.
- Well-Formedness and Validity in Relation to XML.
- XML Data Interchange and Interoperability.
- The Role of Namespaces.
- The Use of DTDs with XML Documents.
- What Entities are and How to Create them.
- The Limitations of DTDs.
- The Use of Schema (with Particular Emphasis on Data Typing).
- The Use of Some Key XML Applications: XHTML, XSLT, Schema, SOAP.
- Where CSS Fits in.
- What Part Parser/Processors Play.
- Server-Side and Client-Side Parsing/Processing Issues.
- Some W3C and Microsoft Issues for the Real World.
- The Importance of Microsoft Core Services (MSXML 4.0).
- How to Create Instances of MSXML 4.0 in Applications.
- How XPath Expressions are Used to Access XML Data.
- XSLT as a Standard Method of Transforming XML Documents (XML to XML, XML to HTML).
- The DOM as W3C's Recommended API to XML.
- The Use of Simple API for XML (SAX) Separate to, or Alongside DOM.
- Reviewing the Role of XML in Some Current Key XML Applications: XSLT, XHTML, Schema, SOAP.

While coverage of all topics is thorough, aside from the XML Format, DTDs and Namespaces, the purpose of this coverage is to explain the use of, rather than to develop in-depth practical skills in, any particular topic. The course is however a necessary "starting point" for anyone who will be exposed to the XML development toolset whatever their capacity.

After the course, attendees should feel comfortable working with XML documents which use DTDs and incorporate XML Namespaces. They should also feel confident with how to begin their work with the other related technologies - specifically: Schema, XPath, XSLT, DOM, SAX and MSXML 4.0.

Further specialised training and/or study will however be required in these areas.

The course documentation provides a comprehensive list of resources with which to begin this further work. We also provide specialised courses in each of these areas.