XML in 2 days

Course description

This two-day course discusses the history behind XML and its importance as a new Internet standard. It provides an overview of the uses of XML, discusses the related XML standards and reviews the commercial XML tools you can already buy and use. The course also includes an overview of the basic DTD syntax that you need to know to define XML documents, and an overview of the key principles of XSL programming that you need to know to design stylesheets for XML to HTML conversion. You get hands-on experience with DTD design and XSL programming through a number of exercises, where you will define and edit an XML document, and then style and display this document as HTML. At the end of the two days, you will have gained a practical understanding of XML and XSL, and you will clearly start to see where XML technology could be successfully used in your company.

Who should attend

- IT managers, new to XML, who need an overview of the concepts behind and uses of XML
- Software developers who need to understand the technical possibilities and limitations of XML
- Web developers who are familiar with HTML, but want to learn what XML and XSL have to offer

What you will learn

- What XML is and what you can do with it
- What other XML standards you need to know
- What XML can be used for (and shouldn't be used for)
- What tools are already available for using XML
- How you can define and edit XML documents
- How you can style and display XML documents

Topics discussed

Day 1: XML hands-on

- XML intro
  - o The history of XML
  - o The principles and key concepts behind XML

- XML standards
  - o syntax: namespaces
  - o defining: DTD, XML Schema
  - o querying: XPath, XQuery (XML Query Language)
  - o rendering: XSL (Extensible Stylesheet Language)
  - o linking: XLL (Extensible Linking Language)
  - o accessing: DOM (Document Object Model), SAX (Simple API for XML)

- XML basics
  - o The structure of an XML document
  - o The difference between well-formed and valid XML
  - o The syntax of XML Document Type Definitions (DTDs)
  - o How to design, develop and use an XML DTD yourself?

- XML exercises
  - o Analysing a sample document
  - o Designing a DTD for this document
  - o Creating, editing and validating XML content

Day 2: XSL hands-on

- XML uses
  - Examples of the use of XML as a document/data format
    - § as a document format: XHTML, XFDL, ...
    - § as a data format: WML, SOAP, ...
  - Case studies from typical XML application areas
    - § enterprise application integration
    - § document management
    - § B2B e-commerce

- XML tools
  - Market overview
    - § XML convertors and parsers
    - § Schema designers and XML/XSL editors
    - § XML document repositories and data stores
    - § XML support in (object-)relational databases
    - § XML indexing and search tools
    - § XML viewers (Web browsers) and formatters
  - Useful tools advice

- XSL basics
  - Difference between XSL and CSS
  - The XPath syntax and data model
  - The XSLT syntax and processing model
  - Programming push vs. pull XSL stylesheets
  - Transforming XML into HTML: client or server-side?
  - Tips on XSL stylesheet development

- XSL exercises
  - Developing an XSL stylesheet
  - Editing an XSL stylesheet
  - Executing an XSL stylesheet

Course presenter

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