XML100 : XML Introduction

Code : XML100   **Duration :** 1 day   **Category :** XML

Audience :

This course is targeted at project managers, system analysts, application developers and system administrators who want to learn the basic concepts of XML and the usages areas of XML.

Prerequisites :

To attend this course basic knowledge of Internet and HTML is required. Knowledge of databases beneficial to the understanding.

Realization :

The theory is treated on the basis of presentation slides. The theory is accompanied by demos from practice. After discussion of a module, there is the opportunity for practice.

XML Introduction

Contents :

XML is a language for describing structured documents and data and provides the technological basis for data sharing, publishing and e-business. In this course, participants will gain a thorough understanding of the concepts in XML. The concepts in addition to the applications of the meta language XML are discussed. Attention is paid to the syntax of XML documents and the difference between well-formed and valid XML documents. The Role of Document Type Definitions (DTDs) and XML Schemas (XSD files) is discussed and several XML-derived languages, XML vocabularies, are discussed. Further the possibilities for presenting XML documents are treated where the focus is on the use of eXtended Stylesheet and Transformation Language (XSLT). Finally various applications of XML in practice are discussed, including Data Exchange, Publishing and Electronic Commerce.

Module 1 : XML Introduction

What is XML?
XML versus HTML
Roots of XML
Markup Languages
Benefits of XML
XML Technologies
Applications of XML
XML Validation with XML Schema
XML Presentation with Stylesheets
XML Transport with Web Services

Module 2 : XML Syntax

XML Document Structure
Course Catalog in XML
Node Tree
XML Prolog
XML Elements
XML Attributes
Well Formed Documents
Valid Documents
Processing Instructions
Entity References
CDATA Sections
Character References
Comments
Namespaces

Module 3 : XML Validity

Validating XML documents
Document Type Definition
DOCTYPE Declaration
Internal and External DTD
Element Declaration in DTD
Attribute Declaration in DTD
Limitations of DTD's
XML Schema as DTD Successor
DTD to XML-Schema Conversion
XML-Schema Vocabulary
XML Schema Namespace
Referencing XML Schema's
Simple and Complex Types
XML Schema Data Types
User Defined Data Types

Module 4 : XML Formatting

Separate Content and Presentation
What is XSL?
XSLT Stylesheets
How does XSLT work?
What is XPath?
Stylesheet Blueprint
Templates
xsl:value-of
xsl:for-each
xsl:if
Using Predicates
Applying templates
XSLT as Transformation Language