

X401 – XML Programming

Course Objectives

This course introduces XML concepts and how they can be applied in the context of general data processing, data integration and data exchange. A good foundation is provided for an understanding of how XML in its many forms has permeated the enterprise.

XML is examined as a format for data management and exchange, as well as investigating the methods available for storing and retrieving XML based data using Oracle 9i as an example database platform.

The course uses Microsoft Internet Explorer as a tool for validation and inspection of XML documents, with the manipulation of XML data examined through the use of the Java and JavaScript languages.

Several of the more popular open source tools are also reviewed, with an emphasis on the Apache XML Project.

Who Should Attend	Prerequisites	Duration
Developers Analyst/Programmers Designers	None	2 Days

Course Contents

Introduction to XML

History
Overview of Concepts

XML Concepts

What is XML?
XML Syntax and structure
DTD
XML parsers and APIs
DOM and SAX
XSL
Namespaces

XML Schemas

What is an XML schema?
Schemas and DTD
XSD features

Formatting and Presenting XML and Data (XSL)

XSL Language
XSL for transformation
XPath
CSS

Parsing and Validating XML Documents

Review of parsing
XML parsers for programming languages
The DOM parser
Business logic and computation
SAX: Simple API for XML

XML and Oracle 9i

Overview of features
Oracle XML DB
Storing and manipulating XML
XType

The Apache XML Project (an overview)

Xerces - XML parser
Xalan – XSLT and XPath
FOP – Print formatting XSL-FO