

XML Introduction

Audience Course XML Introduction

The course <u>XML</u> Introduction 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 Course XML Introduction

To participate in this course basic knowledge of Internet and HTML is required.

Realization Training XML Introduction

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. The course times are from 9.30 up and to 16.30.

Certification XML Introduction

Participants receive an official certificate XML Introduction after successful completion of the course



Content Course XML Introduction

In the course XML Introduction participants will gain a thorough understanding of the concepts of XML and the applications of the meta language XML.

XML Intro

XML is a language for describing structured documents and data and provides the technological basis for data sharing, publishing and e-business.

XML Syntax

Attention is paid to the syntax of XML documents and the difference between well-formed and valid XML documents.

XML Validation

The Role of Document Type Definitions (DTDs) and XML Schemas (XSD files) is discussed and several XML-derived languages, XML vocabularies, are discussed.

XML Styling and Transformation

Further the possibilities for presenting XML documents are treated where the focus is on the use of eXtended Stylesheet and Transformation Language (XSLT).

XML Applications

Finally various applications of XML in practice are discussed, including Data Exchange, Publishing and Electronic Commerce. Possible follow-up courses are <u>XSLT Stylesheet</u>, <u>XML Schema</u> and <u>XQuery</u>



Modules Course XML Introduction

| Module 1 : XML Introduction | Module 2 : XML Syntax | Module 3 : XML Validity |
|-----------------------------------|-------------------------|------------------------------|
| What is XML? | XML Document Structure | Document Type Definition |
| XML versus HTML | Node Tree | DOCTYPE Declaration |
| Structured Documents | XML Prolog | Internal and External DTD |
| Roots of XML | XML Elements | Element Declaration in DTD |
| XML Standard | XML Attributes | Attribute Declaration in DTD |
| Markup Languages | Well Formed Documents | XML Schema as DTD Successor |
| XML as Meta Language | Valid Documents | DTD to XML-Schema Conversion |
| Benefits of XML | Processing Instructions | XML-Schema Vocabulary |
| XML Technologies | Entity References | XML Schema Namespace |
| Applications of XML | CDATA Sections | Referencing XML Schema's |
| XML Validation with XML Schema | Character References | Simple and Complex Types |
| XML Presentation with Stylesheets | Comments | XML Schema Data Types |
| XML Transport with Web Services | Namespaces | 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