

Price: R4,500.00 excl. VAT
Duration: 2 days
Code: XMLSW

XML and Schemas

Description

XML (eXtensible Markup Language) is an international standard for describing data and creating structured formats. XML schema definition is a standardised language for describing the elements in an XML document. XML and schemas are used in many systems to handle data, configuration, and interfaces, and also form the basis of web services. This workshop covers the fundamentals of well-formed XML, XML namespaces, and XML schemas.

Objectives

After you have completed the XML and Schemas course, you will be able to:

- Understand the role of XML and the international standards that apply.
- Understand why it is important to validate XML.
- Understand the concept of XML namespaces.
- Create and use an XML Schema document.
- Create well-formed and valid XML documents.

Intended Audience

You should attend the XML and Schemas course if:

- You need to work with XML data.
- You need a better understanding of XML and schemas for working with web services.
- You want to use XML for documentation or training material.

Prerequisites

Before you attend the XML and Schemas course:

- You must be familiar with files, folders and filename extensions.
- You should be able to use a text editor.
- You do not need to have previous experience with programming or a markup language, although that experience will help you on the course. But if you plan to attend our HTML and CSS course, please attend that course first.

Course Contents

XML Basics

- The W3C and the evolution of XML.
- The role of XML today.
- XML elements and attributes.
- The XML Prolog.
- Well-formed XML and valid XML.
- Document type definitions.

XML Namespaces

- The role of namespaces.
- Declaring a namespace.
- Using multiple namespaces.
- The default namespace.

- Attributes and namespaces.

XML Schemas

- Schemas versus DTDs.
- The XMLSchema and XMLSchema-instance namespaces.
- The two-document model.
- The type hierarchy.
- Simple element content versus complex element content.

Simple Types

- Built-in simple types.
- Element type definitions.
- Custom simple types.
- Facets for restriction for strings, numbers and dates.
- Union and list types.
- Attribute type definitions.

Complex Types

- Custom complex types for elements with element content.
- Custom complex types for elements with mixed content.
- Custom complex types for elements with text content.
- Custom complex types for empty elements.

Additional Topics

- Annotations.
- Multiple schemas.
- Schemas and namespaces.

*** The lecturer reserves the right to modify the contents of the course to suit the needs of the delegates.*