

XQuery

Audience Course XQuery

The course [XQuery](#) is designed for developers who wish to apply XQuery in practice for the selection of XML data.

Prerequisites Course XQuery

To participate in this course basic knowledge of [XML](#) and [HTML](#) syntax is required. Experience with programming and Structured Query Language (SQL) is beneficial for a good understanding.

Realization Training XQuery

The theory is discussed on the basis of presentation slides. Demos are used to clarify the theory. The theory is interspersed with hands-on exercises. Usage is made of modern XQuery tools and the course material is in English. The course times are from 9.30 up and to 16.30.

Certification XQuery

After successful completion of the course, participants receive an official XQuery certificate.

Duration: 3 days

Price: € 1850

[Open Schedule](#)



```
xquery version "1.0";
<ul type="square">{
  for $course in doc("courses.xml")/courses/course
  where $course/@duration=1
  order by $course/title
  return <li>{data($course/title)}</li>
}</ul>
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Content Course XQuery

The XML language XQuery is central to the XQuery course. The participants learn how XQuery can be used to select and transform XML data.

XQuery Intro

Attention is paid to the syntax of XQuery, the XQuery specification and the parts of XQuery.

XML Vocabularies

Also the relationships of XQuery with other XML vocabularies such as XPath, XSLT and XML Schema are discussed.

XQuery Data Types and Expressions

Furthermore the data types, built-in functions of XQuery and the different XQuery expressions are discussed.

Flower Expression

The so called flower expressions which are characteristic for XQuery are treated in detail.

Joins

Finally attention is paid to some more advanced applications of XQuery like joins, the use of XQuery in combination with other technologies and for the accessing of relational data.

Modules Course XQuery

Module 1 : XQuery Introduction	Module 2 : XQuery Syntax	Module 3 : XPath Node Selection
What is XQuery? XQuery Motivation XML versus Relational Model Requirements Query Language Three Parts of XQuery XQuery Language Characteristics Types of Queries Where is XQuery used? XQuery's Position XQuery and Other Technologies XQuery Specifications	Basic Syntax Rules XQuery Functions Structure of an XQuery Module XQuery Expressions Path Expressions Predicates Element Constructors Other Query Expressions FLWR Expressions Conditional Expressions XQuery Comparisons	XPath Expressions XPath Data Types XPath Context Peer Axis Types Descendent Axis Types Ancestor Axis Types Location Path Syntax Predicates For Expressions Quantified Expressions Conditional Expressions
Module 4 : XQuery Data Types	Module 5 : Joins	Module 6 : Functions and Operators
XPath Data Models Infoset and PSVI Three Building Blocks Items Atomic Types and Values XQuery Type Hierarchy XML Schema Types String Types Date and Time Types Numeric Types Binary Data Types	Expressing Joins Constructing Nodes FLWR Expressions For versus Let Node Generation Processing Instructions Element Constructors Attribute Constructors Text Constructors Other Constructors Sample Queries	XPath Functions XQuery Functions Regular Expressions Enhanced String Functions Functions for Sequences XPath Operators XQuery Operators Comparison Operators Types Issues Constructor Functions User Defined Functions
Module 7 : Advanced Concepts		
Library Modules Global Variables Recursive Functions Strong Typing XML Schema Validation String Search Queries using Namespaces Listing Namespaces Listing Target URI's Recursive Parts Explosion Access to Relational Data		