



Developing MarkLogic Applications

This hands-on course provides a developer with the information and experience needed to build applications with the MarkLogic Server. Familiarity with basic programming fundamentals and database technology is beneficial. Participants should have hands-on experience with programming languages (Java, .Net, C++) and web development technologies (ASP, JSP, Perl, HTML, JavaScript).

Course Objectives

- Use MarkLogic tools and XQuery code to build and load content into a database
- Build a MarkLogic application using Application Builder and XQuery
- Develop simple and advanced search queries against a MarkLogic database, including faceted navigation and geospatial searches
- Optimize search queries using MarkLogic index structures
- Create reusable application code libraries
- Perform insert, update, delete and query transactions
- Implement a role-based security model

Class Details

Length: 4 days

Refundable Booking Fee: \$400 (USD)

Availability: Classroom, Live Online

Topics Covered

Understanding MarkLogic Server

- List the core components of the MarkLogic Server

Setting Up MarkLogic Server

- Install MarkLogic Server

Information Studio

- Create a database and load content using Information Studio

App Builder

- Build a Search Application using App Builder
- Deploy and App Builder Project

Build an Application with XQuery

- Install an XQuery Editor
- Create an Application using XQuery

Writing XPath Expressions

- Write XPath code to navigate documents, work with element and attribute values, implement predicates and utilize axes

Creating FLWOR Expressions

- Develop XQuery code user FLWOR

Conditional Expressions

- Create IF-THEN-ELSE expressions

Topics Covered (cont.)

XQuery Functions and Operators

- Create a text search

Creating a Function

- Create a local function in the main module of an xQuery program

Understanding App Servers, Databases, and Forests

- Script the creation of a database, forest and app server using the Admin API

Loading Content into a Database

- Load documents using several different methods

Building an Application with XQuery

- Develop code to build an application using MarkLogic Server, XQuery and XPath

Error Handling & Logging

- Control MarkLogic logging levels

Creating a Basic Search

- Develop queries using the SearchAPI

Working with Indexes

- Implement additional indexes to enhance query performance

Geospatial Data, Indexing and Search

- Integrate geospatial data, maps, and search into an application

Snippets, Highlighting, Sorting and Pagination

- Use the Search API to control search results

Developing Library Modules

- Create reusable functions using library modules

Creating Faceted Navigation

- Implement a range index and facet constraint

Creating an Advanced Search

- Create an advanced search interface

Updating Database Content

- Perform insert, update, delete and query transactions

Assigning Application Security

- Create and implement a security model

Data Modeling Best Practices

- Evaluate the impact of data modeling decisions on performance

Terms and Conditions

Participants are entitled to a full booking fee refund or to request a substitution candidate if MarkLogic is notified in writing at least one working day prior to the start of the course. Recipients who cancel less than the 1- business day period and recipients who register and fail to fully attend a Public Course are not eligible for a refund of any kind. MarkLogic Corp. reserves the right to cancel courses up to 10 working days prior to the published start date. Please consider this when making your travel plans as MarkLogic's liability is limited to a full refund of the booking fee only. **Dates are subject to change.**

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