

XML and Java are two of the most successful technologies of the last 5 years. The fact that they naturally co-exist in software applications is no coincidence. The combination of the simplicity and flexibility of XML and the functionality of Java makes them a perfect team. Recently, XML has been used in data messaging underpinning distributed applications.

Contents:

- **Introduction:** The need for XML; XML specifications and technologies; Industry support for XML
- **XML Document Anatomy:** XML document structure, elements, and attributes; Namespaces; Comments, processing instructions, and CDATA sections; Document design guidelines
- **Document Type Definitions (DTDs):** Overview of DTDs; Defining elements and attributes; Defining entities; DTDs and namespaces
- **XML Schemas (XSD):** Overview of XML Schemas; Defining elements and attributes; Defining simple types and complex types; XML Schema and namespaces; Using inheritance
- **Working with the Simple API for XML (SAX):** XML programming techniques; Overview of SAX; Handling elements, attributes, and content; Error handling and validation; SAX and the Java API for XML Processing (JAXP)
- **Working with the Streaming API for XML (StAX):** Overview of StAX; Reading a document using StAX; Creating a new document using StAX
- **Working with the Document Object Model (DOM):** Overview of DOM; Navigating a document; Modifying content; Error handling and validation; DOM and the Java API for XML Processing (JAXP)
- **Java and XPath:** Overview of XPath; Using XPath in Java; Filtering results; Using XPath functions and operators; Using XPath 2.0 features
- **Java and XSLT:** Overview of XSLT; Using XSLT in Java; Defining overloaded template rules; Loops and decision making in XSLT; Sorting results; Defining and calling named template rules; Parameterizing template rules; Using XSLT 2.0 features
- **Web Services:** Overview of Web Services; Defining and calling Web Services in Java; Using Java-WS; Passing complex types to and from a Web Service

Who Should Attend:

This training course is aimed at Java programmers who need to manipulate and transform XML data.

Prerequisites:

Java programming experience.