

# Introduction to XML (DTX-110)

## Product Description

### Product Outline/Details

The Introduction to XML course provides students with the principles and use of XML (Extensible Markup Language). The course takes a hands-on approach. It begins with the concepts of tagging and markup and moves quickly to more advanced topics, such as validation and presentation. The course teaches key XML technologies, such as document type definitions (DTDs), cascading style sheets (CSS), Extensible Style Language for Transformation (XSLT), and schemas. The course labs employ Java technology. The course materials include a copy of "XML, In a Nutshell" from O'Reilly and Associates, Inc., as reference material for the course.

<i>Product ID:</i> DTX-110	<i>Duration:</i> 4 days	<i>Price:</i> \$1600.00
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## Who Can Benefit

Students who can benefit from this course are web developers, network administrators, project architects, application programmers, systems administrators, and web designers.

## Prerequisites

**To succeed fully in this course, students should be able to:**

- Perform general UNIX computing skills, such as changing directories, copying files, and running a command from the command line
- Display an understanding of Hypertext Markup Language (HTML)

## Skills Gained

**Upon completion of this course, you should be able to:**

- Mark up a page of data by using tags
- Create a well-formed XML document
- Create a valid XML document
- Design a DTD for XML documents
- Use a CSS to format an XML document
- Use XSLT to transform an XML document
- Use XSLT and XPath to transform an XML document
- Use an XML schema to validate an XML document
- List current XML standards

## Related Courses

- **After:** SL-110: Fundamentals of the Java Programming Language
- **After:** SL-275: Java Programming Language
- **After:** SL-285: Java Programming Language Workshop
- **After:** SL-385: Managing XML With the Java Platform

## Course Content

## **Module 1 - Introducing XML**

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- Use an editor to create a basic XML file
- Describe XML
- Describe why XML is important
- List two examples of how XML is used

## **Module 2 - Using XML**

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- Create an XML document that has a root element that contains elements and content
- Test an XML document to determine if it is well-formed
- Create an XML document that includes element attributes
- Create a well-formed XML document

## **Module 3 - Creating DTDs and Validating Documents**

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- Differentiate a well-formed document from a valid document
- Create a DTD that defines order, quantity, and hierarchy
- Use DTDs to validate XML documents
- Define a DTD that includes attributes and mixed content

## **Module 4 - Using CSS With HTML and XML**

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- List the benefits of separating presentation from content
- Change HTML output by using a CSS
- Create a CSS for an XML file

## **Module 5 - Transforming With XSLT**

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- Combine two XML documents that contain the same elements names into one document by using namespaces
- Create a default XSLT style sheet that transforms an XML document into text
- Create an XSLT style sheet that matches a specific element and displays only the text for that element
- Create an XSLT style sheet that transforms an XML document into an HTML document
- Transform an XML document into an HTML document

## **Module 6 - Transforming With XSLT and Basic XPath**

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- Write a style sheet that uses XPath expressions to select document nodes
- Write a style sheet that selects documents based on location paths
- Write a style sheet that uses XPath expressions to identify element attributes
- Write a style sheet that adds attributes to an output document
- Use XPath expressions to transform an XML document that contains elements and attributes into an HTML document that contains tags and attributes

## **Module 7 - Using XML Schemas**

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- Design an XML schema
  - Use an XML schema to validate an XML document

### **Module 8 - Reviewing Current XML Standards**

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- Describe XML Formatting Objects (XSL-FO)
- Describe the Simple API for XML (SAX) programming model
- Describe the Document Object Model (DOM) programming model
- Describe the purpose of the Universal Description, Discovery and Integration (UDDI) standard
- Describe the Simple Object Access Protocol (SOAP) standard
- Describe the ebXML standard