XML Implementation, Overview

Hands-on course of 4 days - 28h
Ref.: PXM - Price 2025: CHF2 540 (excl. taxes)

XML has become an indispensable technology as much on the user work stations as on the company's servers. The need to share and exchange information between users and between applications has accelerated the use of XML technologies. This course will show you how to take advantage of these technologies and the related standards. Through hands-on work you will learn how to design and manage your XML data, how to distribute and publish them, how to use them via your applications, Web services and databases, without ignoring the issues relating to security.

HANDS-ON WORK

The hands-on work will be performed in the XML-Spy environment.

THE PROGRAMME

last updated: 07/2024

1) Industrial XML

- Review of structured languages: SGML, HTML, XML and XHTML. The issues. Why XML is indispensable ?
- XML advantages and disadvantages.
- Overview: XML editors, technologies, SAX, DOM, JAXB...

2) XML parsers

- Market offers. The role of parsers.
- API parsers. Java (JAXP), .Net, Flash parsers.
- Ajax and reading data in HTML pages.

Hands-on work : Utilising various parsers.

3) Validating documents

- Structure and components of an XML document.
- A well-structured document and a valid document.
- Validation models. Syntax and use.
- DTD. XML Schema. XSD schemas: structure, data typing, composition tools. Modelling. Implementation.
- Namespaces. Role, integrating, sharing, creating them.

4) XSLT transformation

- Challenges of the XSLT language on XML transformation. Constructing trees, re-structuring, generating multi-formats: XHT

5) Publishing documents

- Raw display via the navigators.
- Formatting with CSS style sheets.
- XHTML's role in accessibility. Technical hints.
- XPATH for navigating in XML data.
- XSL-T. Transforming data into web formats.

PREREQUISITES

Basic Knowledge in programming, databases and Internet architecture.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@ORSYS.fr to review your request and its feasibility.

- The XSL-FO language for object formatting. Conversion to paper-type formats PDF, RTF, etc.

Hands-on work : Manipulating XSL-T and XSL-FO.

6) Message and XML exchanges

- DOM and the standardised programming interface.
- Applications servers: architecture in .NET and JEE.
- Flash: FLEX, XML exchanges and Web services.
- Transferring and serialising messages: Rest, XML-RPC, SOAP, WSDL, UDDI. Defining Web Services.

Hands-on work : Adapting a JavaScript application using XML documents. Interrogating a Web Service.

7) XML and databases

- Storing XML documents. RDBMS to native XML databases. XML interrogation languages: XPath, XQuery, XLink, XPointer, SQL e

8) Security of XML exchanges

- The different security protocols: HTTPS, XML Signature (Xml Dsig): digital signature, XML encryption, XML access control

9) Graphics interfaces and office system

- Microsoft's XAML language. SMIL: Web animations. XForms, InfoPath: electronic form. Blogs and RSS, ATOM. SVG: vector sta

DATES

Contact us