CO1 COMPENDIUM CENTRUM EDUKACYJNE

Training: Capstone Courseware
501 Introduction to XML

TRAINING GOALS:

Version 1.1.1

This one-day course introduces the **eXtensible Markup Language**, or **XML**, including basic grammar and XML validation using **DTDs** or **XML Schema**. Students learn to read and to hand-write XML well-formed XML documents, and then proceed to modeling concepts, first learning the basic DTD language and then studying namespaces and XML Schema. The course closes with a chapter on important XML-related technology, including XPath, XSLT, SAX or DOM parsing, and SOAP-based Web services.

The module presents what might be called "Pure XML" - by which we mean two things. Firstly, everything in the module is based strictly on W3C specifications, without any vendor-specific extensions. Secondly, no knowledge of any particular programming language or other external technology is required to participate fully in the module. Thus the hands-on exercises, and the knowledge that is developed, are portable and applicable to any XML authoring or development effort.

CONSPECT:

- Chapter 1. A Brief History of XML
    - Birth of XML
    - Content vs. Presentation
    - Self-Describing Data
    - A Standard Document Format
    - Uses for XML
- Chapter 2. XML Grammar
    - Structure of an XML Document
    - Handling Whitespace
    - Character and Entity References
    - Well-Formed XML
    - Elements
    - Attributes
    - Processing Instructions
    - Comments

- CDATA Sections
- Chapter 3. Valid XML
    - Document Types
    - DTD Structure
    - Defining Elements
    - Cardinality
    - Attributes
    - Required, Implied, Default, and Fixed Attributes
    - Enumerations
    - XML Namespaces
    - Limitations of DTDs
    - XML Schema
    - Advantages of XML Schema
    - Data Types
- Chapter 4. Using XML in Applications
    - SAX and DOM Parsing
    - XSLT
    - XPath
    - XSL-FO
    - Web Services
    - SOAP

REQUIREMENTS:

- None. Some familiarity with HTML will be beneficial.

Difficulty level

CERTIFICATE:

The participants will obtain certificates signed by Capstone Courseware.

TRAINER:

Authorized Capstone Courseware Trainer.