CO1 COMPENDIUM CENTRUM EDUKACYJNE

Training: Capstone Courseware
501 Introduction to XML

capstone courseware

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

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- 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.