



REPRÉSENTATION ET MANIPULATION DE DONNÉES STRUCTURÉES

REPRESENTATION AND MANIPULATION OF STRUCTURED DATA

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| Lecturers : 16.0 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 12.0 | Project : 0.0 | Language : FR

Objectives

Understand how the XML ecosystem enforces fundamental Information System properties, such as organization, data integrity, application interoperability, or internationalization.

Keywords : Structured data, XML, DTD, XML Schema, Xpath, XSLT, Webservices

Programme

Introduction
Structured Data – XML
Data Integrity – validation, DTD, schemas
Interoperability – Namespaces
Querying – Xpath, XQuery
Transformations – XSLT
Data exchange, Webservices – XML-RPC
Applications – SVG, XSL-FO

Learning outcomes

- Compétence 2 - Composante 1

Independent study

Objectifs : 1 - Design an XML application
2 - Transformations with XSLT
3 - Focus on a given application (SVG, XSL-FO, ...)

Méthodes : practical labs

Core texts

Danny Ayers, Liam R.E. Quin, Joe Fawcett, *BEGINNING XML, 5TH EDITION*, Wrox, 2012
Ian Williams *BEGINNING XSLT AND XPATH: TRANSFORMING XML DOCUMENTS AND DATA*, Wrox, 2009
Amelia Bellamy-Royds, Kurt Cagle, Dudley Storey *USING SVG WITH CSS3 AND HTML5*, O'Reilly Media, Inc., 2017

Assessment

50% knowledge: written exam without documents
50% know-how: mean of lab marks (1/3 each)