

### XML, model your documents and data



**BPC-51** 3 Days (21 Hours)



# **Description**

Recent years have seen a strong increase in the popularity of XML, the W3C standard for writing structured documents. At the end of this training, the participant will have complete mastery of the syntax of the XML Schema language and the modeling rules allowed by this language.

# Who is this training for ?

#### For whom

Architects, designers, developers, project managers and IT project owners who need to design XML models for the data and documents of their information systems.

### **Prerequisites**

Aucune

# **Training objectives**

# **Training program**

Rappels sur XML et les technologies associées

- Structure and components of an XML document.
- Well-formed document and valid document.
- · Structured and semi-structured data.
- The different types of XML parsers and their role.
- The galaxy of XML technologies.
- Practical work Create and validate an XML document.

XML et la composition de documents



- Objectives of structuring languages: DTD, XML Schema, Schematron and Relax NG.
- The main parts of a schema.
- EBNF syntax for DTD (Data Type Definition).
- · Validation of documents.
- DTD with multiple roots.
- Practical work Writing a DTD and documents conforming to that -ci.
- Modular restructuring of the DTD.

#### Les espaces de noms

- Description and use of namespaces.
- Combination of multiple vocabularies.
- Combination of languages: XHTML, Xforms and SVG.
- Study of the scope of a namespace.
- Practical work Writing a document using several namespaces.

### Le langage XML Schema

- The syntax of the language.
- Defining a vocabulary and a grammar.
- Testing the values ??of elements and attributes.
- Organization of elements: sequence, choice, heap.
- Use of keys and uniqueness rules.
- Practical work Redefinition of a DTD with XML syntax -Schema.
- Code improvement.

#### Techniques de modélisation XML

- · Design patterns.
- Unique patterns applicable to different document types.
- · Generic reusable patterns (list, grid, etc.
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- · Documents using multiple diagrams.
- · Practical work Application of the models studied.

#### XML et la conception objet

- Reminders on object-oriented concepts.
- · Object concepts of the XML Schema language.
- Types, class, derivation, polymorphism.
- UML/XML representation.
- · Inclusion of schemas.
- Practical work Composition of modular and reusable schemas.

### Les meilleures pratiques de modélisation



- Composition and inheritance.
- Types of constructions: "Russian dolls", "Slices of salami" and "Venetian blinds".
- Design pattern catalogs.
- Extensible content patterns.
- Practical work Evaluation of composition methods and use of different languages.