

Chapter 1: Getting Started

You will learn:

- SGML and SGML document components.
- What XML is.
- XML as compared to SGML and HTML.
- XML format.
- XML specifications.
- XML architecture.
- Data structure namespaces.
- Data delivery, manipulation.
- Parsing XML.
- How to parse XML.
- Manipulating and editing data using the Document Object Mode.
- Displaying XML-based data in HTML
- XSL: Extensible Stylesheet Language.
- XML: Transforming and querying.

Chapter 2: XML Application

You will learn:

- How to create an XML document.
- The role of the document map, prolog, and XML declarations.
- Standalone declarations.
- Style sheet processing instructions.
- DOCTYPE declaration.
- Textual content.
- Elements.
- Assigning meaning to XML tags.
- Naming conventions.
- Document: XML declaration and root element.
- Organization of the XML data.

Chapter 3: XML Syntax and Well-formedness

You will learn:

- XML syntax
- How to nest XML elements.
- Root tag.
- XML, white space.
- CR / LF.
- Entity references.
- CDATA.
- Elements.
- Attributes.
- Well-formed documents.
- XML DTD.
- XML schema.

Chapter 4: DTDs and Validity

You will learn:

- Document type declarations.
- Validating against a DTD.
- Validation parsers.
- Listing the elements.
- Indicating random orders.
- List of dissimilar elements.
- Mixed content.
- Empty elements.
- Sharing DTDs among documents.
- DTDs at remote URLs.
- Public DTDs.
- Internal and external DTD subsets.

Chapter 5: DOM: Document Object Model

You will learn:

- DOM - purpose and function.
- Node interface.
- Parsing the DOM.
- Loading an XML file into the parser.
- Loading XML text into the parser.
- parseError Object.

Chapter 6: Entities and External DTD Subsets

- Data/declarations from external sources.
- Entity types.
- Internal general entities.
- Entity references.
- Defining an internal general entity reference.
- Using general entity references in the DTD.
- Restrictions on general entities values.
- Predefined general entity references.
- External general entities.
- Embedding information in HTML.
- XML solution.
- Internal and external parameter entities.
- Entities and DTDs in Well-formed documents.
- Internal and external entities.

Chapter 7: Attribute Declarations in DTDs

You will learn:

- Elements with attributes.
- Multiple attributes.
- Declaring attributes in DTDs.
- Declaring multiple attributes.
- Specifying default values.
- Attribute types.
- CDATA attribute type.
- Enumerated attribute type.
- The NMTOKEN attribute type.
- ID attribute type.
- IDREF attribute type.
- ENTITY attribute type.
- ENTITIES attribute type.
- NOTATION attribute type.
- Predefined attributes.
- `xml:space`.
- `xml:lang`.
- Language code.

Chapter 8: Using Non-XML Data

You will learn:

- Non-XML data.
- Notations.
- Declaring and embedding unparsed entities.
- Embedding multiple unparsed entities.
- Processing instructions.
- Conditional sections in DTDs.

Chapter 9: CCS: Cascading Style Sheets

You will learn:

- Purpose of style sheets.
- CSS: purpose and evolution.
- Attaching style sheets to documents.
- CSS with HTML versus CSS with XML.
- Selection of elements.
- Grouping selectors.
- Pseudo-elements and psuedo-classes.
- Addressing the first lne.
- Selection by ID.
- Contextual selectors.
- STYLE attributes.
- Inheritance.
- Cascades.
- @import directive.
- !important declaration
- Cascade order.
- Absolute, relative, and percentage units of length.
- Values: ulr, color, keyword.
- Block, inline, and list item elements.
- Cascading Style Sheets Level 2.

Chapter 10: XSL Transformations and Formatting

- Transformation language.
- The formatting language.
- XSL transformations.
- Trees.
- XSL style sheet documents.
- Location of XML transformation.
- XSL formatting language.
- Formatting objects and their properties.
- XSL formatting model.
- The fo namespace.
- Formatting properties.
- Transforming to formatting objects.

Chapter 11: XML in Data Islands

- Purpose of using data islands.
- XML embedded in HTML.
- Data binding.
- External XML file.

Chapter 12: XML Namespaces

- Declaring namespaces.
- Qualified names.
- Using qualified names.
- Applying namespaces to elements and attributes.
- Namespace scoping.
- Namespace defaulting.
- Uniqueness of attributes.
- Conformance of documents.