



XML Tutorial

[XML HOME](#)[XML Introduction](#)[XML How to use](#)[XML Tree](#)[XML Syntax](#)[XML Elements](#)[XML Attributes](#)[XML Namespaces](#)[XML Display](#)[XML XSLT](#)[XML XPath](#)[XML XLink](#)[XML Doctypes](#)[XML Validator](#)[XML DTD](#)[XML Schema](#)[XML Server](#)[XML Applications](#)[XML Examples](#)[XML Quiz](#)

XML Tree

[« Previous](#)[Next Chapter »](#)

XML documents form a tree structure that starts at "the root" and branches to "the leaves".

XML Tree Structure

XML DOM

DOM Intro

DOM Nodes

DOM XMLHttpRequest

DOM Accessing

DOM Node Info

DOM Node List

DOM Traversing

DOM Navigating

DOM Get Values

DOM Change Nodes

DOM Remove Nodes

DOM Replace Nodes

DOM Create Nodes

DOM Add Nodes

DOM Clone Nodes

DOM Examples

DOM Reference

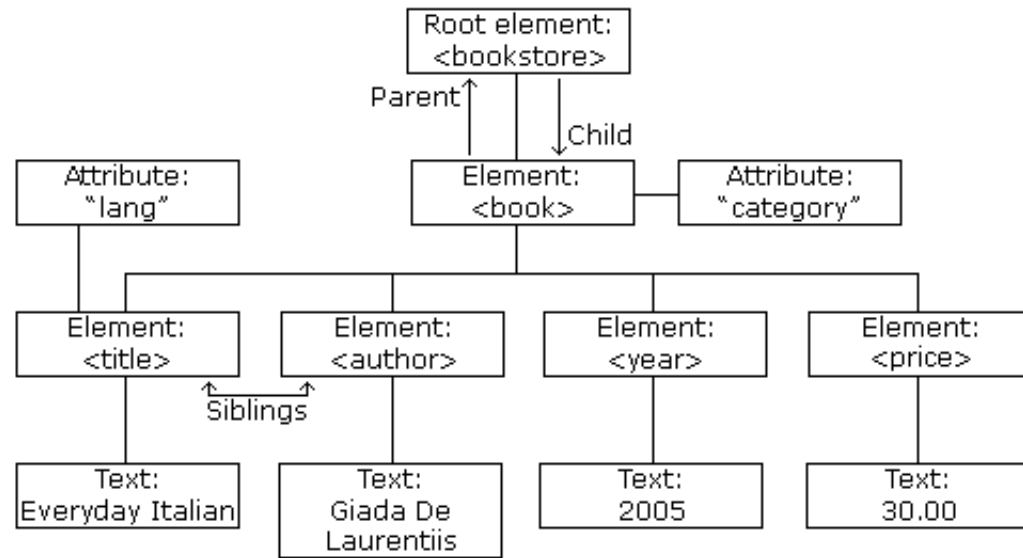
DOM Node Types

DOM Node

DOM NodeList

DOM NamedNodeMap

DOM Document



An Example XML Document

The image above represents books in this XML:

```
<?xml version="1.0" encoding="UTF-8"?>
<bookstore>
  <book category="cooking">
    <title lang="en">Everyday Italian</title>
    <author>Giada De Laurentiis</author>
    <year>2005</year>
    <price>30.00</price>
  </book>
  <book category="children">
    <title lang="en">Harry Potter</title>
```

DOM Element

DOM Attribute

DOM Text

DOM CDATA

DOM Comment

DOM XMLHttpRequest

DOM Parser

Web Services

XML Services

XML WSDL

XML SOAP

XML RDF

XML RSS

XML DTD

DTD Intro

DTD Building Blocks

DTD Elements

DTD Attributes

DTD Elements vs Attr

DTD Entities

DTD Examples

XSD Schema

```
<author>J K. Rowling</author>
<year>2005</year>
<price>29.99</price>
</book>
<book category="web">
  <title lang="en">Learning XML</title>
  <author>Erik T. Ray</author>
  <year>2003</year>
  <price>39.95</price>
</book>
</bookstore>
```

XML Tree Structure

XML documents are formed as **element trees**.

An XML tree starts at a **root element** and branches from the root to **child elements**.

All elements can have sub elements (child elements):

```
<root>
  <child>
    <subchild>.....</subchild>
  </child>
</root>
```

- XSD Intro
- XSD Why Use
- XSD How To
- XSD <schema>

XSD Simple

- XSD Elements
- XSD Attributes
- XSD Restrictions

XSD Complex

- XSD Elements
- XSD Empty
- XSD Elements Only
- XSD Text Only
- XSD Mixed
- XSD Indicators
- XSD <any>
- XSD <anyAttribute>
- XSD Substitution
- XSD Example

XSD Data

- XSD String
- XSD Date

The terms parent, child, and sibling are used to describe the relationships between elements.

Parent have children. Children have parents. Siblings are children on the same level (brothers and sisters).

All elements can have text content (Harry Potter) and attributes (category="cooking").

Self-Describing Syntax

XML uses a much self-describing syntax.

A prolog defines the XML version and the character encoding:

```
<?xml version="1.0" encoding="UTF-8"?>
```

The next line is the **root element** of the document:

```
<bookstore>
```

The next line starts a <book> element:

```
<book category="cooking">
```

XSD Numeric

XSD Misc

XSD References

XSD Reference

The <book> elements have **4 child elements**: <title>,< author>, <year>, <price>.

```
<title lang="en">Everyday Italian</title>  
<author>Giada De Laurentiis</author>  
<year>2005</year>  
<price>30.00</price>
```

The next line ends the book element:

```
</book>
```

You can assume, from this example, that the XML document contains information about books in a bookstore.

[« Previous](#)

[Next Chapter »](#)



Database as a Service

REDIS



[Learn more](#)


W3SCHOOLS EXAMS

COLOR PICKER



SHARE THIS PAGE


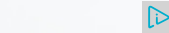




Web Design Canvas
Made For Designers.



Request A Demo



Stream your movies to all of your screens

GET PLEX

[REPORT ERROR](#)
[PRINT PAGE](#)
[FORUM](#)
[ABOUT](#)

Top 10 Tutorials

[HTML Tutorial](#)
[CSS Tutorial](#)
[JavaScript Tutorial](#)
[SQL Tutorial](#)
[PHP Tutorial](#)
[jQuery Tutorial](#)
[Bootstrap Tutorial](#)
[Angular Tutorial](#)
[ASP.NET Tutorial](#)
[XML Tutorial](#)

Top 10 References

[HTML Reference](#)
[CSS Reference](#)
[JavaScript Reference](#)
[Browser Statistics](#)
[HTML DOM](#)
[PHP Reference](#)
[jQuery Reference](#)
[HTML Colors](#)
[HTML Character Sets](#)
[XML Reference](#)

Top 10 Examples

[HTML Examples](#)
[CSS Examples](#)
[JavaScript Examples](#)

[HTML DOM Examples](#)

[PHP Examples](#)

[jQuery Examples](#)

[XML Examples](#)

[ASP Examples](#)

[SVG Examples](#)

Web Certificates

[HTML Certificate](#)

[HTML5 Certificate](#)

[CSS Certificate](#)

[JavaScript Certificate](#)

[jQuery Certificate](#)

[PHP Certificate](#)

[Bootstrap Certificate](#)

[XML Certificate](#)

W3Schools is optimized for learning, testing, and training. Examples might be simplified to improve reading and basic understanding. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using this site, you agree to have read and accepted our terms of use, cookie and privacy policy. Copyright 1999-2015 by Refsnes Data. All Rights Reserved.

