

Menu ▼

Log in

Introduction to XML

< Previous

Next >

XML is a software- and hardware-independent tool for storing and transporting data.

What is XML?

- XML stands for eXtensible Markup Language
- XML is a markup language much like HTML
- XML was designed to store and transport data
- XML was designed to be self-descriptive
- XML is a W3C Recommendation

XML Does Not DO Anything

Maybe it is a little hard to understand, but XML does not DO anything.

This note is a note to Tove from Jani, stored as XML:

```
<note>
    <to>Tove</to>
    <from>Jani</from>
    <heading>Reminder</heading>
    <body>Don't forget me this weekend!</body>
</note>
```

☐ Dark mode





HTML CSS







- It has sender information
- It has receiver information
- It has a heading
- It has a message body

But still, the XML above does not DO anything. XML is just information wrapped in tags.

Someone must write a piece of software to send, receive, store, or display it:

Note

To: Tove

From: Jani

Reminder

Don't forget me this weekend!

The Difference Between XML and HTML

XML and HTML were designed with different goals:

- XML was designed to carry data with focus on what data is
- HTML was designed to display data with focus on how data looks
- XML tags are not predefined like HTML tags are

ADVERTISEMENT





HTML CSS







XML Does Not Use Predefined Tags

The XML language has no predefined tags.

The tags in the example above (like <to> and <from>) are not defined in any XML standard. These tags are "invented" by the author of the XML document.

HTML works with predefined tags like , <h1>, , etc.

With XML, the author must define both the tags and the document structure.

XML is Extensible

Most XML applications will work as expected even if new data is added (or removed).

Imagine an application designed to display the original version of note.xml (<to> <from> <heading> <body>).

Then imagine a newer version of note.xml with added <date> and <hour> elements, and a removed <heading>.

The way XML is constructed, older version of the application can still work:

```
<note>
    <date>2015-09-01</date>
    <hour>08:30</hour>
    <to>Tove</to>
    <from>Jani</from>
```





HTML CSS







Old Version

Note

To: Tove

From: Jani

Reminder

Don't forget me this weekend!

New Version

Note

To: Tove

From: Jani

Date: 2015-09-01 08:30

Don't forget me this weekend!

XML Simplifies Things

- · XML simplifies data sharing
- XML simplifies data transport
- XML simplifies platform changes
- XML simplifies data availability

Many computer systems contain data in incompatible formats. Exchanging data between incompatible systems (or upgraded systems) is a time-consuming task for web developers. Large amounts of data must be converted, and incompatible data is often lost.





HTML

CSS







XML also makes it easier to expand or upgrade to new operating systems, new applications, or new browsers, without losing data.

With XML, data can be available to all kinds of "reading machines" like people, computers, voice machines, news feeds, etc.

XML is a W3C Recommendation

XML became a W3C Recommendation as early as in February 1998.

Previous

Next >

ADVERTISEMENT





HTML CSS











Chefs Required for the UK. #jobs #culinaryjobs #UkJobs #ChefsforUK...

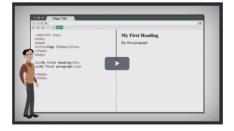
Chefs Required for the UK. #jobs #culinaryjobs #UkJobs #ChefsforUK #Cooks #InternationalRecruitment...

SPONSORED BY VIRA INTERNATIONAL...



NEW

We just launched W3Schools videos



Explore now

COLOR PICKER





HTML



















Get certified by completing a XML course today!



Get started

CODE GAME



Play Game

ADVERTISEMENT





HTML (

CSS





Q

ADVERTISEMENT

ADVERTISEMENT

☐ Dark mode





HTML CSS





Q

Report Error

Forum

About

Shop

Top Tutorials

HTML Tutorial
CSS Tutorial
JavaScript Tutorial
How To Tutorial
SQL Tutorial
Python Tutorial
W3.CSS Tutorial
Bootstrap Tutorial
PHP Tutorial
Java Tutorial

Top References

C++ Tutorial jQuery Tutorial

HTML Reference
CSS Reference
JavaScript Reference
SQL Reference
Python Reference
W3.CSS Reference
Bootstrap Reference
PHP Reference
HTML Colors
Java Reference
Angular Reference
jQuery Reference





HTML CSS









CSS Examples
JavaScript Examples
How To Examples
SQL Examples
Python Examples
W3.CSS Examples
Bootstrap Examples
PHP Examples
Java Examples
XML Examples

Web Courses

jQuery Examples

HTML Course
CSS Course
JavaScript Course
Front End Course
SQL Course
Python Course
PHP Course
jQuery Course
Java Course
C++ Course
C# Course
XML Course

Get Certified »

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using W3Schools, you agree to have read and accepted our terms of use, cookie and privacy policy.

Copyright 1999-2022 by Refsnes Data. All Rights Reserved. W3Schools is Powered by W3.CSS.

