XHTML Introduction

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XHTML is HTML written as XML

What Is XHTML?

* XHTML stands for EXtensible HyperText Markup Language
* XHTML is almost identical to HTML 4.01
* XHTML is a stricter and cleaner version of HTML
* XHTML is HTML defined as an XML application
* XHTML is a W3C Recommendation of [January 2000](http://www.w3schools.com/w3c/default.asp).
* XHTML is supported by all major browsers.

Why XHTML?

Many pages on the internet contain "bad" HTML.

The following HTML code will work fine if you view it in a browser (even if it does NOT follow the HTML rules):

<html>  
<head>  
<title>This is bad HTML</title>  
<body>  
<h1>Bad HTML  
<p>This is a paragraph  
</body>

XML is a markup language where documents must be marked up correctly and "well-formed".

If you want to study XML, [Read our XML tutorial](http://www.w3schools.com/xml/default.asp).

Today's market consists of different browser technologies. Some browsers run on computers, and some browsers run on mobile phones or other small devices. Smaller devices often lack the resources or power to interpret a "bad" markup language.

Therefore - by combining the strengths of HTML and XML, XHTML was developed. XHTML is HTML redesigned as XML.

The Most Important Differences from HTML:

DOCUMENT STRUCTURE

* XHTML DOCTYPE is **mandatory**
* The XML namespace attribute in <html> is **mandatory**
* <html>, <head>, <title>, and <body> is **mandatory**

ELEMENT SYNTAX

* XHTML elements must be **properly nested**
* XHTML elements must always be **closed**
* XHTML elements must be in **lowercase**
* XHTML documents must have **one root element**

ATTRIBUTE SYNTAX

* XHTML attribute names must be in **lower case**
* XHTML attribute values must be **quoted**
* XHTML attribute minimization is **forbidden**

<!DOCTYPE ....> Is Mandatory

An XHTML document must have a XHTML DOCTYPE declaration.

A complete list of XHTML Doctypes is found in [W3Schools' Tags Reference](http://www.w3schools.com/tags/tag_doctype.asp).

The <html>, <head>, <title>, and <body> elements must also be present, and the xmlns attribute in <html>, must specify the xml namespace for the document.

The example below shows an XHTML document with a minimum of required tags:

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">  
  
<html xmlns="http://www.w3.org/1999/xhtml">  
  
<head>  
<title>Title of document</title>  
</head>  
  
<body>  
......   
</body>  
  
</html>

How to Convert from HTML to XHTML

1. Add an XHTML <!DOCTYPE> to the first line of every page
2. Add an xmlns attribute to the html element of every page
3. Change all element names to lowercase
4. Close all empty elements
5. Change all attribute names to lowercase
6. Quote all attribute values

Validate XHTML With The W3C Validator

Top of Form

Put your web address in the box below:





Bottom of Form

XHTML Quiz Test

The test contains 20 questions and there is no time limit.

The test is not official, it's just a nice way to see how much you know, or don't know, about XHTML.

You will get 1 point for each correct answer. At the end of the Quiz, your total score will be displayed. Maximum score is 20 points.

[Start the XHTML Quiz](http://www.w3schools.com/quiztest/quiztest.asp?qtest=XHTML)

XHTML - Elements

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XHTML elements are HTML elements written as XML

XHTML Elements - Syntax Rules

* XHTML elements must be **properly nested**
* XHTML elements must always be **closed**
* XHTML elements must be in **lowercase**
* XHTML documents must have **one root element**

XHTML Elements Must Be Properly Nested

In HTML, some elements can be improperly nested within each other, like this:

<b><i>This text is bold and italic</b></i>

In XHTML, all elements must be properly nested within each other, like this:

<b><i>This text is bold and italic</i></b>

XHTML Elements Must Always Be Closed

This is wrong:

<p>This is a paragraph  
<p>This is another paragraph

This is correct:

<p>This is a paragraph</p>  
<p>This is another paragraph</p>

Empty Elements Must Also Be Closed

This is wrong:

A break: <br>  
A horizontal rule: <hr>  
An image: <img src="happy.gif" alt="Happy face">

This is correct:

A break: <br />  
A horizontal rule: <hr />  
An image: <img src="happy.gif" alt="Happy face" />

XHTML Elements Must Be In Lower Case

This is wrong:

<BODY>  
<P>This is a paragraph</P>  
</BODY>

This is correct:

<body>  
<p>This is a paragraph</p>  
</body>

XHTML - Attributes

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XHTML attributes are HTML attributes written as XML

XHTML Attributes - Syntax Rules

* Attribute names must be in **lower case**
* Attribute values must be **quoted**
* Attribute minimization is **forbidden**

Attribute Names Must Be In Lower Case

This is wrong:

<table WIDTH="100%">

This is correct:

<table width="100%">

Attribute Values Must Be Quoted

This is wrong:

<table width=100%>

This is correct:

<table width="100%">

Attribute Minimization Is Forbidden

This is wrong:

<input checked>  
<input readonly>  
<input disabled>  
<option selected>

This is correct:

<input checked="checked" />  
<input readonly="readonly" />  
<input disabled="disabled" />  
<option selected="selected" />