

What Is XHTML?

- XHTML stands for **EX**tensible **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 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".

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**

XHTML Elements

- 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 Attributes

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

<!DOCTYPE> Is Mandatory

An XHTML document must have an XHTML DOCTYPE declaration.

A complete list of all the [XHTML Doctypes](#) is found in our HTML Tags Reference.

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>
```

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: 
```

This is correct:

```
A break: <br />  
A horizontal rule: <hr />  
An image: 
```

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>
```

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">
```
