**Difference between XHTML and HTML5**

**1.** [**XHTML**](https://www.geeksforgeeks.org/xhtml-introduction/)**:**

XHTML stands for Extensible Hypertext Markup Language. It can be considered as a part of the XML markup language this is because of XHTML have features of both XML and HTML. XHTML is extended from XML and HTML. XHTML can be considered as a better version of HTML.

**Advantages of XHTML:**

* Strict syntax: XHTML has a stricter syntax compared to HTML5, which means that it is more structured and easier to read.
* Standardization: XHTML follows the syntax rules of XML, which is a standardized markup language. This makes it easier to create interoperable web pages that work well with different web browsers and devices.
* Better for parsing: XHTML is easier to parse and process than HTML5, which makes it a better choice for developers who want to create web pages that can be easily processed by other software tools.

**Disadvantages of XHTML:**

* More difficult to code: XHTML has a stricter syntax compared to HTML5, which can make it more difficult to code.
* Not backward compatible: XHTML is not backward compatible with older versions of HTML, which means that some older web browsers may not be able to display XHTML documents properly.
* Requires more bandwidth: XHTML documents tend to require more bandwidth compared to HTML5 documents due to their stricter syntax and increased number of tags.

**2. HTML5:**

HTML is the Hypertext Markup Language which is the most widely used language over the internet. HTML is used to create web pages and link them from one to another. Please note HTML is not a [programming language](https://www.geeksforgeeks.org/introduction-to-programming-languages/), it is a markup language. We can use different other technologies as like CSS and [javascript](https://www.geeksforgeeks.org/javascript-tutorial/) to give a new look to the pages developed by HTML.

**Advantages of HTML5:**

* Easier to code: HTML5 has a more relaxed syntax compared to XHTML, which makes it easier to code.
* Backward compatibility: HTML5 is designed to be backward compatible with older versions of HTML, which means that it can be used with older web browsers.
* Multimedia support: HTML5 includes support for multimedia elements such as video and audio, which makes it easier to create web pages that include multimedia content.

**Disadvantages of HTML5:**

* Non-standardization: HTML5 is not a standardized markup language, which means that different web browsers may interpret it differently.
* Security issues: HTML5 includes new features such as geolocation and offline storage, which can create security vulnerabilities if not implemented properly.
* Incompatibility with older web browsers: Some older web browsers may not be able to display HTML5 documents properly, which can create compatibility issues for developers.

**Similarities between the two:**

* **Basic Structure:**  
  Both XHTML and HTML5 have the same basic structure, consisting of a head and a body. The head contains information about the document, such as the title and any scripts or stylesheets. The body contains the content that is displayed on the web page.
* **Semantics:**  
  Both XHTML and HTML5 use semantic markup, which means that the tags used to structure the content are meaningful and descriptive. This helps search engines and screen readers to understand the content and improve accessibility.
* **Browser Support:**  
  Both XHTML and HTML5 are supported by all modern web browsers. This means that web developers can choose either language and be confident that their pages will be displayed correctly in most browsers.
* **Separation of Content and Presentation:**  
  Both XHTML and HTML5 encourage the separation of content and presentation, which means that the content should be structured using semantic markup, while the presentation should be handled separately using CSS (Cascading Style Sheets).
* **Accessibility:**  
  Both XHTML and HTML5 prioritize accessibility and provide tools and techniques for creating accessible web pages. This includes using semantic markup, providing alternative text for images, and using ARIA (Accessible Rich Internet Applications) attributes to improve accessibility for screen readers and other assistive technologies.

**Difference between HTML and XHTML :**

| **S.No.** | **HTML** | **XHTML** |
| --- | --- | --- |
| 1. | HTML stands for Hypertext Markup Language. | XHTML stands for Extensible Hypertext Markup Language. |
| 2. | It was developed by Tim Berners-Lee. | It was developed by W3C i.e World Wide Web Consortium. |
| 3. | It was developed in 1991. | It was released in 2000. |
| 4. | It is extended from SGML. | It is extended from XML and HTML. |
| 5. | The format is a document file format. | The format is a markup language. |
| 6. | All tags and attributes are not necessarily to be in lower or upper case. | In this, every tag and attribute should be in lower case. |
| 7. | Doctype is not necessary to write at the top. | Doctype is very necessary to write at the top of the file. |
| 8. | It is not necessary to close the tags in the order they are opened. | It is necessary to close the tags in the order they are opened. |
| 9. | While using the attributes it is not necessary to mention quotes.  For e.g. <Geeks>. | While using the attributes it is mandatory to mention quotes.  For e.g. <Geeks=”GFG”>. |
| 10. | Filename extension used are .html, .htm. | Filename extension are .xhtml, .xht, .xml. |

**XTML CODE WITH MINIMUM REQUIRED TAGS:**

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"  
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
  <title>Title of document</title>  
</head>  
<body>  
  
  some content here...  
  
</body>  
</html>

## **XHTML Elements Must be Properly Nested**

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

### Correct:

<b><i>Some text</i></b>

### Wrong:

<b><i>Some text</b></i>

## **XHTML Elements Must Always be Closed**

In XHTML, elements must always be closed, like this:

### Correct:

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

### Wrong:

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

## **XHTML Empty Elements Must Always be Closed**

In XHTML, empty elements must always be closed, like this:

### Correct:

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

### Wrong:

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

## **XHTML Elements Must be in Lowercase**

In XHTML, element names must always be in lowercase, like this:

### Correct:

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

### Wrong:

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

## **XHTML Attribute Names Must be in Lowercase**

In XHTML, attribute names must always be in lowercase, like this:

### Correct:

<a href="https://www.w3schools.com/html/">Visit our HTML tutorial</a>

### Wrong:

<a HREF="https://www.w3schools.com/html/">Visit our HTML tutorial</a>

## **XHTML Attribute Values Must be Quoted**

In XHTML, attribute values must always be quoted, like this:

### Correct:

<a href="https://www.w3schools.com/html/">Visit our HTML tutorial</a>

### Wrong:

<a href=https://www.w3schools.com/html/>Visit our HTML tutorial</a>

## **XHTML Attribute Minimization is Forbidden**

In XHTML, attribute minimization is forbidden:

### Correct:

<input type="checkbox" name="vehicle" value="car" checked="checked" />  
<input type="text" name="lastname" disabled="disabled" />

### Wrong:

<input type="checkbox" name="vehicle" value="car" checked />  
<input type="text" name="lastname" disabled />

**Conclusion:**

 XHTML and HTML5 are two different markup languages used for creating web pages. XHTML is more structured and stricter than HTML5, and requires that all tags be properly closed and in lowercase. HTML5 is more forgiving of errors and allows for self-closing tags. XHTML requires a Document Type Declaration, while HTML5 does not. XHTML documents are validated using XML parsers, while HTML5 documents are validated using the HTML5 validator. HTML5 is designed to be backward-compatible with older versions of HTML, while XHTML is not.