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GUIDES 

HTML5 TO THE POINT

Quick solutions
to all your
HTML5 questions –
comprehensive
and to the point!

by **Scott DeLoach**

HTML 5 *to the point*

Scott DeLoach

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www.clickstart.net

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9 8 7 6 5 4 3 2 1

Printed and bound in the United States of America

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Introduction

This book was designed to help you find quick solutions to common HTML5 questions. The sections use a question-answer format, with a short description of the question, a visual example, and the HTML5 solution.

Icons used in this book

The following icons are used throughout this book to help you find important and time-saving information.

Icon	Meaning	Description
	Caution	Information about feature that may be removed from HTML5.
	Note	Additional information about a topic.
	Tip	A recommended best practice, shortcut, or workaround.

Updates

For the most up-to-date information about this book, see www.clickstart.net or www.html5tothepoint.com.

Overview

This section provides a focused, “to the point” overview of HTML5.

What is HTML5?

HTML5 is a new version of HTML4 and XHTML1 that also adds new APIs for Web applications. Other specifications, such as SVG, Geolocation, and WAI-ARIA, are often grouped with HTML5 even though they are not part of HTML5. This book also covers SVG, Geolocation, and WAI-ARIA so you can use them in your HTML5 documents.

The W3C started developing HTML5 in 2004. It is being developed as a joint effort between the W3C HTML Working Group and the Web Hypertext Application Technology Working Group (WHATWG).

Why did the W3C create HTML5?

According to the W3C, HTML5 “reflects an effort, started in 2004, to study contemporary HTML implementations and deployed content. The HTML5 draft:

- Defines a single language called HTML5 which can be written in HTML or XHTML syntax (or ‘serialization’).
- Defines detailed processing models to foster interoperable implementations.
- Improves markup for documents.
- Introduces markup and APIs for emerging idioms, such as Web applications.”

How did they select the new elements for HTML5?

Ian Hickson, the editor of the HTML 5 recommendation for WHATWG, analyzed over a billion web pages to determine the most commonly-used class names. Authors often use classes to tag blocks of content, such as headers, that have a specific purpose and/or require unique formatting. The top twenty class names were:

- footer
- menu
- title
- small
- text
- content
- header
- nav
- copyright
- button
- main
- search
- msonormal
- date
- smalltext
- body
- style1
- top
- white
- link

Some of these classes, such as “msonormal” (often created by Microsoft Office when you save an Office document as html), “smalltext,” “style1,” and “white,” are format-specific or meaningless.

The other classes match the new HTML5 elements as follows:

Class	HTML5 Element
footer	footer
menu	menu
title header top	header
small smalltext	small
text content main body	article
nav	nav

Class	HTML5 Element
copyright	none
search	none
date	date

Who is the editor of the HTML5 recommendation?

Ian Hickson (@hixie) is the editor of the HTML5 recommendation for the W3C. Dave Hyatt, the co-creator of Firefox, helped Ian Hickson develop the HTML5 recommendation.

Does HTML5 replace HTML4?

Yes.

HTML4 is very forgiving, but the code is often unorganized. HTML5 adds new structure elements such as section, article, and nav to help organize content.

Does HTML5 replace XHTML?

Yes.

The W3C has announced that they are no longer developing XHTML 2.

Which browsers support HTML5?

Currently, no browser provides complete support for HTML5.

For an up-to-date summary of browser support for HTML5's new elements, attributes, APIs, and other features, see any of the following sites:

- [en.wikipedia.org/wiki/Comparison_of_layout_engines_\(HTML_5\)](http://en.wikipedia.org/wiki/Comparison_of_layout_engines_(HTML_5))
- www.caniuse.com
- www.quirksmode.org/dom/html5.html

To test your browser's support for HTML5, see www.html5test.com.

Do mobile devices support HTML5?

iPhone/iPad, Android, and Palm Pre devices all support browsers that are based on the Webkit rendering engine, which supports HTML5.

For more information about using HTML5 on mobile devices or developing HTML5 applications for mobile applications, see Ian Sefferman's website www.mobilehtml5.com.

How can I emulate mobile devices for testing?

You can use Safari to see how your page will appear in mobile devices or other browsers.

1. Open Safari.
2. Select Edit > Preferences > Advanced.
3. Select the Show Develop menu in toolbar checkbox.
4. Select Develop > User Agent.

TIP ▶ *To mimic the iPhone, set the maximum width of your document to 480px and use the Helvetica font.*

Can I make HTML5 work in older browsers?

Older browsers may not support XHTML, so you should use the HTML syntax. You will also need to provide style definitions for the new elements in HTML5.

Example

```
article,aside,canvas,details,figcaption,figure,footer,header,hgroup,menu,nav,section,summary { display: block; }
```

Can I make HTML5 work with Internet Explorer?

Yes!

Remy Sharp has written a JavaScript that you can use to make HTML5 elements work in Internet Explorer 8 and below. See www.remysharp.com/2009/01/07/html5-enabling-script.

What does HTML5's syntax look like?

There are two syntaxes that can be used to for HTML5 documents: HTML-based syntax and XHTML-based syntax.

To use HTML syntax, you should include the DOCTYPE declaration (case insensitive).

Example HTML Syntax

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>... </body>
</html>
```

To use XHTML syntax, you must specify the XML namespace for the html element. The DOCTYPE declaration is optional. If you include it, "DOCTYPE" must be uppercase. "html" is case insensitive.

Example XHTML Syntax

```
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>...</head>
  <body>... </body>
</html>
```

What are the advantages of using HTML syntax?

The HTML syntax has the following advantages:

- It's backward compatible with existing browsers
- More authors are familiar with HTML than XHTML syntax
- You can omit some tags and attribute values

Since the HTML-based syntax is more forgiving and better supported by browsers, it's a safe choice until support for HTML5 is more widespread.

What are the advantages of using XHTML syntax?

The XHTML syntax has the following advantages:

- It requires well-formed markup, which is easier to maintain
- It integrates directly with SVG and MathML

The downside of using the XHTML syntax is that all of your code has to be written correctly. If you make one mistake in a XHTML-based document, it will not display.

What is the HTML5 DOCTYPE declaration?

HTML5's DOCTYPE declaration is:

```
<!DOCTYPE html>
```

For HTML5 using HTML syntax, the DOCTYPE is not case sensitive, but it is usually written as capitalized above. If a browser or web server requires a DOCTYPE, you can use:

```
<!DOCTYPE html SYSTEM "about:legacy-compat">
```

The capitalization must match the example, and you must use double quotes.

For HTML5 using XHTML syntax, the DOCTYPE is optional and case sensitive. If you include it, it triggers “no-quirks” mode.

If a browser or webserver requires a DOCTYPE, you can use:

```
<!DOCTYPE html SYSTEM 'about:legacy-compat'>
```

The capitalization must match the example, and you must use single quotes. The quotes are used to distinguish between HTML and XHTML syntax.

What is quirks mode?

There are three rendering modes in HTML5: the default no quirks mode (aka “standards” or “strict” mode), limited quirks mode (aka “almost standards” mode), and quirks mode. Quirks mode is used to provide backwards compatibility with older browsers. Since browsers provide widely varying support for standards, quirks mode produces different results in each browser. The browsers even use different names for the modes!

If you use the `<!DOCTYPE html>` declaration, the browser will use “no quirks” mode. If you do not use a DOCTYPE declaration, older browsers will use quirks mode.

For a detailed discussion of rendering modes and their differences, see Henri Sivonen’s website at hsivonen.iki.fi/doctype.

Should I close empty elements?

HTML5’s HTML-based syntax does not require you to close empty or ‘void’ elements such as `input`, `br`, and `img`. So, `
` and `
` are both valid. If you are using the XHTML-based syntax, you should to close empty elements because it is required in XHTML.

Does WordPress support HTML5?

Yes.

There are many HTML5 WordPress themes available at www.socialblogr.com/2010/03/8-free-html5-wordpress-themes.html and digwp.com/2009/07/free-html-5-wordpress-theme.

Can I use MathML with HTML5?

Yes, but browsers currently provide very limited support for MathML.

A good test of MathML support in your browser can be found at eyeasme.com/Joe/MathML/HTML5_MathML_browser_test.html