What is MultiMarkdown?

And why should you care?

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http://fletcherpenney.net/multimarkdown/

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MultiMarkdown is a derivative of Markdown

Markdown[1] is a program and a syntax by John Gruber that allows you to easily convert plain text into HTML suitable for using on a web page.

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[1] http://daringfireball.net/projects/markdown/

The old way was complicated

```
<p>In order to create valid
<a href="http://en.wikipedia.org/wiki/HTML">HTML</a>, you
need properly coded syntax that can be cumbersome for
&#8220;non-programmers&#8221; to write. Sometimes, you
just want to easily make certain words <strong>bold
</strong>, and certain words <em>italicized</em> without
having to remember the syntax. Additionally, for example,
creating lists:</p>

<ul>
<li>should be easy</li>
<li>should not involve programming</li>
</ul>
```

The new way is easier

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coded syntax that can be cumbersome for
"non-programmers" to write. Sometimes, you just want
to easily make certain words **bold**, and certain
words *italicized* without having to remember the
syntax. Additionally, for example, creating lists:

* should be easy
* should not involve programming

[HTML]: http://en.wikipedia.org/wiki/HTML

Markdown is designed for people

The overriding design goal for Markdown's formatting syntax is to make it as readable as possible. The idea is that a Markdown-formatted document should be publishable as-is, as plain text, without looking like it's been marked up with tags or formatting instructions. While Markdown's syntax has been influenced by several existing text-to-HTML filters, the single biggest source of inspiration for Markdown's syntax is the format of plain text email. [1]

But Markdown wasn't complete

I, and others, loved the spirit and elegance of Markdown, but felt it was still missing a few features that each of us considered were essential. Several variations on Markdown arose to meet the needs of these other programmers.

MultiMarkdown adds several new features

- footnotes
- tables
- citations and bibliography
- image attributes
- metadata
- internal cross-references
- ASCIIMathML support
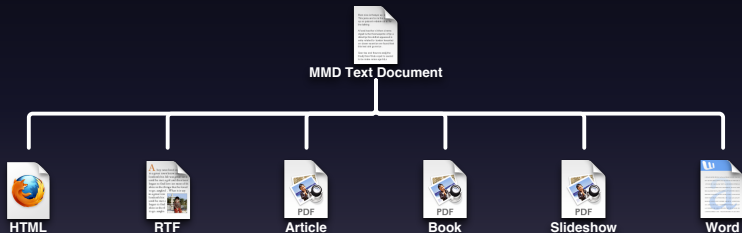- glossary entries
- definition lists
- and more...

MMD also adds something else. . .

- Outside of the actual syntax, MMD supports the use of XSLT[2] to convert the XHTML output into something else, e.g. LaTeX[3].
- This allows you to use the same markup language (MultiMarkdown) to create a high quality pdf (article, book, or presentation like this one) without any additional programming.
- Most importantly, you don't have to know how this works, or even what it means!

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[2]http://en.wikipedia.org/wiki/XSL_Transformations
[3]http://en.wikipedia.org/wiki/LaTeX

So, one text file becomes multiple final documents

MMD Text Document

HTML   RTF   Article   Book   Slideshow   Word

The goal is to separate content from formatting

By focusing on the text content of your document, you can focus on the creative, the scientific, the *human*. Let your computer do what it is good at — the fairly boring job of making sure that margins are correct, that paragraphs are properly separated, your footnotes are in order, and that your tables line up — regardless of the final format you want your document to take.

ASCIIMathML — it's like Markdown for mathematics

Built into MultiMarkdown is support for ASCIIMathML[4] — a tool that allows you to write mathematical equations in plain text, yet produce high quality output. It can be used for web pages (if your browser supports MathML), or for LaTeX.

```
<< e^(i pi) + 1 = 0 >>
```

becomes

$$e^{i\pi} + 1 = 0 \tag{1}$$

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[4] http://asciimathml.sourceforge.net/
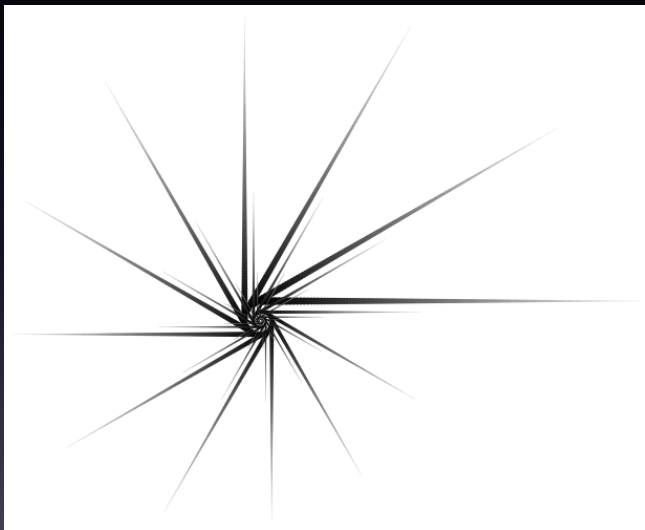
Images are just as easy

```
![Nautilus Star](Nautilus_Star.png)
```

becomes…

Images are just as easy

Support for a bibliography is also included

- MultiMarkdown has support for BibTeX[5], or for just including your own citations, so that you can back up your arguments. [2, p. 42]
- The citation above links to the corresponding entry in the bibliography.

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[5]http://www.bibtex.org/

Installation is easy

- Download the MultiMarkdown software.
- If you want to use LaTeX, install a version appropriate for your operating system.
- If you're running Windows you will need to install Perl. If you want to use LaTeX or the more advanced XHTML XSLT files, you need to install xsltproc. These are included in Mac OS X, and default installs of most Linux distributions.

More complete instructions are available at the MultiMarkdown site[6].

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[6]http://fletcherpenney.net/mmd/users_guide/quickstart_guide_to_multimarkd/

How do I create a MultiMarkdown document?

- A MultiMarkdown is simply a text document that is written in the MultiMarkdown syntax. You can use any text editor or application you like. If your editor supports fonts, italics, etc. then be sure to save as a plain text file (not a .doc, RTF, or other "rich" format).

- Some applications include built-in support for MultiMarkdown in various ways. There's a bundle[7] for TextMate[8], and Scrivener[9] includes MultiMarkdown support.

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[7]http://fletcher.github.com/markdown.tmbundle/
[8]http://macromates.com/
[9]http://www.literatureandlatte.com/scrivener.html

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Why should I mess with this LaTeX stuff?

MultiMarkdown's support for LaTeX is designed to automatically do the "right" thing in most situations for most people. But if you want to dig in and learn more, you can customize MMD to create highly tailored documents that suit your specific needs. If you want high quality typography, LaTeX is the way to go.

If you already know what LaTeX is, then MultiMarkdown allows you to create documents without learning all of the complicate LaTeX commands and markup.

How do I create a fancy PDF?

If you're using LaTeX, and have the proper software installed it's easy:

1. Type `mmd2pdf filename.txt`
2. There is no step 2

Where to learn more

- `http://fletcherpenney.net/multimarkdown/`
- `http://groups.google.com/group/multimarkdown/`
- `http://fletcher.github.com/MultiMarkdown-Gallery/`

By the way...

This presentation was, of course, written in MultiMarkdown and processed by typing `mmd2pdf what_is_mmd.txt`.

It uses the `beamer` XSLT file, and the `keynote-gradient` beamer theme.

Bibliography I

📄 John Gruber. Daring Fireball: Markdown. [Cited January 2006]. Available from `http://daringfireball.net/projects/markdown/`.

📄 John Doe. *A Totally Fake Book*. Vanity Press, 2006.