markdown-memo example document:

make writing easier and more productive

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November 1, 2017

This is an example document discussing and demonstrating how to use the markdown-memo package, meant to aid quick development of quality html and pdf documents from simple Markdown markup. Markdown-memo is developed by Ryan Reece at https://github.com/rreece/markdown-memo.

Keywords: academic writing, blogging, digital humanities, LaTeX, Markdown, open publishing, open science, productivity, technical writing, typesetting, writing

Contents

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1 Introduction

1.1 What this is for

This project is meant to make writing easier and more productive.

So you want to write a document. Maybe you'll share it on the web. Maybe you want a polished pdf. Maybe it's a blog, research paper, book draft, or just a set of notes. You *don't* want to think about typesetting details. You just want to throw your ideas in some plain text files and call `make`.

This package makes it very easy to compile text taken in Markdown to valid xhtml or to a pdf via LaTeX. It can be used to make simple webpages quickly, for example (this site):
http://rreece.github.io/sw/markdown-memo/

This same document compiled to a pdf can be found here:
http://rreece.github.io/sw/markdown-memo/example.pdf

1.2 How it works

Markdown is a very simple markup language for writing documents that basically looks as if you were to write your ideas in a plain-text email. In this package, we aim to hide some of the boiler-plate issues of compiling a completely formatted document or webpage from Markdown, trying to make it as trivial as possible to get your ideas out.

Most of the heavy-lifting work underneath markdown-memo is done by the pandoc program, which does the actual compilation of Markdown to html or pdf.

Most of the magic in the implementation of markdown-memo is in its Makefile, which basically calls pandoc in various useful configurations and applies some hacks to the output using the tools in `scripts/`.

Keep content and style separated.

The idea is that all user *content* should be in plainly written `*.md` files and one metadata file: `meta.yaml`. All *stylistic* issues should be implemented in the details of the files in `templates/` and configurable through `meta.yaml`, and unless you want to, you shouldn't have to worry about them.

For example, **see what changes** when this document is created with

```
css: 'templates/markdown-memo-alt.css'
```

set in `meta.yaml`, instead of the css file used in the **default version**:

```
css: 'templates/markdown-memo.css'
```

2 Getting started

2.1 Checking-out the template

Check out markdown-memo with a simple git command, like:

```
git clone https://github.com/rreece/markdown-memo.git
```

Some basic instructions are given in the README.md. They are expanded on here.

Basically, once you have cloned markdown-memo, if you satisfy its requirements you should be able to call `make` and receive reasonable html output, and call `make pdf` and receive a reasonable pdf.

Feel free to rename markdown-memo as whatever is suitable to your project, and delete the example `*.md` files.

2.2 Requirements

- make
- LaTeX (texlive/mactex)
- python
- pandoc
- pandoc-citeproc
- pandoc-crossref
- matplotlib (for pagecount and wordcount plots)
- xpdf (pdfinfo command for pagecount)

On my Mac, I used to install the missing dependencies through macports, but beginning with OS 10.11, I started using homebrew.

First, if you are on a Mac, you should install Xcode through the Apple app store to get `make` and basic build utilities.

Some basic requirements I had to install with *homebrew* were the following, and I got pip and used it to install somethings:

```
brew install wget
brew install xpdf
sudo python get-pip.py
sudo pip install scipy
sudo pip install matplotlib
sudo pip install pandas
```

Then, with *homebrew*, the main packages to install are

```
brew cask install mactex
brew install pandoc
brew install pandoc-citeproc
brew install pandoc-crossref
```

Instead of homebrew, some years ago, with *macports* I installed

```
sudo port selfupdate
sudo port install texlive-latex texlive-latex-recommended texlive-latex-extra texlive-math-extra
sudo port install pandoc
sudo port install hs-cabal-install
cabal update
cabal install pandoc-citeproc pandoc-crossref
```

If something doesn't work for you, please let me know! I'll do my best improve the documentation and make the software more robust as time allows. Contact me at:

Please let me know if you have success or failure testing this on different systems.

2.3 Starting a page or section

Just open or create a first `md` file in that directory like `01-introduction.md`, and start typing. Each file should probably correspond to a webpage or section in the document, and in that case, it should begin with an `h1`-level heading (section), denoted with a double-rule of equal-signs, like:

```
Section title
==========================================================================
```

Or marked like this:

```
# Section title
```

Then you can have sub-sections as you wish, and/or just start typing the main text. There's no need for additional markup or html.

You can delete the example `*.md` files within this template when beginning your project.

2.4 Going from there

The following sections of this example document will show examples of Markdown syntax. For now, briefly, some examples of Markdown syntax are

```
Section 1
================================

Sub-section 1
--------------------------------

[Lorem ipsum](https://en.wikipedia.org/wiki/Lorem_ipsum)
dolor sit amet, duo ut putant verear, nam ut brute utroque.
Officiis qualisque conceptam te duo, eu vim soluta numquam, has ut aliquip
accusamus. Probo aliquam pri id. Mutat singulis ad vis, eam euismod pertinax
an, ea tale volumus vel. At porro soleat est. Debet facilis admodum an sed,
at falli feugiat est.

1.  one
1.  two
1.  three

You can do latex in-line, $e^{i\pi} + 1 = 0$, like that.
Or equations:

\begin{equation}
    \int_{\partial\Omega} \omega = \int_{\Omega} \mathrm{d}\omega \,.
\end{equation}
```

2.5 Building your document

In addition to writing the basic `md` files for your project, you need to write a metadata file: `meta.yaml`. See the example metadata there.

Then you can build your document. A lot of the inner-workings of markdown-memo are done in the `Makefile`.

- Call `make` or `make html` to generate valid xhtml. For example, this document.
- Call `make pdf` to generate a pdf document. For example, this document.
- Call `make clean` to delete temporary LaTeX files.
- Call `make realclean` to additionally delete the output html and pdf files.

I use an image of my email to hide it from text crawlers. Please replace `img/my-email.png` with a screenshot of your email address instead of mine, or just remove the use of the image in `meta.yaml`.

Customize the files in `templates/` to adjust the format of the output html and pdfs files to your needs.

3 Markdown basics

Here we review the basics of Markdown. A further reference on Markdown syntax by its creator is here.

3.1 Sections

Are markded like this:

```
Section title {#sec:put-section-label-here}
================================================================================

Sub-section title
--------------------------------------------------------------------------------
```

Or marked like this:

```
# Section title {#sec:put-section-label-here}

## Sub-section title

### Sub-sub-section title

Main text here.
```

Note the examples of labeling a section in braces with `#`, as shown above. This allows one to refer to labels in the text like:

```
The next section, [@sec:lists], is about lists.
```

The next section, Section 3.2, is about lists.

3.2 Lists

Unnumbered lists like this:

```
-   Galileo Galilei
-   Robert G. Ingersoll
-   Jill Tarter
```

- Galileo Galilei
- Robert G. Ingersoll
- Jill Tarter

Numbered lists like this:

```
1.  Na&iuml;ve realists
1.  Scientific realists
1.  Constructive empiricists
1.  Positivists
1.  Relativists
```

1. Naïve realists
2. Scientific realists
3. Constructive empiricists
4. Positivists
5. Relativists

3.3 Blocks

The following is a **quote block**.

```
>   It ain't what you don't know that gets you into trouble.
>   It's what you know for sure that just ain't so.

-- Mark Twain
```

> It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.

– Mark Twain

A **code block** (used throughout these examples) is just indented with 4 spaces, like this:

```
    def bubble_sort(alist):
        exchanges = True
        passnum = len(alist)-1
        while passnum > 0 and exchanges:
           exchanges = False
           for i in range(passnum):
               if alist[i]>alist[i+1]:
                   exchanges = True
                   temp = alist[i]
                   alist[i] = alist[i+1]
                   alist[i+1] = temp
           passnum = passnum-1

    alist=[20,30,40,90,50,60,70,80,100,110]
    bubble_sort(alist)
    print(alist)
```

which makes:

```
def bubble_sort(alist):
    exchanges = True
    passnum = len(alist)-1
    while passnum > 0 and exchanges:
       exchanges = False
       for i in range(passnum):
           if alist[i]>alist[i+1]:
```

```
                exchanges = True
                temp = alist[i]
                alist[i] = alist[i+1]
                alist[i+1] = temp
        passnum = passnum-1

alist=[20,30,40,90,50,60,70,80,100,110]
bubble_sort(alist)
print(alist)
```

Maybe you want to refer to **code inline** like this with backticks:

```
Here's some inline code: `vec.push_back(3.14)`.
```

Here's some inline code: `vec.push_back(3.14)`.

For poems and the like where you want **linebreaks taken literally**, prepend lines with `|` and a single space. Additional spaces can be used, but will indent the output.

```
| Art is long,
| Life is short,
| Opportunity fleeting,
| Experiment dangerous,
| Judgment difficult.
```

Art is long,
Life is short,
Opportunity fleeting,
Experiment dangerous,
Judgment difficult.

Otherwise, one can put two or more spaces at the end of a line of Markdown for the linebreak to be taken literally
like
this.

A **horizontal rule** can be made by just writing some number of dashes:

```
--------------------------------------------------
```

Boom.

3.4 Fonts

```
-   *This is emphasis.*
-   **This is bold.**
-   _This is also emphasis._
-   __This is also bold.__
-   _This is emphasis **and** bold._
-   __This is bold *and* emphasis.__
-   ~~This is struck-out.~~
```

produces:

- *This is emphasis.*
- **This is bold.**
- *This is also emphasis.*
- **This is also bold.**
- *This is emphasis* ***and*** *bold.*
- **This is bold *and* emphasis.**
- ~~This is struck-out.~~

Don't do this. These will work in LaTeX (LaTeX) but may not in html.

```
-   \textsf{This should be Sans.}
-   \textsc{This Should BE SMALL caps.}
-   $\textsf{This works though!}$
-   $\textsc{But this does not!}$
```

produces:

- This should be Sans.
- This Should BE SMALL caps.
- This works though!
- But this does not!

3.5 Links and labels

URLs are done like this:

```
[Lorem ipsum](https://en.wikipedia.org/wiki/Lorem_ipsum)
```

Lorem ipsum

When referring to labeled sections/figures/tables, you do not include the literal word "Section", "Figure", or "Table", which will be included for you. These prefixes/words are configurable in the `meta.yaml` file.

Refer to labeled things like this:

- for sections: `[@sec:footnotes]`
  Section 3.6
- for figures: `[@fig:scientific_universe]`
- for tables: `[@tbl:atlas_channels]`
- for equations: `[@eq:stokes]`

You can refer to multiple lables like Section 3.1, 3.2, 3.3 like this:

```
[@sec:sections;@sec:lists;@sec:blocks]
```

Automatic grouping into a range doesn't seem to be working, so you can also try refer to Section 3.1–Section 3.3 in some versions like this:

```
[Sections @sec:sections]--[-@sec:blocks]
```

3.6 Footnotes

```
Here's how you do a footnote[^SomeSpecialNote].

[^SomeSpecialNote]: Lorem ipsum dolor sit amet, duo ut putant verear, nam ut brute utroque.
    Officiis qualisque conceptam te duo, eu vim soluta numquam, has ut aliquip
    accusamus. Probo aliquam pri id. Mutat singulis ad vis, eam euismod pertinax
    an, ea tale volumus vel. At porro soleat est. Debet facilis admodum an sed,
    at falli feugiat est.
```

produces:

Here's how you do a footnote[1].

4 Bibliographies

4.1 Making a bibliography

Markdown-memo uses bibtex via pandoc to generate a bibliography for your document. We've made this even simpler by allowing the user to create a simple text file to generate the necessary bibtex `.bib` file using the `markdown2bib` script. Markdown-memo looks for

[1] Lorem ipsum dolor sit amet, duo ut putant verear, nam ut brute utroque. Officiis qualisque conceptam te duo, eu vim soluta numquam, has ut aliquip accusamus. Probo aliquam pri id. Mutat singulis ad vis, eam euismod pertinax an, ea tale volumus vel. At porro soleat est. Debet facilis admodum an sed, at falli feugiat est.

any `bibs/*.txt` files and uses `markdown2bib` to combine them and create `bibs/mybib.bib` in bibtex format. This is later used by pandoc when creating tex → pdf or html.

The `bibs/*.txt` should be plain text with a single reference per line, with each reference in a style that loosely follows the American Psychological Association (APA), which is commonly used in humanities. Currently four types of references are supported: `article`, `book`, `incollection`, and `misc`. The journal or book titles need to be in markdown-style *emphasis*, meaning `*Set Within Asterixis*`. Also note that for works in a collection, you need to use the word "`In`" in the right place, like in the reference by Quine below. The rest of the syntax tries to be forgiving. If you want to add a `note` to appear at the end of the reference, put it at the end within [square brackets] like the work by Plato below.

For example, the `mybib.txt` file in this document is

```
ATLAS Collaboration. (2008). The ATLAS Experiment at the CERN Large Hadron Collider. *Journal of Instrumentatio
ATLAS Collaboration. (2012). Observation of a new particle in the search for the Standard Model Higgs boson wit
Feynman, R.P. (1963). *The Feynman Lectures on Physics, Volume I*. California Institute of Technology. http://w
Feynman, R.P. (1965). The Development of the Space-Time View of Quantum Electrodynamics. Nobel Lecture, Decembe
Guest, D., Collado, J., Baldi, P., Hsu, S. C., Urban, G., & Whiteson, D. (2016). Jet flavor classification in h
Miller, A. (2014). Realism. *Stanford Encyclopedia of Philosophy*. http://plato.stanford.edu/entries/realism/
Plato. (2000). *The Republic*. (G. Ferrari, Ed. & T. Griffith, Trans.). Cambridge University Press. [(Originall
Quine, W.V.O. (1969). Natural kinds. In *Ontological Relativity and Other Essays* (pp. 114--138). Columbia Univ
van Fraassen, B. (1980). *The Scientific Image*. Oxford University Press.
```

If you do not want to use simplified txt files to generate bibtex, and you want to write your own bibtex, then simply remove any `bibs/*.txt` files and write a file called `bibs/mybib.bib`.

If you do not need a bibliography, set

```
dorefs: false
```

in `meta.yaml`, and then these scripts and programs are not run.

4.2 Doing citations

Citations start with an `@`-sign, and can be used inline, like:

```
@Miller_2014_Realism argues that we should get real.
```

which produces:

Miller (2014) argues that we should get real.

Inside a caption, you may want to end it with the citation in parentheses like this:

```
Blah blah blah [@Feynman_1963_The_Feynman_Lectures_on_Physics_Volume_I]\.
```

which produces:

Blah blah blah (Feynman, 1963).

Typically, I find it better to leave citations[2] in footnotes to keep from cluttering the main text. Let's try citing various kinds of references. Feynman said some important things[3]. But everything is a footnote to Plato[4]. Van[5] is a cool cat too. A reference with more than 4 authors should be automatically shortened with *et al.*[6]

In order for a References section to be generated per html page, you need to add a special html comment near the end of your Markdown file for that page:

```
<!-- REFERENCES -->
```

Pages without such a comment will not get an automatic References section, but the complete pdf document will automatically still have a complete References section at the end as long as

```
dorefs: true
```

is set in `meta.yaml`.

5 Mathematical expressions

5.1 Typesetting math

You can do latex inline like this:

```
Euler's formula is remarkable: $e^{i\pi} + 1 = 0$.
```

Euler's formula is remarkable: $e^{i\pi} + 1 = 0$.

You can use `$$` to make an equation block like this:

```
$$ \frac{\partial \rho}{\partial t} + \nabla \cdot \vec{j} = 0 \,. \label{eq:continuity} $$
```

$$\frac{\partial \rho}{\partial t} + \nabla \cdot \vec{j} = 0 \,.$$

[2] Quine (1969).
[3] Feynman (1965).
[4] Plato (2000).
[5] van Fraassen (1980).
[6] Guest, D. *et al.* (2016).

The latex equation environment can be used directly. Stokes' theorem is pretty cool:

```
\begin{equation} \label{eq:stokes}
    \int_{\partial\Omega} \omega = \int_{\Omega} \mathrm{d}\omega \,.
\end{equation}
```

$$\int_{\partial\Omega} \omega = \int_{\Omega} \mathrm{d}\omega \,. \tag{1}$$

You can also refer to labeled equations, such as eq. (1), with the syntax:

```
... such as [@eq:stokes],
```

The `align` environment can also be used. Maxwell's equations, eq. (2), are also tough to beat:

```
\begin{align}
    \nabla \cdot  \vec{E} &= \rho \nonumber \\
    \nabla \cdot  \vec{B} &= 0    \nonumber \\
    \nabla \times \vec{E} &= - \frac{\partial \vec{B}}{\partial t} \label{eq:maxwell} \\
    \nabla \times \vec{B} &= \vec{j} + \frac{\partial \vec{E}}{\partial t} \nonumber \,.
\end{align}
```

$$\begin{aligned}
\nabla \cdot \vec{E} &= \rho \\
\nabla \cdot \vec{B} &= 0 \\
\nabla \times \vec{E} &= -\frac{\partial \vec{B}}{\partial t} \\
\nabla \times \vec{B} &= \vec{j} + \frac{\partial \vec{E}}{\partial t} \,.
\end{aligned} \tag{2}$$

5.2 Mathjax

When doing md → tex → pdf, LaTeX takes care of the math, but to render the math in html, we use MathJax. Our html template includes the following code to ask MathJax to render it and number the equations:

```
<!--- MathJax stuff -->
<script src='https://cdn.mathjax.org/mathjax/latest/MathJax.js?config=TeX-AMS-MML_HTMLorMML'></script>
<script type="text/x-mathjax-config">
    MathJax.Hub.Config({ TeX: { equationNumbers: {autoNumber: "all"} } });
</script>
```

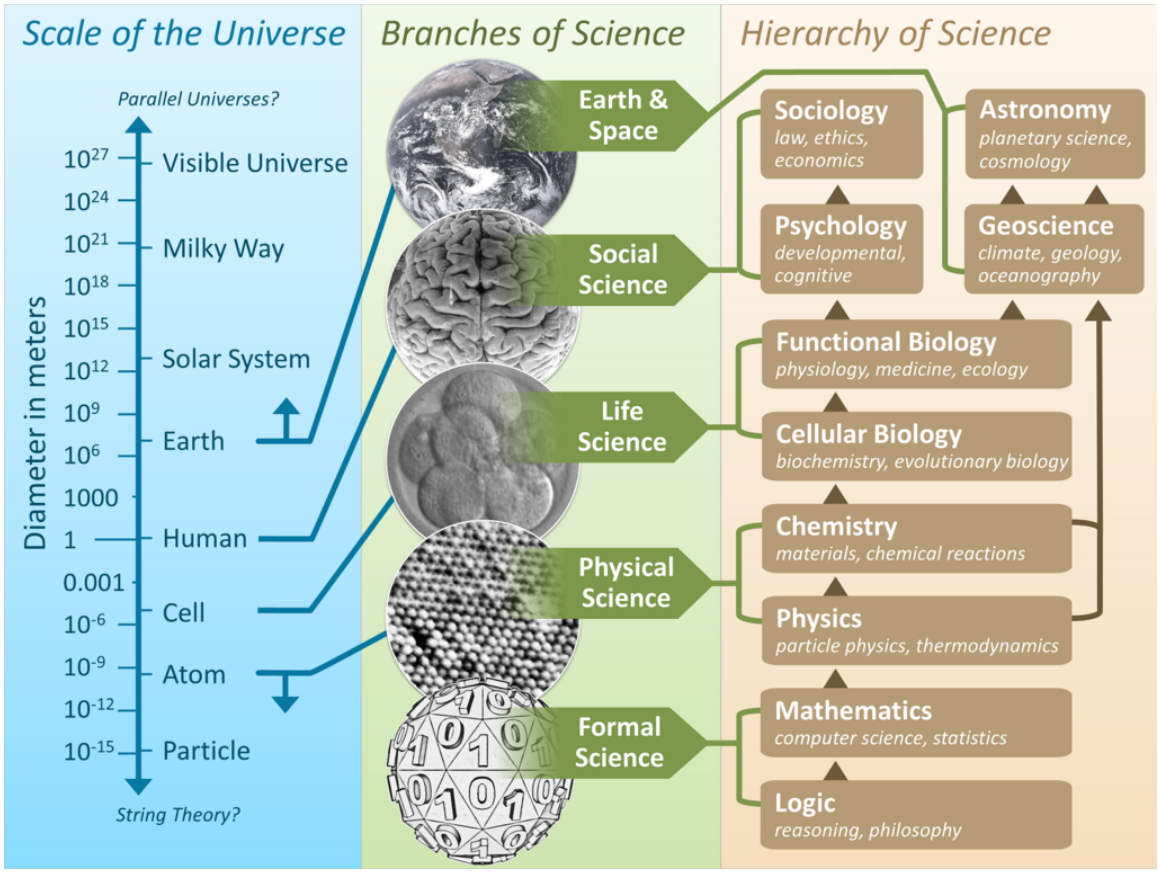

Figure 1: The scale of the universe mapped to the branches of science and the hierarchy of science. CC BY-SA 3.0 (2013) Wikimedia Commons.

6 Floats, Figures, and Tables

6.1 Figures

To add a figure, use the following basic syntax:

```
![caption](img/image-path.png){#fig:scientific_universe}
```

For example,

```
![The scale of the universe mapped to the branches of science and the hierarchy
    of science. CC BY-SA 3.0 (2013) [Wikimedia Commons](https://en.wikipedia.org/wiki/Science#/media/File:The_S
    ](img/1024px-the_scientific_universe.png){#fig:scientific_universe}
```

produces:

Figure 1 shows some cool things.

Lorem ipsum dolor sit amet, duo ut putant verear, nam ut brute utroque. Officiis qualisque conceptam te duo, eu vim soluta numquam, has ut aliquip accusamus. Probo aliquam pri id. Mutat singulis ad vis, eam euismod pertinax an, ea tale volumus vel. At porro soleat est. Debet facilis admodum an sed, at falli feugiat est.

Ne nonumy quodsi petentium vix, mel ad errem accusata periculis. Porro urbanitas consetetur mei eu, his nisl officiis ei. Ei cum fugit graece, ne qui tantas qualisque voluptaria. Vis ut laoreet euripidis, vix aeque omittam at, vix no cetero volumus. Per te omnium volutpat torquatos, cu vis sumo decore. Eirmod hendrerit an pri.

Another example:

```
![The observed (solid) local $p_{0}$ as a function of $m_{H}$ in the low mass range.
    The dashed curve shows the expected local $p_{0}$ under the hypothesis of a
    SM Higgs boson signal at that mass with its $\pm{}1\sigma$ band.
    The horizontal dashed lines indicate the $p$-values corresponding to significances
    of 1 to 6$\sigma$\ [@ATLAS_2012_Observation_of_a_new_particle_in_the_search]\.
    ](img/ATLAS-local-p0-vs-mH.png){#fig:ATLAS_local_p0_vs_mH}
```

produces:

You can refer to labeled figuers like this:

```
[@fig:ATLAS_local_p0_vs_mH] shows the $p_{0}$ value as a function of the reconstructed
Higgs mass from the ATLAS experiment.
```

Figure 2 shows the p_0 value as a function of the reconstructed Higgs mass from the ATLAS experiment.

6.2 Tables

The basic syntax for a table is:

```
Table: Approximate number of readout channels per sub-detector in ATLAS for the primary sub-detectors (ignoring

| System                | Subsystem     |  Approx. channels |
|:----------------------|:--------------|------------------:|
| Inner detector        | Pixels        |              80 M |
|                       | SCT           |             6.3 M |
|                       | TRT           |             350 k |
| EM Calorimeter        | LAr barrel    |             110 k |
|                       | LAr end-cap   |              64 k |
| Hadronic Calorimeter  | Tile barrel   |             9.8 k |
|                       | LAr end-cap   |             5.6 k |
|                       | LAr forward   |             3.5 k |
| Muon spectrometer     | MDTs          |             350 k |
|                       | CSCs          |              31 k |
|                       | RPCs          |             370 k |
|                       | TGCs          |             320 k |
| Total                 |               |              88 M |
```

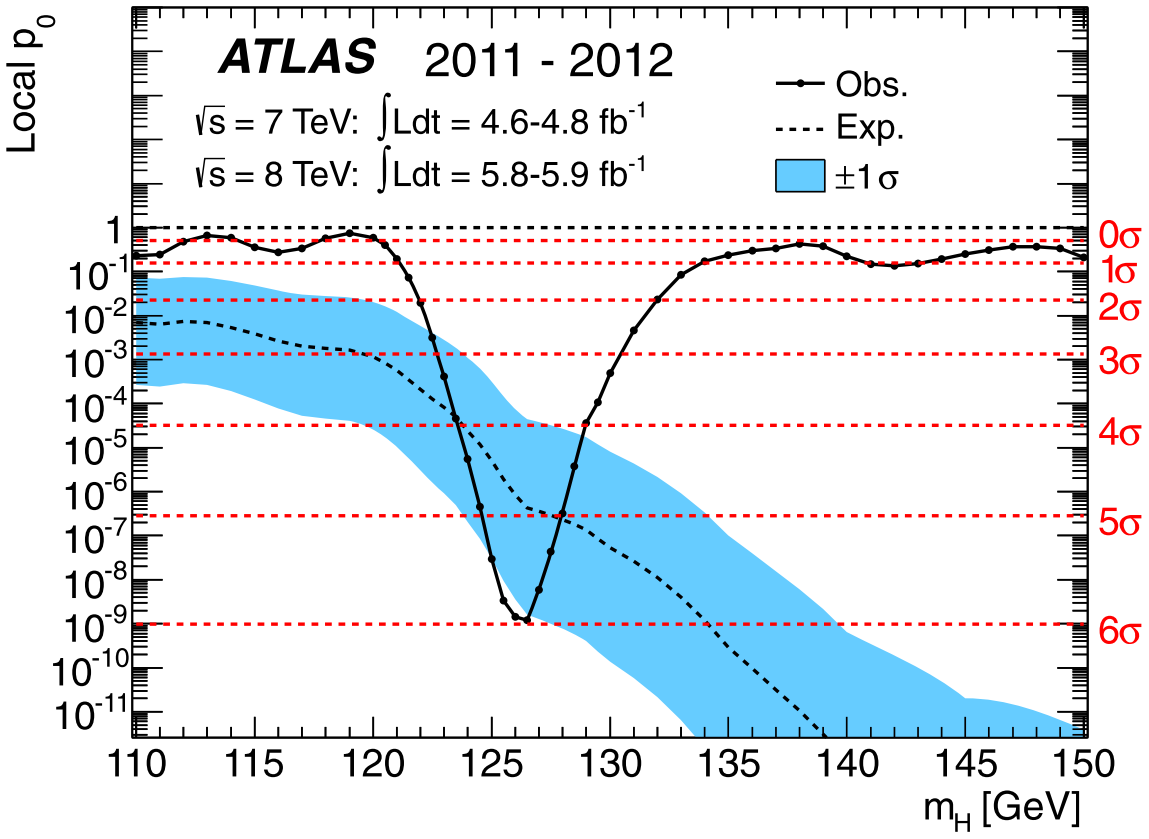

Figure 2: The observed (solid) local p_0 as a function of m_H in the low mass range. The dashed curve shows the expected local p_0 under the hypothesis of a SM Higgs boson signal at that mass with its $\pm 1\sigma$ band. The horizontal dashed lines indicate the p-values corresponding to significances of 1 to 6σ (ATLAS Collaboration, 2012).

which produces:

Table 1: Approximate number of readout channels per sub-detector in ATLAS for the primary sub-detectors (ignoring the minbias trigger system, luminosity monitors, and DCS sensors) (ATLAS Collaboration, 2008).

System	Subsystem	Approx. channels
Inner detector	Pixels	80 M
	SCT	6.3 M
	TRT	350 k
EM Calorimeter	LAr barrel	110 k
	LAr end-cap	64 k
Hadronic Calorimeter	Tile barrel	9.8 k
	LAr end-cap	5.6 k
	LAr forward	3.5 k
Muon spectrometer	MDTs	350 k
	CSCs	31 k
	RPCs	370 k
	TGCs	320 k
Total		88 M

Refer to tables like this:

```
[@tbl:atlas_channels] shows some cool things too.
```

Table 1 shows some cool things too.

6.3 Table of contents per html page

To insert a table of contents for a single html page, add the following line to the Markdown, probably near the top of the page as is done for this one.

```
<!-- PAGETOC -->
```

6.4 Clickmore

You can hide parts of a document in a heading that needs to be clicked to show more by making a `div` of class `clickmore` and a `div` of class `more`, linked to eachother like this:

```
<div class="clickmore"><a id="link:test1" class="closed" onclick="toggle_more('test1')">Click for more details<
<div id="test1" class="more">

Ne nonumy quodsi petentium vix, mel ad errem accusata periculis. Porro
```

```
urbanitas consetetur mei eu, his nisl officiis ei. Ei cum fugit graece,
ne qui tantas qualisque voluptaria. Vis ut laoreet euripidis, vix aeque
omittam at, vix no cetero volumus. Per te omnium volutpat torquatos, cu vis
sumo decore. Eirmod hendrerit an pri.

...

</div>
```

For example:

Click for more details

Here, we show a `PlotTable` float, where the user can specify a table, and a corresponding figure plotting the data in the table is automatically generated.

For example:

```
PlotTable: My caption {#tbl:plot_table}

|    X |  Apple |  Banana | Pistachio |
|-----:|-------:|--------:|----------:|
|    1 |      2 |       2 |         3 |
|    2 |      3 |       1 |         5 |
|    3 |      5 |       0 |         5 |
|    4 |      4 |       1 |         7 |
|    5 |      7 |       2 |         8 |
|    6 |      8 |       3 |         9 |
|    8 |      9 |       4 |         8 |
|   11 |      9 |       3 |         9 |
```

makes Table 2 and Figure 3.

Table 2: My caption

X	Apple	Banana	Pistachio
1	2	2	3
2	3	1	5
3	5	0	5
4	4	1	7
5	7	2	8
6	8	3	9
8	9	4	8
11	9	3	9

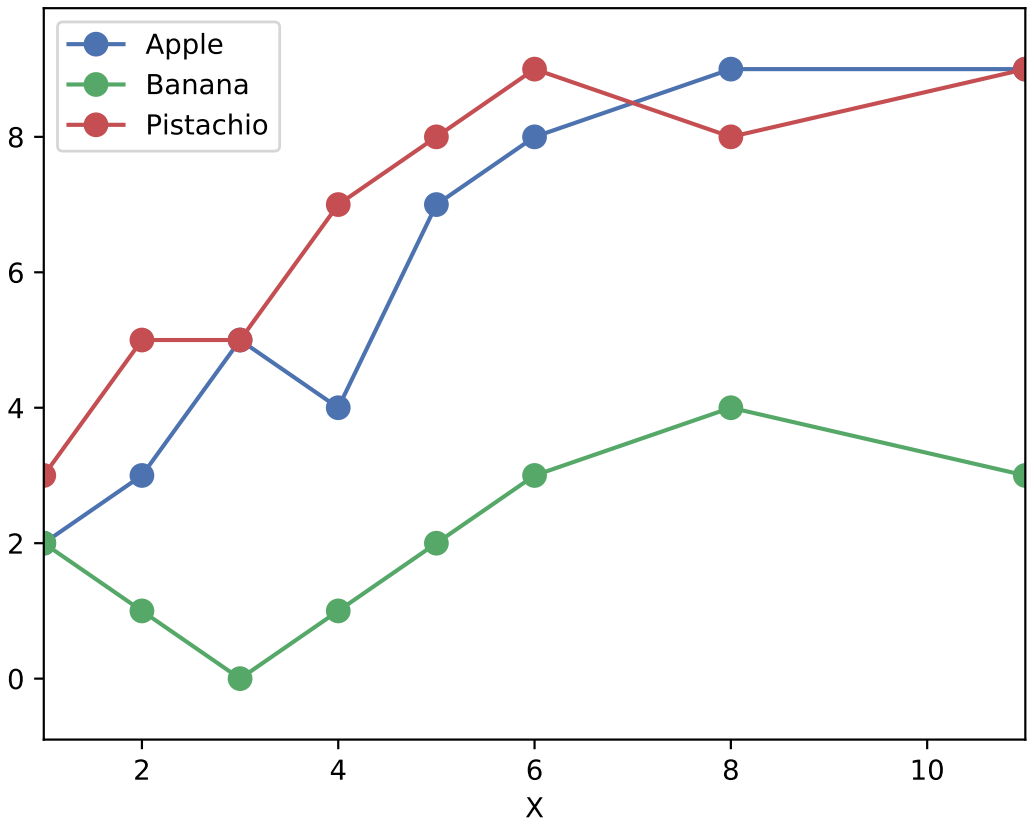

Figure 3: A plot of Table 2.

7 Conclusion

This project is meant to make writing easier and more productive.

markdown-memo is developed by Ryan Reece.

Let me know what you think about it in an email to

or find me on Twitter @RyanDavidReece.

Acknowledgements

Thanks to everyone who helped with this manuscript.

A Special features

This is an appendix. You start it like any other section, except put the following command first, before the section heading.

```
\appendix

Put appendix name here
======================================================================
```

If you add multiple appendices, perhaps you want to separate them from the main text with a part:

```
\clearpage
\appendix
\part*{Appendices}
\addcontentsline{toc}{part}{Appendices}

Example appendix
======================================================================

Start writing the appendix...
```

A.1 Special files

There are a few special files that help steer the execution of markdown-memo or are otherwise exceptional.

Documentation:

- `README.md` - Please empty this file and adapt it to your project.
- `VERSIONS.md` - Documents the chronology of markdown-memo versions. Feel free to delete or adapt this to your project.

Primary files edited by the user:

- `meta.yaml` - The main metadata file controlling the project in many ways.
- `*.md` - Any other user-created Markdown files, the markup of your document.

Optional files:

- `index.[md,txt]` - The top-level, root file of your project. By default, if `index.txt` is missing, a table of contents is generated for `index.md`, otherwise (the user-written) `index.txt` is copied to be the `index.md`. *You should not write* `index.md`.
- `bib_index.md` - Call `make bib_index.md` to generate this file. It is to help incoorporate citations into your document by being an automatically generated list of the references, with footnotes, created from the available bibliography files in `bibs/`.
- `order.txt` - Optionally, the user can create this file, which should have a list of Markdown files used in the document, one-per-line, in the order as to be used for the navigation buttons in the html template. By default, building the html will generate this file if it doesn't already exist, with the Markdown files listed in alphabetical order. If one names the Markdown files something like `01-first-section.md`, `02-second-section.md`, etc., then the order should be handled automatically.

A.2 Disqus integration

You can choose to append a comments section at the end of your html. Just register a user name and the site name with disqus.com. Then in the `meta.yaml`, set your `disqus_shortname`:

```
disqus_shortname: 'my-sites-disqus-name'
```

A.3 Google analytics integration

You can choose to add Google analytics tracking to your site, by registering it with Google analytics and add your tracking ID to the `meta.yaml`:

```
google_analytics_tracking_id: 'UA-XXXXXXXX-X'
```

A.4 Word count

Note that word-count and page-count plots are generated when you call `make pdf`. You might want to keep these around in the `README.md` for your document.

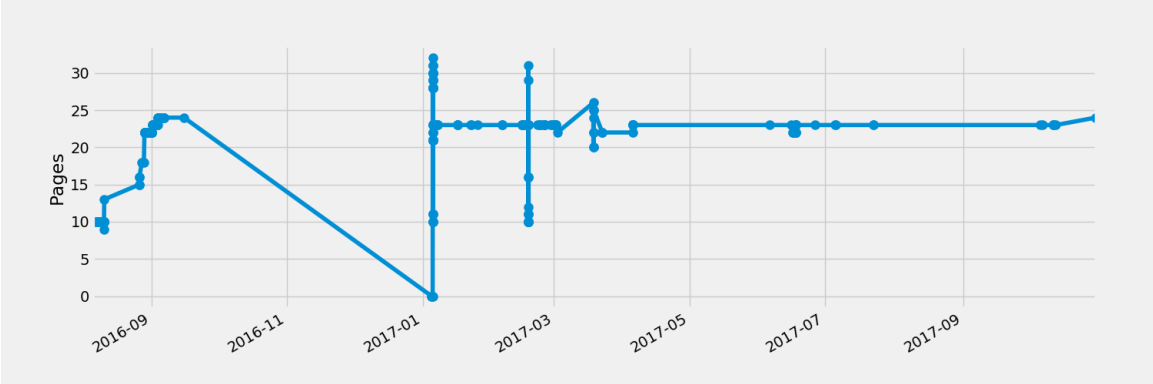

Figure 4: Page count over time.

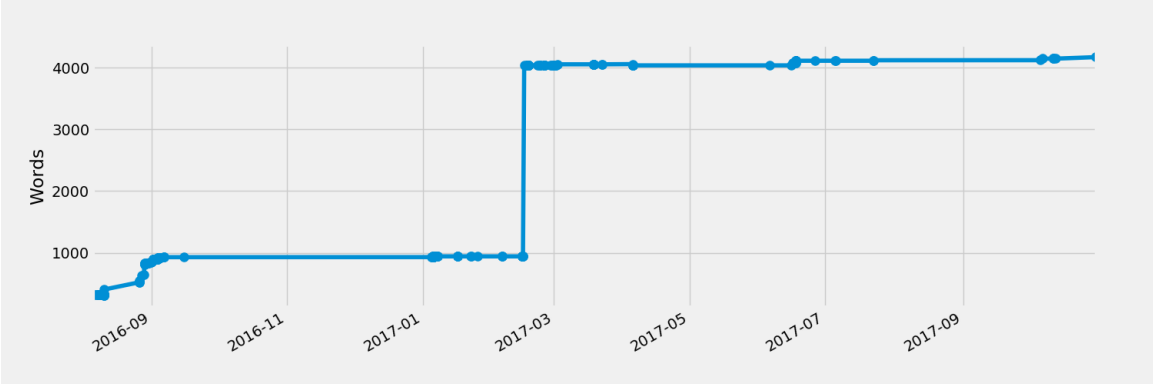

Figure 5: Word count over time.

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