

Intro to Markdown

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Slides:

https://github.com/karldw/markdown_intro_2021-06-29

Thank you, Pamela!

- #econ_prosem is a great service

What?

- Plain text
 - (Which is a very good thing!)
- Readable by itself
- That gets converted into HTML

Why?

- Lighter weight than LaTeX
 - Easier to jot things down
 - Less fiddly
 - Failure to compile is very rare
- Usable in places Word and LaTeX aren't
 - e.g. every Github page you've seen
 - Your own website (come back July 13!)

Why?

- Easy to use with version control (e.g. Git)
 - Track changes to your code *and your words* over time
 - Easily search through history
- Prettier than just writing in a .txt file

How do you write it?

- Recommended: Find a general-purpose text editor you like
 - VS Code, Atom, Emacs, Nano, Sublime, Vi, ...
- Or: edit in-website
 - Github
 - Today: [Hedgedoc](#)

Syntax Details

- <https://www.markdownguide.org/basic-syntax>
- <https://www.markdownguide.org/extended-syntax>

Basics

- Headings
- Items
- Enumerations
- Code
- Links
- Images
- Math

Headings

Markdown
<code># Heading level 1</code>
<code>## Heading level 2</code>
<code>### Heading level 3</code>
<code>#### Heading level 4</code>
<code>##### Heading level 5</code>
<code>##### Heading level 6</code>

Rendered Output
Heading level 1
Heading level 2
Heading level 3
Heading level 4
Heading level 5
Heading level 6

Items

Groceries:

- Yeast
- Flour
- Basil

Or with checkboxes (not universal):

- ☒ Mozzarella
- ☐ Chili flakes

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Enumerations

Colors I know:

1. Magenta
1. Cyan
1. Black

Colors I don't know:

4. Taupe
8. Chartreuse
7. Puce

Colors I know:

1. Magenta
2. Cyan
3. Black

Colors I don't know:

4. Taupe
5. Chartreuse
6. Puce

Emphasis

`*Italic*` or `_italic_`

`**Bold**` or `__bold__`

`***Bold italic***` or `____bold italic__`

`~~strikethrough~~`

Italic or italic

Bold or bold

Bold italic or bold italic

~~strikethrough~~

Math (inline)

- In: `$a^2 + b^2 = c^2$`
- Out: $a^2 + b^2 = c^2$

Math (display)

```
\[
\begin{align}
\int_0^\infty f(\cos^2(\psi)) &= z_0 \\
&= \pi r^2
\end{align}
\]
```

$$\int_0^\infty f(\cos^2(\psi)) = z_0 \\ = \pi r^2$$

Caveats:

1. Depends on [Mathjax](#), which is in some, but not all markdown renderers
2. The [list of supported commands](#) is very long, but it's not a LaTeX substitute

Comments and Escapes

```
<!--  
Block comments  
  
escape everything inside (except in a code block)  
  
This is the same as comments in HTML code  
-->
```

- Escape special characters with \

Links

- Plain URLs and emails get auto-linked (usually)
 - https://twitter.com/hashtag/econ_prosem
 - karldw@berkeley.edu
- Text links have the form [words to display](URL)
 - In: [Twitter](https://twitter.com)
 - Out: [Twitter](https://twitter.com)
- We can also link within the document:
 - In: [Last section](#/comments-and-escapes)
 - Out: [Last section](#)

Links to images

- Images are almost identical, but with ! before [
 - In:
`! [penguin logo](palmerpenguins_logo.png)`
 - Out:



Tables

- Sometimes easy to read
- Always a pain to write
- Have a computer do it for you (e.g. knitr in R)

Reg. A	Reg. B
-----	-----
3.14	0.01
[1.0, 10.0]	[-0.001, 0.015]

→

Reg. A	Reg. B
3.14	0.01
[1.0, 10.0]	[-0.001, 0.015]

More fancy markdown

- References
- R Markdown (. Rmd)
 - Works with Stata too, with [some setup](#)
- Direct HTML/CSS
- Footnotes (support varies)
- [Pandoc](#) conversion to other formats

References

- Citations (via [Pandoc](#) & [Citeproc](#))
 - Input: @Pigouvian_taxes:1932 (from my bib file)
 - Output: Pigou (1932)

```
<!-- Code to ask pandoc to print refs: -->  
::: {#refs}  
:::
```

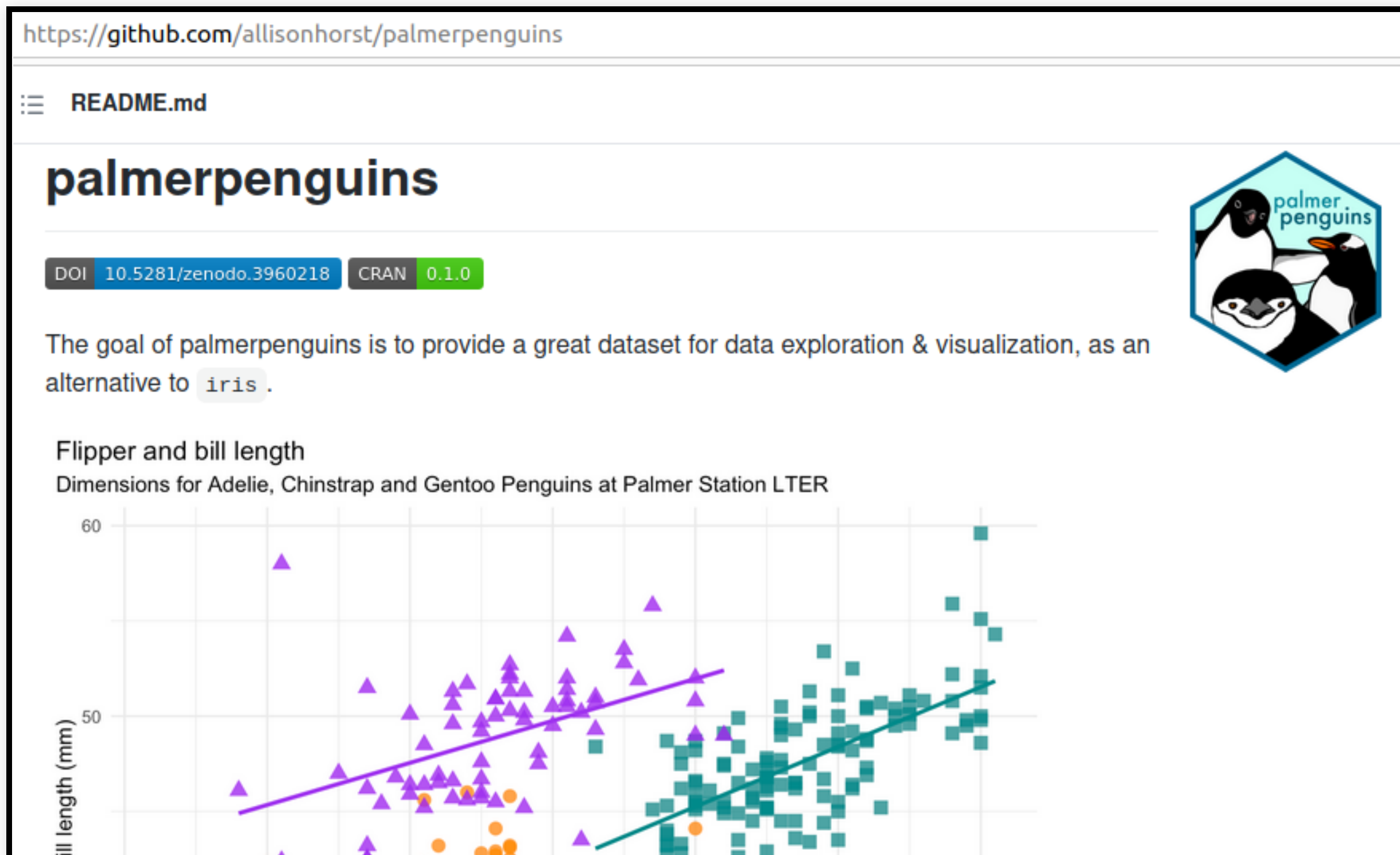
Pigou, Arthur Cecil. 1932. *The Economics of Welfare*. 4th ed. Vol. 2. Macmillan; Co.

R Markdown

- Combines code and text
- Never have to copy updated tables, figures, or numbers into your text
- Works with Markdown or LaTeX



What does R Markdown output look like?



What does R Markdown → Markdown look like?

```
1
2  <!-- README.md is generated from README.Rmd. Please edit that file -->
3
4  # palmerpenguins <a href='https://allisonhorst.github.io/palmerpenguins'><img
5  • src='man/figures/logo.png' align="right" height="138.5" /></a>
6
7  <!-- badges: start -->
8  [![DOI](https://zenodo.org/badge/DOI/10.5281/zenodo.3960218.svg)](https://
9  • doi.org/10.5281/zenodo.3960218)
10 [![CRAN](https://www.r-pkg.org/badges/version/palmerpenguins)](https://cran.r-
11 • project.org/package=palmerpenguins)
12
13 <!-- badges: end -->
14
15 The goal of palmerpenguins is to provide a great dataset for data
16 exploration & visualization, as an alternative to `iris`.
17
18 
20
21 ## Installation
```

What does the original R Markdown look like?

```
1 ---
2 output: github_document
3 ---
4
5 <!-- README.md is generated from README.Rmd. Please edit that file -->
6
7 ```{r, include = FALSE}
8 knitr::opts_chunk$set(
9   collapse = TRUE,
10   comment = "#>",
11   fig.path = "man/figures/README-",
12   out.width = "75%",
13   warning = FALSE,
14   message = FALSE,
15   fig.retina = 2,
16   fig.align = 'center'
17 )
18 library(tidyverse)
19 library(palmerpenguins)
20 ```
21
22 # palmerpenguins <a href='https://allisonhorst.github.io/palmerpenguins'><img
```


Questions?

- Let's try it out in Hedgedoc (link in the chat)