## Tufte Handouts in rmarkdown

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## Introduction

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. This package provides output formats to create "Tufte-style" handouts. <sup>1</sup>

Tufte-style handouts make heavy use of the right margin. Our package provides templates for creating these types of documents in pdf or html format. The pdf format uses the tufte-handout document class.<sup>2</sup>

The html format uses bootstrap with some css to put stuff in the margin. Each uses knitr hooks to specify the types of figures. There is also an html version of this document. <sup>3</sup>

## Usage

To create sidenotes in html, some raw html is required. We make use of the aside tag. Place the sidenote content between the tags <aside></aside> to place them in the sidebar. In the pdf version, simply use the pandoc footnote format ^[Content]. Anything can be enclosed in the aside tag, even code! In latex, you are limited to inline code in the sidenotes. For instance, I can evaluate rnorm(1). 4

The package provides two custom hooks for figure placement. The first is marginfigure. Set marginfigure = TRUE in a chuck option to place a figure in the right margin. Optionally, specify the figure size and include a caption. Captions are passed through the fig.cap chunk option.

```
library(ggplot2)
ggplot(mtcars, aes(y = mpg, x = wt)) + geom_point() +
    stat_smooth(method = "lm")
```

The html documents have the body set at a fixed width of 96opx. Feel free to edit the css to suit your needs. Html output supports any of the built in Bootstrap themes. Be careful using the fluid grid system, it may break the output for narrow screens.

The second custom hook is fig.star. Setting fig.star = TRUE creates a full-width figure spanning the main body and the margin. The caption goes in the sidebar under the figure. These look pretty sweet! Specify the width and height for best results.

- <sup>1</sup> For more details on using R Markdown see http://rmarkdown.rstudio.com.
- <sup>2</sup> Credit: http://code.google.com/p/tufte-latex/
- 3 http://sachsmc.github.io/ tufterhandout

<sup>4</sup> -0.5574

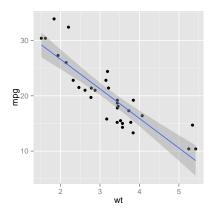


Figure 1: This is a marginfigure

```
ggplot(faithful, aes(y = eruptions, x = waiting)) +
    geom_point() + stat_smooth(method = "loess")
```

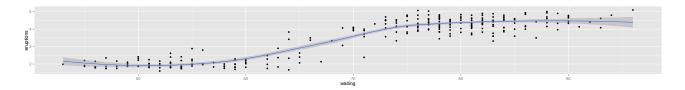


Figure 2: Full-width figure

Finally, normal figures are plotted in the main body, with the captions in the margin. The only option necessary here is the caption itself.

```
ggplot(faithful, aes(x = eruptions)) + geom_histogram(binwidth = 0.1)
```

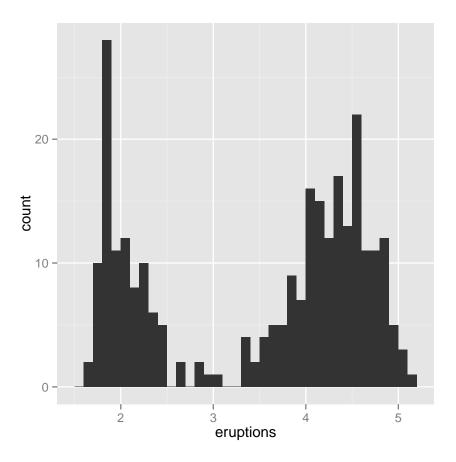


Figure 3: Normal figure with caption in the margin

## Resources

Learn more about rmarkdown: http://rmarkdown.rstudio.com