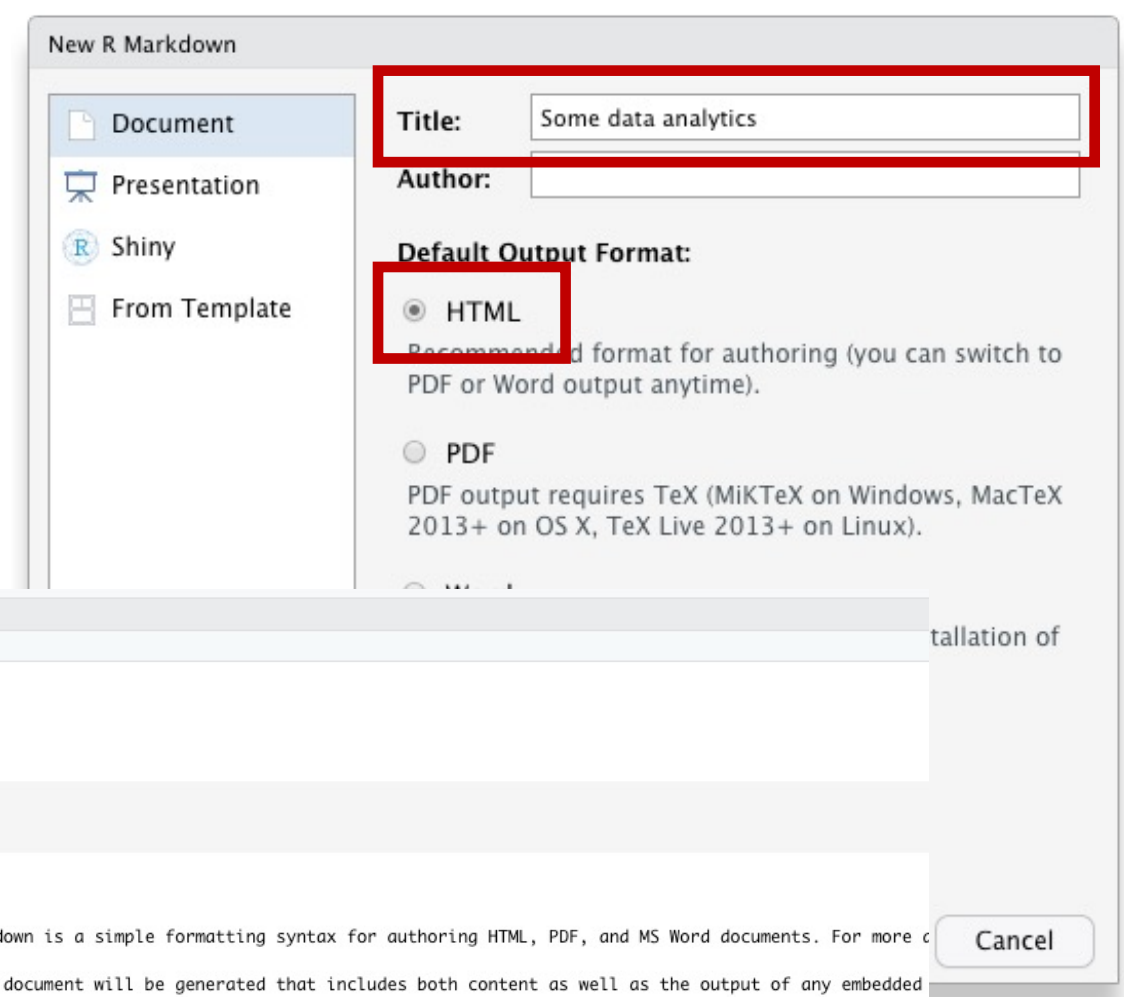# Make your data analysis report a website

In 10 minutes or less

Step 1 – **Create a R Markdown file**

- Create a new folder
- Open R studio
- File → New File → R Markdown
- Add a title, select HTML, click OK
- Click Knit
- Save in the newly created folder as index

You've built a R Markdown document! ☺

Html output ➡ index.html

R analysis ➡ index.Rmd

New R Markdown

- Document
- Presentation
- Shiny
- From Template

Title: Some data analytics

Author:

Default Output Format:

○ HTML
Recommended format for authoring (you can switch to PDF or Word output anytime).

○ PDF
PDF output requires TeX (MiKTeX on Windows, MacTeX 2013+ on OS X, TeX Live 2013+ on Linux).

Cancel

Untitled1

Knit ▾

```
1  ---
2  title: "Some data analytics"
3  output: html_document
4  ---
5
6  ```{r setup, include=FALSE}
7  knitr::opts_chunk$set(echo = TRUE)
8  ```
9
10 ## R Markdown
11
12 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more
13
14 When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded
15
16 ```{r cars}
17 summary(cars)
18 ```
19
20 ## Including Plots
21
22 You can also embed plots, for example:
23
24 ```{r pressure, echo=FALSE}
25 plot(pressure)
26 ```
27
28 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.
29
```

Step 2 – **Add your analysis**

Document title →

Section title →

Some text to explain what your doing ←

R code →

Plot with ggplot2 … →

… made interactive with plotly ←

Knit again !!

```
index.Rmd

1  ---
2  title: "Analysis the gapminder dataset"
3  output: html_document
4  ---
5
6  ```{r setup, include=FALSE}
7  knitr::opts_chunk$set(echo = TRUE)
8  ```
9
10 ## Libraries
11
12 Let's load some libraries needed
13 ```{r }
14 # Libraries
15 library(tidyverse)   # includes ggplot2
16 library(hrbrthemes)  # better chart appearance
17 library(viridis)     # better color palette
18 library(plotly)      # interactive charts
19 #library(gridExtra)
20
21 # The dataset is provided in the gapminder library
22 library(gapminder)
23 ```
24
25 ## Data wrangling
26
27 Let's keep data for 2007 only
28
29 ```{r}
30 data <- gapminder %>% filter(year=="2007") %>% select(-year)
31 ```
32
33
34 ## Let's build a chart
35
36 Build the chart with ggplot2, make it interactive with plotly.
37
38
39 ```{r}
40 # Interactive version
41 p <- data %>%
42   mutate(gdpPercap=round(gdpPercap,0)) %>%
43   mutate(pop=round(pop/1000000,2)) %>%
44   mutate(lifeExp=round(lifeExp,1)) %>%
45   arrange(desc(pop)) %>%
46   mutate(country = factor(country, country)) %>%
47   mutate(text = paste("Country: ", country, "\nPopulation (M): ", pop, "\nLife Expectancy: ", lifeExp, "\nGdp per capita: ", gdpPercap, sep="")) %>%
48   ggplot( aes(x=gdpPercap, y=lifeExp, size = pop, color = continent, text=text)) +
49     geom_point(alpha=0.7) +
50     scale_size(range = c(1.4, 19), name="Population (M)") +
51     scale_color_viridis(discrete=TRUE, guide=FALSE) +
52     theme_ipsum() +
53     theme(legend.position="none")
54
55 ggplotly(p, tooltip="text")
56 ```
```

CODE ▾

Text formating
Horizontal lines
Chapter auto numbering
Skip a line
Center an image
White space around img
Footer and header
Space before title
Figures caption
Custom caption
Equations

holtzy.github.io/Pimp-my-rmd ➡

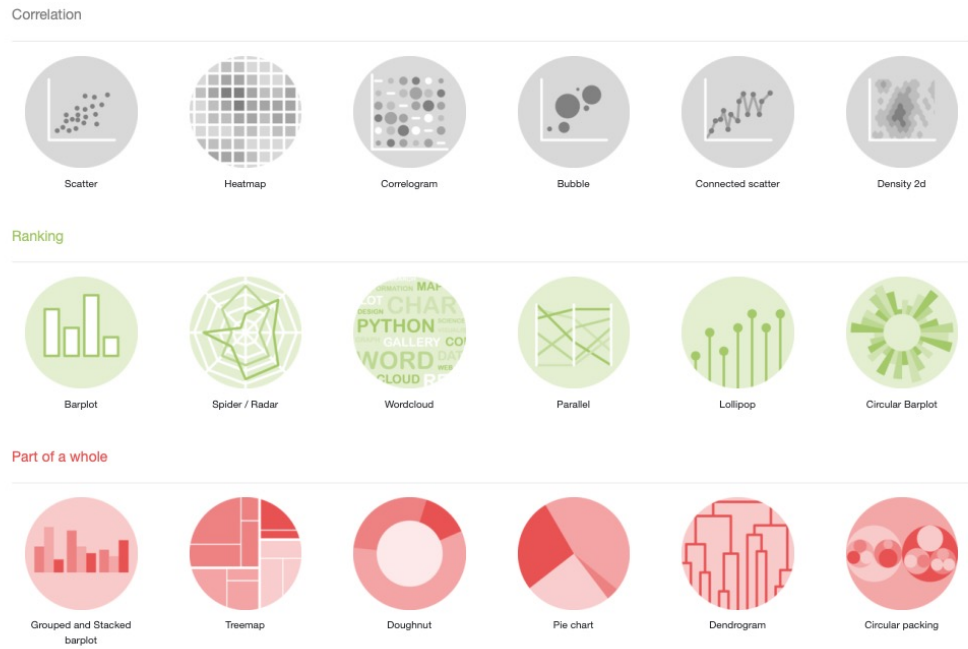# Pimp my RMD: a few tips for R Markdown

by Yan Holtz - 10 December 2018 -

R markdown creates interactive reports from R code. This post provides a few tips I use on a daily basis to improve the appearance of output documents. In any case, an unavoidable resource is the Rstudio documentation.

Correlation

| Scatter | Heatmap | Correlogram | Bubble | Connected scatter | Density 2d |

The R Graph Gallery

R-graph-gallery.com ➡

Welcome the R graph gallery, a collection of charts made with the R programming language. Hundreds of charts are displayed in several sections, always with their reproducible code available. The gallery makes a focus on the tidyverse and ggplot2. Feel free to suggest a chart or report a bug; any feedback is highly welcome. Stay in touch with the gallery by following it on Twitter or Github. If you're new to R, consider following this course.

Ranking

| Barplot | Spider / Radar | Wordcloud | Parallel | Lollipop | Circular Barplot |

Part of a whole

| Grouped and Stacked barplot | Treemap | Doughnut | Pie chart | Dendrogram | Circular packing |

Step 3 – **Store your analysis on Github**

- You need a Github account
- Click on Repositories
- Click on New
- Add a name, make it public, click create repo
- Copy the adress in the blue section
- Go to your local folder using a terminal
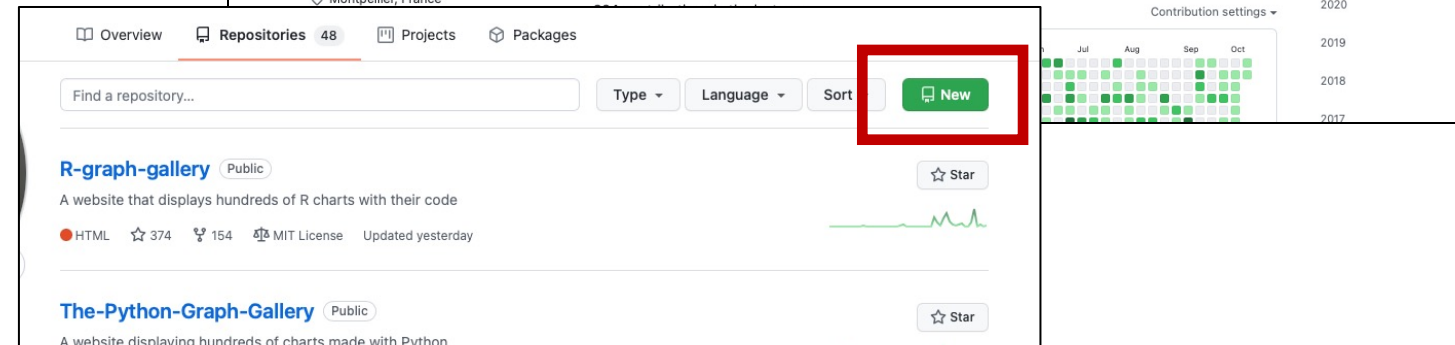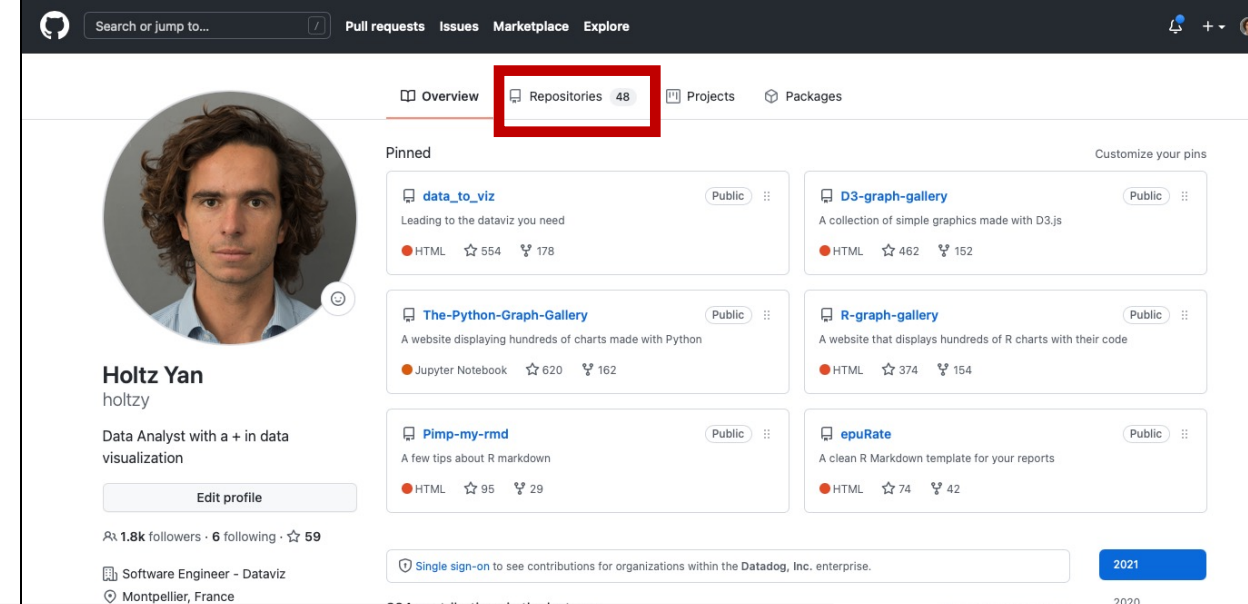
Quick setup — if you've done this kind of thing before

Set up in Desktop or HTTPS SSH git@github.com:holtzy/data_analysis_website.git

Get started by creating a new file or uploading an existing file. We recommend every repository include a README, LICENSE, and .gitignore.

```
cd Desktop/data_analysis_website/
```

Step 3 – **Store your analysis on Github**

- Copy paste this code

Update this!!

```
git init
git add -A
git commit -m "first commit"
git branch -M main
git remote add origin git@github.com:holtzy/data_analysis_website.git
git push -u origin main
```
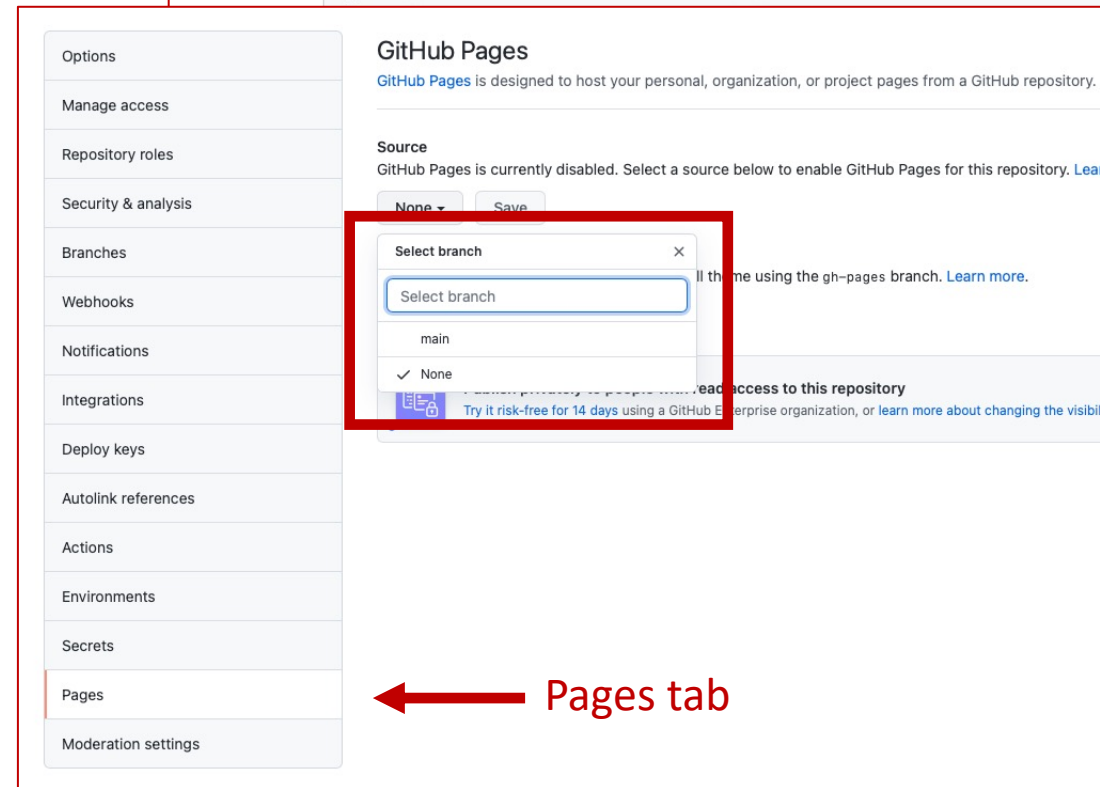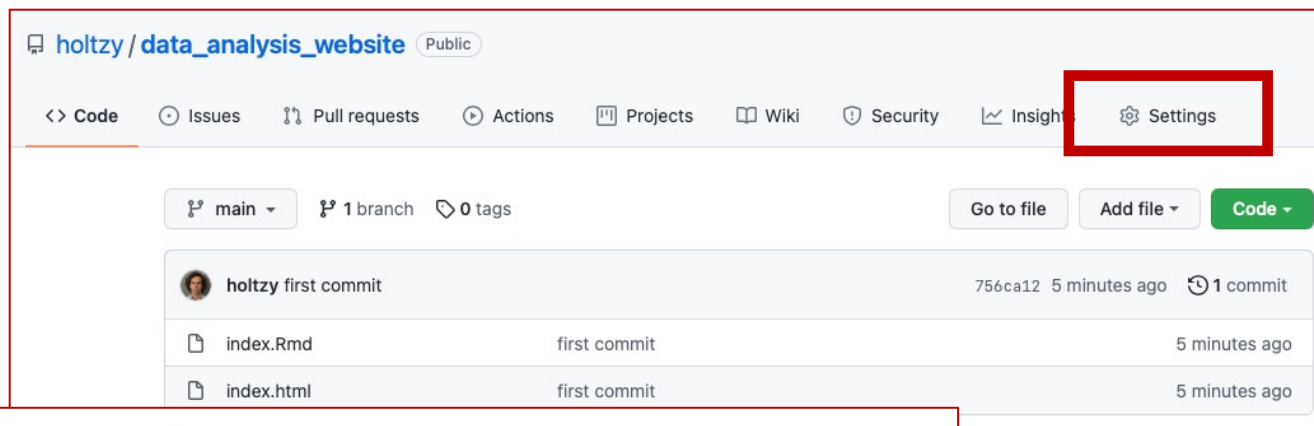
Your github repository now exists!! 😊 (Refresh the browser)

⑂ main ▾ ⑂ 1 branch ⬡ 0 tags		Go to file Add file ▾ Code ▾
🧑 **holtzy** first commit	756ca12 2 minutes ago	🕐 **1** commit
🗎 index.Rmd	first commit	2 minutes ago
🗎 index.html	first commit	2 minutes ago

Step 4 – **Make it a website**

- Click on Settings
- Go to the Pages tab
- Select the main branch
- Click Save

Your website is waiting for you! ☺

holtzy / **data_analysis_website** Public

<> Code   ⊙ Issues   ⇅ Pull requests   ▷ Actions   ⊞ Projects   ▭ Wiki   ⊙ Security   ∿ Insight   ⚙ Settings

⑂ main ▾   ⑂ 1 branch   ⬫ 0 tags   Go to file   Add file ▾   Code ▾

holtzy first commit   756ca12 5 minutes ago   ⟳ 1 commit

index.Rmd   first commit   5 minutes ago

index.html   first commit   5 minutes ago

Options

Manage access

Repository roles

Security & analysis

Branches

Webhooks

Notifications

Integrations

Deploy keys

Autolink references

Actions

Environments

Secrets

Pages

Moderation settings

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source
GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository. Learn

None ▾   Save

Select branch   ×

Select branch

main

✓ None

ll theme using the gh-pages branch. Learn more.

Try it risk-free for 14 days using a GitHub Enterprise organization, or learn more about changing the visibility

← Pages tab

ⓘ Your site is ready to be published at https://holtzy.github.io/data_analysis_website/

Step 5 – **Use a template to make the report look better**

- Epurate is a R Markdown template:
- github.com/holtzy/epuRate

- More Templates on the rmarkdown website:
- rmarkdown.rstudio.com/gallery.html

Data-to-viz.com

@R_Graph_Gallery

github.com/holtzy/Talk

Yan.holtz.data@gmail.com

www.yan-holtz.com