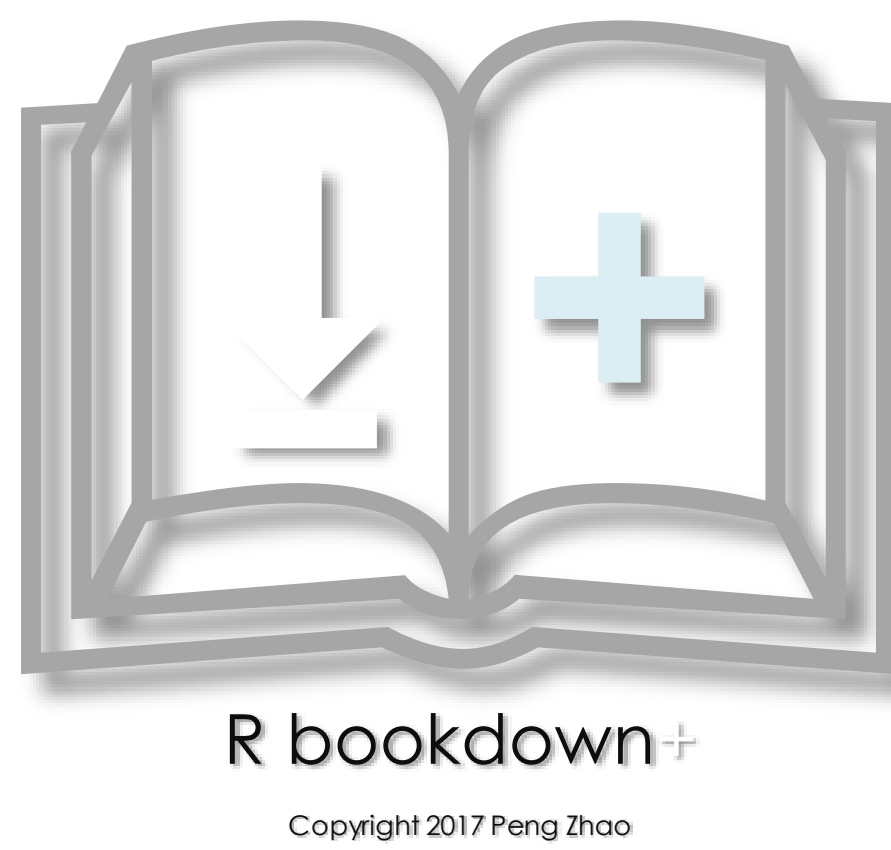


R bookdown+: Authoring varied types of books and documents with R bookdown

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Introduction

Motivation

R bookdown (Xie, 2016) is an excellent R (R Core Team, 2017) package for authoring books on programming languages. It has the potential to do much more than authoring R books if users customize self-defined templates. However, the development of templates is difficult and unnecessary. Therefore I developed bookdown+ (Zhao, 2017).

Features

R bookdown+ is a collection of multiple templates. With bookdown+ you can easily

- ▶ write a laboratory journal, or a personal diary,
- ▶ draw a monthly or weekly or conference calendar,
- ▶ record guitar chords,
- ▶ write a mail in an elegant layout,
- ▶ and, of course, write academic articles in your favourite way,
- ▶ with chemical molecular formulae and equations,
- ▶ even in Chinese,
- ▶ and more wonders will come soon.

This poster you are viewing now is produced by R bookdown+.

Quick start

Before starting, you have to install R, RStudio, bookdown package, and other software and packages (i.e. Pandoc, L^AT_EX, rmarkdown, rticle, knitr, etc.) which bookdown depends on. See the official manual of bookdown ^a for details.

Download bookdown+ ^b package as a zip file from Github. Unzip it to a folder in your PC. Double click a file named `_start.Rproj`, which will be opened by RStudio.

Open `_runme.R` and run it. The explanation is as follows,

1. Specify the title and the author of your book or document.
2. Choose a template out of the available templates. Run `fun/build.R`.
3. Press `ctrl+shift+b` to build a demo book, which you can find in `book/`. Write your own text in `body.Rmd`, and build your own lovely book.

^a<https://bookdown.org/yihui/bookdown/>

^b<https://github.com/dapengde/bookdown-plus>

Graphs

Using `bookdown` or `rmarkdown`, users can insert figures into a document in a friendly way. Just embed the R scripts into your `.Rmd` file(s) and compile it/them with `knitr` package, and the figures will appear automatically with high resolution and reproductivity.

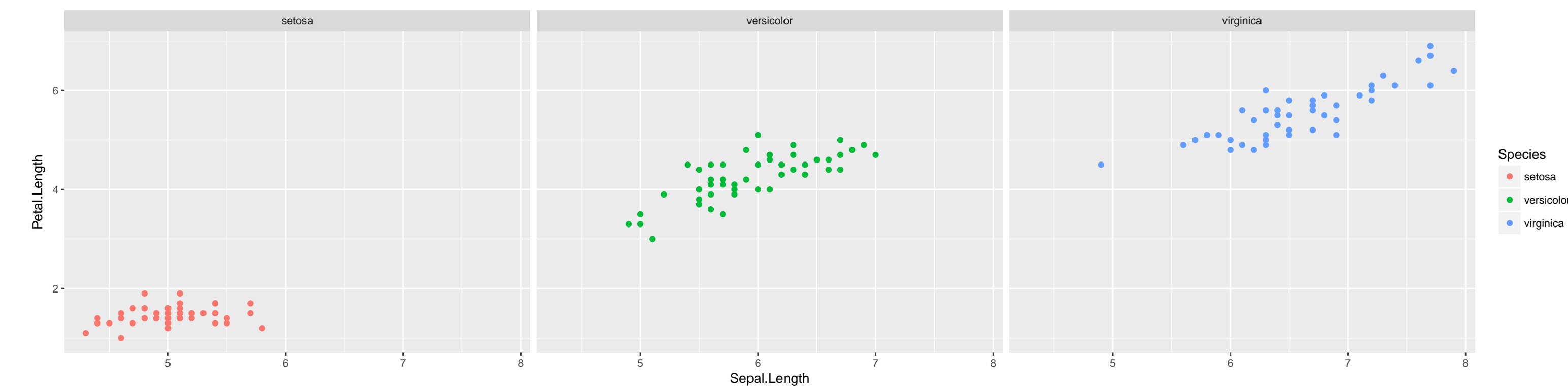


Figure 1: IRIS data plotted with R ggplot2 package.

Table

Similarly to graphs, tables can be inserted either with R script or with markdown syntax.

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa

Bibliography

R Core Team (2017). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing. Vienna, Austria.

Xie, Y (2016). *bookdown: Authoring Books and Technical Documents with R Markdown*. R package version 0.3.17.

Zhao, P (2017). *R bookdown+: Enhancement of bookdown for writing varied types of books and documents*.

Book types supported by bookdown+

Some sample pages are displayed as follows. More details can be found in the tutorial book (Zhao, 2017).

[illegible]

Take-home message

- R bookdown+ is an extension of bookdown for academic and literal writing, especially for reproducible reports.
- R bookdown+ is still being developed. Feel free to join me either in contributing templates to **my Github repo**^a, or in writing the tutorial of R bookdown+ (Zhao, 2017).

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The open source codes from Github and R community are much appreciated.