title

Authoring Articles, Mails, Guitar Chords, Chemical Molecular Formulae and Equations with R bookdown

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Introduction

The R package `bookdownplus` (Zhao, 2017a) is an extension of `bookdown` (Xie, 2016). It is a collection of multiple templates on the basis of LaTeX, which are tailored so that I can work happily under the umbrella of `bookdown`. `bookdownplus` helps you write academic journal articles, guitar books, chemical equations, mails, calendars, and diaries.

> This is an info block.

> This is an important block.

> This is a danger block.

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Features

`bookdownplus` extends the features of `bookdown`, and simplifies the procedure. Users only have to choose a template, clarify the book title and author name, and then focus on writing the text. No need to struggle in YAML and LaTeX.

With `bookdownplus` users can

- record guitar chords,
- write a mail in an elegant layout,
- write a laboratory journal, or a personal diary,
- draw a monthly or weekly or conference calendar,
- 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.

Full documentation can be found in the book R bookdownplus Textbook[1]. The webpage looks so-so, while the pdf file[2] might give you a little surprise.

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[1] https://bookdown.org/baydap/bookdownplus
[2] https://bookdown.org/baydap/bookdownplus/bookdownplus.pdf

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Quick start

Although this section might not be the latest version, the general idea won't change. Please see R bookdownplus Textbook[1] to keep up with the update.

3.1   Preparation

Before starting, you have to install R, RStudio, bookdown package, and other software and packages (i.e. Pandoc, LaTeX, rmarkdown, rticle, knitr, etc.) which bookdown depends on. See the official manual[2] of bookdown for details. Additionally, if you want to produce a poster, phython must be installed before using, and the path of phython might have to be added to the environmental variables for Windows users.

3.2   Installation

```
install.package("bookdownplus")
# or
devtools::
  install_github("pzhaonet/bookdownplus")
```

3.3   Generate demo files

Run the following codes, and you will get some files (e.g. `index.Rmd`, `body.Rmd`, `bookdownplus.Rproj`) and folders in your working directory.

```
getwd() # this is your working directory. run setwd() to change it.
bookdownplus::bookdownplus()
```

3.4   Build a demo book

Now open `bookdownplus.Rproj` with RStudio, and press `ctrl+shift+b` to compile it. Your will get a book file named `*.pdf` in `_book/`folder.

3.5   Write your own

Write your own text in `index.Rmd` and `body.Rmd`, and build your own lovely book.

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[1]https://bookdown.org/baydap/bookdownplus
[2]https://bookdown.org/yihui/bookdown/

3.6   More outputs

By default, the book is in a pdf file. From 'bookdownplus' 1.0.3, users can get more output formats, including 'word', 'html' and 'epub'. Run:

```
bookdownplus::
  bookdownplus(template = 'article',
               more_output = c('html', 'word', 'epub'))
```

3.7   Recommendations

I have been developing some other packages, which bring more features into 'bookdown', such as:

- mindr (Zhao, 2017b), which can extract the outline of your book and turn it into a mind map, and

- pinyin (Zhao, 2017c), which can automatically generate '{#ID}'[3] of the chapter headers even if there are Chinese characters in them.

Both of them have been released on CRAN and can be installed via:

```
install.packages('mindr')
install.packages('pinyin')
```

Enjoy your bookdowning!

3.8   Models

Eq. (3.1) is an equation.

$$E = mc^2 \tag{3.1}$$

It can be written as $E = mc^2$.

Theorem 3.1. *This is a theorem.*

Bevis. This is a proof.   □

Exercise 3.1. This is an exercise

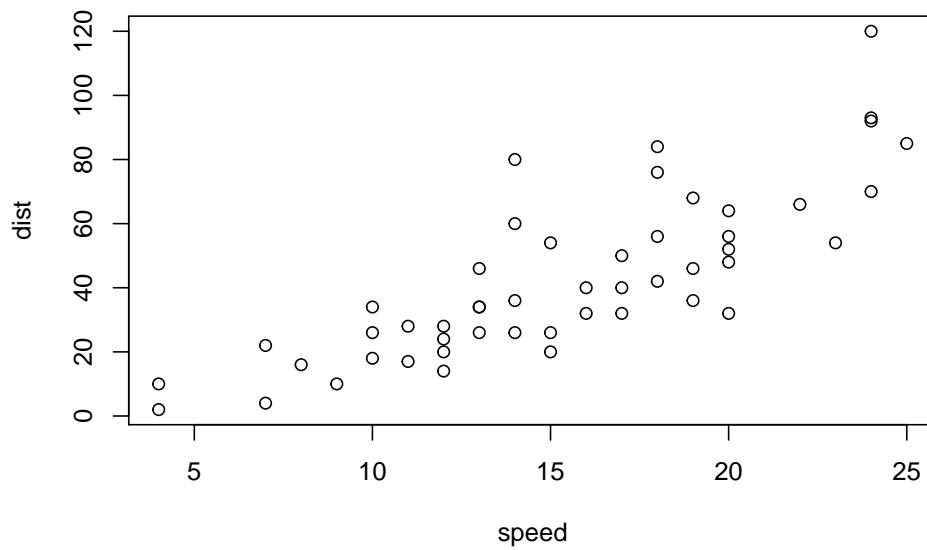[3]https://bookdown.org/yihui/bookdown/cross-references.html

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Results

Fig. 4.1 psum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Tab. 4.1 psum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Figur 4.1: caption

Tabell 4.1: Here is a nice table!

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
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa
5.4	3.7	1.5	0.2	setosa
4.8	3.4	1.6	0.2	setosa
4.8	3.0	1.4	0.1	setosa
4.3	3.0	1.1	0.1	setosa
5.8	4.0	1.2	0.2	setosa
5.7	4.4	1.5	0.4	setosa
5.4	3.9	1.3	0.4	setosa
5.1	3.5	1.4	0.3	setosa
5.7	3.8	1.7	0.3	setosa
5.1	3.8	1.5	0.3	setosa

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Conclusions

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

Tillegg A

Installation of R and RStudio

Bibliografi

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