

A Minimal Book Example

Yihui Xie

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Contents

| | | |
|----------|-------------------------|-----------|
| 1 | Prerequisites | 5 |
| 2 | Set up a project | 7 |
| 3 | Literature | 9 |
| 4 | Methods | 11 |
| 5 | Applications | 13 |
| 5.1 | Example one | 13 |
| 5.2 | Example two | 13 |
| 6 | Final Words | 15 |

Chapter 1

Prerequisites

This is a *sample* book written in **Markdown**. You can use anything that Pandoc's Markdown supports, e.g., a math equation $a^2 + b^2 = c^2$.

The **bookdown** package can be installed from CRAN or Github:

```
install.packages("bookdown")  
# or the development version  
# devtools::install_github("rstudio/bookdown")
```

Remember each Rmd file contains one and only one chapter, and a chapter is defined by the first-level heading #.

To compile this example to PDF, you need XeLaTeX. You are recommended to install TinyTeX (which includes XeLaTeX): <https://yihui.org/tinytex/>.

Chapter 2

Set up a project

First, choose *New Project* and *New Directory*.

Second, choose *Book Project using bookdown* and pick a name as well as the directory. RStudio will automatically set up the Rproject as well as the folder skeleton.

Third, use the package `usethis` and tie the project with Git. It will re-open the existing project with ready Git integration

```
library(usethis)
use_git()
```

Fourth, use the package `usethis` again and create a GitHub repo if the project name is available on the owner's repos. When facing git protocol, choose `https`.

```
> library(usethis)
> use_github()

Setting active project to '/Users/sushicat/Dropbox/R_Me/Bradford'
Checking that current branch is 'master'
Which git protocol to use? (enter 0 to exit)

1: ssh    <-- presumes that you have set up ssh keys
2: https  <-- choose this if you don't have ssh keys (or don't know if you do)

Selection: 2

Tip: To suppress this menu in future, put
`options(usethis.protocol = "https")`
in your script or in a user- or project-level startup file, '.Rprofile'.
Call `usethis::edit_r_profile()` to open it for editing.
Check title and description
```

```
Name:      Bradford
Description:
Are title and description ok?

1: Not now
2: Nope
3: I agree

Selection: 3
Creating GitHub repository
Setting remote 'origin' to 'https://github.com/dataning/Bradford.git'
Pushing 'master' branch to GitHub and setting remote tracking branch
Opening URL 'https://github.com/dataning/Bradford'
```


Chapter 3

Literature

Here is a review of existing methods.

Chapter 4

Methods

We describe our methods in this chapter.

Chapter 5

Applications

Some *significant* applications are demonstrated in this chapter.

5.1 Example one

5.2 Example two

Chapter 6

Final Words

We have finished a nice book.