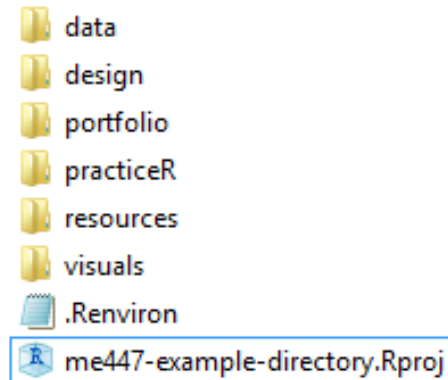
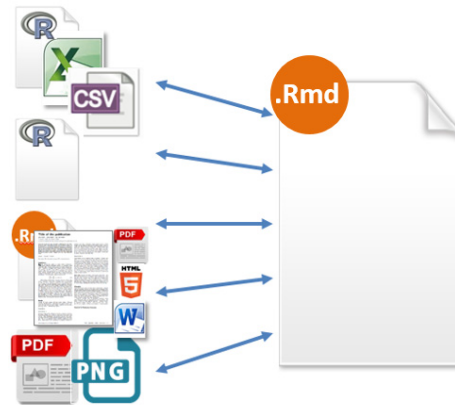


Basic file management

Organize to manage files
at the start of a project



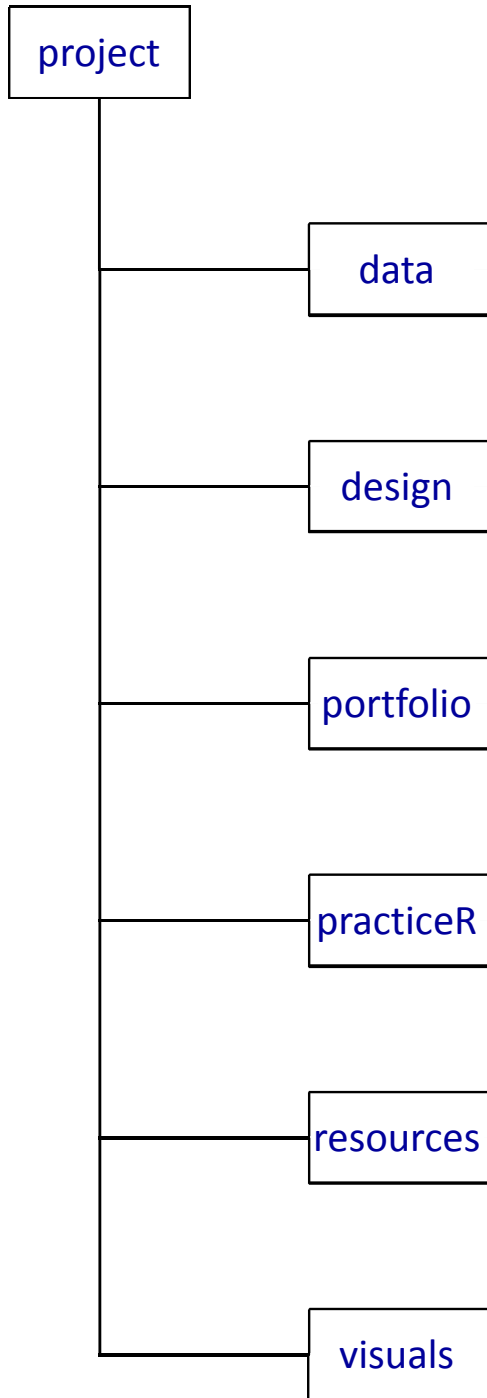
Link scripts explicitly

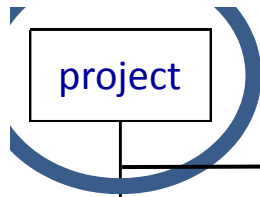


Use relative paths

```
read_excel('data/lotr-words-spoken.xlsx')
```

suggested directory tree





the top level directory

includes:



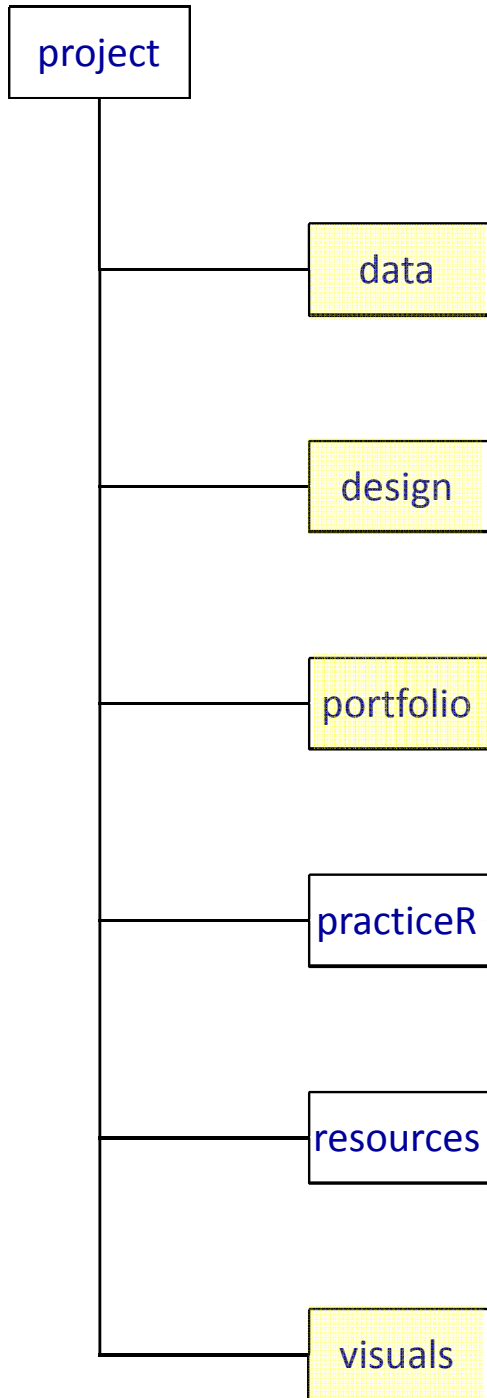
.Renviron



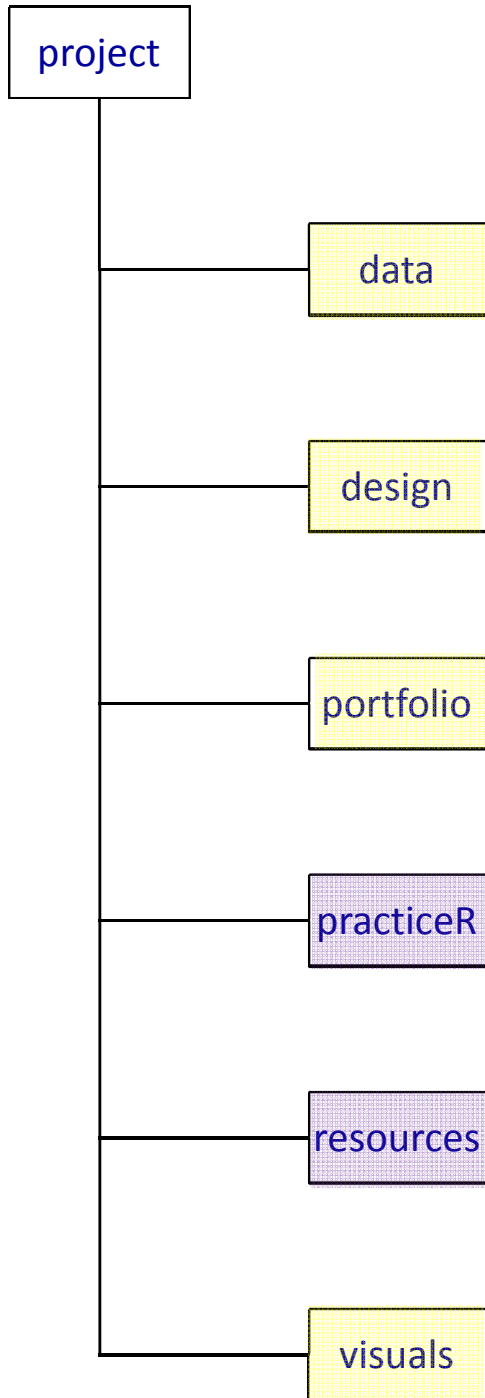
me447-example-directory.Rproj

The top-level directory is the **working directory**

one level down



Everything related to the portfolio

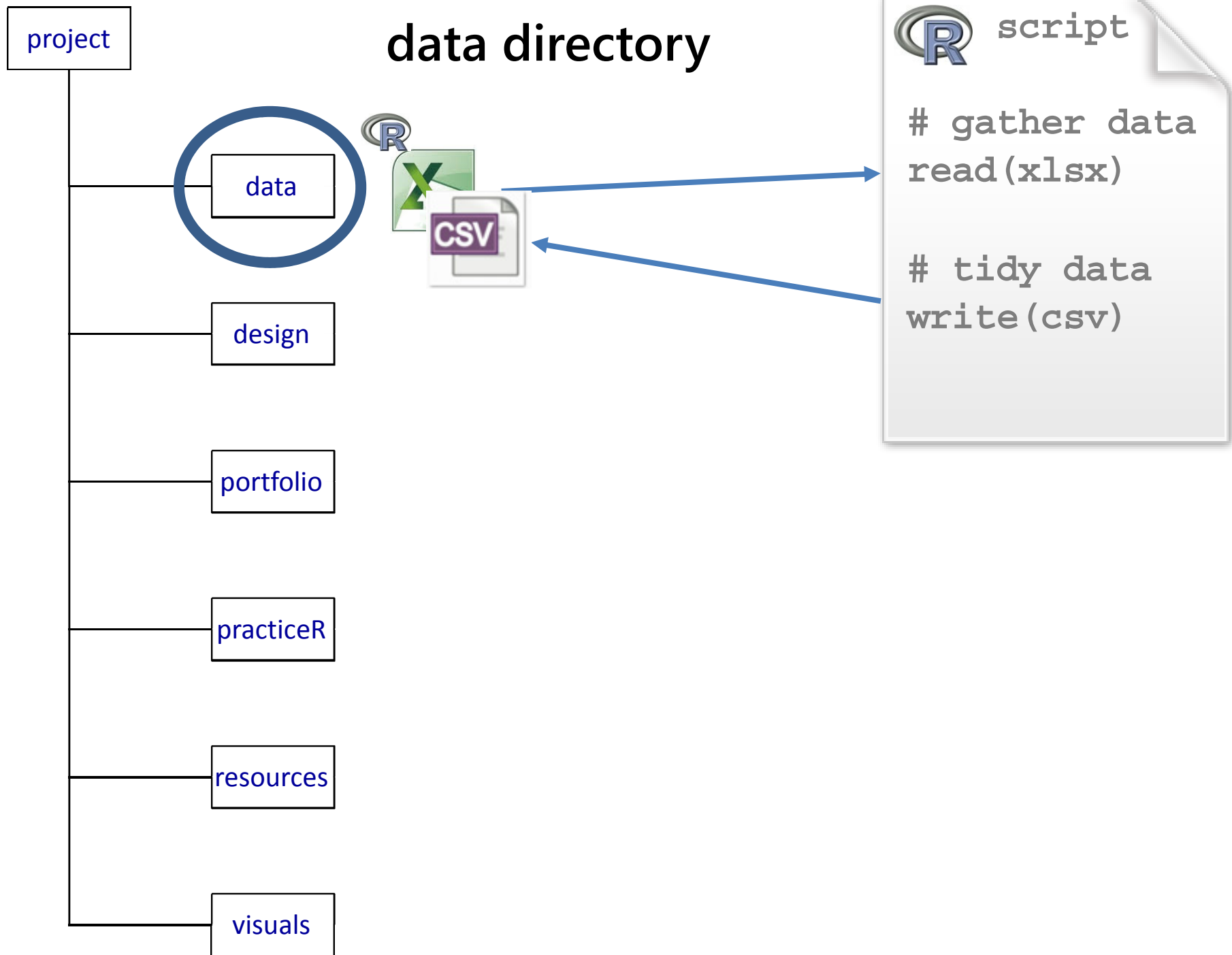


one level down

Everything related to the portfolio

Everything not directly related to the portfolio

I suggest having no additional directory sub-levels.



project

design directory

data

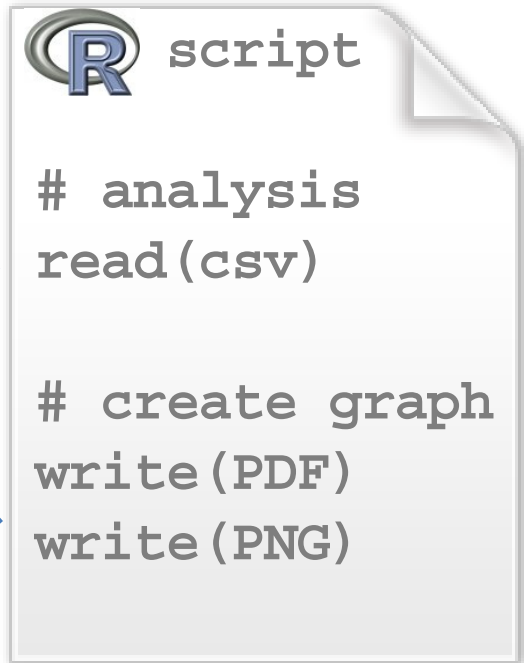
design

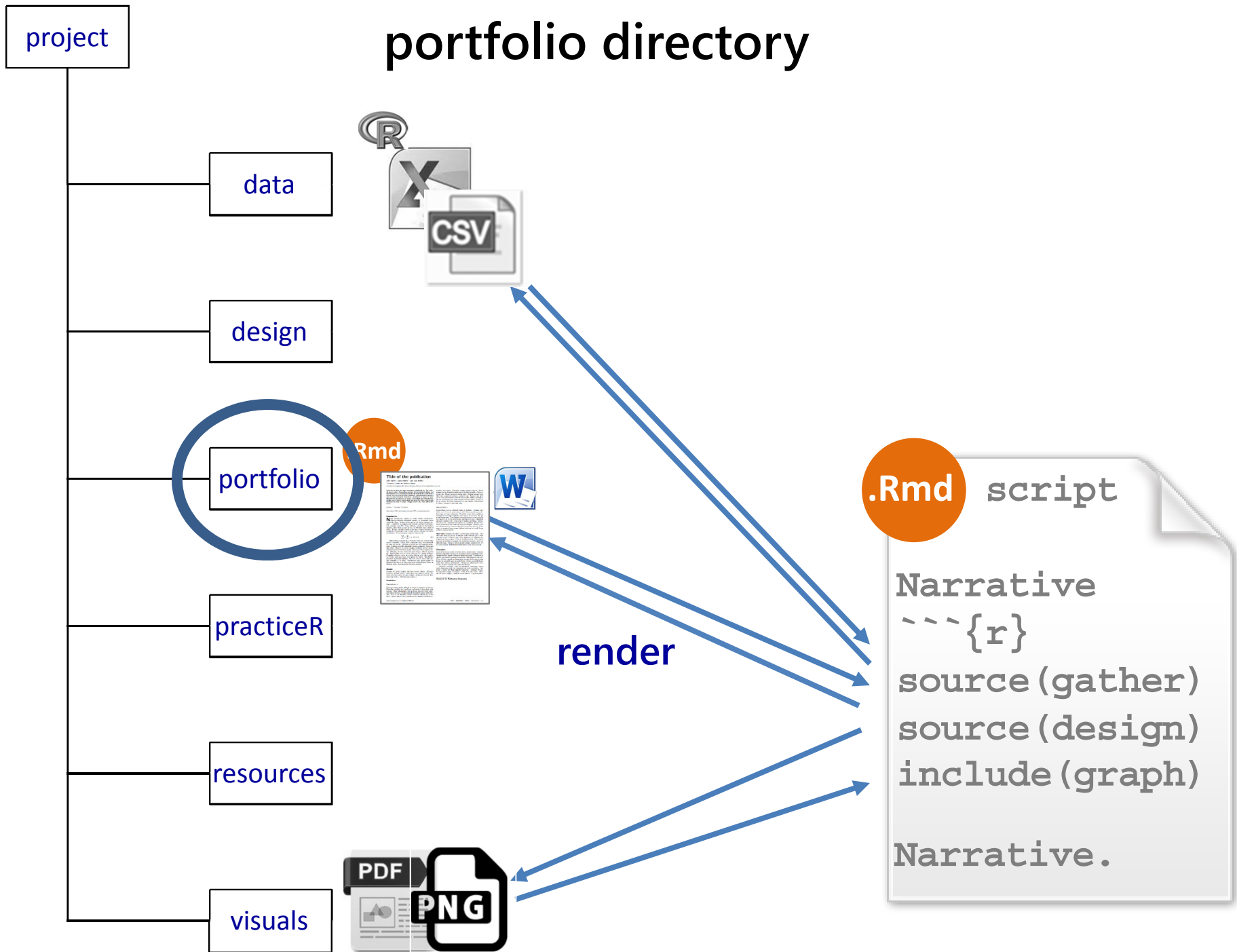
portfolio

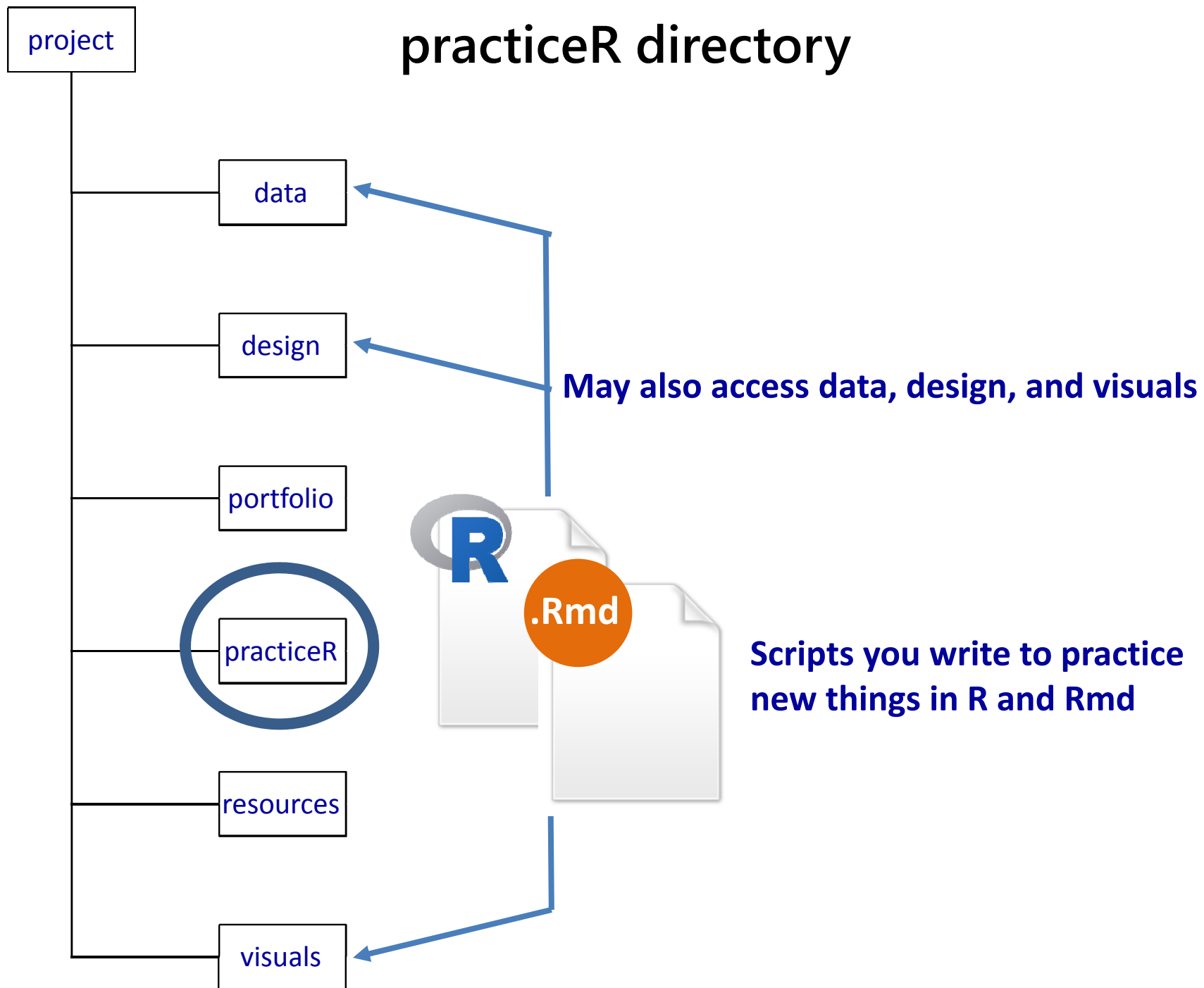
practiceR

resources

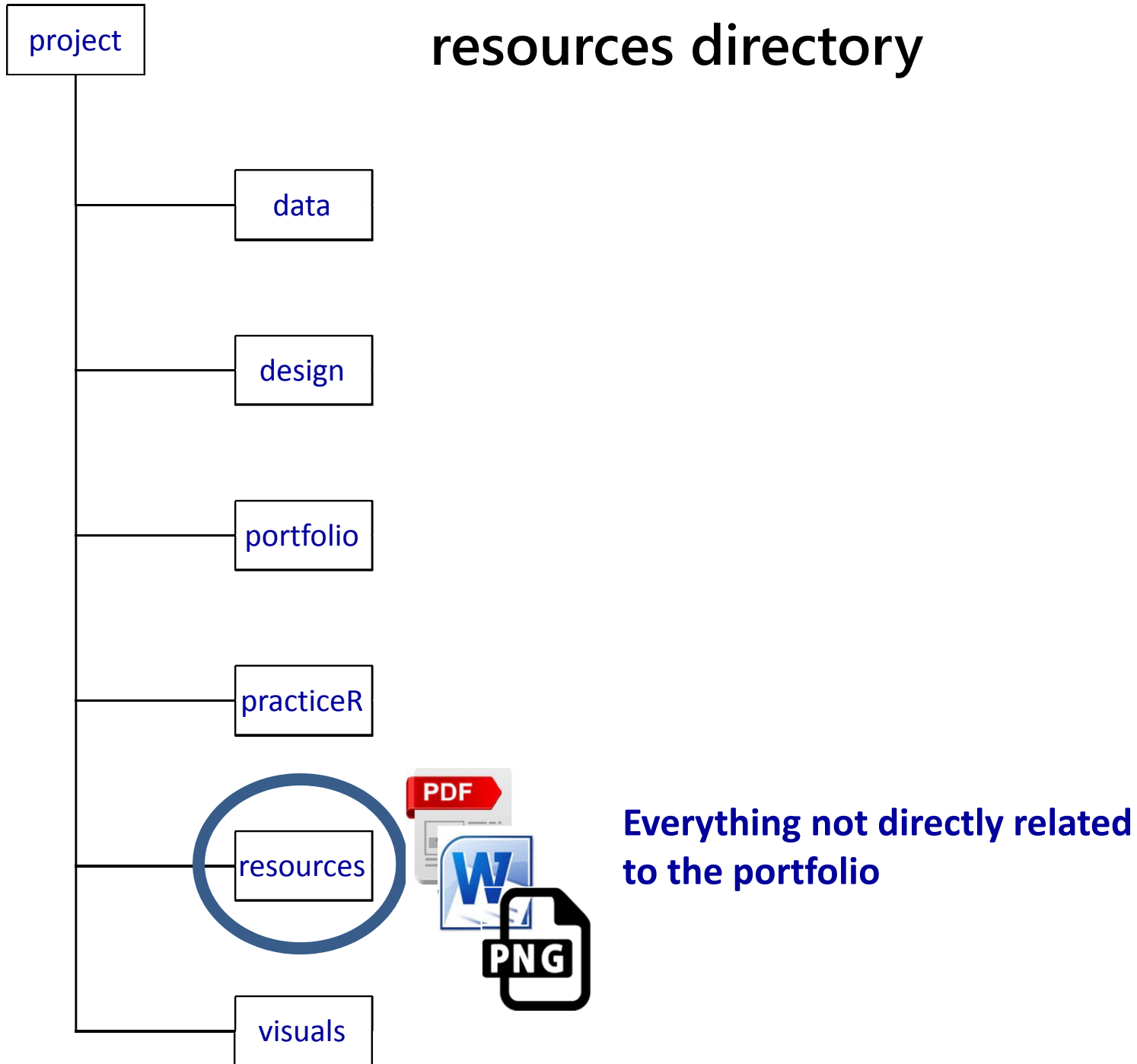
visuals







resources directory



project

visuals directory

data

design

portfolio

practiceR

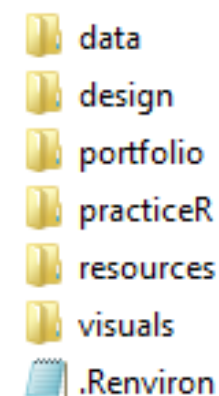
resources

visuals



All images used in creating the portfolio

Always use paths relative to the .Rproj working directory



A file explorer window showing a project directory. The contents are listed vertically: data, design, portfolio, practiceR, resources, visuals, .Renvirom, and me447-example-directory.Rproj. The last item is highlighted with a blue border and a blue arrow points to it from the left.



Launching .Rproj sets its top-level directory as the working directory



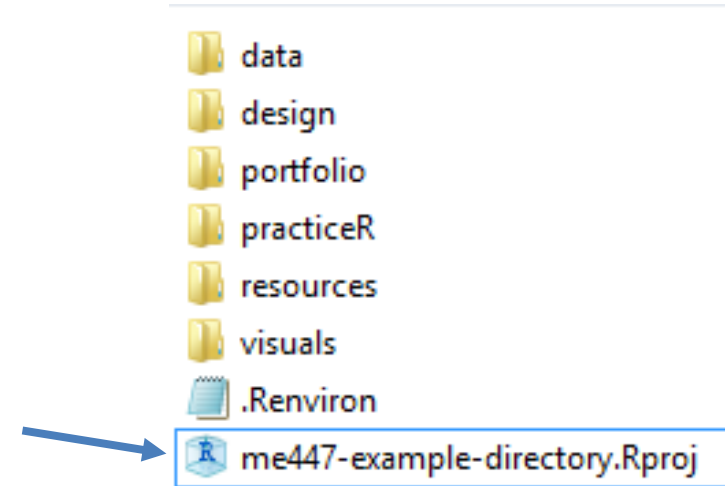
me447-example-directory.Rproj

Console

To see for yourself, launch your project and type `getwd()` in the Console.

Never set the working directory manually
Never use absolute file paths

**R's working directory is the
.Rproj top-level directory**

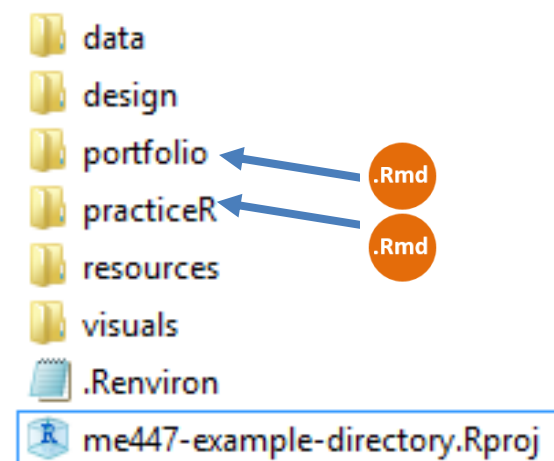


**Paths in .R scripts are always “relative to” the top-level
directory of the Rstudio Project.**

```
# data  
df <- read_excel('data/lotr-words-spoken.xlsx')
```



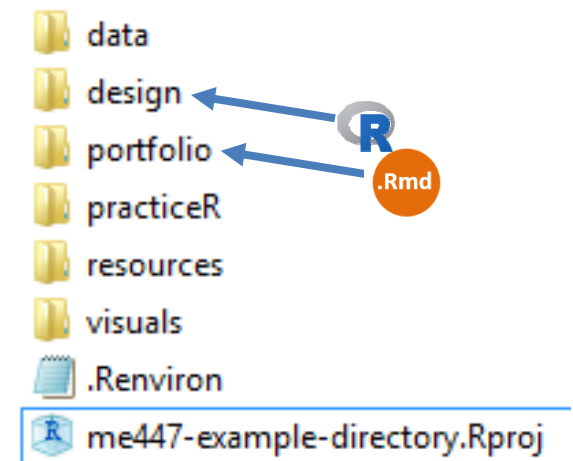
But knitr's default working directory is the Rmd file location.



Because our .Rmd scripts are one level down from .Rproj, we reset the knitr root directory one level up

```
```{r setup, include=FALSE}
set the knitr working directory
library(knitr)
opts_knit$set(root.dir = "../")
```
```

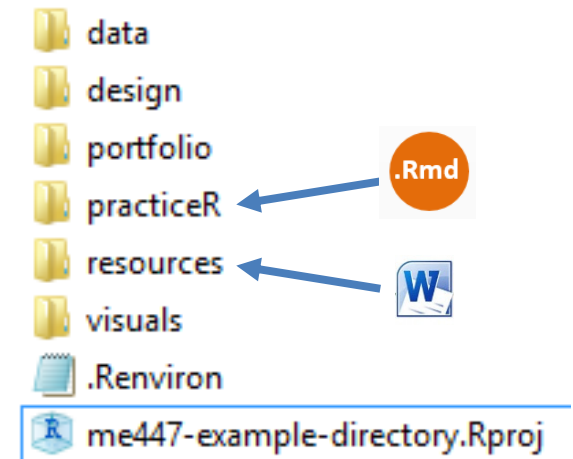
Now both .R and knitr in .Rmd have the same working directory



.Rmd Paths in .R and .Rmd code chunks are now both relative to the .Rproj top-level directory

```
```{r 1118, results='hide'}  
start the image PNG device
png(filename = 'visuals/tut11_multiway.png'
 , width = 6.5
 , height = 5.5
 , units = 'in'
 , res = 300
)
```

## Exception 1: the YAML working directory is the Rmd file location.



### Suppose

- the Rmd script is in “practiceR”
- the word styles reference file is in “resources”

```

output:
 word_document:
 reference_docx: '../resources/word-styles-reference-01.docx'

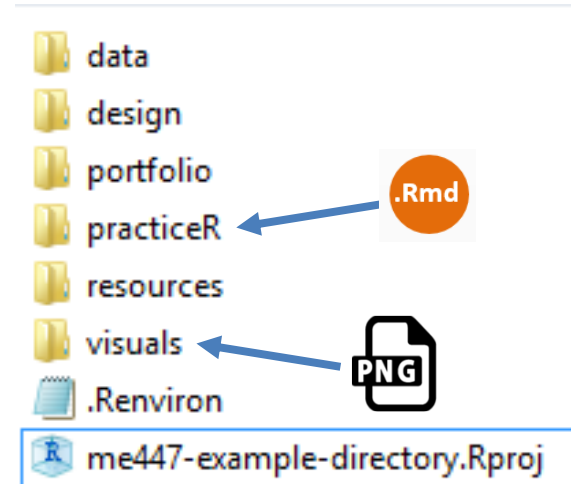
```



## Exception 2: the image import working directory is the Rmd file location.

### Suppose

- the Rmd script is in “practiceR”
- the graph PNG file is in “visuals”

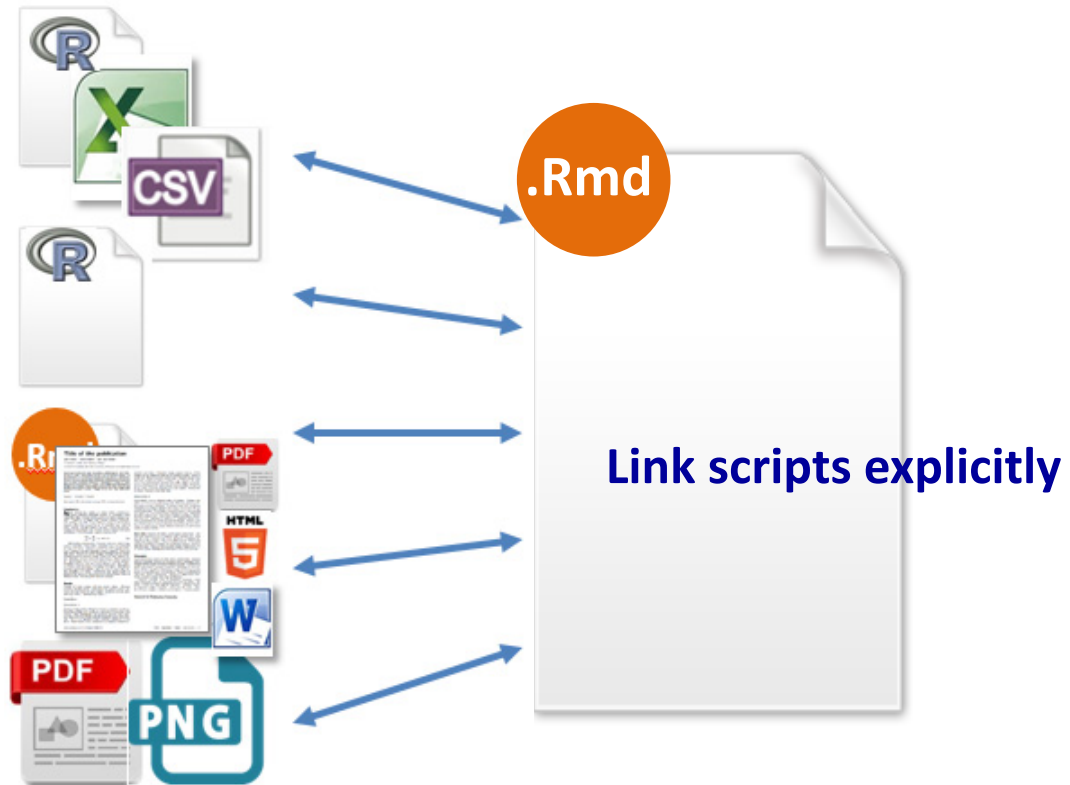
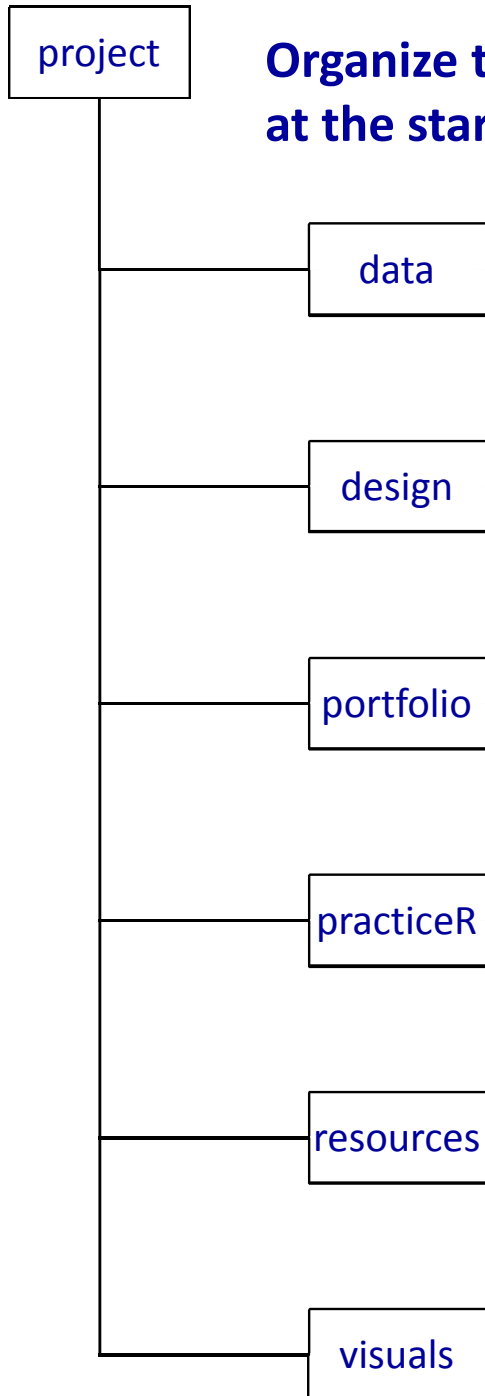


```
Practice importing an image

```

# Summary

**Organize to manage files  
at the start of a project**



**Use relative paths**

```
read_excel('data/lotr-words-spoken.xlsx')
```