

README.pdf

Directory layout

The data camp documents consist of the following six subfolders.

- CheatSheets
- data
- Day1
- Day2
- Day3
- Day4

Please copy the folder **DataCamp** from the network disk **U** to the local disk **C**. Do not Knit the .Rmd files from the network disk **U**.

File formats

- There are three types of files in this data camp.
 - The lectures have file extension .pdf or .html. Please open the .pdf files using Adobe Acrobat Reader and open the .html files using Google Chrome or Microsoft Edge.
 - Each lab has two files: .Rmd and .html. Open the .Rmd files using RStudio. You can try to **Knit** an .Rmd file to produce the corresponding .html file or run the R code chunks in each .Rmd file.

Path to the data sets

- All data sets are stored in the subfolder **data**. When you run the R code which imports a data set, change the path if necessary. For example, the path of the data file **exam.csv** in the presentation is **F:/DataCamp/data/exam.csv**. Change the disk name accordingly such as **C:/DataCamp/data/exam.csv** if the folder **DataCamp** is copied to the **C** disk.

R and RStudio installation

You can install R and RStudio to your own PC/Laptop/MacBook:

- Download and install the latest version of R.
 - Windows: <https://cran.r-project.org/bin/windows/base>
 - Mac: <https://cran.r-project.org/bin/macosx/>
- Download and install the latest version of RStudio.
 - <https://www.rstudio.com/products/rstudio/download/#download> (scroll down to “installers for Supported Platforms”)
- For more information about the installation of R and RStudio, see the file **RInstallations.pdf**.

Installation of R packages

- The following packages are required in this data camp. Open RStudio and install the R packages by typing the following in the **Console**.

```
- install.packages("devtools");  
- devtools::install_github("wmurphyrd/fiftystater",force=T);  
- install.packages("rmarkdown");  
- install.packages("readxl");  
- install.packages("grDevices");  
- install.packages("ggplot2");  
- install.packages("lattice");  
- install.packages("gridExtra");  
- install.packages("car");  
- install.packages("GGally");  
- install.packages("RColorBrewer");  
- install.packages("dplyr");  
- install.packages("rgl");  
- install.packages("magick");  
- install.packages("pdftools");  
- install.packages("gapminder");  
- install.packages("datasauRus");  
- install.packages("maps");  
- install.packages("mapproj");  
- install.packages("usmap");  
- install.packages("rgdal");  
- install.packages("leaflet");  
- install.packages("nycflights13");  
- install.packages("stringr");  
- install.packages("ggmap");  
- install.packages("corrplot");  
- install.packages("mvtnorm");  
- install.packages("MASS");  
- install.packages("scatterplot3d");  
- install.packages("knitr");
```