# Installation

The first step is to install package afedR with devtools: devtools::install\_github('msperlin/adfeR')

Another requirement is a working Latex instalation. For that, use tinytex: tinytex::install\_tinytex()

# Compiling Exercises

## How it works?

All book exercises in the exams format: each exercise is a .Rmd file containing code, exercise text and solution. The files themselves can be found in the installation directory of the package:

eoc\_dir <- afedR::get\_EOC\_dir()

eoc\_chapters <- fs::dir\_ls(eoc\_dir) basename(eoc\_chapters)

## [1] "Chapter01-Introduction" "Chapter02-Basic- Operations"

|  |  |  |  |
| --- | --- | --- | --- |
| ## | [3] | "Chapter03-Research-Scripts" | "Chapter04-Import-Local" |
| ## | [5] | "Chapter05-Import-Internet" | "Chapter06-Dataframes-and- |

Others"

## [7] "Chapter07-Basic-Classes" "Chapter08-Programming" ## [9] "Chapter09-Cleaning-and-Structuring" "Chapter10-Figures"

## [11] "Chapter11-FinEcon" "Chapter12-Reporting" ## [13] "Chapter13-Optimizing-Code"

Each folder will have several exercises. Let’s try one out:

eoc\_files <- fs::dir\_ls(eoc\_chapters[1]) basename(eoc\_files)

|  |  |  |
| --- | --- | --- |
| ## | [1] | "afedR\_Chap-01\_01\_SPLUS.Rmd" |
| ## | [2] | "afedR\_Chap-01\_02\_Authors-R.Rmd" |
| ## | [3] | "afedR\_Chap-01\_03\_About-R.Rmd" |
| ## | [4] | "afedR\_Chap-01\_04\_name-R.Rmd" |
| ## | [5] | "afedR\_Chap-01\_05\_about-R.Rmd" |
| ## | [6] | "afedR\_Chap-01\_06\_Tecnology-R.Rmd" |
| ## | [7] | "afedR\_Chap-01\_07\_rtools.Rmd" |
| ## | [8] | "afedR\_Chap-01\_08\_Groups.Rmd" |
| ## | [9] | "afedR\_Chap-01\_09\_RBloggers.Rmd" |
| ## | [10] | "afedR\_Chap-01\_10\_Infrastructure-TI.Rmd" |

We can also read one of the files to show the strucuture of the exercise in code and text:

readLines(eoc\_files[1])

## [1] "```{r datageneration, echo = FALSE, results = \"hide\"}" ## [2] "my\_answers <- c('S', "

## [3] " 'C++',"

|  |  |  |  |
| --- | --- | --- | --- |
| ## | [4] | " | 'Python'," |
| ## | [5] | " | 'Julia'," |
| ## | [6] | " | 'Javascript')" |
| ## | [7] | "" |  |
| ## | [8] | "#check\_answers(my\_answers)" | |
| ## | [9] | "```" | |
| ## | [10] | "" | |
| ## | [11] | "Question" | |
| ## | [12] | "========" | |
| ## | [13] | "" | |
| ## | [14] | "The R language was developed based on what other programming | |
| language?" | | | |
| ## | [15] | "" | |
| ## | [16] | "```{r questionlist, echo = FALSE, results = \"asis\"}" | |
| ## | [17] | "exams::answerlist(my\_answers, markup = \"markdown\")" | |
| ## | [18] | "```" | |
| ## | [19] | "" | |
| ## | [20] | "Solution" | |
| ## | [21] | "================" | |
| ## | [22] | "" | |
| ## | [23] | "Straight from the book, section \*\*What is R\*\*: \"R is a modern | |

version of S, a programming language originally created in Bell Laboratories (formerly AT&T, now Lucent Technologies).\""

|  |  |  |
| --- | --- | --- |
| ## | [24] | "" |
| ## | [25] | "Meta-information" |
| ## | [26] | "================" |
| ## | [27] | "extype: schoice" |
| ## | [28] | "exsolution: `r mchoice2string(c(TRUE, FALSE, FALSE, FALSE, |

FALSE), single = TRUE)`"

## [29] "exname: \"S PLUS\"" ## [30] "exshuffle: TRUE"

## [31] ""

Basically, we define all sections of a question – text, solution, alternatives – using a .Rmd template.

Be aware that, all exams .rmd files available within afedR are self contained and you can export and compile them directly from exams. An easy way to copy all exercise files to your local folder is using function afedR::path\_to\_copy:

# copy to "documents" folder afedR::copy\_book\_files(path\_to\_copy = '~')

## Copying data files files to ~/afedR files/data ## 37 files copied

## Copying end-of-chapter (eoc) exercises with solutions to ~/afedR files/eoc-exercises/

## 99 files copied

## Copying R code to ~/afedR files/R-code ## 15 files copied

All book files – data, code and exercises – are now available at your “Documents” folder (shorcut of ~).

## Compiling to pdf

For pdf compilation, you’ll need:

name of students (will be printed in pdf)

students ids (I usually use their university card number) Chapters to include

Exercise name Course name

And use the following code

library(afedR)

names\_students <- c('Michael Peterling', 'John Aspper', 'Mr. Beans') ids\_students <- 1:length(names\_students) # probably id card? chapters <- 1:3 # chapters from 1 to 13

dir\_output <- file.path(tempdir(), 'pdf-example')

df\_exams <- compile\_pdf\_exercises(students\_names = names\_students,

students\_ids = ids\_students, chapters\_to\_include = chapters, dir\_out = dir\_output)

The output of compile\_pdf\_exercises is a table with the correct answers for schoice and

num type of questions:

glimpse(df\_exams) ## Rows: 69

## Columns: 4

## $ i\_name "Michael Peterling", "Michael Peterling", "Michael Peterling"…

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ## | $ i\_ver | 1, 1, 1, | 1, 1, | 1, 1, | 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, |
| 1, | 1… |  |  |  |  |
| ## | $ i\_q | 1, 2, 3, | 4, 5, | 6, 7, | 8, 9, 10, 11, 12, 13, 14, 15, 16, |

17, 18…

## $ solution "d", "e", "b", "a", "e", NA, "b", NA, NA, NA, NA, NA, NA, NA,…

After compilation, all pdf files are available at folder dir\_output: fs::dir\_ls(dir\_output)

## /tmp/RtmpNYRZL8/pdf-example/Sample Exercise\_Ver 01\_Michael Peterling.pdf

## /tmp/RtmpNYRZL8/pdf-example/Sample Exercise\_Ver 02\_John Aspper.pdf ## /tmp/RtmpNYRZL8/pdf-example/Sample Exercise\_Ver 03\_Mr. Beans.pdf

The final result will be as follows:

## Compiling to html

You can also compile to a html file using afedR::compile\_html\_exercises:

library(afedR)

names\_students <- c('Michael Peterling', 'John Aspper', 'Mr. Beans') ids\_students <- 1:length(names\_students) # probably id card? chapters <- 1:3 # chapters from 1 to 13

dir\_output <- file.path(tempdir(), 'html-example')

df\_exams <- compile\_html\_exercises(students\_names = names\_students,

students\_ids = ids\_students, chapters\_to\_include = chapters, dir\_out = dir\_output)

## Exams generation initialized. ##

## Output directory: /tmp/RtmpNYRZL8/exams files filef083004f255

## Supplement directory: /tmp/RtmpNYRZL8/filef08188b2d9b ## Temporary directory: /tmp/RtmpNYRZL8/filef083ea56f74

## Exercises: /home/msperlin/R/x86\_64-pc-linux-gnu-library/4.0/afedR/ extdata/exams\_files/02-EOCE-Rmd/Chapter01-Introduction/afedR\_Chap- 01\_01\_SPLUS, /home/msperlin/R/x86\_64-pc-linux-gnu-library/4.0/afedR/ extdata/exams\_files/02-EOCE-Rmd/Chapter01-Introduction/afedR\_Chap- 01\_02\_Authors-R, /home/msperlin/R/x86\_64-pc-linux-gnu-library/4.0

/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter01-Introduction/ afedR\_Chap-01\_03\_About-R, /home/msperlin/R/x86\_64-pc-linux-gnu- library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter01- Introduction/afedR\_Chap-01\_04\_name-R, /home/msperlin/R/x86\_64-pc-linux- gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter01- Introduction/afedR\_Chap-01\_05\_about-R, /home/msperlin/R/x86\_64-pc- linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter01- Introduction/afedR\_Chap-01\_06\_Tecnology-R, /home/msperlin/R/x86\_64-pc- linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter01- Introduction/afedR\_Chap-01\_07\_rtools, /home/msperlin/R/x86\_64-pc-linux- gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter01- Introduction/afedR\_Chap-01\_08\_Groups, /home/msperlin/R/x86\_64-pc-linux- gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter01- Introduction/afedR\_Chap-01\_09\_RBloggers, /home/msperlin/R/x86\_64-pc- linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter01- Introduction/afedR\_Chap-01\_10\_Infrastructure-TI, /home/msperlin

/R/x86\_64-pc-linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-

Rmd/Chapter02-Basic-Operations/afedR\_Chap-02\_01\_Basic, /home/msperlin

/R/x86\_64-pc-linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE- Rmd/Chapter02-Basic-Operations/afedR\_Chap-02\_02\_Basic, /home/msperlin

/R/x86\_64-pc-linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE- Rmd/Chapter02-Basic-Operations/afedR\_Chap-02\_03\_getwd, /home/msperlin

/R/x86\_64-pc-linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE- Rmd/Chapter02-Basic-Operations/afedR\_Chap-02\_04\_download,

/home/msperlin/R/x86\_64-pc-linux-gnu-library/4.0/afedR/ extdata/exams\_files/02-EOCE-Rmd/Chapter02-Basic-Operations/afedR\_Chap- 02\_05\_unzip, /home/msperlin/R/x86\_64-pc-linux-gnu-library/4.0/afedR/ extdata/exams\_files/02-EOCE-Rmd/Chapter02-Basic-Operations/afedR\_Chap- 02\_06\_installpkgs, /home/msperlin/R/x86\_64-pc-linux-gnu-library/4.0

/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter02-Basic- Operations/afedR\_Chap-02\_07\_filespkgs, /home/msperlin/R/x86\_64-pc- linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter02- Basic-Operations/afedR\_Chap-02\_08\_installpkgs2, /home/msperlin

/R/x86\_64-pc-linux-gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE- Rmd/Chapter02-Basic-Operations/afedR\_Chap-02\_09\_installpkgs3-cranlogs,

/home/msperlin/R/x86\_64-pc-linux-gnu-library/4.0/afedR/ extdata/exams\_files/02-EOCE-Rmd/Chapter02-Basic-Operations/afedR\_Chap- 02\_10\_devtools, /home/msperlin/R/x86\_64-pc-linux-gnu-library/4.0/afedR/ extdata/exams\_files/02-EOCE-Rmd/Chapter02-Basic-Operations/afedR\_Chap- 02\_11\_files-in-computer, /home/msperlin/R/x86\_64-pc-linux-gnu- library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter03-Research- Scripts/afedR\_Chap-03\_01\_pesquisa, /home/msperlin/R/x86\_64-pc-linux- gnu-library/4.0/afedR/extdata/exams\_files/02-EOCE-Rmd/Chapter03-

Research-Scripts/afedR\_Chap-03\_02\_folders ##

## Generation of individual exams.

## Exam 1: \_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_01\_SPLUS (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_02\_Authors-R (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter01-Introduction\_afedR\_Chap-01\_03\_About-R (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_04\_name-R (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_05\_about-R (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_06\_Tecnology-R (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_07\_rtools (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_08\_Groups (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_09\_RBloggers (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter01-Introduction\_afedR\_Chap-01\_10\_Infrastructure-TI (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_01\_Basic (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_02\_Basic (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02- Basic-Operations\_afedR\_Chap-02\_03\_getwd (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter02-Basic-Operations\_afedR\_Chap-02\_04\_download (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_05\_unzip (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu-

library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_06\_installpkgs (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter02-Basic-Operations\_afedR\_Chap-02\_07\_filespkgs (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_08\_installpkgs2 (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_09\_installpkgs3-cranlogs (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_10\_devtools (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_11\_files-in-computer (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter03-Research-Scripts\_afedR\_Chap- 03\_01\_pesquisa (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter03-Research- Scripts\_afedR\_Chap-03\_02\_folders (srt) ... w ... done.

## Exam 2: \_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_01\_SPLUS (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_02\_Authors-R (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter01-Introduction\_afedR\_Chap-01\_03\_About-R (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_04\_name-R (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_05\_about-R (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_06\_Tecnology-R (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_07\_rtools (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_08\_Groups (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_09\_RBloggers (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter01-Introduction\_afedR\_Chap-01\_10\_Infrastructure-TI (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_01\_Basic (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_02\_Basic (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02- Basic-Operations\_afedR\_Chap-02\_03\_getwd (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter02-Basic-Operations\_afedR\_Chap-02\_04\_download (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_

extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_05\_unzip (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_06\_installpkgs (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter02-Basic-Operations\_afedR\_Chap-02\_07\_filespkgs (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_08\_installpkgs2 (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_09\_installpkgs3-cranlogs (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_10\_devtools (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_11\_files-in-computer (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter03-Research-Scripts\_afedR\_Chap- 03\_01\_pesquisa (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter03-Research- Scripts\_afedR\_Chap-03\_02\_folders (srt) ... w ... done.

## Exam 3: \_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_01\_SPLUS (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_02\_Authors-R (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter01-Introduction\_afedR\_Chap-01\_03\_About-R (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_04\_name-R (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_05\_about-R (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_06\_Tecnology-R (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01-Introduction\_afedR\_Chap- 01\_07\_rtools (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_08\_Groups (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter01- Introduction\_afedR\_Chap-01\_09\_RBloggers (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter01-Introduction\_afedR\_Chap-01\_10\_Infrastructure-TI (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_01\_Basic (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_02\_Basic (srt) \_home\_msperlin\_R\_x86\_64-pc- linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02- Basic-Operations\_afedR\_Chap-02\_03\_getwd (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-

Rmd\_Chapter02-Basic-Operations\_afedR\_Chap-02\_04\_download (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_05\_unzip (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_06\_installpkgs (srt) \_home\_msperlin\_R\_x86\_64- pc-linux-gnu-library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE- Rmd\_Chapter02-Basic-Operations\_afedR\_Chap-02\_07\_filespkgs (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_08\_installpkgs2 (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_09\_installpkgs3-cranlogs (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic-Operations\_afedR\_Chap- 02\_10\_devtools (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter02-Basic- Operations\_afedR\_Chap-02\_11\_files-in-computer (srt)

\_home\_msperlin\_R\_x86\_64-pc-linux-gnu-library\_4.0\_afedR\_ extdata\_exams\_files\_02-EOCE-Rmd\_Chapter03-Research-Scripts\_afedR\_Chap- 03\_01\_pesquisa (srt) \_home\_msperlin\_R\_x86\_64-pc-linux-gnu- library\_4.0\_afedR\_extdata\_exams\_files\_02-EOCE-Rmd\_Chapter03-Research- Scripts\_afedR\_Chap-03\_02\_folders (srt) ... w ... done.

## Exporting to Moodle

You can also export to *e-learning* platforms such as Moodle. The process is quite simple as

exams package does the heavy work:

require(afedR)

my\_eoc\_dir <- afedR::get\_EOC\_dir(

available\_chapters <- fs::dir\_ls(my\_eoc\_dir) exercise\_files <- fs::dir\_ls(available\_chapters[1]) dir\_output <- file.path(tempdir(), 'moodle-test')

exams::exams2moodle(file = exercise\_files,

name = 'TestingMoodle', dir = dir\_output)

fs::dir\_ls(dir\_output)

## /tmp/RtmpNYRZL8/moodle-test/TestingMoodle.xml

You can later import this .xml file in your Moodle class.

## Exporting to Blackboard

require(afedR)

my\_eoc\_dir <- afedR::get\_EOC\_dir( available\_chapters <- fs::dir\_ls(my\_eoc\_dir)

exercise\_files <- fs::dir\_ls(available\_chapters[1]) dir\_output <- file.path(tempdir(), 'blackboard-test')

exams::exams2blackboard(file = exercise\_files,

name = 'TestingBlackBoard', dir = dir\_output)

fs::dir\_ls(dir\_output)

## /tmp/RtmpNYRZL8/blackboard-test/TestingBlackBoard.zip

This .zip file contains all exercises of chapter 01 and can be imported in your blackboard account.