**Create RPackage**

In RStudio

1. New Project -> New Directory -> R Package
2. In console:

install.packages(“devtools”) #for data

install.packages(“roxygen2”) #for NAMESPACE

1. Build -> Configure Build Tools



Choose “Package” and “Generate documentation with Roxygen” (choose all options).

Click “OK”

1. Optional (because normally not needed): Delete *hello.R* in folder /R and *hello.Rd* in folder /man
2. Create R-File with the coordinated preamble as follows:

#' Title of this function

#'

#' @param <parameter> Description of parameter

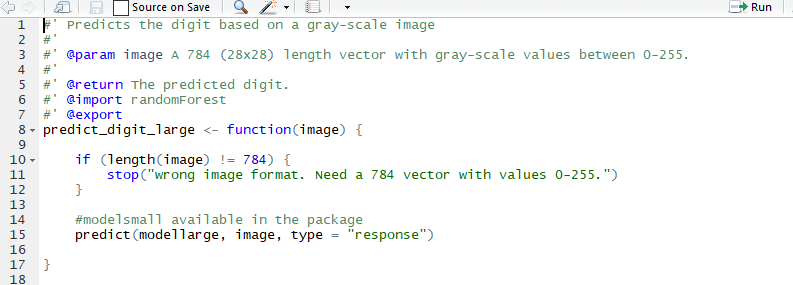
#' @return Description of returned value(s)

#' @import packages, which should be installed

#'

#' @export (this is the command that one can use the function if the package is loaded)

Example:



1. Save the created *R-file* in folder /R.
2. Type in console: load\_all(). This should produce a *DESCRIBTION-file* in the project folder. With the coordinated preamble the “roxygen2” package should produce a *.Rd-file* in the folder /man. Further, a *NAMESPACE-file* is created. Please check this.
3. Open *DESCRIPTION-file* and change it as follows:

Package: MyPackageName

Type: Package

Title: What The Package Does (one line, title case required)

Version: 0.1.0

Author: YourName

Maintainer: YourName <your e-mail address>

Description: More about what it does (maybe more than one line). Use four spaces (\_\_\_\_) when indenting paragraphs within the Description.

License: What license is it under? (mostly GPL-3)

Encoding: UTF-8

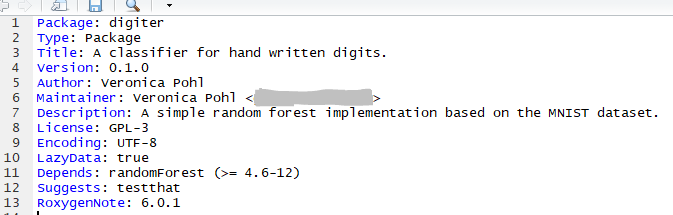
LazyData: true

Depends: package (>= or <= version)

Suggests: package which is not needed but suggested

RoxygenNote: version

Example:



1. Save the *DESCRIPTION-file*.
2. To save data or trained models into your package use following in the console:

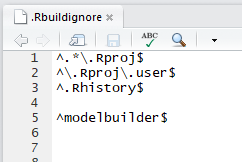
model <- readRDS(file = "model.rds")

devtools::use\_data(model, internal = TRUE, overwrite = TRUE)

This save the model into the folder /R as *sysdata.rda* . If the package is loaded one can use the data or model without loading it by hand.

1. To ignore some folders or files choose automatic created *.Rbiuldignore file* and include ^namefolder$.

Example:



1. Click “Build and Reload” for pushing all your saved Changes into the package.



Please check if errors occur!

1. Click “Check” to check the package. Please check if errors occur!
2. If the check succeed, click “More -> Build Source Package”. This generates the file *MyPackageName\_0.1.0.tar.gz*

Your folder structure should look like:

