**Create RPackage**

In RStudio

1. New Package -> 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

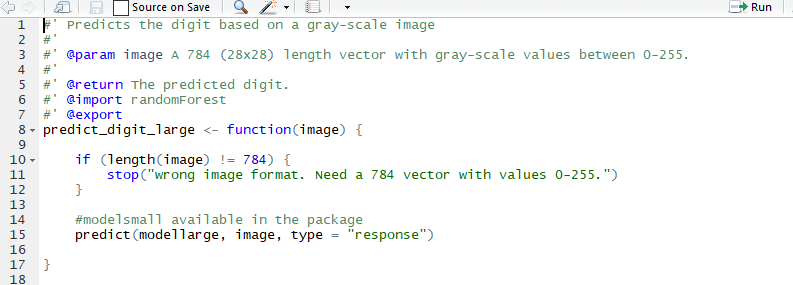
#' @return Description of returned value(s)

#' @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

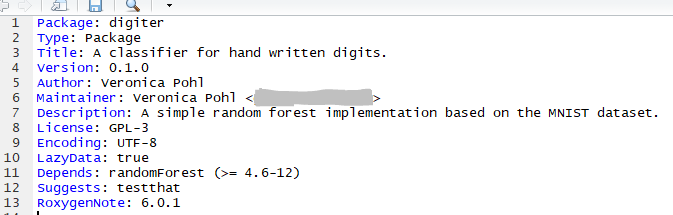
LazyData: true

Depends: package (>= or <= version)

Suggests: package which is not needed but suggested

RoxygenNote: version

Example:



1. Save the *DESCRIPTION-file*.
2. Click “Build and Reload” for pushing all your saved Changes into the package.



1. To save Data or trained models into your package use following in the console:

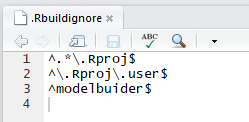
model <- readRDS(file = "model.rds")

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 “Check” to check the package
2. If the check succeed, click “More -> Build Source Package”. This generates the file *MyPackageName\_0.1.0.tar.gz*
3. Click “Close Project” and if you asked to save it, click “save”.

Your folder structure should look like:

