## Write an R package in 15 minutes

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## What's in an R package

- Set of conventions (basic):
  - ./R/ contains source code
  - NAMESPACE, DESCRIPTION files
  - ./man/ contains documentation pages
  - ./vignettes/ tutorials, use cases
  - ./tests/ tests for functions
  - .... many others .... (depends on package complexity)

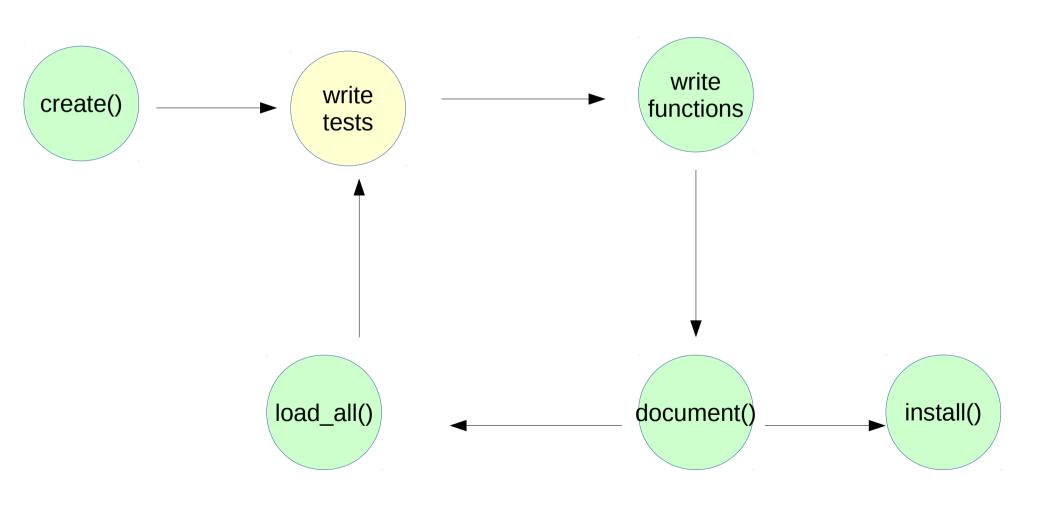
## R package: devtools

old: package.skeleton() ... most of the maintenance has to be done by hand...

new: devtools package by Hadley Wickham

- implements a flexible and easy to use workflow for package development
- it interfaces nicely with git (local repos, github, bitbucket, gitorious)
- makes packages ready for CRAN
- easily helps creating NAMESPACE
- makes easy to write functions documentation and vignettes, share data, manage tests

## devtools workflow



```
#' Say hi
#'
   Oparam name Character, the name to which the
function says hi.
#'
   @return
#' @export
#'
#' @examples
#' say_hi("Luca")
say_hi <- function(name = NULL){</pre>
  if(is.null(name)){
    stop("Sorry I need a name, whom should I
greet?")
  message(paste("Hi", name, "!"))
```