R Coding Best Practices

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17 August 2020

Some best practices for writing r-code

(To Be Continuously Updated)

No use of `rm(list = ls())` at beginning of files

- Do not empty the workspace with `rm()`.
- `rm()` keeps many previous settings .
- For example, all the packages that were already loaded remain or options like `options(stringsAsFactors = FALSE)` remain set.
- *Instead*: always start with a fresh r-session.

No use of `setwd()`

- Instead: *use the here package*, see: https://github.com/jennybc/here_here
- If you use r-studio, create an R-project for the project in the main folder.
- When loading `library(here)` within the project in rstudio, the main folder will become the basis from which to declare any paths.
- If you use other editors, you can create a .here file in the main folder.
- Use `here()` to declare paths from main folder.
- This means no more changing of paths, etc.
- The code will run on different machines or at different points in time. Even if we rename the main folder at some point or move it to a different location.

No massive package loading

- Instead: *only load those packages that are actually used in the file.*
- Also, pay attention to function conflicts when loading, i.e., which functions are masked when loading a new package.
- For example, if tidyverse is loaded the lag functions within plm, lfe will not work!
- Instead: *use the conflicted package*, see: https://github.com/r-lib/conflicted
- The conflicted package will alert/throw an error when using any function that has conflict.
- Also, when loading a package that has a conflicted function, immediately after loading the package declare which package to use the function from, e.g.: `conflict_prefer("filter", "dplyr") ### use filter from dplyr`.

Comment, Comment, Comment

- You should add comments to almost every line in your code. This will help others to understand your code but also help your future self when you come back to the file one, two, or ten years from now.

Try to adhere to the r-studio style guide as much as possible

If possible and sensible, follow the r-studio style guide: http://adv-r.had.co.nz/Style.html. It will make your code more readable.