Using github with Rstudio

Practical

Julien Martin

25 January, 2021

Context

Let's apply what we have learnt in the course on **Introduction to Git and GitHub with Rstudio**

We will configure Rstudio to work with our github account, then create a new project and start using `github`. To have some data I suggest to use the awesome `palmerpenguins` dataset 🐧.

Information of the data

These data have been collected and shared by Dr. Kristen Gorman and Palmer Station, Antarctica LTER.

The package was built by Drs Allison Horst and Alison Hill, check out the official website.

The package `palmerpenguins` has two datasets.

```
library(palmerpenguins)
data(package = 'palmerpenguins')
```

The dataset `penguins` is a simplified version of the raw data; see `?penguins` for more info:

```
head(penguins)
```

```
## # A tibble: 6 x 8
##   species island bill_length_mm bill_depth_mm flipper_length_~ body_mass_g sex
##   <fct>   <fct>           <dbl>         <dbl>            <int>       <int> <fct>
## 1 Adelie  Torge~           39.1          18.7              181        3750 male
## 2 Adelie  Torge~           39.5          17.4              186        3800 fema~
## 3 Adelie  Torge~           40.3          18                195        3250 fema~
## 4 Adelie  Torge~           NA            NA                 NA          NA <NA>
## 5 Adelie  Torge~           36.7          19.3              193        3450 fema~
## 6 Adelie  Torge~           39.3          20.6              190        3650 male
## # ... with 1 more variable: year <int>
```

The other dataset `penguins_raw` has the raw data; see `?penguins_raw` for more info:

```
head(penguins_raw)
```

```
## # A tibble: 6 x 17
##   studyName `Sample Number` Species Region Island Stage `Individual ID`
##   <chr>               <dbl> <chr>   <chr>  <chr>  <chr> <chr>
## 1 PAL0708                 1 Adelie~ Anvers Torge~ Adul~ N1A1
## 2 PAL0708                 2 Adelie~ Anvers Torge~ Adul~ N1A2
## 3 PAL0708                 3 Adelie~ Anvers Torge~ Adul~ N2A1
## 4 PAL0708                 4 Adelie~ Anvers Torge~ Adul~ N2A2
## 5 PAL0708                 5 Adelie~ Anvers Torge~ Adul~ N3A1
```

```
## 6 PAL0708                 6 Adelie~ Anvers Torge~ Adul~ N3A2
## # ... with 10 more variables: `Clutch Completion` <chr>, `Date Egg` <date>,
## #   `Culmen Length (mm)` <dbl>, `Culmen Depth (mm)` <dbl>, `Flipper Length
## #   (mm)` <dbl>, `Body Mass (g)` <dbl>, Sex <chr>, `Delta 15 N (o/oo)` <dbl>,
## #   `Delta 13 C (o/oo)` <dbl>, Comments <chr>
```

For this exercise, we're gonna use the `penguins` dataset.

Questions

1) Create a github acocunt if not done yet.

2) Configure Rstudio with your github account using the `usethis` package.

3) Store your GITHUB Personal Authorisation Token in your .Renviron file

4) Create a new R Markdown project, and create a new git repository

5) Create a new Rmarkdon document, in your project. Then save the file and stage it.

6) Create a new commit including the new file and push it to github (Check on github that it works).

7) Edit the file. Delete everything after line 12. Add a new section title, simple text and text in bold font. Then knit and compile.

8) Make a new commit (with a meaningful message), and push to github.

9) Create a new branch, and add a new section to the rmarkdown file in this branch. Whatever you want. I would suggest a graph of the data.

10) Creat a commit and push it to the branch.

11) On github, create a pull request to merge the 2 different branches.

12) Check and accep the pull request to merge the 2 branches.

You have successfully used all the essential tools of `git` 🎉 . You are really to explore 🥷 and discover its power 💪

Happy git(hub)-ing