Session 02:
Ch 2 (Installation) &
Ch 3 (Connect Git, GitHub, RStudio)

Book club: **Happy Git and GitHub for the useR**

R-Ladies Bergen, R-Ladies Den Bosch, R-Ladies Amsterdam


R
Ladies

Program for today

- Presentation of **Chapter 2 (Installation)** &
- Presentation of **Chapter 3 (Connect Git, GitHub,**

House rules for R-Ladies arrangements

- R-Ladies is dedicated to providing a harassment-experience for everyone
- We do not tolerate harassment of participants in any form
- See the **code of conduct.**

A good start is a great beginning!

It is vital that you attempt to set up your system in advance. You cannot show up at the workshop with no preparation and keep up!

Try this. Best case scenario is about 1 - 2 hours. If you hit a wall, we will help:

- Register a free GitHub account.
- Install or update R and RStudio.
- Install Git.
- Introduce yourself to Git.
- Configure a personal access token or set up SSH keys.
- Prove local Git can talk to GitHub.
- Prove RStudio can find local Git and, therefore, can talk to GitHub.
  - FYI: this is where our hands-on activities usually start. We walk through a similar activity together, with narrative, and build from there.
- Contemplate if you'd like to install an optional Git client, now or in future.

Troubleshooting:

- Sometimes RStudio needs a little help finding Git.
- General troubleshooting: RStudio, Git, GitHub Hell.

These are battle-tested instructions, so most will succeed. We believe in you! If you have trouble, reach out for help and stick with it. Where to get help:

- If you are enrolled in an upcoming workshop, find it below to get specifics on pre-workshop support.
- We *might* be able to respond to a GitHub issue here.
- If there is a clear R/RStudio angle, post on https://forum.posit.co/.
- General advice: search with Google and on https://stackoverflow.com, see also https://github.community.

Alt text

Chapter 2: Installation

- **Register a free GitHub account**
  - Can have unlimited number of private repos (collaborators)
- **Install or upgrade R and RStudio**
  - Install/Update **R**
  - Install **RStudio** (Posit)
  - Update your R packages:
    - `update.packages(ask = FALSE, checkBuilt = TRUE)`
  - Update:
    - **R** *1-2 times/year*
    - **RStudio (Posit)** *every month*

Chapter 2: Installation

- **Install Git**
  - ***Windows* 1**: Git for Windows (**Git Bash**) / **2**: v Chocolatey
    - `Update git update-git-for-windows`
  - ***macOS* 1**: Xcode command line tools / **2**: via this **link** / **3**: through Homebrew (missing package manager for OS X)
  - ***Linux***

Chapter 2: Installation

- **Introduce yourself to Git** Making yourself identif
  - *1*: Shell *git config*
    - `git config --global user.name "Jane Doe"`
    - `git config --global user.email "jane@example.com"`
    - `git config --global --list`
  - *2*: RStudio (Posit) *«usethis»-package*
    - `use_git_config(user.name = "Jane Doe", user.email = "jane@example.org")`
  - Check: `git config -global --list`
  - Configure the Editor `git config -global core.editor`
  - Configure the default name for an initial branch (e.g., “main”)
    - **1**: Shell `git config --global init.defaultBranch main`
    - **2**: R `usethis::git_default_branch_configure()`

Chapter 2: Installation

- **Install a Git client** For more graphical interface ir command lines
  - Git (=R) vs. Git Client (=RStudio/Posit)
  - **GitKraken** / **SourceTree** / **GitHub Desktop**

Chapter 3: Connect Git, GitHub, RStudio

- **Credential setup** To be identified as a specific Git
  - Git's communication with a remote server **2 p**
  - **1: Personal access token (PAT) for HTTPS**
    - **1**: Through this **link** -> «Generate token» (Select «repo», «user», «workflow»)
    - **2**: R console `usethis::create_github_token()`
      - Can store the PAT in R `gitcreds::gitcreds_set()`
      - Paste the PAT
  - **2: Set up keys for SSH** More secure
    - Create a public-private SSH key pair -> Add the private key to your ssh-agent -> Add your public key to your GitHub profile
    - SSH should be swapped around once a year

Chapter 3: Connect Git, GitHub, RStudio

- **Connect to GitHub**
  - Make a repo on GitHub
  - Clone the repo to your local computer
  - Make a local change, commit, and push
  - Confirm the local change propagated to the GitHub remote
  - Clean up

- **Connect Rstudio to Git and GitHub**

The end of the session 2!

- Meetup for the Chapters
  - R-Ladies Amsterdam
  - R-Ladies Bergen
  - R-Ladies Den Bosch
- We need YOU as a presenter!