R Practical

Intro to R, R Projects and R markdown

All files can be downloaded from
https://github.com/jessstapley/BasicR

Step 1. Set up your directory structure

- Make a new folder (directory) – called ‘Practical_R’
- In that directory make the following sub directories
  - data
  - scripts
  - Plots
  - docs

- Copy ‘NCBI_eukaryotes.txt’ to data directory
- Copy ‘01_Basics.R to scripts’ directory
- Copy all .Rmd files to docs directory

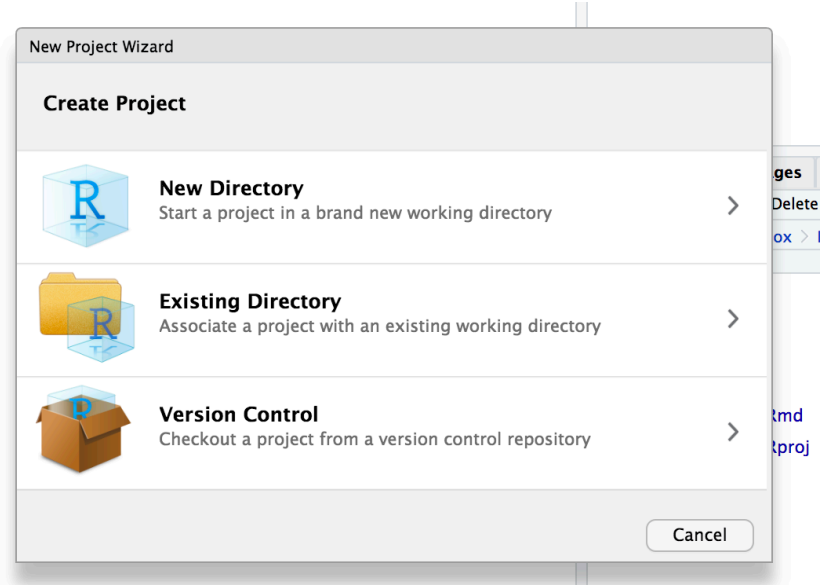
Step 2. Get to know R

- Open scripts/01_Basics.R – with R studio (this may not be the default)

- This script gives you a very basic understanding of R and how to read in data and save plots.
- If you have some of your own data – try reading it into R.
- When finished – QUIT R

- If you are familiar with R then you can skip this step and go to the next step

Step 3. Make an R Project



- Open R Studio
- Create an R project with existing directory
- Name it ‘Practical_R’

- Now look at your directory. What is in the folder?

- Open your new project.
- Look at the Files tab (bottom left window) and open 01_Basics.R

Files produced when you make an R Project

https://support.rstudio.com/hc/en-us/articles/200526207-Using-Projects

1.Creates a project file (with an .Rproj extension) within the project directory. This file contains various project options (discussed below) and can also be used as a shortcut for opening the project directly from the filesystem.

2.Creates a hidden directory (named .Rproj.user) where project-specific temporary files (e.g. auto-saved source documents, window-state, etc.) are stored. This directory is also automatically added to .Rbuildignore, .gitignore, etc. if required.

3.Loads the project into RStudio and display its name in the Projects toolbar (which is located on the far right side of the main toolbar)

Step 4. Using R Markdown

- Open the Rmd_Practical.Rmd
- Follow this practical and make a html or pdf document

- Open the Tutorial_GsizePlot.Rmd
- Follow this practical and make a html document

Step 5. Data analysis

- Open the DataAnalysisR.Rmd and follow this practical to understand how to do some basic analysis in R