Introduction to RStudio

Introduction to Data Management Practices course

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Learning objectives

- Briefly explain what R is

- Get familiarized with RStudio IDE

- Recognize the benefits of R Projects

- Know how to create an R Project and a README with Markdown

R in a nutshell

R

Powerful programming language

Open source

Rich ecosystem of packages

Large and active community

What is RStudio IDE?

Integrated **D**evelopment **E**nvironment, **R** and python

- Includes code editor and a console

- Provides project and file management

- Features interactive data visualization tools

- Integrates with R packages seamlessly

Cheat sheets and Keyboard shortcuts → HELP within RStudio

Let us take a look on the 4 panes!

The benefits of R Projects

Working directory - where the science happens

- Relative pathways

- Consistency, automatic directory setup

- Reproducibility, easier for others to review

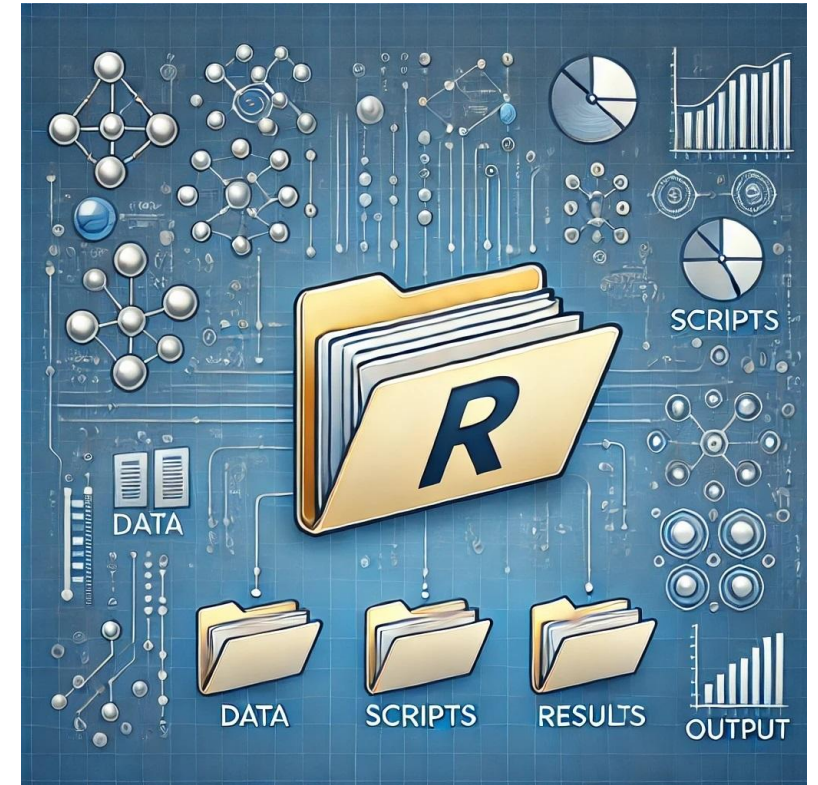Let us create an R Project with a few folders!

Image generated by ChatGPT

README README README

The first thing we look for!

Helps you and others to understand the project

Markdown can be used to write your README
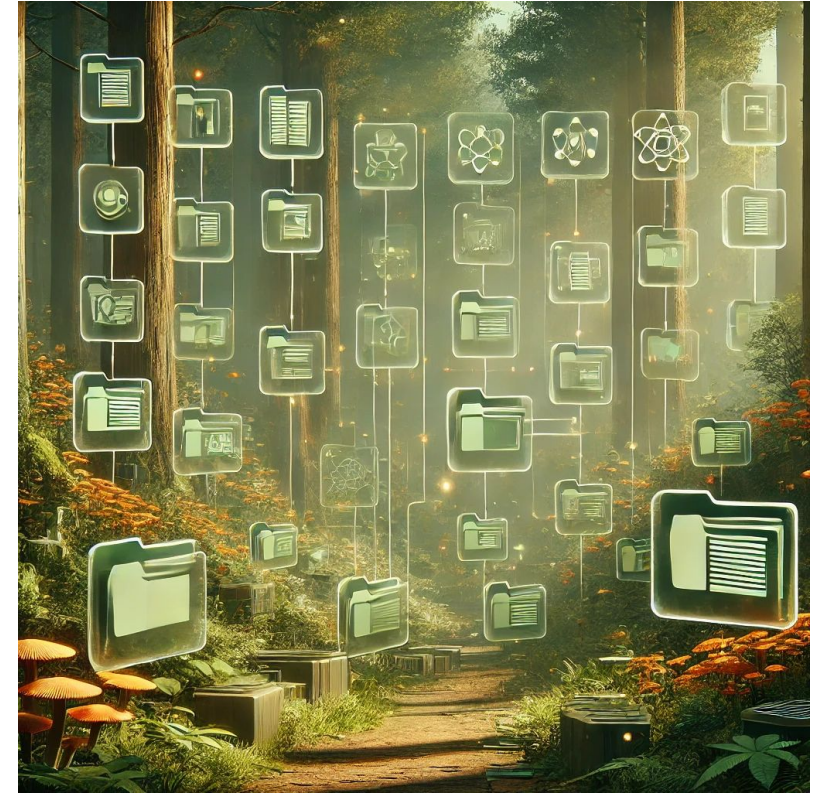
Sounds good, but what should be included?

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Write a README with Markdown

Project overview

Data description

File organization

Data processing

`Usage instructions`

~~Contact information~~

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Question?

Next up is Introduction to scripted analysis with R