

Day 2, Part 0: Import Your Data

Brennan Terhune-Cotter and Matt Dye


https://github.com/brennangitsit/2023_IAM3_R

Agenda

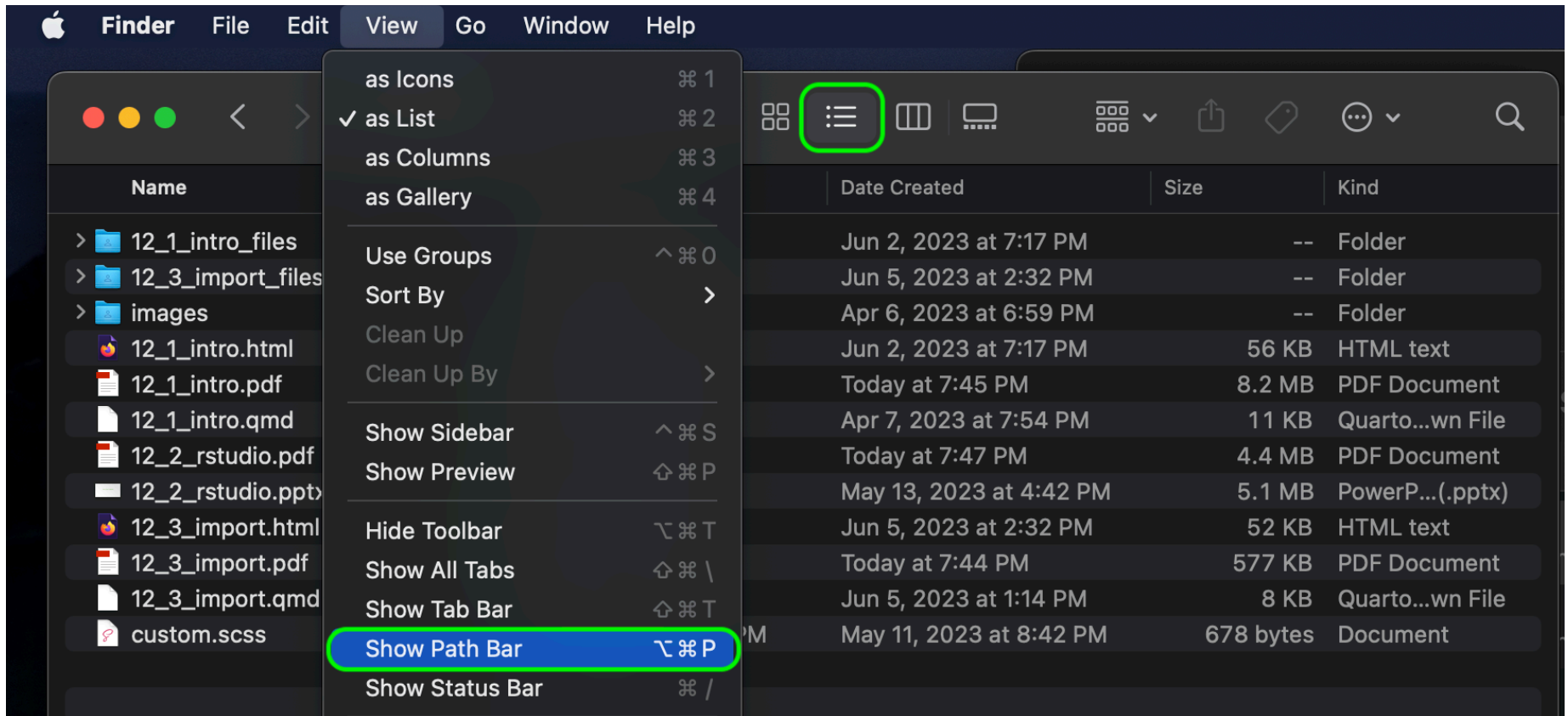
1. Some house cleaning
 1. Finding the absolute file path on Mac
 2. Using Posit Cloud
2. Importing data, step by step

Some house cleaning

Changes to the format

- Instead of **one** project for the workshop:
 - One project per day; each project will have slides and scripts for that day
 - The “data” project has data files you can use for the workshop
- More breaks to look at the .Rmd or your script and try coding on your own
 -  If you see this, try doing what it says on your Posit Cloud project!

Finding the absolute file path of a file on Mac



if you do not see the path bar, click 🖱️ on list view **AND** view > show path bar 👁️

Using Posit Cloud

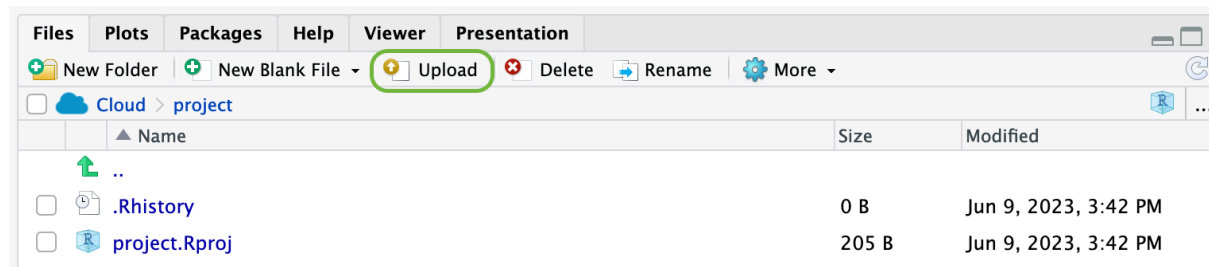


For the workshop, **make your own project** which you can use for your code!

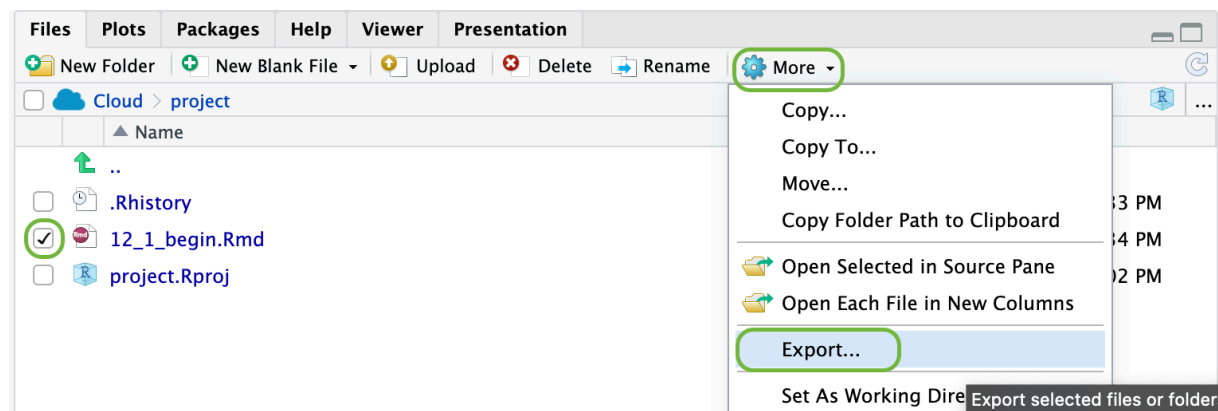
1. Derive the “Data” project to make your own copy
 2. Rename the project with your name
- This project has:
 - a “data” folder with different data files you can use
 - **13_import.Rmd, 13_basics.Rmd, and 13_visualization.Rmd**
 - project.Rproj

Using Posit Cloud

- Unlike RStudio, you have to upload files to Posit Cloud before you can use them:



- If you want to download files from Posit Cloud to your computer:



Importing data, step by step!

1. Open `13_import.Rmd`
2. Click Install if it asks you to install packages. Watch the pretty words as they run by!
3. Read **R Markdown Files and How to Run Code**

First - install and load *tidyverse*

- The packages `readr::` and `readxl::` are both part of `tidyverse::`
- To use them to import data, we first have to **install and load `tidyverse`**.



1. Read **Install the Tidyverse, Load the Tidyverse, and Make Sure Tidyverse is Loaded**
2. Run the code chunks by pressing the green play buttons

Installing and Using Packages

Install packages *once per machine*; use the following commands in your console (or click prompts to “install” when they pop up in RStudio)

(package names are in quotes)

```
1 install.packages("tidyverse")
```

Load packages in every session; use the following commands in your scripts

(package names are NOT in quotes)

```
1 library(tidyverse)
```

Import Your Data

- When importing your data, you want to tell R to:
 1. read the data in a file
 2. give the data a **name**

```
1 my_name <- read_xlsx("filepath/filename")
```

What data is in the project now?

 Open the `data` folder in the `Files` pane. Look at the files in that folder.

- What are the file types of the data in that folder?
 - `.xlsx` is an Excel file.
 - Use `readxl::read_xlsx("data/filename.xlsx")`
 - `.csv` is a text file with commas.
 - Use `readr::read_csv("data/filename.csv")`
 - `.rds` is an R data file.
 - Use `readRDS("data/filename.rds")`
 - `.pdf` if a PDF file.
 - Click on it to open it if you want 🙄

Importing data into your project!



Read [Import Game of Thrones Data](#) and [Import Your Data](#)

If you're done with the above...



Try creating a new R script and importing your own data in that script. Save that script!

That's it!



Read **Getting Help** and **That's It!**