

Getting Started

Shiro Kuriwaki

Last updated September 13, 2018

By now, you should have:

- Downloaded R or Stata

THE PROGRAMMING USER INTERFACE

1. In in-class demos, will be using a cloud version of RStudio at <https://rstudio.cloud>. You should join the GOV-1360 2018 link from the link on Canvas. During a demo, “Copy” the project for the day by clicking the copy icon.

Although most of you will probably doing your work on RStudio local rather than cloud, we are trying to use cloud because it makes it easier to standardize people’s settings.

2. RStudio (either cloud or desktop) is a GUI for the programming language R. A Graphical User Interface allows users to interface with the software (in this case R) using graphical aids like buttons and tabs. Often we don’t think of GUIs because to most computer users, everything is a GUI (like Microsoft Word or your “Control Panel”), but it’s always there!

The **Console / Results** is kind of a the core window through which you see your GUI actually operating through R. It’s not graphical so might not be as intuitive. But all your results, commands, errors, warnings.. you see them in here. A console tells you what’s going on now.

3. Theoretically, one could do all their work in a Console / Results. But that would be a lot of work, because you’d have to give instructions each time you start your data analysis. Moreover, you’ll have no record of what you did. That’s why you need a **script**. This is a type of **code**. It can be referred to as a **source** because that is the source of your commands. Source is also used as a verb; “source the script” just means execute it.

RStudio or Stata doesn’t start out with an empty script, so you can make one from “File > New” or the New file icon.

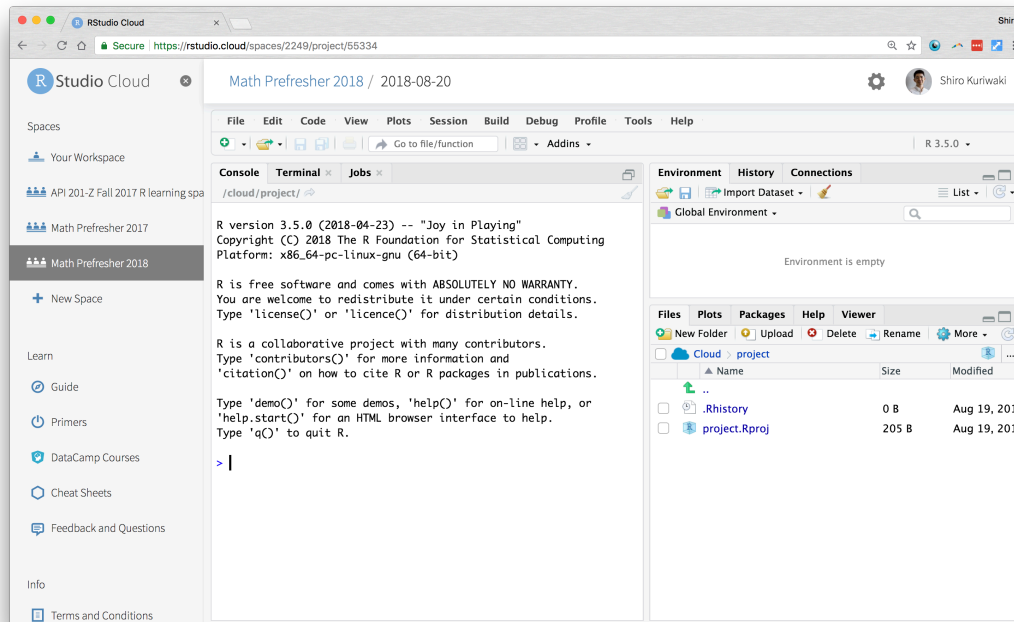


Figure 1: A Typical RStudio Window at Startup

4. You can also open scripts that are in your folder. A script is a type of File. Find your Files in the bottom-right “Files” pane.
5. In R, there are two main types of scripts. A classic .R file and a .Rmd file (for Rmarkdown). In Stata, the main script type is a .do file. A .R file is just lines and lines of R code that is meant to be inserted right into the Console.

A .Rmd tries to weave code and English together, to make it easier for users to create reports that interact with data and intersperse R code with explanation. For example, we built this book in Rmds.

Figure 2: A Typical Stata Window at Startup