# EDUC 260A: Data Management and Manipulation in R

Software to install before first class meeting

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Please skim through all of the instructions before getting start.

### 1. Create a GitHub account

- We will conduct all class-related discussions on this version control system instead of using Canvas. We will also use GitHub to collaborate on weekly problem sets, send announcements, and ask questions.
- Follow these instructions to set up an account.
  - Go to https://github.com/ and sign up for GitHub. Please consider including your first and/or last name as part of your username so that we can easily identify your work, questions, and comments.
  - Once you have successfully created a GitHub account, you will receive an email to verify your account. Follow the instructions on the email.
  - Plug in your name and Github username in the shared spreadsheet

#### 2. Install R

Note: if you have already installed R and R studio, you don't need to re-install, but if compatibility issues arise later in the quarter, you may have to re-install/update.

- Go to https://cran.r-project.org/
- Select "Download R for Windows"

- Click "install R for the first time"
- Click "Download R 4.4.1 for Windows"
- Select "Download R for macOS"
  - Click either "R-4.4.1-arm64.pkg" or "R-4.4.1-x86\_64.pkg" depending on the version of your Mac.

### 3. Install RStudio

- Go to https://posit.co/download/rstudio-desktop/
- Scroll to the bottom of the page
- Select "RSTUDIO-2024.04.2-764.EXE" for Windows users
- Select "RSTUDIO-2024.04.2-764.DMG" for Mac users

Note: The newest Rstudio works on macOS 12 or later. If you have issues installing and your Mac has an older operating system, you may need to install an older version of RStudio here.

# 4. Create a Quarto file that "renders" an HTML document in RStudio

- What do we mean by this?
  - We will use Quarto for lectures and turning in problem sets (homeworks).
  - Quarto allows us to create documents in a variety of formats (HTML, pdf, word, etc.). For example, this document was created using Quarto (pdf).
  - A Quarto file is a file with a ".qmd" extension
  - Here is a link to more information on Quarto.
- Steps to follow to create a Quarto file that renders an HTML document
  - Load RStudio
  - At the top left corner select "File" -> "New file" -> "Quarto Document"
  - Select "HTML", title your Quarto file (optional), and click "OK"
  - Now select the blue arrow and "Render" icon

- Give your file a name and save (you can delete later) in place that is easy to locate (Desktop, Downloads, etc.)
- You should have a saved HTML file (extension .HTML) and a Quarto file (extension .qmd)

Note: HTML stands for Hyper Text Markup Language and is the standard markup language for creating web pages

# 5. Check out the first chapter of Introduction to R on Datacamp here.

- Note: All first chapters of DataCamp's standard courses are free.
  - Follow the link and create an account
  - The tutorial may take about 1-2 hours
  - We do not expect you to complete the entire first chapter. Just spend some time with this course to get a better sense of R before the first class. This course assumes no R experience, so it is okay if you do not complete the first chapter.

Disclaimer: We consist of both Mac and Windows users. Some of us are better at assisting with Mac issues as opposed to Windows issues and vice versa. We will do our best in assisting with any issues regardless if it's a Mac or Windows.