Making Packages in R

March 3rd, 2023

Notes for the R Package Workshop on 2023-03-03.

1 Pre-work

1. **Install R**

   If you already have R, note your version with `R --version` in a terminal or typing `R.version` in an R console (like in RStudio). If you are getting R for the first time, get version 4.2.2.

   (a) MacOS: https://cran.rstudio.com/bin/macosx/

   (b) Windows: https://cran.rstudio.com/bin/windows/base/R-4.2.2-win.exe

2. **Install RStudio:** https://posit.co/download/rstudio-desktop/

3. **Get the R Build toolchain**

   (a) Windows:
      - Go to https://cran.r-project.org/bin/windows/Rtools/ and begin installing the version that matches your R version
      - When installing, make sure "Edit the system PATH" is **unchecked** and "Save version information to registry" is **checked**

   (b) MacOS:
      - Register as an Apple developer (for free): https://idmsa.apple.com/IDMSWebAuth/signin?appIdKey=891bd3417a7776362562d2197f89480a8547b108fd934911bcbea0110d07f757&path=%2Fregister%2Fagree%2F&rv=1
      - Open a terminal and type `xcode-select --install`

4. **Install R packages that help you make R packages**
   - Open RStudio
   - Within the console tab, enter:
     `install.packages(c("devtools", "roxygen2", "testthat", "knitr"))`. See picture on the next page for assistance.

5. **Move the "em-data" folder to a location on your computer that you can find**

   Perhaps in your "Documents" folder. Or maybe even, "Downloads".

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function   Addins ▾   Ⓡ demopackage ▾

Environment **History** **Connections** **Build** **Tutorial**

Import Dataset ▾   127 MiB ▾   ≡ List ▾

R ▾   Global Environment ▾

Environment is empty

Console **Terminal** ✕ **Background Jobs** ✕

Ⓡ R 4.2.2 · ~/Documents/demopackage/

Type 'license()' or 'licence()' for distribution details.

  Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

```r
> install.packages(c("devtools", "roxygen2", "testthat", "knitr"))
```

Files **Plots** **Packages** **Help** **Viewer** **Presentation**

📁 Folder   Blank File ▾   Delete   Rename   ⚙ ▾

☐ 🏠 Home > Documents > demopackage   Ⓡ ...

	▲ Name	Size	Modified
	..		
☐	.gitignore	12 B	Feb 27, 2023, 4:43 PM
☐	.Rbuildignore	51 B	Feb 27, 2023, 5:32 PM
☐	demopackage.Rproj	414 B	Mar 1, 2023, 11:31 AM
☐	DESCRIPTION	380 B	Feb 27, 2023, 5:32 PM