

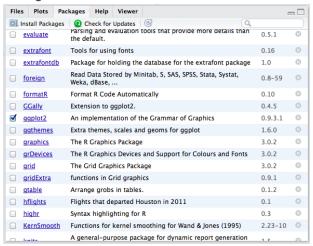
# Top Exploratory Data Analysis Tech Related Problems

This document goes through some of the problems that students encounter in this course.

Installing Packages / Loading Packages
Setting the working directory:
Incompatible Version(s) of R / Rstudio
Working with Gapminder Data

#### Installing Packages / Loading Packages

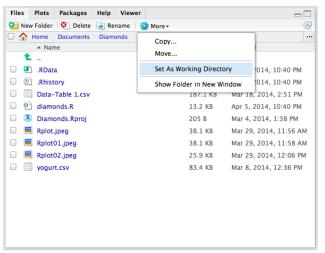
- Programmatically:
  - o install.packages('ggplot2') Or install.packages('ggplot2', dependencies = TRUE)
  - o library('ggplot2')
- Interactively:
  - Tools -> Install Packages, type name of package and click install
  - Click on the Packages tab, check the box next to the package



- Packages must be reloaded each time Rstudio is opened
- Packages used in this course: ggplot2, knitr, ggthemes, gridExtra, plyr, dplyr, alr3, energy, reshape2, GGally, scales, memisc, lattice, MASS, car, reshape, RColorBrewer, RCurl

## Setting the working directory:

- http://www.rstudio.com/ide/docs/using/workspaces
- Check working directory: getwd()
- Programmatically: setwd("filepath of working directory")
  - R supports tab completion
  - note: in Windows, use slash or double backslash in the file path. R will not recognize backslash
- Interactively: Navigate to working directory in the Files pane, select the More dropdown menu and click Set As Working Directory



## Incompatible Version(s) of R / Rstudio

- Check Rstudio version: Rstudio -> About Rstudio
- Check R version: In R, R -> About R
- Update Rstudio: Help -> Check for Updates
- Update R: <a href="http://cran.r-project.org/">http://cran.r-project.org/</a>

### Working with Gapminder Data

- Gapminder datasets often have lots of missing values that require data munging ie: <a href="https://spreadsheets.google.com/a/knowlabs.com/pub?key=rEMA-cbNPaOtpDyxTcwugnw&gid=0">https://spreadsheets.google.com/a/knowlabs.com/pub?key=rEMA-cbNPaOtpDyxTcwugnw&gid=0</a>
- Try to find a gapminder dataset that is tidy
- Most of datasets are quite small so data munging can be done manually using Excel