This document describes how to install the tools necessary to run the Swirl exercises accompanying every chapter of the book manuscript: “*A First Course in Quantitative Social Science*.” You only need to do the installation once at the beginning of the semester.

**1 Install SocraticSwirl after login to the rstudio server**

To install the R package SocraticSwirl, please type:

devtools::install\_github("HJ08003/socraticswirl-RStudioServer")

**2 To Run a Lesson and the First Assignment**

After a successful installation of socraticswirl, we will be ready to run the first swirl lesson for Chapter 1 in the book.

library(socraticswirl)

socratic\_swirl("INTRO", "INTRO1")

start()

When you are done, try the second lesson.

socratic\_swirl("INTRO", "INTRO2")

start()

In general, to run a different lesson, change the two arguments of the

socratic swirl() call. For example, to run the second lesson in the Causality chapter:

socratic\_swirl("CAUSALITY", "CAUSALITY2")

start()

If you want to interrupt your swirl session to perform a different task in R, you can type:

> ## you will be able to perform tasks outside the lesson

> play()

 > ## will resume swirl's lesson at the point where it was interrupted

> nxt()

For multiple choice questions, enter 0 to exit the question and then use play() and nxt() to experiment in R.

There’s an easy way in Swirl to skip exercises you’ve already completed and resume work exactly where you left off. This trick is especially handy if you want to focus on one problem in particular. Here’s how to do this. Type **exercise(n)** to move directly to exercise n. You need to know the number of the exercise you wish to resume. Swirl doesn’t number the problems, unfortunately, so you have to keep track of the exercises manually. If you select an incorrect exercise, you can always move to another one by typing exercise(n) again. Just remember that you won’t be able to use this command in a multiple-choice question – in that setting, enter 0 first and then exercise(n). This is a convenient alternative to the **skip()** function.

Note that if you skip any exercises, whether by using skip() or exercise(), you will still have to complete them at a later time – no answers are recorded for the skipped problems.

For example, if the lesson CAUSALITY1 in the chapter CAUSALITY was interrupted at the 10th question, to resume the lesson at that question you can type:

library(socraticswirl)

socratic\_swirl("CAUSALITY","CAUSALITY1")

start()

exercise(10)

At times you may see R warnings on the screen as code is evaluated but you will still be in the Swirl environment and can continue with the lesson as usual. If you have any questions, please do not hesitate to contact the instructors.

Note: The courses/lessons are available for the following:

INTRO/INTRO1

INTRO/INTRO2

CAUSALITY/CAUSALITY1

CAUSALITY/CAUSALITY2

DISCOVERY/DISCOVERY1

DISCOVERY/DISCOVERY2

DISCOVERY/DISCOVERY3

MEASUREMENT/MEASUREMENT1

MEASUREMENT/MEASUREMENT2

PREDICTION/PREDICTION1

PREDICTION/PREDICTION2

PREDICTION/PREDICTION3

PROBABILITY/PROBABILITY1

PROBABILITY/PROBABILITY2

UNCERTAINTY/UNCERTAINTY1

UNCERTAINTY/UNCERTAINTY2

UNCERTAINTY/UNCERTAINTY3