Introduction to SWIRL

What SWIRL is

an R package for teaching and learning statistics and R **simultaneously** and **interactively**

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Lessons are a *dialogue* between swirl and the user

Composed of:

- text output,
- multiple choice and text-based questions,
- and (most importantly) questions that require the user to enter actual R code at the prompt.

Responses are evaluated for correctness based on instructor-specified answer tests.

- Appropriate *feedback* is given immediately to the user.

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Why are we using swirl?

Students work directly in R console = real working environment

Allows immediate evaluation of code and immediate feedback

Allows remote logging of scores so I can check progress

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1. Install SWIRL package

You only need to do this once.

```
# install swirl.
# Requires ""
install.packages("swirl")
```

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2. Install the lessons

Lessons for MSBA Intro to R are on my dropbox page

You only need to do this once (for now, until we find errors, etc)

```
# load the swirl package
library(swirl)

# access github and download the course
# (this function is provided with the swirl package)
uninstall_all_courses(force=TRUE)

install_course_github("Prof-Fernandez","Data-Science-Summer-Camp")
```

This command downloads the first set of lessons to your computer.

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3. Start swirl

You will need to do this every time you start R or want to continue an old lesson or start a new lesson.

```
# load the swirl package into your current R session
# (No need for "")
library(swirl)

| Hi! Type swirl() when you are ready to begin.
```

```
# start swirl ...
# (swirl is a function, so you need '()')
swirl()
```

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4. Choose a name

```
> library(swirl)

| Welcome to swirl! Please sign in.
| If you've been here before, use the same name as you did then.
| If you are new, call yourself something unique.

What shall I call you?
```

Enter your name.

I will need to be able to identify you, so please use:

- firstname lastname, or
- UofL ID.

This name will also allow you to continue lessons if you stop them in the middle.

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5. Choose a course

```
| Please choose a course, or type 0 to exit swirl.

1: Data-Science-Summer-Camp
2: Take me to the swirl course repository!

Selection:
```

We will be working through the lessons in the 'Intro to R' course.

Type: '1'

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6. Choose a lesson

```
| Please choose a lesson, or type 0 to return to course menu.

1: Intro to R
2: Tidyverse
3: Graphing
4: Regression

...
```

Choose the first lesson:

Type: '1'

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7. Do the lesson!

```
| Attempting to load lesson dependencies...

| Package 'base64enc' loaded correctly!

  |                                                                      |    0%

| In this lesson, we will explore some basic building blocks of the R programming
language.

...
```

Hit 'Enter' to advance when presented with '...'

The screen also shows you how far through the lesson you are (0%).

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8. Completing the lesson

You will need to be connected to the internet to submit your lesson

When you are done, the last question will ask if you want to submit your answers to me to verify that your completed the lesson.

You should enter the number of your response (usually '1').

This will bring up a new web page, a Google form.

Scroll down, and click 'submit'.

This will send an encrypted response to the Google form so that I can verify you completed the lesson.

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Some useful commands for swirl

bye()

Exit swirl

play()

Leave swirl temporarily and gain access to the console again

nxt()

Return to swirl after playing

main()

Return to the main menu

info()

Display a list of these special commands