Introduction to Data Science with R

EDLD 651

Joe Nese

How many popcorn kernels are in the jar?

(keep your guess to yourself!)

Introduction to the Course

Week 1

Agenda

- Introductions
- Syllabus
- Introduce R

Learning Objectives

- Understand the course requirements
- Get you excited about R!

About me

- husband, dad
- BA: UC Santa Barbara
- PhD, School Psychology: University of Maryland
- Behavioral Research & Teaching (BRT) at UO since 2009
- Research Associate Professor

Research

- Applied statistical methods to measure and monitor student growth
- Inform the applied research methodologies used by researchers
- Developing and improving systems that support data-based decision making using advanced technologies to influence teachers' instructional practices and increase student achievement
  - CORE and CORE II
  - Inclusive Skill-building Learning Approach (ISLA)

Teaching

- EDLD 651 - this one!
- EDLD 654 - Applied Machine Learning for Educational Data Scientists
- EDLD 609 - Data Science Capstone

About you

Please introduce yourself

1. Name and program/year of study
2. Do you have any `R` experience?
3. Tell me whatever you'd like me and the class to know (e.g., pronouns, circumstances, etc.)
4. How many popcorn kernels are in the jar?
   - No changing your answer! *Academic integrity!*

The Great Popcorn Experiment!

Why is this important?

- reproducibility
- transparency
- open data and code

Conduct reseach!

with `quarto`

Like we just did!

Create slides!

with `quarto`

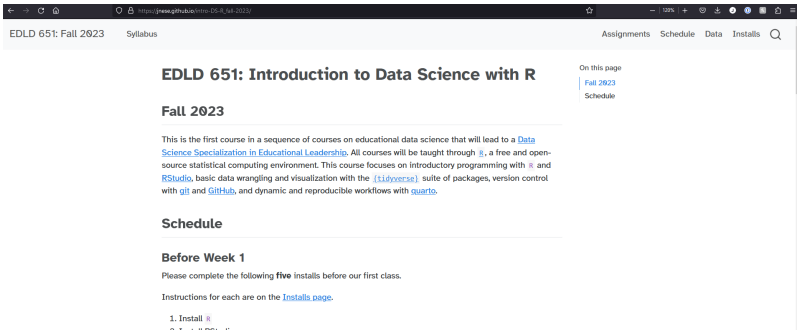
Like these!

Create a website!

with `{blogdown}`, `{distill}`, `{bookdown}`, `{rmarkdown}`, or `{quarto}`

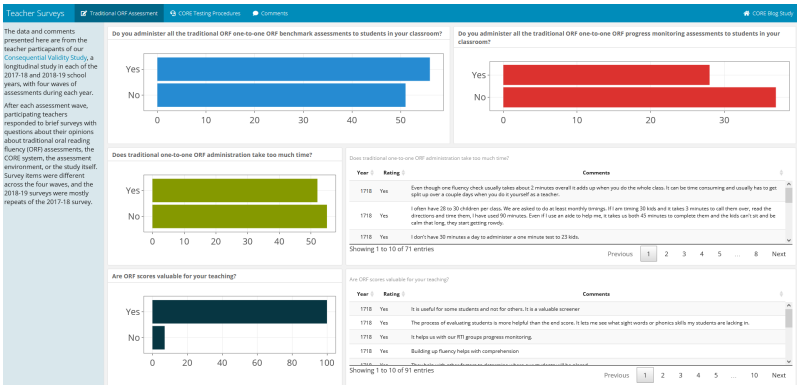
For a project

For this class



Create a dashboard!

with `{flexdashboard}`!



Create an app!

with `{shiny}`!