

DATA SCIENCE

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DATA SCIENCE TOOLS

LEARNING OBJECTIVES

- ▶ Data Visualization
- ▶ Using Git to create and share your work
- ▶ Performing exploratory analysis - full stack!
- ▶ Describe Probability vs Odds

COURSE

PRE-WORK

PRE-WORK REVIEW

- ▶ Explain the difference between variance and bias
- ▶ Use descriptive stats to understand your data

GUIDED PRACTICE

DATA VISUALIZATION

LET'S DISCUSS THE CURRENT LESSON OBJECTIVES

- ▶ Visualizing data is very important
- ▶ Let's spend some time going through a Data Visualization lab!

INTRODUCTION

GIT

GIT

- ▶ Version control is necessary when working on complex projects.
- ▶ Git is a way of tracking changes we've made to our programs that allows us to go back in time to fix errors.
- ▶ Combined with Github, Git is a powerful tool for collaborating with colleagues. You can work on different aspects of projects simultaneously and merge the changes together seamlessly.
- ▶ There are many different ways to use these tools.

GIT

- ▶ Let's see an example of using Git and Github.
- ▶ There are three primary commands we'll use.
 - ▶ `git add`
 - ▶ `git commit`
 - ▶ `git push`
- ▶ When we want to implement a colleague's change, we may use the command `git pull`.

GUIDED PRACTICE

GIT

ACTIVITY: GIT



EXERCISE

DIRECTIONS (20 minutes)

1. Let's set up student repositories and move project and student work to them.

DELIVERABLE

Questions

EXERCISE

EXPLORATORY DATA ANALYSIS

ACTIVITY: GIT



EXERCISE

DIRECTIONS (45 minutes)

1. Let's work on a dataset! <http://archive.ics.uci.edu/ml/datasets/Adult>

DELIVERABLE

Questions

GUIDED PRACTICE

ODDS AND PROBABILITY

ACTIVITY: ODDS & PROBABILITY



EXERCISE

DIRECTIONS (20 minutes)

Some of you may already be familiar with odds and probability.

1. We will use the starter code in lesson-05 of the class repo to review the concepts of odds and probability.

DELIVERABLE

Answer the questions in the notebook

CONCLUSION

TOPIC REVIEW

REVIEW

- ▶ Why is data visualization important?
- ▶ Are you comfortable with Git?
- ▶ Are you comfortable with exploratory analysis now...?

LESSON

Q & A

LESSON

EXIT TICKET

DON'T FORGET TO FILL OUT YOUR EXIT TICKET