Pandas I

A Note on Delivery

- This unit's lessons will occur in jupyter notebooks
 - Slides will be an introduction to the lesson (no code, just overview)
 - Then, we'll open a notebook and start coding!

Teaching Tips: - We could have made this into a speaker note, but it's helpful to get it out there so everybody's on the same page - No repl.it for this unit as we'll be in notebooks

Learning Objectives

After this lesson, you will be able to:

- Use Pandas to read in a dataset.
- Investigate a dataset's integrity.
- Filter, sort, and manipulate DataFrame series.

Talking Points: This lesson introduces the Pandas library and the beginnings of Exploratory Data Analysis. The majority of the lesson should be spent going through code – whether that is via Jupyter Slides or a Jupyter Notebook demonstration.

To present this content, begin with intro-to-pandas-i.ipynb to introduce Pandas as a library and data integrity. Transition to the Jupyter Notebook to introduce reading in data, column manipulation, filtering and sorting; conclude with exercises.

Teaching Tips: - There are **Class Questions** littered throughout the notebook. Use as much/little time on these as you see fit relative to how your class is pacing - There is an **Independent Exercise** at the end of this lesson. It is aspirational to have time to let students work entirely independently on this time-wise, so consider doing a guided code-along or paired programming. Answers are included. - Pause after learning objectives and level-set for what students will get out of the lesson

What is Pandas?

- A group of adorable bears • •
- A Python library for data manipulation.