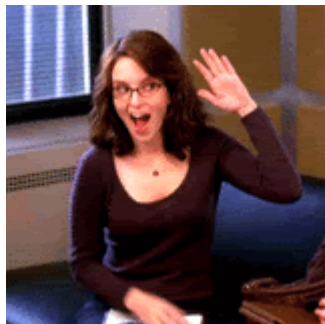# Final Project

First off, let's take a second to congratulate you for making it this far! We know we've packed a lot of knowledge into a relatively short time! Kudos for rocking it!

Prompt

We'd like you to have something tangible to show for having taken this course with us, so let's use your newly acquired Pandas skills to make a data-pulling app!

Got Ideas?

You are free to make a website about anything you'd like, as long as it meets all the requirements listed below. If you're having trouble coming up with a topic, consider:

• Finding a fun data set and basing it on that.
• Making an app that contrasts data from your hobbies.
• Making something you think would improve your life in some way.

Feel free to share resources and inspiration with your classmates!

Deliverables

You must have a Pandas app in Jupyter Notebooks. You will work individually on this project, but feel free to share inspiration, resources, or cool data sets that you find with your classmates!

Requirements

Your assignment **must** include:

1. Data pulled from at least one data set.

- Get creative! Tons of free data sets exist! Ask your instructor or classmates for ideas.
2. Data displayed in a minimum of two different visualizations.
    - Take care that they're the best choice of visualizations for the data and are easy to comprehend.
3. Cleaning the data — handling of NULL values or other potential errors in the data.
4. Core Python topics. At minimum:
    - Dictionaries *or* sets *or* tuples.
    - `**args` *or* `kwargs` *or* `*kwargs`.
    - Basic debugging, such as a `try-except` block *(only if necessary)*.
    - A class.
    - User input *or* reading from a file.
5. Comments, so another developer can easily see what your app does.

Resources

Suggested Ways to Get Started

- **Begin with the end in mind.** Know where you want to go by planning ahead, so you don't waste time building things you don't need.
- **Read the docs** for whatever technologies or data sets you use. Most of the time, there is a tutorial that you can follow! This isn't always the case, however, learning to read documentation is crucial to your success as a developer.
- **Write pseudocode before you write actual code.** Thinking through the logic of something helps.

Additional Resources

- An underlined helpful debugging flowchart.
- The Python Docs.
- Keyword `args`.
- `args` and `kwargs`.
- `chain` and Other `itertools`.
- Sets on a Python Tutorial Website).
- Tuples.

Evaluation

Your project will be evaluated based on the rubric below.

Rubric

Score	Expectations
0	Incomplete.
1	Does not meet expectations.
2	Meets expectations, good job!
3	Exceeds expectations, you wonderful creature, you!

A zero-to-three grading scale may not intuitively make sense, so here is an example using the criteria as if your assignment were to cook a pizza:

Criteria	0 Incomplete.	1 Does not meet expectations.	2 Meets expectations.	3 Exceeds expectations.
Crust	No crust present. Submission is just cheese and sauce on a plate.	Pizza has a crust, but it is raw.	Crust is cooked thoroughly.	Crust is golden brown and just thin enough without being too thick.
Cheese	No cheese present.	Cheese is made of soy.	Cheese covers the pizza from edge to edge.	Cheese is delicious, plentiful, and melted to perfection.