**Course Two**

# Get Started with Python



# Instructions

Use this PACE strategy document to record decisions and reflections as you work through this end-of-course project. You can use this document as a guide to consider your responses and reflections at different stages of the data analytical process. Additionally, the PACE strategy documents can be used as a resource when working on future projects.

# Course Project Recap

Regardless of which track you have chosen to complete, your goals for this project are:

* Complete the questions in the Course 2 PACE strategy document
* Answer the questions in the Jupyter notebook project file
* Complete coding prep work on project’s Jupyter notebook
* Summarize the column Dtypes
* Communicate important findings in the form of an executive summary

# Relevant Interview Questions

Completing the end-of-course project will help you respond these types of questions that are often asked during the interview process:

* Describe the steps you would take to clean and transform an unstructured data set.
* What specific things might you look for as part of your cleaning process?
* What are some of the outliers, anomalies, or unusual things you might look for in the data cleaning process that might impact analyses or ability to create insights?

**Reference Guide**

This project has three tasks; the visual below identifies how the stages of PACE are incorporated across those tasks.



**Data Project Questions & Considerations**

******PACE: Planning Stage**

* How can you best prepare to understand and organize the provided information?

Read the column descriptions and consider any implications (i.e. driver entered values might be invalid); observe the number of rows and consider the appropriate techniques for handling that amount of data.

* What follow-along and self-review codebooks will help you perform this work?

The notebook provided in the course.

* What are some additional activities a resourceful learner would perform before starting to code?

Make sure an ideal environment is set up (Jupyter Notebooks in VSCode is a good example). Either have syntax memorized or have a tab open for looking up syntax.

******PACE: Analyzing Stage**

* Will the available information be sufficient to achieve the goal based on your intuition and the analysis of the variables?
* How would you build summary dataframe statistics and assess the min and max range of the data?
* Do the averages of any of the data variables look unusual? Can you describe the interval data?

******PACE: Constructing Stage**

Note: The Construct stage does not apply to this workflow. The PACE framework can be adapted to fit the specific requirements of any project.

******PACE: Execute Stage**

* Given your current knowledge of the data, what would you initially recommend to your manager to investigate further prior to performing exploratory data analysis?
* What data initially presents as containing anomalies?
* What additional types of data could strengthen this dataset?