

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

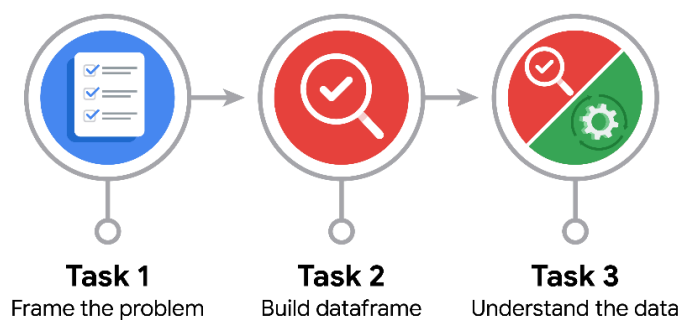
Completing the end-of-course project will help you respond these types of questions that are often asked during the interview process:

- 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: Plan Stage

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

By exploring the data types and the context of the database by itself.

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

The provided follow-alongs and review codebooks will assist me greatly in this project.

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

Checking out official python documentation and pandas documentation.



PACE: Analyze Stage

- Will the available information be sufficient to achieve the goal based on your intuition and the analysis of the variables?

Yes, the information provided is enough to create a machine learning model to predict user churn.

- How would you build summary dataframe statistics and assess the min and max range of the data?

Is quite simple, using `df.describe`, with that you can assess the distribution of numeric values of the dataset.

- Do the averages of any of the data variables look unusual? Can you describe the interval data?

The values of the data look pretty normal, nothing is unusual.



PACE: Construct 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?

I would like to investigate more about variables like drives_per_driving_day and km_per_driving_day.

- What data initially presents as containing anomalies?

Some of the "label" data was missing, 700 rows affected

- What additional types of data could strengthen this dataset?

Having more qualitative data for the demographics of the users