**Course Seven**

# Google Advanced Data Analytics Capstone



# Instructions

Use this PACE strategy document to record your decisions and reflections as a data professional as you work through the capstone project. As a reminder, this document is a resource guide that you can reference in the future and a space to help guide your responses and reflections posed at various points throughout the project.

# Portfolio Project Recap

Many of the goals you accomplished in your individual course portfolio projects are incorporated into the Advanced Data Analytics capstone project including:

* Create a project proposal
* Demonstrate understanding of the form and function of Python
* Show how data professionals leverage Python to load, explore, extract, and organize information through custom functions
* Demonstrate understanding of how to organize and analyze a dataset to find the “story”
* Create a Jupyter notebook for exploratory data analysis (EDA)
* Create visualization(s) using Tableau
* Use Python to compute descriptive statistics and conduct a hypothesis test
* Build a multiple linear regression model with ANOVA testing
* Evaluate the model
* Demonstrate the ability to use a notebook environment to create a series of machine learning models on a dataset to solve a problem.
* Articulate findings in an executive summary for external stakeholders.

**Project proposal**

**Salifort Motors project proposal**

## **Overview**

Build a model that predicts whether or not an employee will leave the company.

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| **Milestones** | **Tasks** | **PACE stages** |
| **1** | **Understand the usecase scenario and address the problem** | **Plan** |
| **2** | **Data exploration, transformation and cleaning** | **Analyze** |
| **3** | **Determine which models are the most appropriate** | **Analyze, Construct** |
| **4** | **Construct the model** | **Construct** |
| **5** | **Confirm model assumptions** | **Analyze** |
| **6** | **Evaluate model results** | **Analyze** |
| **7** | **Interpret results and share actionable steps with stakeholders** | **Execute** |