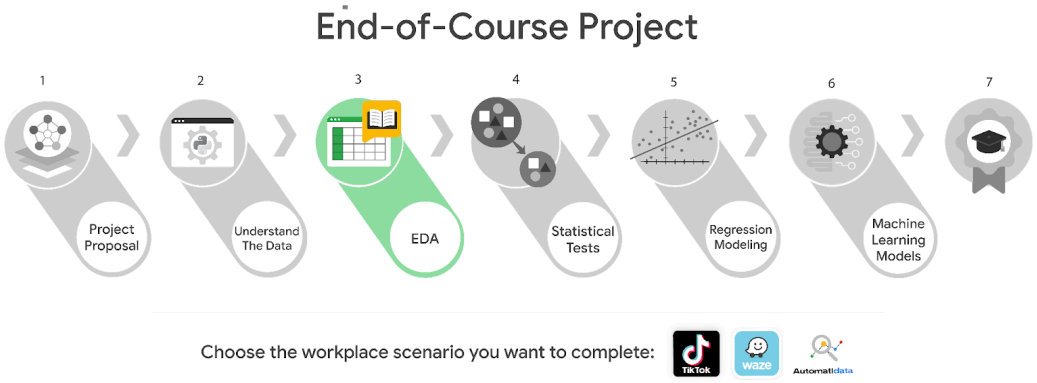
Reading: Explore your Course 3 workplace scenarios

Overview

This certificate offers you a choice of several different workplace scenarios to use when completing each end-of-course project:

- Automatidata, featuring a fictional data consulting firm
- TikTok, created in partnership with the short-form video hosting company
- Waze, created in partnership with the realtime driving directions app

Each scenario offers you an opportunity to apply your skills and create work samples to share when applying for jobs; so, you will be practicing similar skills regardless of the workplace scenario. It is recommended that you work with the same scenario for each end-of-course project to have a cohesive experience. However, you are welcome to investigate any of the workplace scenarios you are interested in as you progress through the program.

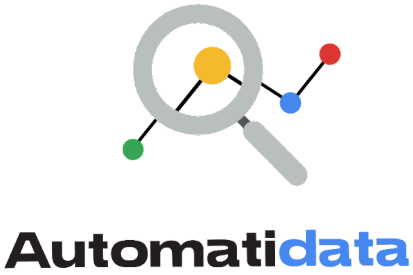


Reminder: *We recommend that you choose one workplace scenario to follow for all end-of-course projects to ensure end-to-end project development.*

The minimum requirement to earn your Advanced Data Analytics Certificate is to complete the end-of-course project, using one workplace scenario, for each course. You may complete the project for as many of the workplace scenarios as you wish. Completing the project for more than one workplace scenario in a single course offers you additional practice and work examples you can add to your portfolio and share with prospective employers during your job search.

This reading offers an overview of all available workplace scenarios. Before moving on, identify the scenario you would like to complete for the Course 3 end-of-course project.

Course 3 workplace scenarios
Automatidata



Project goal:
In this fictional scenario, the New York City Taxi and Limousine Commission (TLC) has approached the data consulting firm Automatidata to develop an app that enables TLC riders to estimate the taxi fares in advance of their ride.

Background:
Since 1971, TLC has been regulating and overseeing the licensing of New York City's taxi cabs, for-hire vehicles, commuter vans, and paratransit vehicles.

Scenario:
The New York City TLC data is ready for exploratory data analysis (EDA) in Python. You will need to clean, join, validate, and create a visualization for the taxi commission data. The findings will be shared with internal stakeholders from different departments within Automatidata.

Course 3 tasks:

- Load data, explore, and extract the New York City TLC data with Python
- Use custom functions to organize the information within the New York City TLC dataset
- Build a dataframe for the New York City TLC project
- Create an executive summary for Automatidata for a general audience of internal professionals

Note: *The story, all names, characters, and incidents portrayed in this project are fictitious. No identification with actual persons (living or deceased) is intended or should be inferred. And, the data shared in this project has been created for pedagogical purposes.*

TikTok

Project goal:
The TikTok data team is developing a machine learning model for classifying claims made in videos submitted to the platform.

Background:
TikTok is the leading destination for short-form mobile video. The platform is built to help imaginations thrive. TikTok's mission is to create a place for inclusive, joyful, and authentic content–where people can safely discover, create, and connect.

Scenario:
It is now time to begin the process of exploratory data analysis (EDA). As a data analyst on TikTok's data team, you will complete the EDA process for the claims classification project. You'll also use Tableau to create visuals for an executive summary to help non-technical stakeholders engage and interact with the data.

Course 3 tasks:

- Imports of relevant packages and TikTok data into Python
- EDA and cleaning
- Assess Tableau measures and dimensions
- Select and build visualization(s) type
    - Create plots to visualize variables and relationships between variables
- Share your results with the TikTok team

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Waze

Project goal:
Waze leadership has asked your data team to develop a machine learning model to predict user churn. An accurate model will help prevent churn, improve user retention, and grow Waze's business.

Background:
Waze's free navigation app makes it easier for drivers around the world to get to where they want to go. Waze's community of map editors, beta testers, translators, partners, and users helps make each drive better and safer.

Scenario:
Your team is still in the early stages of their user churn project. So far, you've completed a project proposal, and used Python to inspect and organize Waze's user data. Now, the data is ready for exploratory data analysis (EDA) and further data visualization.

Course 3 tasks:

- Clean data
- Handle outliers
- Perform EDA
- Visualize data
- Share an executive summary with the Waze data team

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Key Takeaways

In Course 3, Go Beyond the Numbers: Translate Data into Insights, you explored the process of exploratory data analysis (EDA). You learned to Identify the core steps, basic methods, and benefits of structuring and cleaning data. Additionally, you investigated raw data using Python, and created data visualizations using Tableau

Course 3 skills:

- Conduct exploratory data analysis
- Create data visualization with Tableau
- Expand knowledge of Python coding
- Share insights and ideas with stakeholders

Course 3 end-of-course project deliverables:

- Complete EDA with workplace scenario dataset using Python
- Executive summary including a Tableau visualization

The end-of-course portfolio projects are designed for you to apply your data analytical skills within a workplace scenario. No matter which scenario you work with, you will practice your ability to discuss data analytic topics with coworkers, internal team members, and external clients.

As a reminder, you are required to complete one project for each course. To gain additional practice, or to add more samples to your portfolio, you may complete as many of the scenarios as you wish.
