



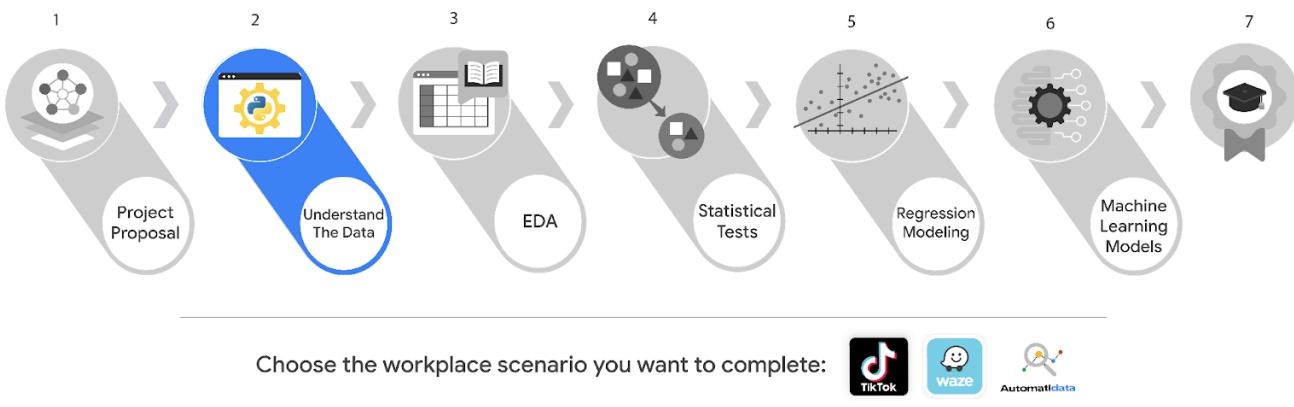
# Reading: Explore your Course 2 workplace scenarios

## 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.



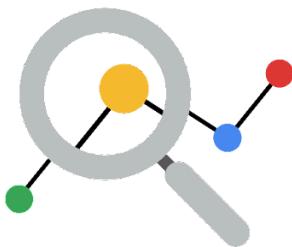
**Reminder:** We recommend that you choose one workplace scenario to follow for all end-of-course projects to ensure end-to-end project development.

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 2 end-of-course project.

## Course 2 workplace scenarios

### Automatidata



## 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:**

You have received notice that the recently submitted New York City TLC project proposal has been approved. The Automatidata team now has access to the New York City TLC data to analyze, identify key variables, and prepare for exploratory data analysis.

#### **Course 2 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

**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:**

As a data analyst on TikTok's data team, you'll help by preparing the data needed for the claims classification project. You'll build a dataframe, organize the claims data for the process of exploratory data analysis, and update the team on your progress and insights.

### **Course 2 tasks:**

- Build a dataframe for the TikTok dataset
- Read in data from TikTok csv file
- Display rows within dataframe
- Examine data type of each column
- Gather descriptive statistics
- Visualize the TikTok data in Python
- Report to TikTok's data team through an executive summary

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## Waze



### Project goal:

Waze leadership has asked your data team to develop a machine learning model to predict user churn. Churn quantifies the number of users who have uninstalled the Waze app or stopped using the app. This project focuses on monthly 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 in the early stages of their user churn project. Your project proposal has been approved and your team has been given access to Waze's user data. To get clear insights, the data must first be inspected, organized, and prepared for analysis.

### Course 2 tasks:

- Import data
- Create a dataframe
- Inspect data
- Identify outliers
- Create a data visualization
- Share an executive summary with the Waze data team

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## Key Takeaways

In Course 2, Get Started with Python, you were introduced to some basics of the Python programming language. You explored syntax, loops, strings, lists, dictionaries, object-oriented programming, and explored how data professionals use code on the job.

## **Course 2 skills:**

- Code with Python
- Create data visualization
- Use comments to enhance code readability
- Work within a Jupyter Notebook
- Share insights and ideas with stakeholders

## **Course 2 end-of-course project deliverables:**

- Build a dataframe
- Create an executive summary

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.

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