Activity: Create your Course 2 Automatidata project

# Activity Overview

In this activity, you will complete a project that showcases your ability to use Python to import, inspect, and organize data. You will also update team members through an executive summary, demonstrating your ability to organize and communicate key information.

For additional information on how to complete this activity, review the previous readings: [*End-of-course portfolio project introduction*](https://www.coursera.org/learn/foundations-of-data-science/supplement/9Opfe/end-of-course-portfolio-project-introduction) and [*Course 2 end-of-course portfolio project overview: Automatidata*](https://www.coursera.org/learn/get-started-with-python/supplement/D0f72/course-2-end-of-course-portfolio-project-overview-automatidata).

Be sure to complete this activity before moving on. The next course item will provide you with completed exemplars to compare to your own work. You will not be able to access the exemplars until you have completed this activity.

# Scenario

You are the newest member of Automatidata’s data analytics team. Your team is still in the early stages of their project for the New York City Taxi & Limousine Commission (TLC).

Previously, you were asked to complete a project proposal by your supervisor, Deshawn Washington. You have received notice that your project proposal has been approved and that TLC has given the Automatidata team access to their data for research purposes. Congratulations! To get clear insights, TLC's data must be analyzed, key variables identified, and the dataset ensured it is ready for analysis.

You discover two new emails in your inbox: one from your supervisor, Deshawn Washington, and one from your teammate, Luana Rodriguez. Review the emails, then follow the provided instructions to complete the PACE strategy document, the code notebook, and the executive summary.

***Note:*** *Team member names used in this workplace scenario are fictional and are not representative of the New York City TLC.*

## Email from Deshawn Washington, Data Analysis Manager

**Subject:** Help with coding notebook?

**From:** “Deshawn Washington,” Deshawn@automatidata.com

**Cc:** “Luana Rodriquez” Luana@automatidata.com

Good morning team,

I have a couple of updates on the TLC project. The project proposal that you completed previously has been approved. Thanks for all of your great work so far.  Additionally, I just received an email from our Senior Project Manager, Uli King, that TLC has given our team access to their data.

Before we begin the process of Exploratory Data Analysis (EDA), we could really use your help with coding and prepping the data. During your interview you mentioned that you worked with Python during the Google Career Certificate program. That experience sounds applicable here.

Luana (Cc’d) started a Jupyter notebook with the relevant dataset from TLC (attached). She is busy in the final stages of another project currently. I’m sure she could use your assistance in completing the coding and setting up the notebook for the TLC project.

Luana, do you mind sharing the details?

Humblest regards,

Deshawn Washington

Data Analysis Manager

Automatidata

## Email from Luana Rodriquez, Senior Data Analyst

**Subject:** RE:Help with coding notebook?

**From:**  “Luana Rodriquez” Luana@automatidata

**Cc:** “Deshawn Washington,” Deshawn@automatidata

Nice to meet you (virtually)!

Hope you have enjoyed your first few weeks!

The project proposal you helped prepare covered the major points of this project, so I’ll get right to how you can assist the team. There are a number of us making adjustments to the machine learning developed for the last client, so your help is greatly appreciated!

Until we finish the prior project, there is no need to do a full EDA on this data. We will get to that soon. Do you mind reviewing the TLC data we received for the team? It would be fantastic if you could include a summary of the column Dtypes, data value nonnull counts, relevant and irrelevant columns, along with anything else code related you think is worth sharing in the notebook? It would be really helpful if you can create meaningful variables by combining or modifying the structures given.

Thanks,

Luana Rodriquez

Senior Data Analyst

Automatidata