

Scenario

Your team is still in the early stages of their project for the New York City Taxi and Limousine Commission (TLC). So far, you've completed a project proposal and used Python to inspect and organize the TLC dataset.

You check your inbox and notice a new message from Luana Rodriguez, the Senior Data Analyst at Automatidata. Luana is pleased with the work you have already completed and requests your assistance with some exploratory data analysis (EDA) and data visualization. You also notice a follow-up email from Udo Bankole, the Director of Data Analysis. Udo suggests including an executive summary of your analysis to share with teammates.

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

Email from Luana Rodriguez, Senior Data Analyst

Subject: New York City TLC EDA & Vizzes

From: "Luana Rodriguez" Luana@automatidata

Cc: "Deshawn Washington," Deshawn@automatidata; "Udo Bankole," Udo@automatidata

Hi there,

Thanks for the amazing work you've done so far.

We're ready to perform EDA on the taxi data from the New York City TLC to get a general understanding of what taxi ridership looks like. Has Deshawn told you what the management team expects when it comes to EDA? If not, think of it as a "show your work" kind of report. They will want to see a Python notebook showing the structuring and cleaning you did, as well as any matplotlib/seaborn visualizations you plotted to help us understand the data. I would suggest at the very least a box plot of the ride durations and some time series plots, like a breakdown by quarter or month? Whatever you think makes most sense.

Additionally, the management team has recently asked all EDA to include Tableau visualizations. We've found these to be particularly helpful in status reports to the client and board members. Make sure it is easy to understand to someone who isn't data savvy, and remember that the assistant director at the New York City TLC is a person with visual impairments. I understand you have some Tableau experience? Let me know if you need help with this.

By the way, I Cc'd our director, Udo, who is on the management team and will be reviewing/approving our analysis before the project manager reports it back to the client. @Udo, I just want to keep you informed on the progress!

Thanks!

Luana Rodriguez

Senior Data Analyst

Automatidata

Email from Udo Bankole, Director of Data Analysis

Subject: RE: New York City TLC EDA & Vizzes

From: "Udo Bankole," Udo@automatidata;

Cc: "Deshawn Washington," Deshawn@automatidata; "Luana Rodriguez" Luana@automatidata

Thank you, Luana!

Welcome to the team, so glad to have you.

Along with the Tableau visualization and notebook, it would be really helpful if you included an executive summary of your analysis attached via email.

I appreciate your help!

Udo Bankole

Director of Data Analysis

Automatidata

Project background

Automatidata is working on the TLC project. The following tasks are needed before the team can begin the data analysis process:

- EDA and cleaning
- Select and build visualization(s) type
 - Create plots to visualize relationships between relevant variables
- Share your results with the Automatidata team

Your assignment

You will conduct exploratory data analysis on data for the TLC project. You'll also use Tableau to create visuals for an executive summary to help non-technical stakeholders engage and interact with the data.

Specific project deliverables

With this end-of-course project, you will gain valuable practice of your new skills as you complete the following deliverables:

- Course 3 PACE Strategy Document to consider questions, details, and action items for each stage of the project scenario
- Answer the questions in the Jupyter notebook project file
- Create a Jupyter notebook of full EDA
- Create a Tableau visualization showing two important variables
- Write an executive summary of results and include a visualization

Good luck in your role! Automattic looks forward to seeing how you communicate your creative work and approach problem-solving!