

Scenario

Your team is making progress on their project to develop a machine learning model to predict user churn. So far, you've completed a project proposal and used Python to inspect and organize Waze's user data.

You check your inbox and notice a new message from Chidi Ga, your team's Senior Data Analyst. Chidi is pleased with the work you have already completed and requests your assistance with Exploratory Data Analysis (EDA) and further data visualization. You also notice a follow-up email from the Director of Data Analysis, Harriet Hadzic. Harriet 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 Waze.

Email from Chidi Ga, Senior Data Analyst

Subject: EDA & Data Viz

From: "Chidi Ga," Chidi@waze

Cc: "May Santner," May@waze; "Harriet Hadzic," Harriet@waze

Hi there,

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

We're ready to perform EDA on our user data. Has May told you what the leadership 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, and any data visualizations you created to better understand the data. To start, I suggest you create a box plot of the variable "drives," and a scatter plot of the variables "drives" and "sessions." Feel free to add any other visuals you think are useful.

By the way, I cc'd our director, Harriet Hadzic, who is on the leadership team and will be reviewing our analysis. @Harriet, I want to keep you informed on our progress!

Thanks!

Chidi Ga

Senior Data Analyst

Waze

Email from Harriet Hadzic, Director of Data Analysis

Subject: RE: EDA & Data Viz

From: "Harriet Hadzic," Harriet@waze

Cc: "May Santner," May@waze; "Chidi Ga," Chidi@waze

Thanks for the update, Chidi!

Welcome to the team. We're so glad to have you.

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

I appreciate your help!

Harriet Hadzic

Director of Data Analysis

Waze

Project background

Waze's data team is working on the churn 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 variables and relationships between variables
- Share your results with the data team

Your assignment

You will conduct exploratory data analysis on data for the churn project. You'll also use tools 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 and apply your new skills as you complete the following:

- Complete the questions in the Course 3 PACE strategy document
- Answer the questions in the Jupyter notebook project file
- Clean your data, perform exploratory data analysis (EDA)
- Create data visualizations
- Create an executive summary to share your results

Good luck with this project! Your Waze team members are looking forward to seeing how you communicate your creative work and approach problem-solving!