Activity: Create your Course 2 Waze 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 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: Waze*](https://www.coursera.org/learn/get-started-with-python/supplement/SqRqL/course-2-end-of-course-portfolio-project-overview-waze).

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

Your team is still in the early stages of their project to develop a machine learning model to predict user churn.

Previously, you were asked to complete a project proposal by your supervisor, May Santner. Now, you have received notice that 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 be inspected, organized, and prepared for analysis.

You discover two new emails in your inbox: one from May Santner, and one from your teammate, Chidi Ga. In the email, May asks for your help reviewing the data and completing a code notebook, and Chidi shares the details of the notebook. 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 Waze.*

## Email from May Santner, Data Analysis Manager

**Subject:** Help with coding notebook?

**From:** “May Santner,” May@waze

**Cc:** “Chidi Ga,” Chidi@waze

Good morning!

I have a couple of updates on the user churn project. First off, the project proposal you completed has been approved. Thanks for all your great work so far. Second, I just received an email from our Senior Project Manager, Sylvester Esperanza, that our team has been given access to the Waze user 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 in your Google certificate program. You can draw on your Python skills for this task.

Chidi Ga (cc’d above) started a Jupyter notebook with the relevant dataset (imported). Right now, Chidi is busy finishing up a previous project. I’m sure he could use your assistance in completing the coding and setting up the notebook for the user churn project.

Chidi, do you mind sharing the details?

Best,

May Santner

Data Analysis Manager

Waze

## Email from Chidi Ga, Senior Data Analyst

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

**From:** “Chidi Ga,” Chidi@waze

**Cc:** “May Santner,” May@waze

Nice to meet you (virtually)!

Hope you’ve enjoyed your first few weeks at Waze!

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. Right now, a number of us are busy making adjustments to the machine learning model for another project, so your help is greatly appreciated!

Until we finish our previous project, there is no need to do a full EDA on our new user data. We’ll get to that soon. Meanwhile, do you mind reviewing the imported data for the team? It would be fantastic if you could include a summary of the data types for each variable, where missing values exist in the data, key descriptive statistics, and anything else code-related you think is worth sharing in the notebook. I haven’t had a chance to explore the data, so I really appreciate you getting an early start on this.

Thanks,

Chidi Ga

Senior Data Analyst

Waze