

# Title      Inspect and organize Waze's user data project.

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## Overview

The purpose of this project is to inspect Waze's user data and prepare for the upcoming **Exploratory Data Analysis (EDA)** process, and other activities to get clear insights.

## Objective

The goal is to familiarize with the whole dataset. Performing tasks related to the data such as checking missing values, data types, data structures, summary statistics, getting key points, etc. After having the comprehensive dataset, it'll be ready for further steps in the course of the project.

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## Results

- There are 700 missing rows in the '**label**' variable (about **retained** and **churned** users).
  - 82% represents **retained** users, and 18% is from **churned** users.
  - The majority of both **retained** and **churned** users use **iPhone**, which is approximately 65%, compared to **Android** which is 35%. This ratio is consistent when compared to the overall dataset.
  - **Churned** users have active days and driving days less than ~2 times compared to the **retained** users. However, they are way greater in total minutes of driving and total km of driving than the **retained** users.
  - The median **churned** user drives a total of ~608 km in a day, which is more than 250% compared to the median **retained** user. They drove ~8 times in a day, compared to 3 with the median **retained** user. Also, they drove ~200 more kilometers and 2.5 more hours during the last month than the median **retained** user.
  - The majority of both users, in particular for **churned** users, that we might prove they are long-haul truckers (long-distance drivers). However, we'll still need further analysis to validate.
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## Next Steps

- Recommend the data team to gather more data about long-distance drivers. If applicable, gather additional data about typical drivers to compare.
  - Performing further analysis on **retained** and **churned** users to better understand the factors about the low numbers in total km of driving and total driving duration, and why they choose not to use the app (a survey might be a great approach).
  - Preparing for the **Exploratory Data Analysis (EDA)** process.
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