

Communicate-Data-Findings

About the Project

This project has two parts that demonstrate the importance and value of data visualization techniques in the data analysis process. In the first part, I have used Python visualization libraries to systematically explore a selected dataset (Ford GoBike data), starting from plots of single variables and building up to plots of multiple variables.

Why this project?

Data visualization is an important skill that is used in many parts of the data analysis process.

Exploratory data visualization generally occurs during and after the data wrangling process, and is the main method that is used to understand the patterns and relationships present in your data. This understanding will help me approach any statistical analyses and will help me build conclusions and findings. This process might also illuminate additional data cleaning tasks to be performed.

Explanatory data visualization techniques are used after generating my findings, and are used to help communicate my results to others. Understanding design considerations will make sure that my message is clear and effective. In addition to being a good producer of visualizations, going through this project will also help you be a good consumer of visualizations that are presented to you by others.

Which dataset you chose?

➤ I chose the Ford GoBike System Data

Steps taken:

I have downloaded dataset from Udacity resources and started the exploration in jupyter notebook. Using python modules by importing into notebook, explored and visualized

Main findings and Key insights:

- Female has around 30%, which mean male use more bikes to ride than female
- Bike users are mostly subscribers almost 80%
- Most of bike users are around 30 and between 20-50
- The duration in secs of the trips is most of them in between 200 to 1000...meaning that most trip are less then 15 minutes! Which makes a lot of sense because this service works with single rides (up to 30 minutes)

- irrespective of the gender only subscriber user number are way greater
- People between 20 and 40 years old tends to take more time in taking trips.
- 5 PM, 4 PM has the most bikers in customer type and 5 PM and 8 AM has the most bikers in subscriber type
- Customers have a higher mean trip duration, but now we can see this is true across all genders