Exploratory Data Analysis on MTA Turnstile Data

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Abstract:

The main goal of this project is to help my client to choose the strategic location to open her booth which is specialized in making affordable breakfast, snacks and drinks on the go so people can enjoy food on the way of their morning jobs.

Design:

The data provided by the Metropolitan Transportation Authority has the main information about turnstiles data and I used exploratory data analysis to do statistical analysis on the data then visually present them using charts.

Data:

In my EDA I will be using the MTA turnstile dataset free to access on http://web.mta.info/developers/turnstile.html , each database is taken every Saturday of every month and the information inside the database will show you each turnstile in witch control area with the entry and exit date and time.

Algorithms:

After uploading the MTA dataset I will be preforming data cleaning on the data by searching for the NULL and duplicates values and removing them, also I will calculate the total entries and exits for each day and each station before COVID and compare it to the total entries and exits for each day and each station after COVID happened, I will be doing some SQL queries for the data

Tools:

- Jupyter notebook python
- Pandas,matplotlib,numpy,seaborn
- sqlalchemy

Communication:

In addition to the slides and visuals presented, I will be sharing my work on my github account https://github.com/Tarfah98

