



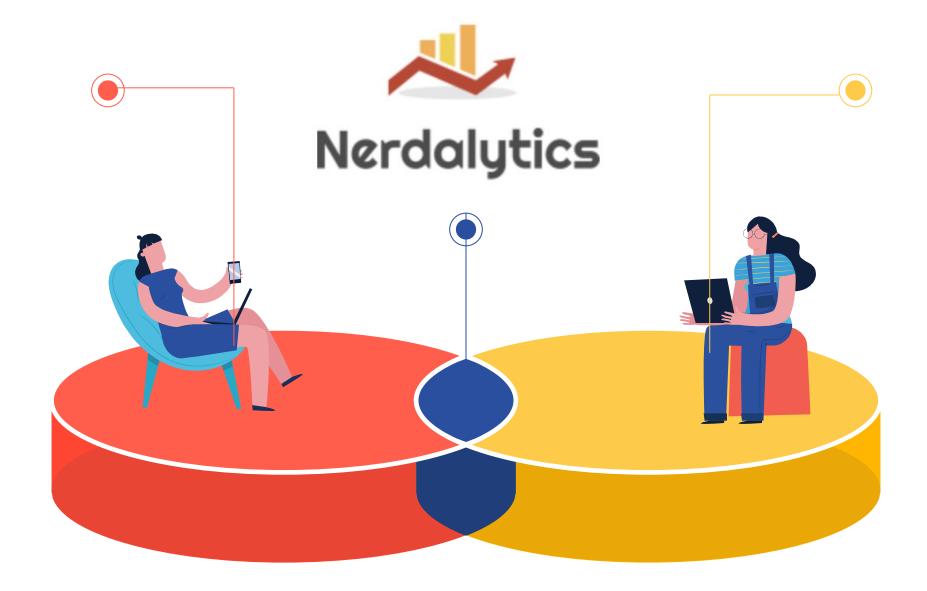
New York Subways Traffic Analysis

Noha Alawwad Lubna_Alhenaki Maha Alsunaidi Ghaida Alsenani Fatimah Sheikho Arwa Alabbad





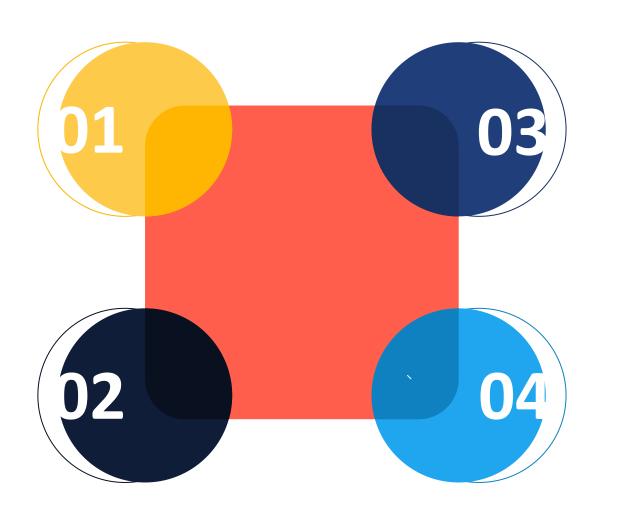
Who are we?



WORKFLOW

Business case evaluation & Data Acquisition

Data understanding & cleansing



Descriptive analysis & data visualization

Results interpretation

Business case evaluation

• Our goal is to optimize their street teams so that they can get the most email signups for their annual OMGYN Gala.



Data Acquisition

MTA, NYC subways data for two months May, August 2019.

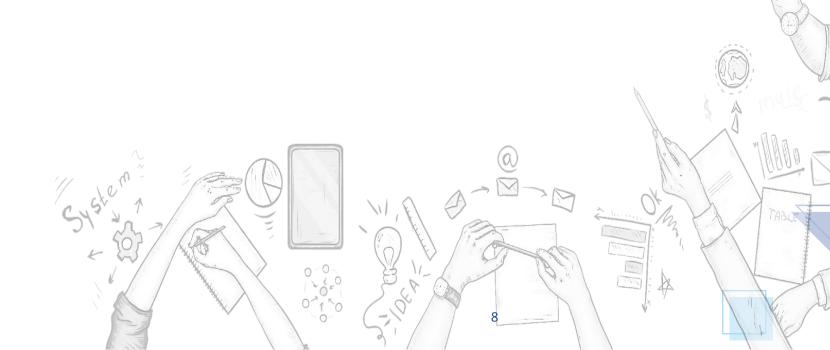
- Data Columns =14
- 378 Stations, 469 Units and 224 Scp's.

Data cleansing

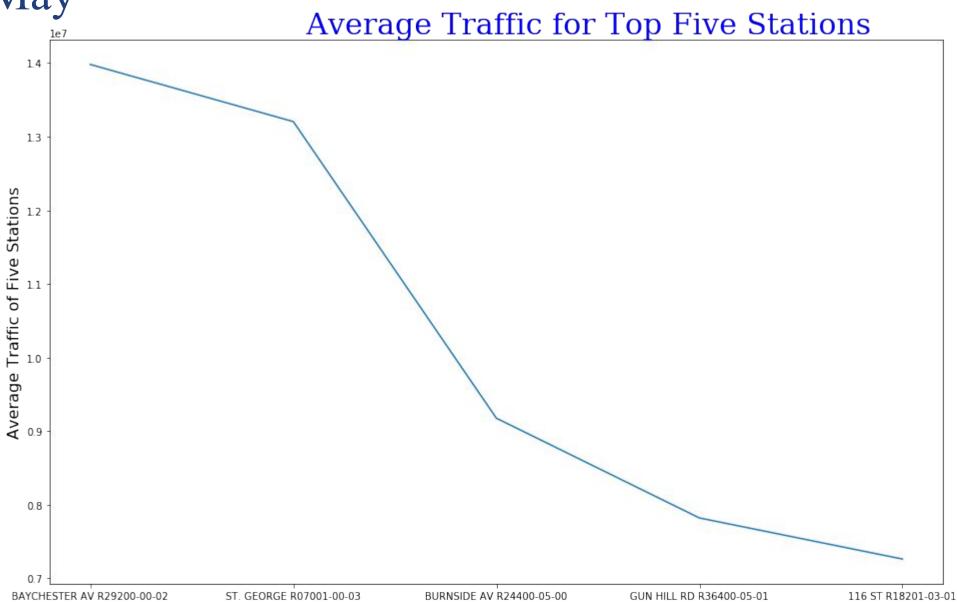
- Removing white spaces in columns' names.
- Handling Entries and Exits accumulation process
- Dealing with missing and negative values.

Feature Engineering and Selection

- DATE_TIME, STATION_UNIT_SCP
- Hours, Months, Weekdays, and Weekends columns.
- Drop LINE NAME, DIVISION, DESC, C/A columns



In May

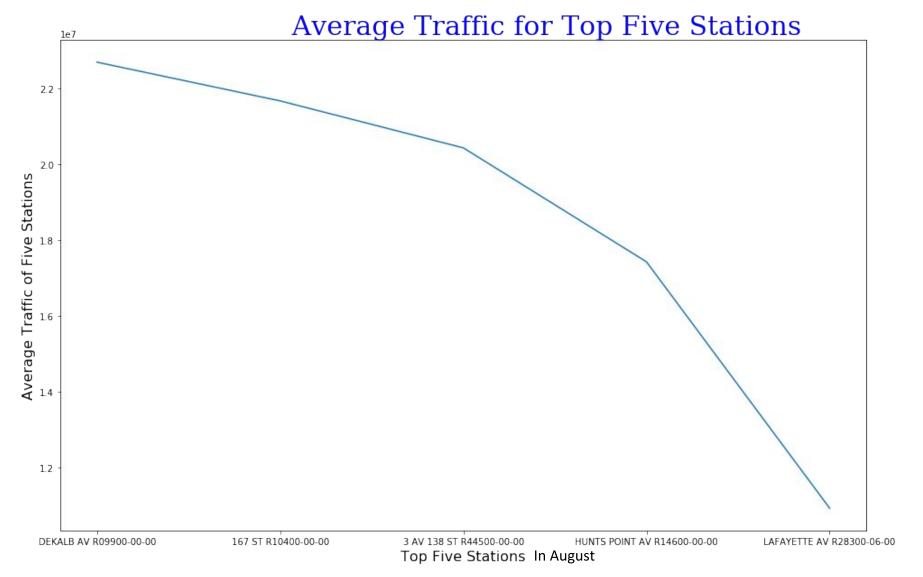


Top Five Stations in May



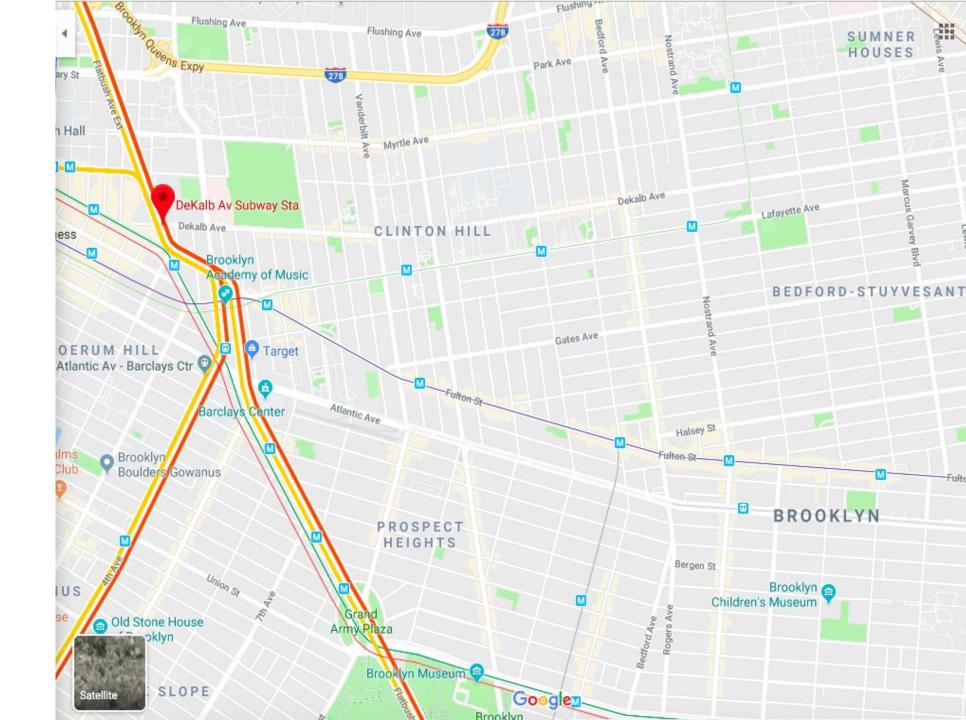
9

In August



Top station in August

Dekalb Ave station.

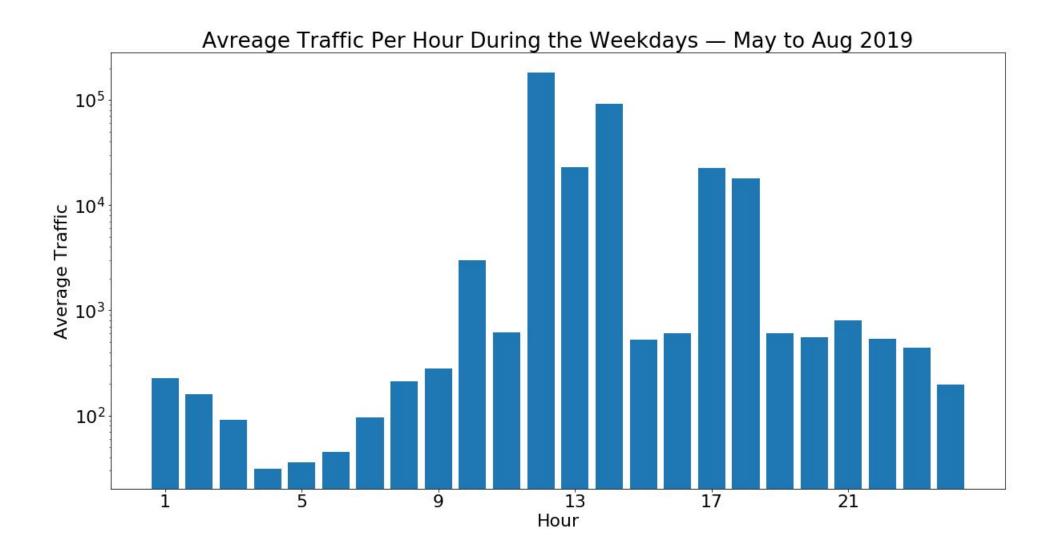


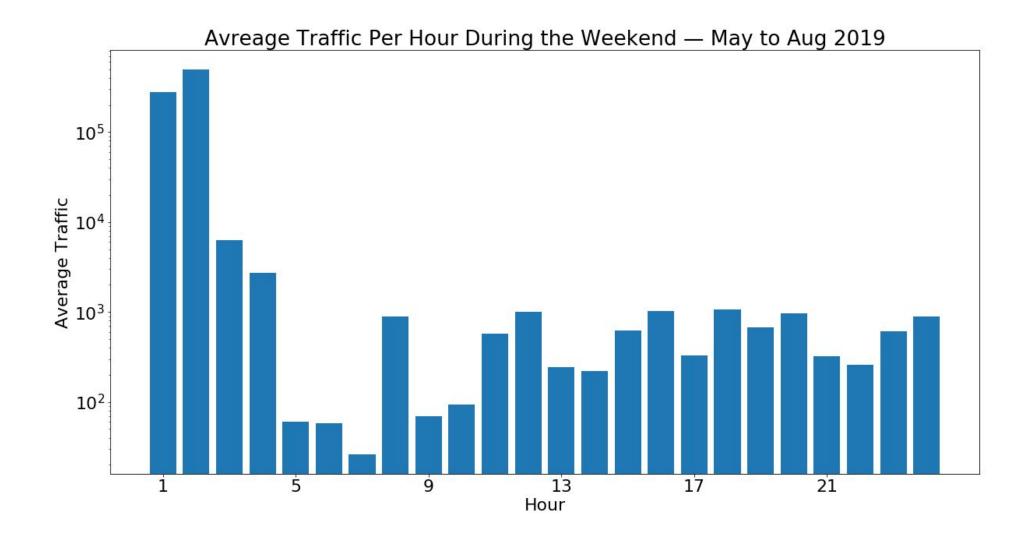
We considered the situation of some closed stations on certain dates on the month of August, due to some maintenance services.



Reference:

https://patch.com/new-york/new-york-city/nyc-weekend-subway-service-changes-august-24-25





Conclusion & Future work



Any Question?