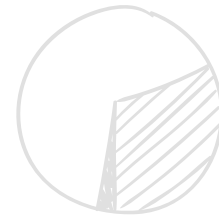
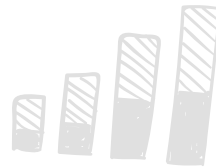
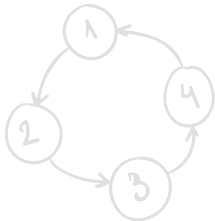
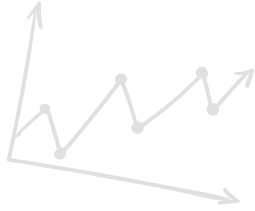
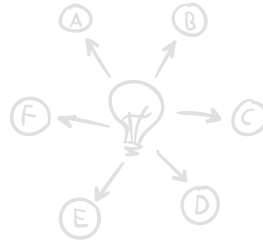
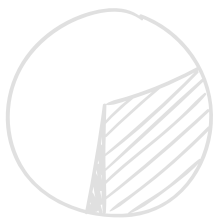


MTA analysis for kids safety event

Amirah Alotaibi





Backstory

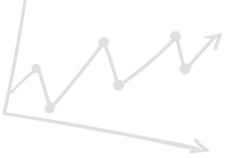


NYC Emergency Management has an annual Kids safety event at the end of the September each year.

Event that talk about safety topics, including bicycle safety, bullying prevention..etc

and to build awareness and reach for the event, they want place staff and volunteers at entrances to hand out preparedness publications and materials to the public.

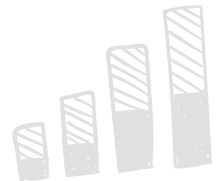




Goals



Use MTA subway data, to help the Emergency Management to find the 10 most traffic station for daily entries, And the specific two days in the week that have the highest entries, so that they can hand out more publications about the event for the public.



Dataset

-NYC MTA turnstile Data [mta.info | Turnstile Data](https://www.mta.info/turnstile-data)

-12 weeks of weekly recorded cumulative entry

-From June 12 to September 3 , 2021



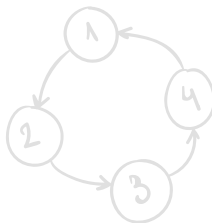
Tools

Pandas

Sqlalchemy

matplotlib

seaborn



Strategy



Data Gathering



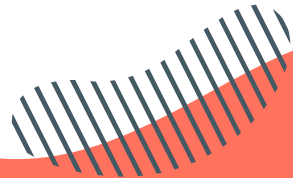
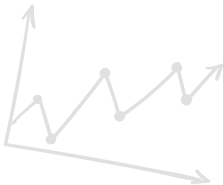
Data Cleaning



Data Aggregation

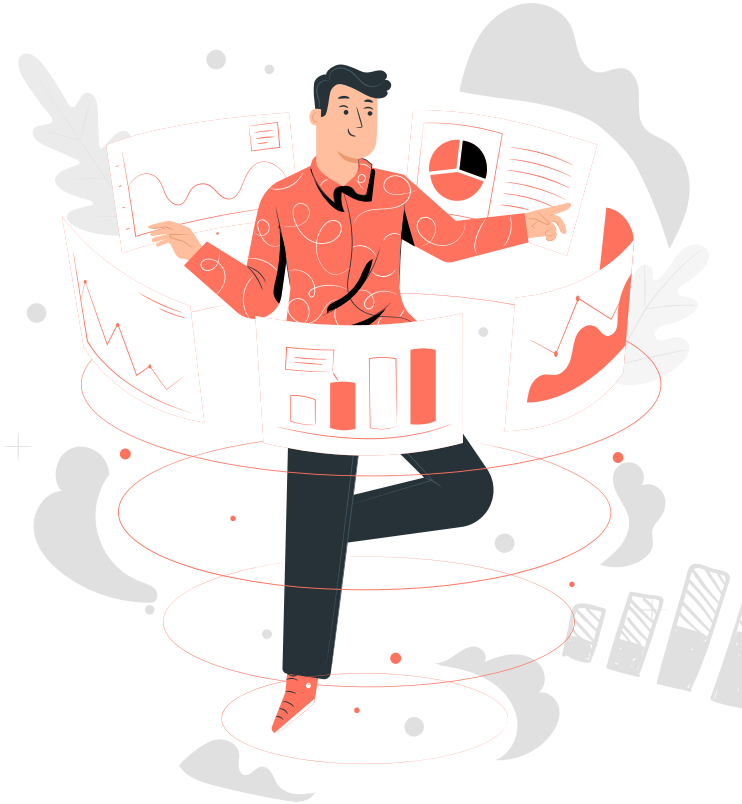


Data Visualization



Data gathering and cleaning

- Downloaded about 400 Thousand of rows from MTA data for the three month June, july and august
- Cleaned the data and add two columns such as time and date columns.
- Sorted the data in particular column like DAILY ENTRIES



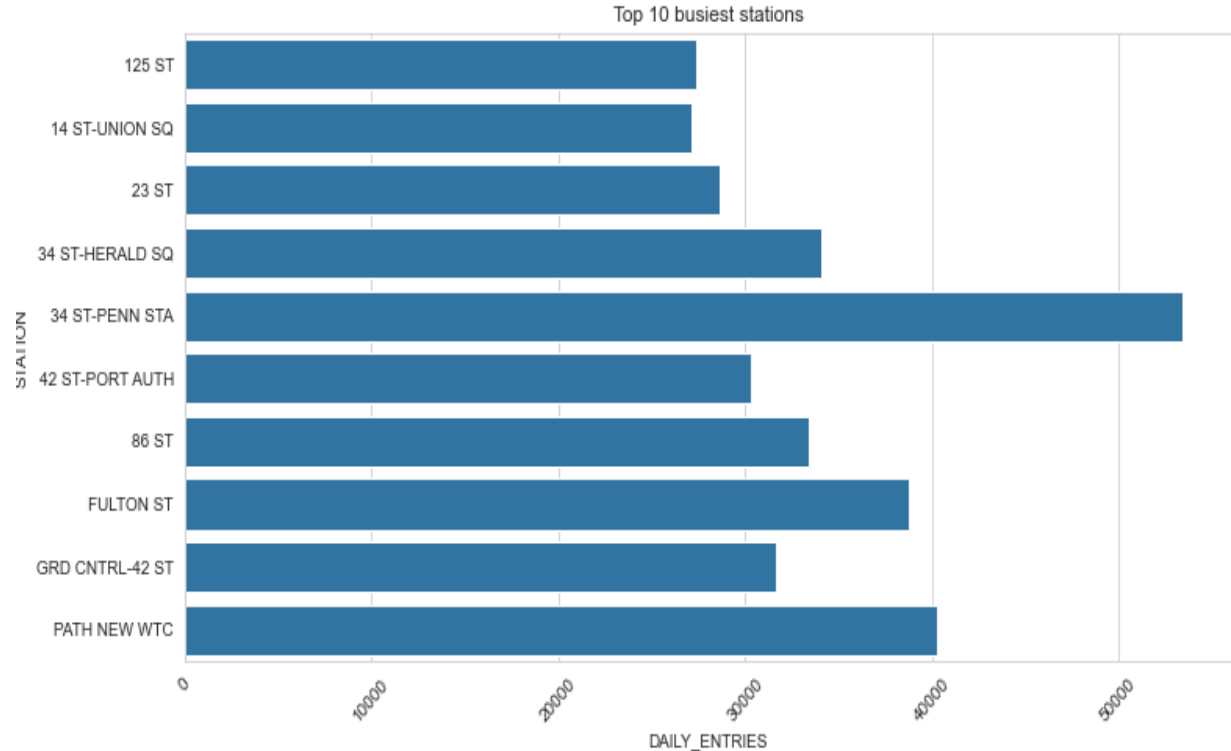
Data Aggregation

Aggregated the MTA data
by stations to calculate
the busiest stations

Aggregated the MTA data
by ENTRIES to calculate
the busiest days of the
week

Top 10 busiest stations

1. The busiest station in NYC is 34 ST-PENN STA.
2. PATH NEW WTC
3. FULTON ST
4. 34 ST-HERALD SQ
5. 86 ST
6. GRD CNTRL-42 ST
7. 42 ST-PROT AUTH
8. 23 ST
9. 14 ST-UNION SQ
10. 125 ST

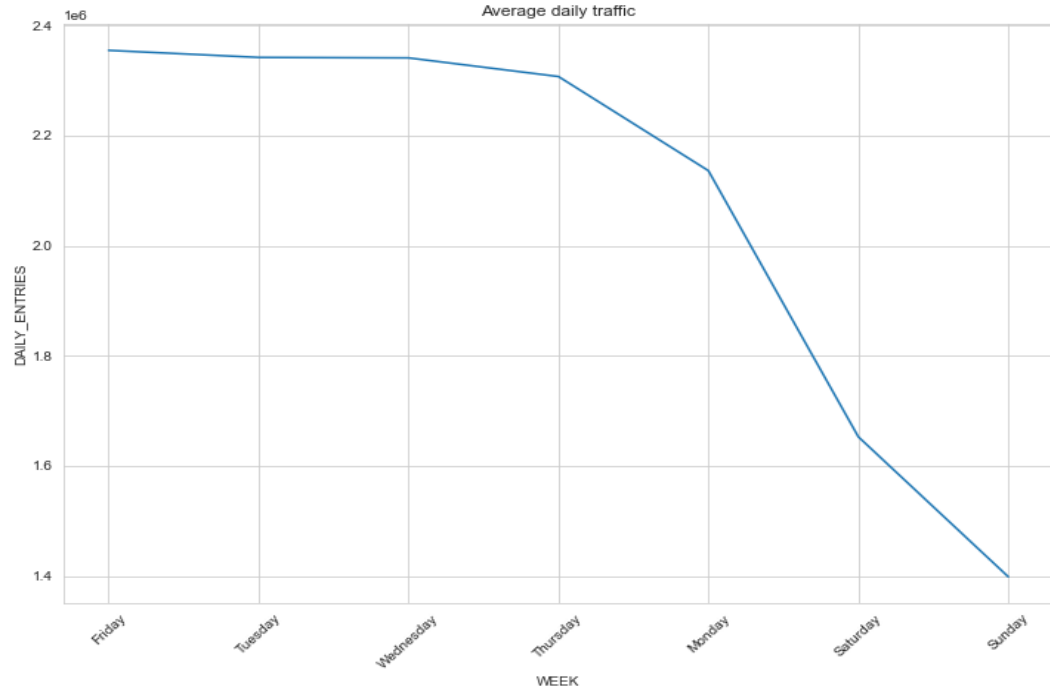


Data Visualization

Busiest Day of the week

The busiest two day of the week is Friday and Tuesday

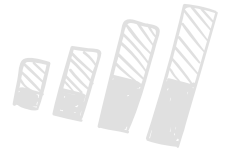
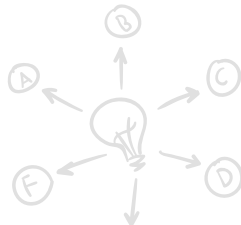
And the least busy day is Sunday



Recommendation



From the analysis i recommend that the NYC
Emergency Management deploy there staff and
volunteers on Friday and Tuesday to the 10
busiest stations for the best target.





Thank you

