



Capstone Project - The Battle of Neighborhoods (Manhattan vs Toronto)

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OUTLINE



- Introduction
- Data
- Methodology
- Results
- Discussion
- Conclusion
- Appendix

INTRODUCTION



- Comparison and evaluation of the rental options in Manhattan NY
 - Desired location is in the Manhattan area, New York.
 - Should be near to the metro stations.
 - Price of rent does not exceed \$7,000 per month.
 - Desirable to have venues such as coffee shops, restaurants Asian, Thai, wine stores, gym, and food shops.
- Business Requirement
 - Someone is looking to open a restaurant in Manhattan area
 - To choose the best possible rental property based on the collected data

Data Selection

- List of Boroughs and Neighbourhoods of Manhattan
- List of property for rent with geo location and price
- Venues & Attractions for each Manhattan neighborhood
- Lost Subway metro station data



METHODOLOGY



- Analysis and the strategy
 - Filter the collected data
 - Map the data
 - Data Visualization Approach
- Data Processing and Combine All-in-One
- Decision Making
 - Property Selection

RESULTS



Decision Making - Property Selection

- Cluster 2 Sutton Place area is closed to Subway station, rental price is also around the budget
- 305 East 63rd Street = \$7500
- 150 East 57th Street = \$5950
- 305 East 63rd Street can be the best choice as close to Cluster 2 (“Sutton Place”)
- Will bring more traffic to the shop

NoteBook, Report and Presentation

- Notebook:
<https://nbviewer.jupyter.org/gist/philipshield99/67e5967095dec4007459adbb9b924321>
- Report:
https://github.com/philipshield99/Cousera_Capstone5/blob/master/Capstone_Project_The%20Battle%20of%20Neighborhoods_Week2.pdf
- Presentation:
https://github.com/philipshield99/Cousera_Capstone5/blob/master/Capstone_Presentation.pdf

DISCUSSION

- Capstone project presented me a great opportunity to practice and apply the Data Science tools
- Good starting point to become a professional Data Scientist

CONCLUSION



- Feel rewarded with the efforts
- Appreciate instructors, customer support and every single one
- Foursquare API , mapping with Folium are very powerful & resourceful techniques

APPENDIX

Tools used for this project

- IBM Watson Studio
- Jupyter Notebook
- Python Programming language
- Foursquare API
- Github
- Data Sources
- https://en.wikipedia.org/wiki/List_of_New_York_City_Subway_stations_in_Manhattan
- <https://www.google.com/maps/search/manhattan+subway+metro+stations/@40.7837297,-74.1033043,11z/data=!3m1!4b1>
- https://www.nestpick.com/search?city=new-york&page=1&order=relevance&district=manhattan&gclid=CjwKCAiAjNjgBRAGeiwAGLI2hkP3A-cPxjZYkURqQEswQK2jKQEpv_MvKcrIhRWRzNkc_r-fGi0lxoCA7cQAvD_BwE&type=apartment&display=list