



The Battle of Neighborhoods

OPENING A NEW THAI RESTAURANT IN NEW YORK CITY

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Business Problem



❑ THE CHOICE OF LOCATION IS A CRITICAL CONSIDERATION IN THE PLAN

❑ AIM:

**EXPLORE AND SELECT THE BEST
LOCATION FOR OPENING A NEW THAI
RESTAURANT**

DATA



❑ DATA REQUIRED:

- Population And Density Of The New York City's Five Boroughs
- Geographical Coordinates Of Neighborhoods
- Venue Data Related To Thai Restaurants

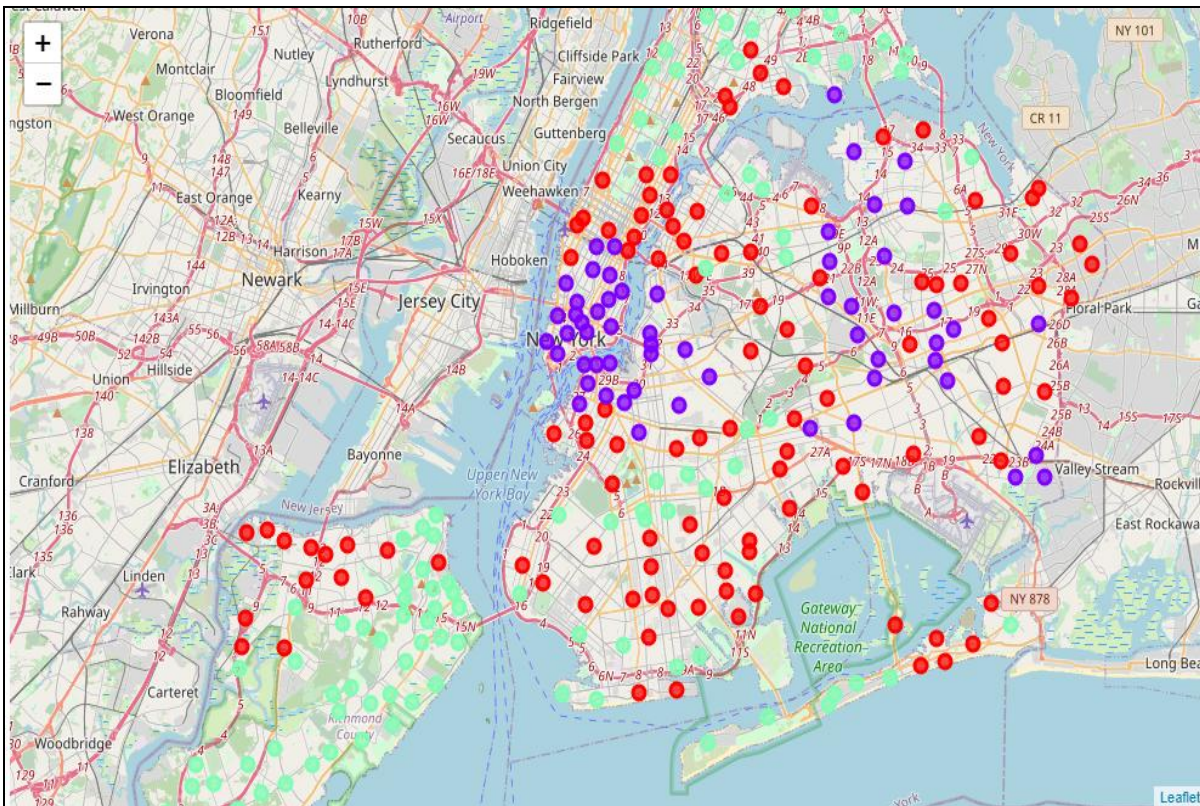
❑ SOURCES OF DATA

- Borough Table Of Wikipedia Page:
https://en.wikipedia.org/wiki/New_York_City#Boroughs
- Geographical Coordinates Of NYC:
https://geo.nyu.edu/catalog/nyu_2451_34572
- Foursquare API For Venue Data

Methodology



- ❑ Web Scrapping Wikipedia Page For Population And Density Table
- ❑ Load Geographic Coordinate Data From NYU Spatial Data Respository
- ❑ Use Foursquare API To Get Venue Data
- ❑ Group Data By Neighborhoods And Boroughs With Filtering Venue Category Of Thai Restaurants To Find Out Thai Restaurant Number Of Each Neighborhood And Each Borough
- ❑ Group Data By Neighborhoods And Taking The Mean Of Occurrence Frequency Of Each Venue Category, Particularly Thai Restaurants
- ❑ Perform K-mean Clustering And Visualize Cluster In Map Using Folium



Result

- ❑ **Categorized The Neighborhoods Into 3 Clusters**
- Cluster 0: Neighborhoods With Moderate Number Of Thai Restaurants
- Cluster 1: Neighborhoods With High Density Of Thai Restaurants
- Cluster 2: Neighborhoods With The Rarest Thai Restaurants

Discussion



- ❑ Most Of The Thai Restaurants Are Concentrated In The Central Area And East Area Of New York City
- ❑ Highest Number In Cluster 1 And Moderate Number In Cluster 0
- ❑ Cluster 2 Has Very Low Number To Almost None Of Thai Restaurants

Recommendation



- ❑ **Recommend To Open New Thai Restaurant In The Bronx:**
 - Is One Of The Boroughs In Cluster 2
 - Is The Borough That Has Least Number Of Thai Restaurants
 - Is The Third Most Densely Populated County In The New York City (NYC).

Conclusion



- ❑ Identify Neighborhoods Of New York City With A Low Presence Of Thai Restaurants
- ❑ Analyzed The Population Amount Of Boroughs In The NYC
- ❑ Find Out The Thai Restaurant Number For Each Neighborhood And Each Borough
- ❑ Identify Thai Restaurant Presence In Each Neighborhood From Foursquare Data We Have Clustered
- ❑ The Best Location For Opening A New Thai Restaurant Will Be Decided By Investors Or Caterers