
COURSERA IBM APPLIED DATASCIENCE PROJECT

OPENING A NEW GAS-STATION IN CITY OF UAE ,DUBAI.

BY

NAUMAN MANSURI

BUSINESS PROBLEM:

- Location of gasstation is important
- Objective is to select best locations in dubai city for opening Gas station
- This project is crucial help in determine location according to business needs
- Question:
 - If oil company is looking to open a gas station where would you recommend?

DATA

- List of suburbs of dubai
- Coordinates of suburbs
- Venue data related to GasStation

Source:

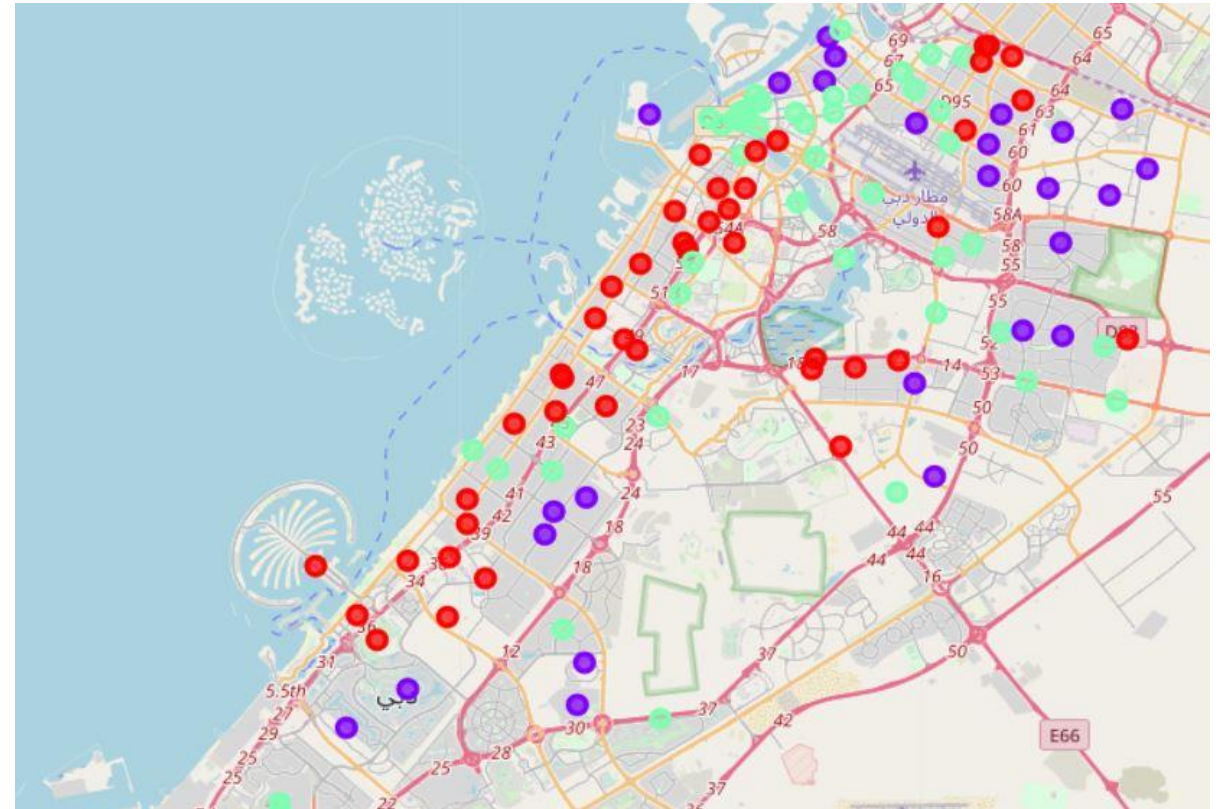
- Wikipedia https://en.wikipedia.org/wiki/List_of_communities_in_Dubai
- Geocoder package for getting coordinates
- Foursquare api

METHODOLOGY:

- Scraping neighbourhood list of city
- Getting latitude and longitude from neighbourhood
- Using foursquare api to get venue data
- Filter venues by Gas-Station.
- Perform clustering to neighbourhood.
- Visualize using folium

RESULTS

- Cluster 0 neighbourhoods with minimum number of gas station.
- -Cluster 1 neighbourhoods with high number of gas station.
- -Cluster 2 neighbourhoods with moderate number of gas station



DISCUSSION

- Most stations are concentrated near industrial area
- Highest stations are in cluster 1
- Moderate stations in cluster 2
- Least stations in cluster 0
- Thus Cluster 1 should be avoided with heavy competition.

CONCLUSION

- Answer:-neighbourhoods near to cluster 0 are most preferred location for opening Gas station.
- This project would help investors and oil company to get best location for opening gasstaion avoiding overcrowded regions