Restaurant Guide for Dubai, UAE

Introduction

Dubai is one of the best tourist destinations around the world, best known for its shopping spots as well as for its magnificent attractions.

This project aims to provide with details regarding to what cuisines are available and their locations.

A further analysis can be done to give the number of restaurants per area or cuisine or grouping based on both.

It also provides with an analysis of the surrounding available ventures for each or any preferred restaurant.

Data

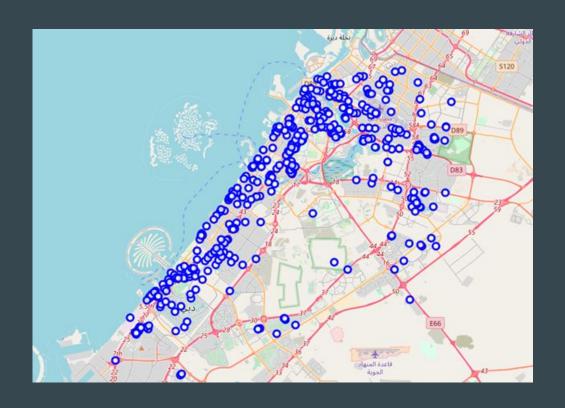
For this project the data needed is:

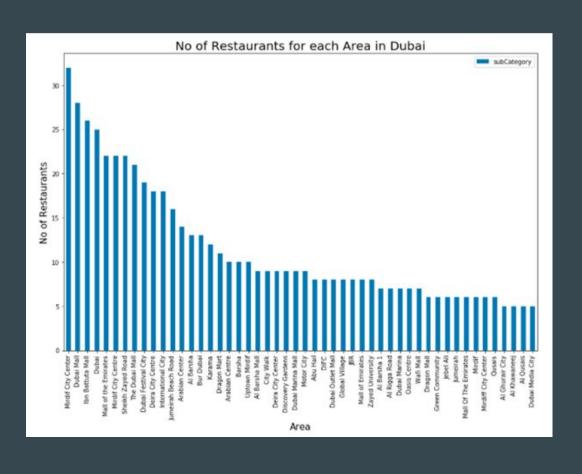
- Dubai dataset containing list of restaurants and other venues along with its name, address, latitude, longitude taken from Kaggle. http://tour-pedia.org/download/dubai-restaurant.csv
- 2. Geopy to get latitudes and longitudes of each venue.
- 3. Foursquare API to get all venues in each area.

the attributes of this dataframe are:

- 1. address address of venue
- 2. category subdivision of venue based on activity
- 3. id venue id
- 4. lat latitude of venue
- 5. lng longitude of venue
- 6. location location of venue (Dubai since it is our city of concern)
- 7. name name o<u>f venue</u>
- 8. originalld string id of venue
- 9. subCategory subdivision of category (restaurant divided into café, hotel, ice cream shop, etc)
- 10. details further details of venue (accessed through a link with no specific information)
- 11. reviews review given by other customers for that venue (accessed through a link with no specific ratings)

Cluster of Venues using K-Means

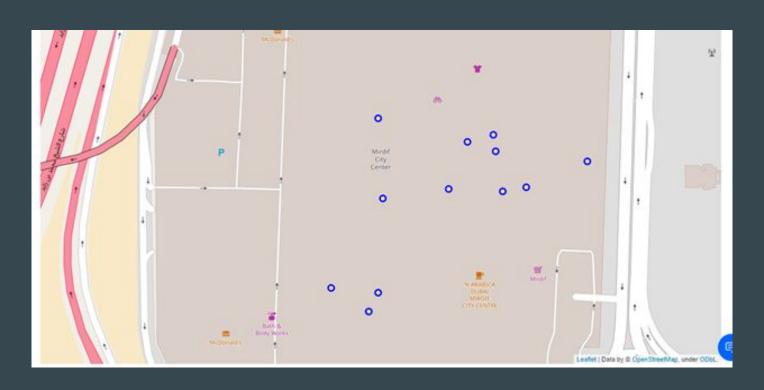


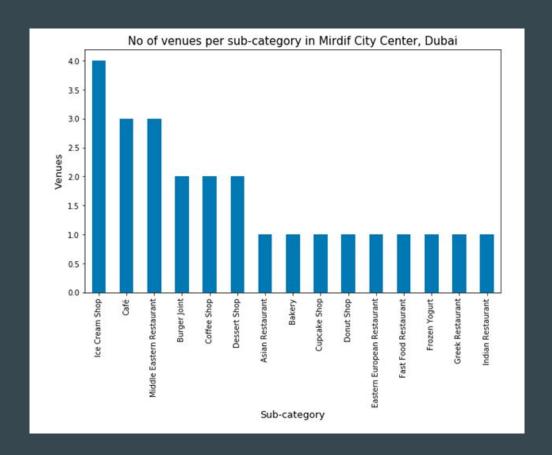


Mirdif City Centre has the highest number of restaurants

The numbers seem to be reduce as we move towards outskirts of Dubai

Cluster Map of Mirdif City Centre





The most common restaurants seem to be ice cream shops followed by Cafes, Middle Eastern cuisine and so on

Venue and its Frequency using One-Hot Encoding

عبدالوهاب عبدالوهاب venue freq 0 Coffee Shop 0.13 1 Movie Theater 0.10 2 Theme Park Ride / Attraction 0.03 3 Chinese Restaurant 0.03 4 Lebanese Restaurant 0.03

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venue freq

0 Coffee Shop 0.10

1 Movie Theater 0.07

2 Clothing Store 0.07

3 Chinese Restaurant 0.03

4 Restaurant 0.03
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کافیه نیرو Caffe' NERO

	vende	
0	Coffee Shop	0.13
1	Movie Theater	0.10
2	Theme Park Ride / Attraction	0.03
3	Chinese Restaurant	0.03
4	Lebanese Restaurant	0.03

Conclusion

From this we can see that:

- 1. Mirdif City Center has the greatest number of restaurants.
- 2. Ice cream shops have potential in Mirdif City Center area.
- The area of Abdelwahab is quite popular and has a high frequency of surrounding venues.
- 4. Japanese cuisine in not as available and has low frequency of surrounding venues.