

CAPSTONE PROJECT

MOROCCAN CITIES CLUSTERING

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A map of Morocco and surrounding regions, including parts of Spain, Algeria, and the Canary Islands. Numerous green dots are plotted across the map, representing coffee venues. The dots are concentrated in the northern and central parts of Morocco, particularly around cities like Rabat, Fes, and Marrakech. The map also shows major cities like Algiers, Oran, and Sidi Bel Abbas in Algeria, and various cities in Spain like Malaga and Granada. The text 'Introduction' is overlaid on a teal box in the center-right of the map.

Introduction

Cluster Moroccan cities based on venues
Detect the cities with a low competition level in
terms of coffees

Data Description

Wikipedia + Beautiful Soup

	City	Population	Region
0	Casablanca	3359818	Casablanca-Settat
1	Fez	1112072	Fès-Meknès
2	Tangier	947952	Tanger-Tetouan-Al Hoceima
3	Marrakesh	928850	Marrakesh-Safi
4	Salé	890403	Rabat-Salé-Kénitra

geopy

	City	Population	name	categories	lat	lng
0	Casablanca	3359818	Casa Jose	Tapas Restaurant	33.597823	-7.615341
1	Casablanca	3359818	Six PM	Hotel Bar	33.595940	-7.618684
2	Casablanca	3359818	Sofitel Casablanca Tour Blanche	Hotel	33.598251	-7.613960
3	Casablanca	3359818	Le Rouget de l'Isle	French Restaurant	33.592591	-7.622857
4	Casablanca	3359818	Hyatt Regency Casablanca	Hotel	33.596195	-7.618708

Foursquare API

[illegible]

Methodology

- Get the list of Moroccan cities
- Convert the data to numeric
- Get latitude and longitude from address
- Define Foursquare Credentials and Version
- Get the venues of each city
- Finalize the dataset by regrouping the population the venues and the total venues of each city
- Cluster cities based on all the venues
- Cluster the cities based on coffees



Results and Discussion

Conclusion

