Coursera Data Science Capstone

IBM Professional Data Science Course

OPENING A RESTAURANT IN HO CHI MINH CITY

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Introduction

Ho Chi Minh City is a huge urban area with a population of more than 10 millions

the key to be successful in every business is the location

this report is conducted in order to help me to make a location decision in a data driven approach instead of randomly picking the location.

have a strategy prior to opening a restaurant

Business Problem

Which Area is the best place to open a restaurant in Ho ChI Minh City.

Target Audience

myself

my co-owners, or investors

those interested in opening a restaurant in HCMC

Methodology

data from Wikipedia : District of Ho Chi Minh city to get the name of 24 districts. https://en.wikipedia.org/wiki/Category:Districts_of_Ho_Chi_Minh_City.
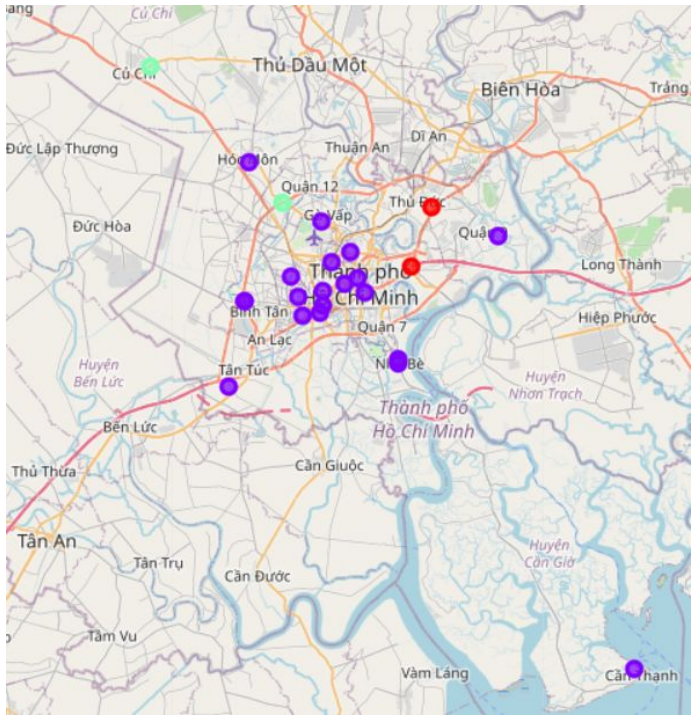
Python Geocoder   Geographical coordinates

FourSquare API   explore the venues

K Means Clustering

- the one with almost no recognized restaurants (Purple)

- the one with a moderate number of restaurants (Red)

- the one with a high density of restaurants. (Green)

Results

the majority of the restaurants in HCMC are situated up
North and East of the city => High Competitiveness

	District	Restaurant	Cluster Labels	Latitude	Longitude
21	Thủ Đức District	0.052632	0	10.84626	106.76992
9	District 2	0.105263	0	10.79199	106.74985

	District	Restaurant	Cluster Labels	Latitude	Longitude
8	District 12	0.222222	2	10.85043	106.62732
4	Củ Chi District	0.333333	2	10.97734	106.50223

Results

southern area and proximity to downtown are ideal for opening a restaurant due to the minimal density of restaurants

	District	Restaurant	Cluster Labels	Latitude	Longitude
0	Bình Chánh District	0.00	1	10.67922	106.57654
20	Phú Nhuận District	0.00	1	10.79565	106.67464
19	Nhà Bè District	0.00	1	10.70153	106.73818
18	Hóc Môn District	0.00	1	10.88839	106.59642
17	Gò Vấp District	0.00	1	10.83379	106.66557
16	District 9	0.00	1	10.82004	106.83185
15	District 8	0.00	1	10.74771	106.66334
14	District 7	0.00	1	10.70515	106.73748
13	District 6	0.00	1	10.74597	106.64769
12	District 5	0.00	1	10.75569	106.66637
11	District 4	0.01	1	10.76670	106.70650
10	District 3	0.01	1	10.77567	106.68670
7	District 11	0.00	1	10.76316	106.64314
6	District 10	0.00	1	10.76867	106.66564
5	District 1	0.01	1	10.78095	106.69911
3	Cần Giờ District	0.00	1	10.41566	106.96130
2	Bình Tân District	0.00	1	10.75909	106.59150
1	Bình Thạnh District	0.00	1	10.80518	106.69280
22	Tân Bình District	0.00	1	10.75909	106.59150
23	Tân Phú District	0.00	1	10.78232	106.63667

The End