IBM Data Science Capstone Project:

The best place to open an Afghani restaurant in Greater London

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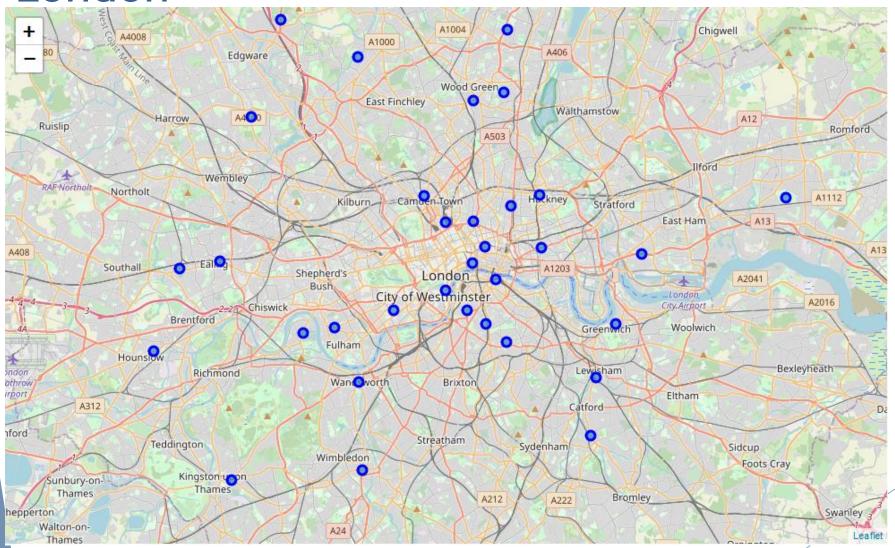
Goal

Goal is to find the best borough in Greater London to open an Afghan restaurant

Analytic approach

- ► Find boroughs with 'a center of attraction '. A lot of restaurants is good!
- ► Avoid boroughs with current Afghan restaurants;
- ➤ Select clusters are similar to boroughs where Afghan restaurants are located.

Greater London Boroughs and City of London



1600 square km
9 million people
33 government districts
multicultural city
tourism

Data sources



Foursquare API

https://ru.foursquare.com/



The London Datastore

https://data.london.gov.uk



TripAdvisor

https://www.tripadvisor.com

Boroughs vs restaurants

Boroughs vs restaurants, cafes, pubs, bars

Boroughs with restaurants and cafés:

Borough		
Enfield	48	
Hammersmith and Fulham	47	
Lambeth	46	
Ealing	43	
Islington	43	
Merton	43	
Tower Hamlets	42	
Southwark	40	
Greenwich	38	
Kingston upon Thames	38	
Harrow	38	
Havering	38	
City of London	38	
Redbridge	36	
Camden	33	
Hillingdon	32	
Sutton	31	
Westminster	26	
Haringey	25	
Wandsworth	24	
Hackney	23	
Brent	20	
Croydon	18	
Hounslow	15	
Newham	15	
Kensington and Chelsea	14	
Richmond upon Thames	13	
Lewisham	12	
Waltham Forest	7	
Barnet	3	
Bromley	2	
Bexley	2	

Current Afghani restaurants

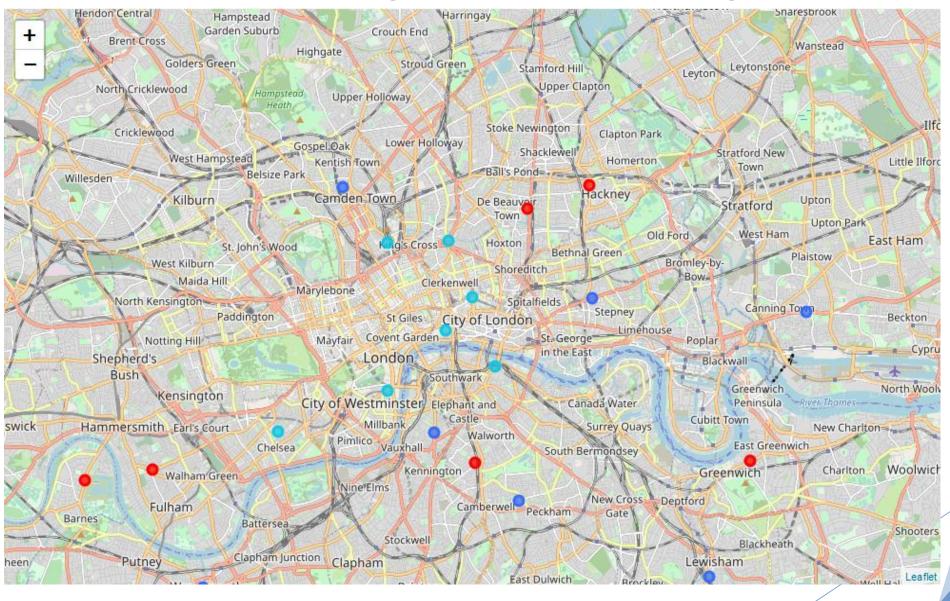
	Name	Borough	Rating
0	Kabul_Food	Kensington and Chelsea	8
1	Kolba	Kensington and Chelsea	8
2	Palaw Resturant	Kensington and Chelsea	10
3	Zam Zam	Westminster	8
4	Balkh_Resturant	Islington	8

- Only 5 well-known Afghani restaurants in Greater London;
- 3 of them are located in Kensington and Chelsea borough, one in Westminster and 1 in Islington;
- All restaurants have good rating

Top 10 venues for each borough

	Borough	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Barking and Dagenham	Metro Station	Convenience Store	Park	Plaza	Gift Shop	Grocery Store	Fast Food Restaurant	Film Studio	Fish & Chips Shop	Fish Market
1	Barnet	Italian Restaurant	Hotel	Pub	Sandwich Place	Coffee Shop	Fast Food Restaurant	Supermarket	Golf Course	Bookstore	Rest Area
2	Bexley	Intersection	Sandwich Place	Park	Performing Arts Venue	Miscellaneous Shop	Grocery Store	Mexican Restaurant	Coffee Shop	Pizza Place	Convenience Store
3	Brent	Café	Indian Restaurant	Japanese Restaurant	Grocery Store	Coffee Shop	Turkish Restaurant	Golf Course	Metro Station	Middle Eastern Restaurant	Supermarket
4	Bromley	Park	Grocery Store	Train Station	Hardware Store	Shipping Store	Event Service	Trail	Fast Food Restaurant	Gym	Supermarket
5	Camden	Café	Coffee Shop	Burger Joint	Park	Italian Restaurant	Breakfast Spot	Pizza Place	Art Gallery	Hotel	Mexican Restaurant
6	City of London	Coffee Shop	Gym / Fitness Center	Hotel	Vietnamese Restaurant	Pub	Food Truck	Bar	Café	Wine Bar	Whisky Bar
7	Croydon	Grocery Store	Café	Pub	Park	Bus Stop	Fast Food Restaurant	Turkish Restaurant	Supermarket	Convenience Store	Middle Eastern Restaurant
8	Ealing	Coffee Shop	Pub	Hotel	Park	Italian Restaurant	Thai Restaurant	Pizza Place	Platform	Burger Joint	Sushi Restaurant
9	Enfield	Pub	Café	Coffee Shop	Restaurant	Bakery	Cocktail Bar	Park	Middle Eastern Restaurant	Grocery Store	Lounge
10	Greenwich	Pub	Grocery Store	Café	Garden	Pizza Place	Coffee Shop	Italian Restaurant	Park	Historic Site	Trail
11	Hackney	Pub	Coffee Shop	Café	Bakery	Cocktail Bar	Restaurant	Garden	Beer Store	Butcher	Wine Shop

K-means clustering: similar boroughs



Results

- The best boroughs to open an Afghan restaurant are Lambeth and Tower Hamlets;
- Greater London do not have a lot of Afghan restaurant;
- Current Afghan restaurant have relatively compact location: Kensington and Chelsea, Westminster and Islington and have high rating and reviews;
- Lambeth and Tower Hamlets are similar to boroughs with current Afghani restaurant;

Thank You!