Capstone – The Battle of Neighborhood

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Introduction

This final project explores the best locations for Indian restaurants throughout the city of New York. New York is a major metropolitan area with more than 8.4 million people living within city limits. Additionally, I will attempt to answer the questions "Where should I open an Indian Restaurant?" and "Where should I stay If I want great Indian food?"

Data

In order to answer the above questions, data on New York City neighborhoods, boroughs to include boundaries, latitude, longitude, restaurants, and restaurant ratings and tips are required.

New York City data containing the neighborhoods and boroughs, latitudes, and longitudes will be obtained from the data source: https://cocl.us/new_york_dataset

New York City data containing neighborhood boundaries will be obtained from the data source: https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm

All data related to locations and quality of Indian restaurants will be obtained via the FourSquare API utilized via the Request library in Python.

Methodology

- Data will be collected from https://cocl.us/new_york_dataset and cleaned and processed into a dataframe.

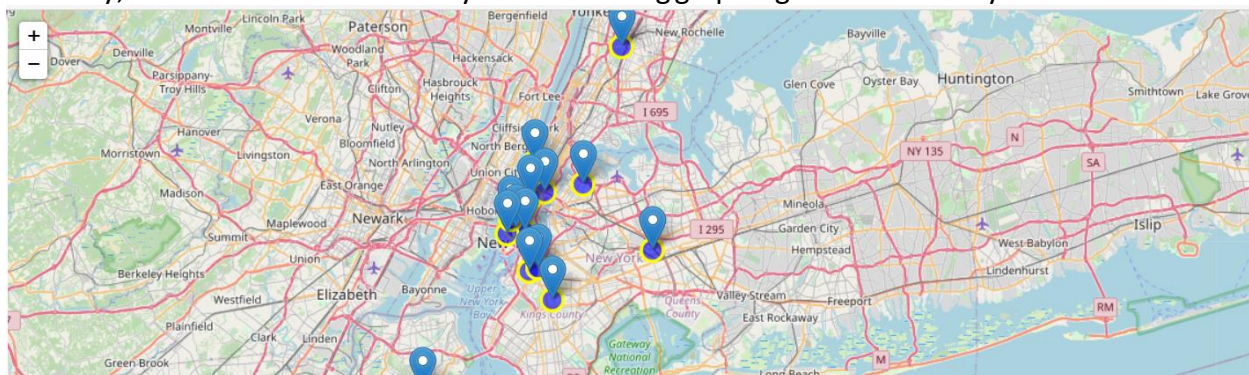|	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585

- FourSquare be used to locate all venues and then filtered by Indian restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.

	Borough	Neighborhood	ID	Name	Likes	Rating	Tips
0	Bronx	Woodlawn	4c0448d9310fc9b6bf1dc761	Curry Spot	5	8.1	10
1	Bronx	Unionport	4c194631838020a13e78e561	Melanies Roti Bar And Grill	3	5.9	2
2	Brooklyn	Bay Ridge	545835a1498e820edc6f636f	Bombay Grill	14	7.1	4
3	Brooklyn	Greenpoint	51a5445c498ee0f182370cb2	Agra Taj Mahal	34	7.3	16
4	Brooklyn	Bushwick	5169f5c4e4b0c7fcb77a0f3c	Agra Heights	12	5.6	5
5	Brooklyn	Gowanus	52f18573498ec2c34e830ffd	Kanan's Indian Restaurant	24	7.8	8
6	Brooklyn	Fort Greene	57596dad498e732300496b23	Dosa Royale	77	8.8	22
7	Brooklyn	Clinton Hill	568d3902498e619efcbc3f58	Spice & Grill	20	8.0	6
8	Brooklyn	Clinton Hill	4ace7c86f964a520d3d020e3	Kinara's	9	5.6	20
9	Brooklyn	Boerum Hill	543870ec498ec64de510608d	Masala Grill	39	8.0	14

• Data will be sorted based on rankings.

	Neighborhood	Average Rating
24	Tribeca	8.900000
7	Fort Greene	8.800000
20	Prospect Lefferts Gardens	8.600000
28	West Village	8.600000
10	Greenwich Village	8.566667
19	Noho	8.500000
23	Sutton Place	8.400000
17	Midtown	8.350000
0	Astoria	8.300000
29	Woodlawn	8.100000

• Finally, the data be will be visually assessed using graphing from various Python libraries.

Problem Statement

What is / are the best location(s) for Indian cuisine in New York City?

In what Neighborhood and/or borough should I open an Indian restaurant to have the best chance of being successful?

Where would I go in New York City to have the best Indian food?

Results / Conclusion

Manhattan and Brooklyn have the best rated Indian restaurants on average.

Staten Island and The Bronx have the least amount of Indian restaurants per borough.

However, Greenwich Village of the Manhattan is the neighborhood in all of NYC with the most Indian Restaurants. Despite Manhattan having the least number of neighborhoods in all five boroughs, it has the most Indian restaurants. Based on this information, I would state that Manhattan and Brooklyn are the best locations for Indian cuisine in NYC. To have the best shot of success, I would open an Indian restaurant in Brooklyn. Brooklyn has multiple neighborhoods with average ratings exceeding 7.0 of a scale of 1.0 to 10.0 and has the least number of Indian restaurants making competition easier than in other boroughs.

Finally, I would go to Tamarind TriBeCa in Manhattan for the best Indian food based on 590 likes with 8.9 rating or The Kati Roll Company in Manhattan with 834 likes.