Introduction:

A Los Angeles based authentic Jamaican food restaurant has been growing over years and would like to expand and open new locations in New York City. The owners recognize there is a large Jamaican population and would like to open restaurants within the Jamaican community. The purpose of this project is to identify the best locations to open the authentic Polynesian restaurants. By using tools learned over the courses of the IBM Data Science Professional Certificate I will identify the best location in Salt Lake City, Utah to open an authentic Jamaican restaurant. The Data needed to solve this problem is, list of neighborhoods in New York City, data related to other Jamaican food restaurants (if any), and latitude and longitude coordinates of neighborhoods in New York City, New York. I will extract the data by getting the longitude and latitude coordinates of neighborhoods, via Geocoder, scraping the New York City neighborhoods using google, and FourSquare to find venue data related to similar neighborhoods

Data

- New York City Data containing boroughs and neighborhoods
- Latitude and longitude coordinates of neighborhoods within boroughs.
- Venue data relative to restaurants

Methodology

- Data will be sorted on untapped and saturated market using K-mean, Scikit, and clustering
- Foursquare to pinpoint venues and analyzing Jamaican restaurants
- Data visualization
- Data collected from: https://geo.nyu.edu/catalog/nyu/2451/34572

Results

	Borough	Neighborhood	Latitude	Longitude	Total	Cluster_Labels
0	Manhattan	Marble Hill	40.876551	-73.910660	13	1
1	Brooklyn	Bay Ridge	40.625801	-74.030621	33	0
2	Brooklyn	Bensonhurst	40.611009	-73.995180	28	0
3	Brooklyn	Sunset Park	40.645103	-74.010316	37	0
4	Brooklyn	Greenpoint	40.730201	-73.954241	19	1
5	Brooklyn	Gravesend	40.595260	-73.973471	11	1
6	Brooklyn	Brighton Beach	40.576825	-73.965094	21	0
7	Brooklyn	Sheepshead Bay	40.586890	-73.943186	29	0
8	Brooklyn	Manhattan Terrace	40.614433	-73.957438	17	1
9	Brooklyn	Flatbush	40.636326	-73.958401	34	0

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3	Brooklyn	Manhattan Terrace	40.614433	-73.957438	17	1
4	Brooklyn	East Flatbush	40.641718	-73.936103	6	1
5	Brooklyn	Brownsville	40.663950	-73.910235	10	1
6	Brooklyn	Red Hook	40.676253	-74.012759	7	1
7	Brooklyn	Park Slope	40.672321	-73.977050	18	1
8	Brooklyn	Cypress Hills	40.682391	-73.876616	11	1
9	Brooklyn	East New York	40.669926	-73.880699	3	1
10	Brooklyn	Starrett City	40.647589	-73.879370	7	1
11	Brooklyn	Canarsie	40.635564	-73.902093	7	1
12	Brooklyn	Flatlands	40.630446	-73.929113	11	1
13	Brooklyn	Mill Island	40.606336	-73.908186	2	1
14	Brooklyn	Coney Island	40.574293	-73.988683	8	1
15	Brooklyn	Borough Park	40.633131	-73.990498	5	1
16	Brooklyn	Gerritsen Beach	40.590848	-73.930102	9	1
17	Brooklyn	Marine Park	40.609748	-73.931344	10	1
18	Brooklyn	Sea Gate	40.576375	-74.007873	2	1
19	Brooklyn	Ocean Hill	40.678403	-73.913068	13	1
20	Brooklyn	City Line	40.678570	-73.867976	14	1
21	Brooklyn	Bergen Beach	40.615150	-73.898556	3	1
22	Brooklyn	Midwood	40.625596	-73.957595	11	1
23	Brooklyn	Georgetown	40.623845	-73.916075	19	1
24	Brooklyn	East Williamsburg	40.708492	-73.938858	18	1
25	Manhattan	Lincoln Square	40.773529	-73.985338	16	1
26	Manhattan	Clinton	40.759101	-73.996119	17	1
27	Manhattan	Midtown	40.754691	-73.981669	19	1
28	Manhattan	Battery Park City	40.711932	-74.016869	10	1

Discussion

Caribbean food can be associated with Jamaican food but is not specifically Jamaican food. There were very few Caribbean restaurants found but no specific Jamaican Restaurants.

Conclusion

As stated of above, although there were some found "Caribbean Restaurants" there were no restaurants found specifically labeled Jamaican Food. I would recommend to the owners based on the saturated and tapped markets best places would be to open Jamaican Restaurants in Bronx and Queens.