# CAPSTONE PROJECT

THE BATTLE OF NEIGHBORHOODS

# INTRODUCTION

• New York City most populous state in United States.

• "Melting pot".

• Diverse culture & different cuisine.

## PROBLEM STATEMENT

• Supply & demand of Indian cuisine.

Market for new restaurants.

• Places to stay if Indian cuisine preferred.

### DATA

• NYC data that contains list of boroughs, neighborhoods along with their lat & long.

• Indian restaurants in NYC (FourSquare API).

• NYC Borough boundaries (GeoSpace Data).

## DATA CLEANING

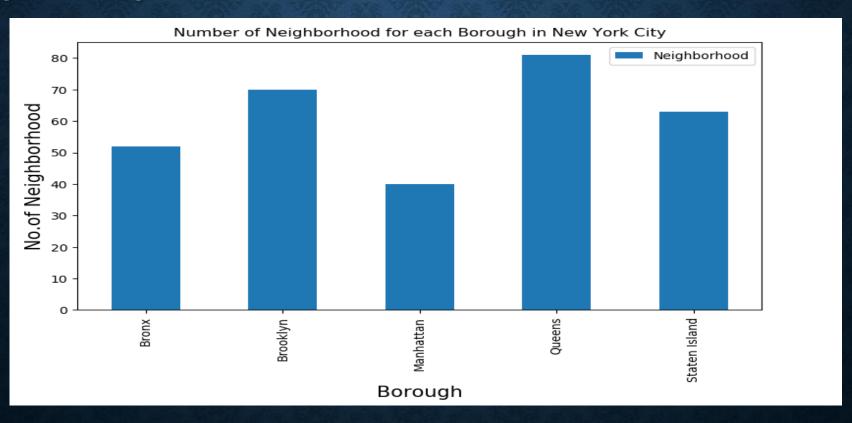
• Find each neighborhood using FourSquare API.

Get only Indian cuisine restaurants.

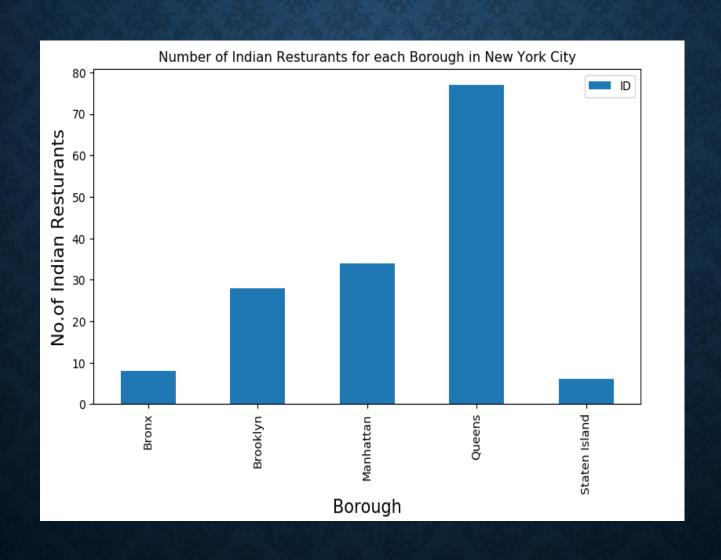
• Sort restaurants using ratings.

# **METHODOLOGY**

#### Exploratory data analysis



#### INFERENTIAL STATISTICS

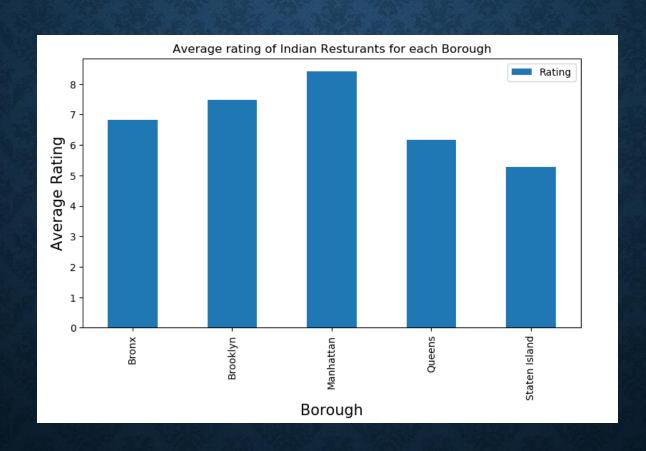


# **MODELLING**

One hot encoding on restaurants.

• Filter restaurants (K means clustering).

# **VISUALIZE**



# RESULTS

	Borough	Neighborhood	Latitude	Longitude	Average Rating
0	Queens	Astoria	40.768509	-73.915654	9.2
1	Queens	Blissville	40.737251	-73.932442	9.2
2	Manhattan	Civic Center	40.715229	-74.005415	9.2
3	Manhattan	Midtown	40.754691	-73.981669	9.0
4	Manhattan	Midtown South	40.748510	-73.988713	9.0
5	Queens	Sunnyside	40.740176	-73.926916	9.2
6	Staten Island	Sunnyside	40.612760	-74.097126	9.2
7	Queens	Sunnyside	40.740176	-73.926916	9.2
8	Staten Island	Sunnyside	40.612760	-74.097126	9.2
9	Queens	Sunnyside	40.740176	-73.926916	9.2
10	Staten Island	Sunnyside	40.612760	-74.097126	9.2
11	Queens	Sunnyside	40.740176	-73.926916	9.2
12	Staten Island	Sunnyside	40.612760	-74.097126	9.2
13	Manhattan	Tribeca	40.721522	-74.010683	9.2

## CONCLUSION

• Best restaurants: Astoria (Queens), Blissville (Queens), Civic Centre (Manhattan).

• Potential market: Manhattan.

• Best stay: Manhattan.

# THANK YOU