Restaurant Recommender System Coursera Capstone Project



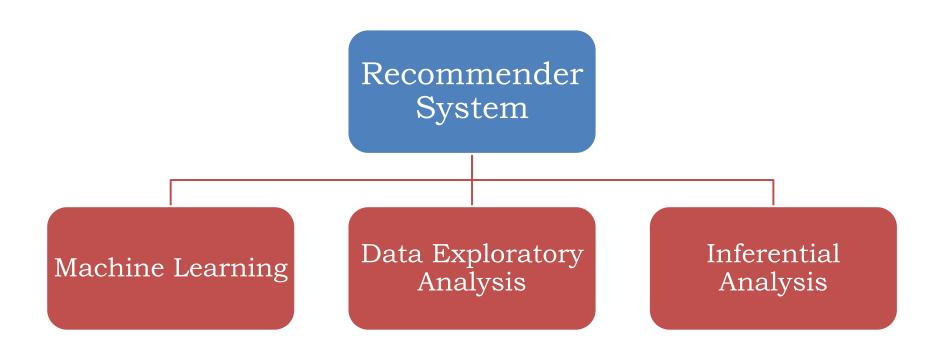
Data Collection & Requirements

Borough	Neighborhoods	Latitude	Longitude
Central	Cantonment area	12.972442	77.580643
Central	Domlur	12.960992	77.638726
Central	Indiranagar	12.971891	77.641151
Central	Jeevanbheemanagar	12.962900	77.659500
Central	Malleswaram	13.003100	77.564300
Central	Pete area	12.982700	77.575800
Central	Rajajinagar	12.990100	77.552500
Central	Sadashivanagar	13.006800	77.581300
Central	Seshadripuram	12.993500	77.578700
Central	Shivajinagar	12.985700	77.605700

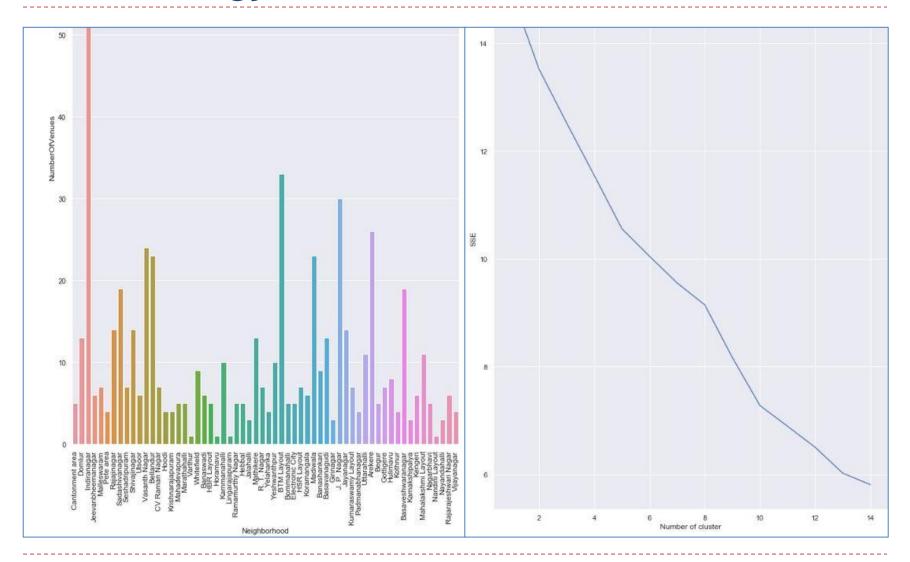
	Borough	Neighborhoods	Population N	ormalized_population
)	Central	Cantonment area	866377	0.880810
1	Central	Domlur	743186	0.755567
2	Central	Indiranagar	474289	0.482190
3	Central	Jeevanbheemanagar	527874	0.536668
4	Central	Malleswaram	893629	0.908516
3	Borough	Neighborhoods	AverageIncome	Normalized_income
0	Central	Cantonment area	18944.099792	0.293051
1	Central	Domlur	56837.022198	0.879225
2	Central	Indiranagar	41991.817435	0.649581
3	Central	Jeevanbheemanagar	6667,447632	0.103140
1	Central	Malleswaram	53270.063892	0.824047

Venue Category	Venue Longitude	Venue Latitude	Venue	Neighborhood Longitude	Neighborhood Latitude	Borough	Neighborhood
Seafood Restaurant	77.578592	12.975569	Hotel Fishland	77.580643	12.972442	Central	Cantonment area
Bookstore	77.578461	12.976355	Sapna Book House	77,580643	12.972442	Central	Cantonment area
Indian Restaurant	77.579257	12.973707	Vasudev Adigas	77.580643	12.972442	Central	Cantonment area
Restaurant	77.579161	12.973554	Adigas Hotel	77.580643	12.972442	Central	Cantonment area
Indian Restaurant	77.578125	12.975985	Kamat Yatrinivas	77.580643	12.972442	Central	Cantonment area

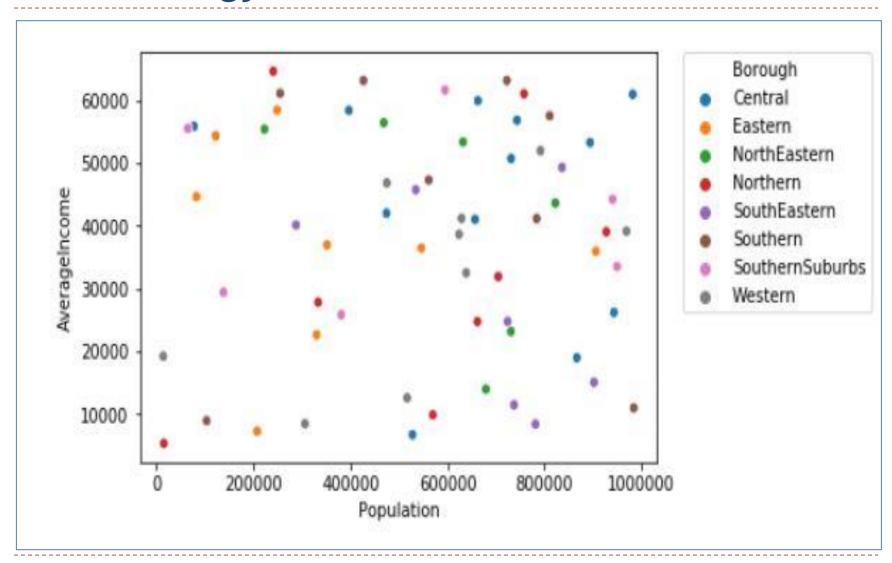
Methodology



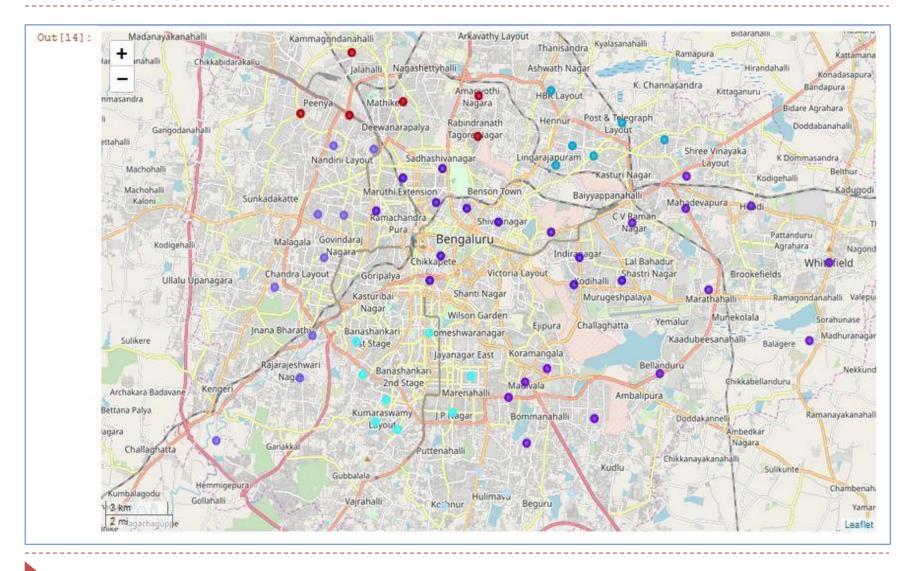
Methodology



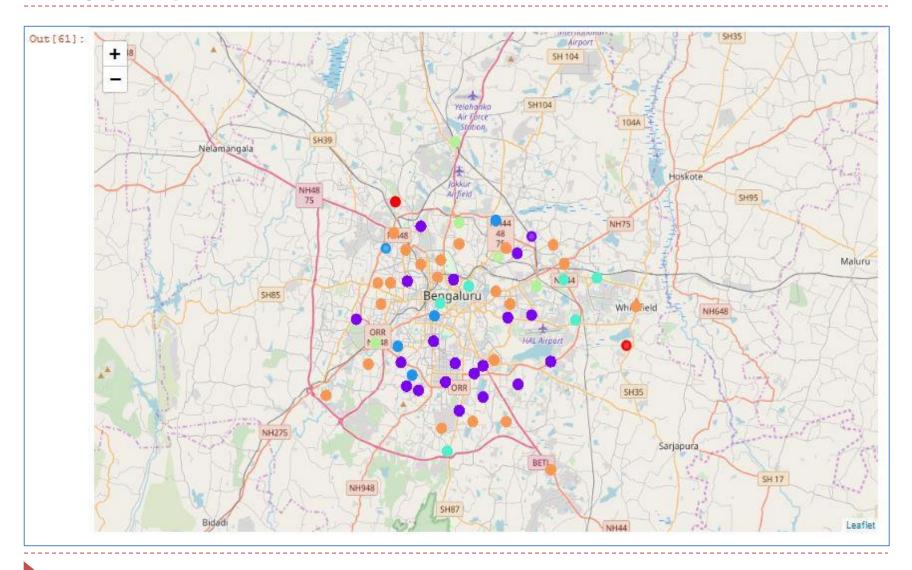
Methodology



Mapping & Clustering



Mapping & Clustering



Results

	Venue Freq	uency	
0	Venue Category Indian Restaurant	0.23	
1	Venue Category_Sporting Goods Shop	0.15	
2	Venue Category Pizza Place	0.08	
3	Venue Category_Department Store	0.08	
4	Venue Category_Liquor Store	0.04	
	BTM Layout		
	V	enue	Frequency
0	Venue Category Indian Restau	rant	0.18
1	Venue Category Snack P	lace	0.09
1 2 3	Venue Category Ice Cream	Shop	0.09
3	Venue Category Pizza P	lace	0.06
4	Venue Category_Vegetarian / Vegan Restau	rant	0.06
	Banashankari		
	Venue	Freque	encv
0	Venue Category Indian Restaurant		0.22
1 2	Venue Category Café		0.22
2	Venue Category Men's Store	0	0.11
3	Venue Category North Indian Restaurant		0.11
4	Venue Category Clothing Store		0.11

Ranking	3rd Most Common Venue	2nd Most Common Venue	1st Most Common Venue	Neighborhoods	
[0.6426377807870477]	Venue Category_Fast Food Restaurant	Venue Category_Indian Restaurant	Venue Category_Ice Cream Shop	Basaveshwaranagar	0
[0.7361321887351776]	Venue Category_Food Court	Venue Category_Indian Sweet Shop	Venue Category_Indian Restaurant	Begur	1
[0.5423513638809381]	Venue Category_Bus Stop	Venue Category_Furniture / Home Store	Venue Category_Outlet Store	Electronic City	2

Thank You!