Restaurant recommender system IBM CAPSTONE PROJECT.

Methodology

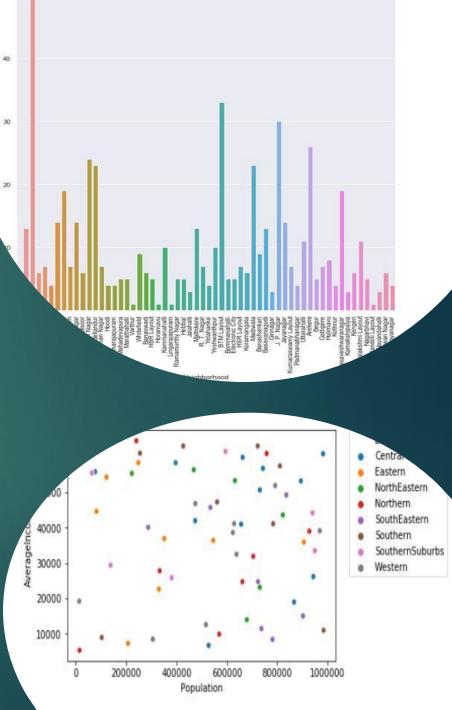


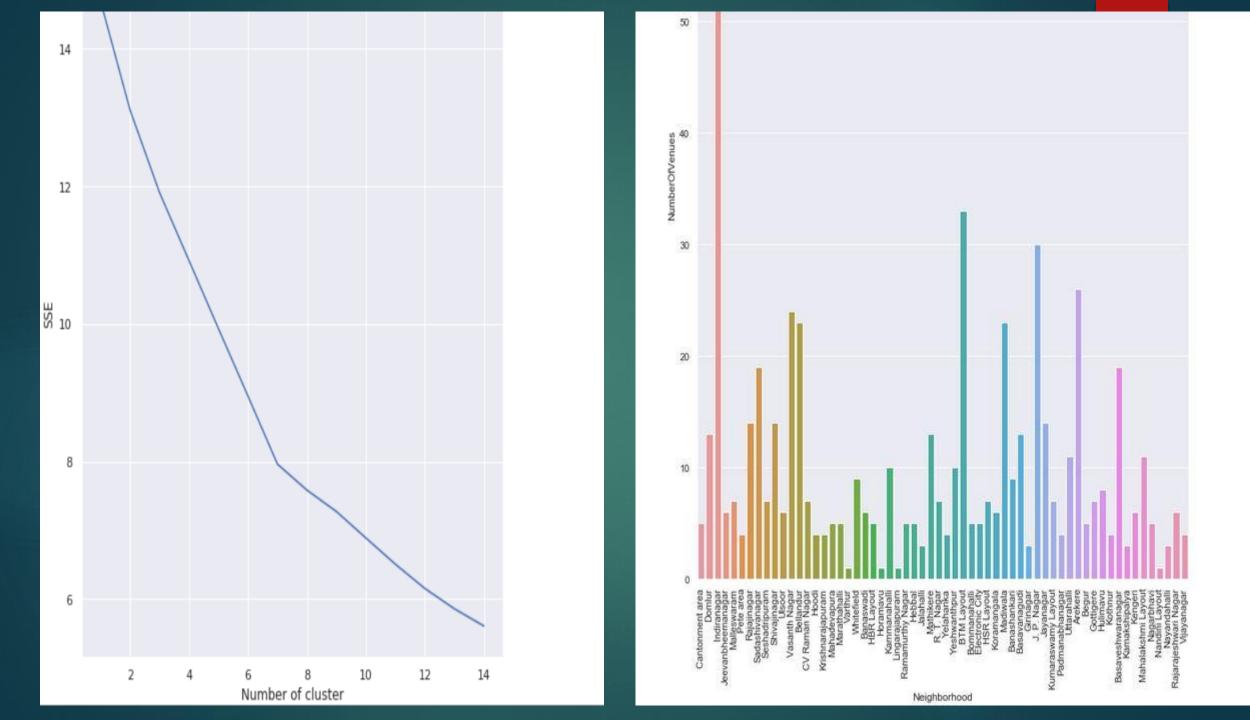
Recommender System

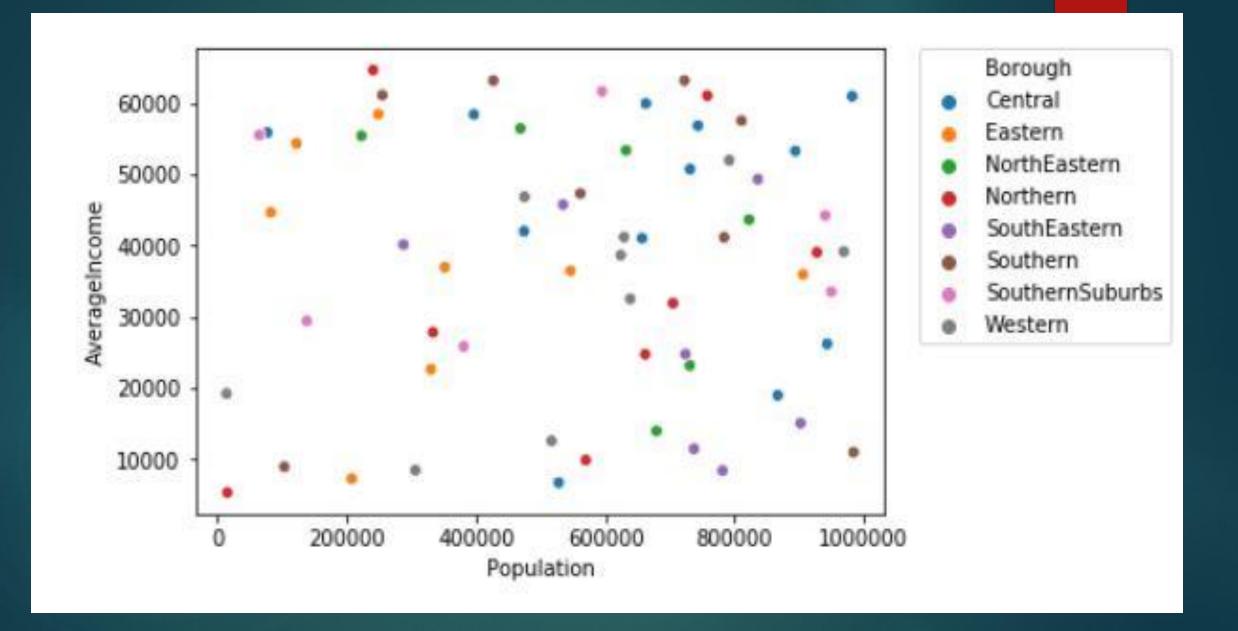












Datasets

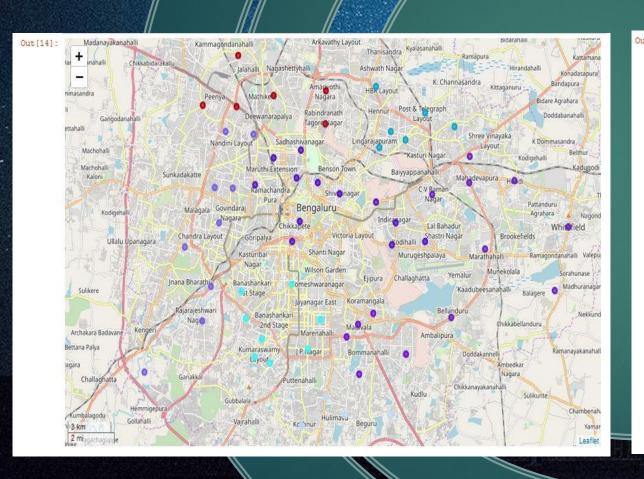
Borough		Neighborhoods	Population	Normalized_population	
0	Central	Cantonment area	866377	0.880810	
1	Central	Domlur	743186	0.755587	
2	Central	Indiranagar	474289	0.482190	
3	Central	Jeevanbheemanagar	527874	0.536668	
4	Central	Malleswaram	893629	0.908516	

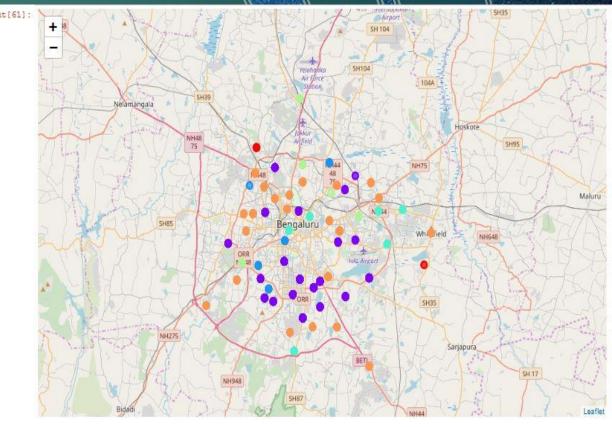
	Neighborhood	Borough	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Cantonment area	Central	12.972442	77. <mark>5</mark> 80643	Hotel Fishland	12.975569	77.578592	Seafood Restaurant
1	Cantonment area	Central	12.972442	77.580643	Sapna Book House	12.976355	77.578461	Bookstore
2	Cantonment area	Central	12.972442	77.580643	Vasudev Adigas	12.973707	77.579257	Indian Restaurant
3	Cantonment area	Central	12.972442	77.580643	Adigas Hotel	12.973554	77.579161	Restaurant
4	Cantonment area	Central	12.972442	77.580643	Kamat Yatrinivas	12,975985	77.578125	Indian Restaurant

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	
4	Central	Malleswaram	53270.063892	0.824047	

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	12.962700	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	

Myping and clusteing





Results and conclusion

-	Arekere	
	Venue Fre	quency
0	Venue Category_Indian Restaurant	0.23
1	Venue Category_Sporting Goods Shop	0.15
2 3	Venue Category Pizza Place	0.08
3	Venue Category_Department Store	0.08
4	Venue Category_Liquor Store	0.04
	BTM Layout	
		Venue Frequency
0	Venue Category_Indian Resta	urant 0.18
1 2 3 4	Venue Category_Snack	Place 0.09
2	Venue Category_Ice Cream	Shop 0.09
3	Venue Category Pizza	Place 0.06
4	Venue Category_Vegetarian / Vegan Resta	urant 0.06
22	Banashankari	
	Venue	Frequency
	Venue Category_Indian Restaurant	0.22
1	Venue Category_Café	0.22
0 1 2 3	Venue Category Men's Store	0.11
2	Venue Category North Indian Restaurant	0.11
4		

	Neighborhoods	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	Ranking
0	Banashankari	Venue Category_Indian Restaurant	Venue Category_Café	Venue Category_Clothing Store	[0.8234029969357849]
1	HBR Layout	Venue Category_Road	Venue Category_Coffee Shop	Venue Category_North Indian Restaurant	[0.7540959810582033]
2	HSR Layout	Venue Category_Department Store	Venue Category_Bakery	Venue Category_Pharmacy	[0.619394501626356]

Thank You! YSAITEJA777@GMAIL.COM