

Coursera Capstone

Battle of Neighborhoods – Coffee Shop in Los Angeles, California

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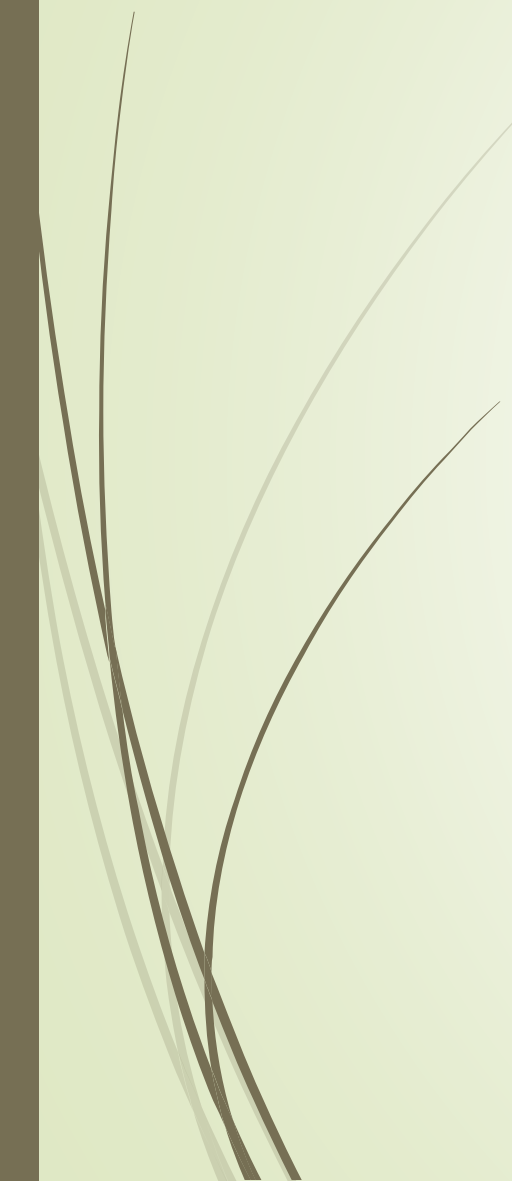
Business Problem

- ▶ Los Angeles County is a metropolitan area with more than 10M in population. It's a vibrant hub with a huge variety of businesses and it's intriguing to find out different types of consumer venues that are driving the economy
- ▶ Where will it be suitable to open a coffee shop given the opportunities it presents yet balancing the fierce competition in the region?





Data

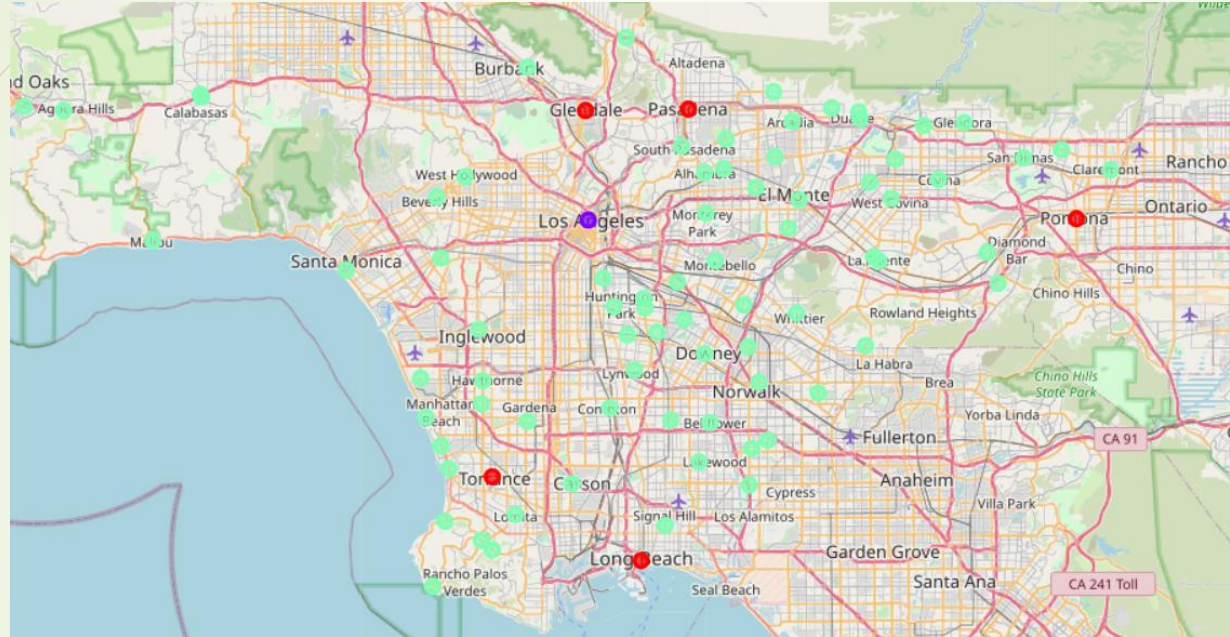
- List of neighborhoods in Los Angeles County
 - Populations of LA County's neighborhoods
 - Latitude and Longitude Coordinates of the neighborhoods (This will allow us to extract the venue data using Foursquare API)
 - Venue Data relating to coffee shop
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Methodology

- BeautifulSoup package to scrap information from Wikipedia
- Geocoder package to convert scraped information into geo-coordinates
- Foursquare API to query venue data for manipulation
- Sklearn package to conduct Kmeans clustering analysis

Discussion



- Three clusters were identified with trade-offs in coffee shop concentration and population sizes for us to make decisions.
- Potential shortfalls/lack of considerations in cultural factors, Foursquare query limitations, more in-depth analysis of the coffee shop analytics.



Conclusion

- It was overall a very fun and practical project that explored a subject that I've always wanted to know – the coffee market dynamics in each neighborhood. The analysis stratified three different clusters for us to consider where it's best to set up a coffee shop in with considerations such as coffee shop density and population sizes. My optimal choice to set up a coffee shop will be “Glendale”, which is part of the red cluster that represents larger populations and the coffee score of the city is only 0.04. It's the optimal choice provided by the analysis as the city has the highest population of 200K yet the coffee shop score is relatively low.

Thanks for reading!

