**Introduction: Business Problem**

Los Angeles is the most populous city in California and the second-most populous city in the United States. It is the cultural, financial, and commercial centre of Southern California. The city is known for its Mediterranean climate, ethnic diversity, Hollywood, the entertainment industry, and its sprawling metropolis.

Having lived in LA for over a year now, I can confirm that it is also one of the most amazing places to eat, thanks to an incredible variety of international cuisines and some of the most talented chefs in the world. LA’s thriving economy, multicultural demographic, access to ingredients, and great seasonal produce makes it an ideal place for restaurants to flourish.

The objective of this project is to identify the best potential neighbourhoods where a restaurant can be set up. An international YouGov study of more than 25,000 people in 24 countries found that pizza and pasta are among the most popular foods in the world, as Italian cuisine beats all comers. According to their analysis, 88% of people surveyed in America liked Italian food. Keeping this in mind, the focus of this capstone would be Italian restaurants. Therefore, the analysis and results of this project would interest stakeholders who are interested in **opening an Italian restaurant in Los Angeles**.

Since there are innumerable restaurants in LA, neighbourhoods that are notalready congested with restaurants would be picked out first. The subsequent filter would be neighbourhoods with the least number of Italian restaurants in its vicinity. Neighbourhoods that are closer to the city centre would then be favoured. Neighbourhood rent is another factor that would be taken into consideration.

**Data**

Based on the criteria specified above, the factors that will influence the final decision are: -

* **Number of existing restaurants in the neighbourhood (any type of restaurant)**
* **Number of and distance to Italian restaurants in the neighbourhood**
* **Distance of neighbourhood from city centre**
* **Average neighbourhood rent**

The following data sources will be needed to extract/generate the required information: -

* List of all neighbourhoods in LA — <https://en.wikipedia.org/wiki/List_of_districts_and_neighborhoods_of_Los_Angeles>
* Coordinates of all neighbourhoods and venues — GeoPy Nominatim geocoding
* Number of restaurants and their type and location in every neighbourhood — Foursquare API
* LA rent data — <https://www.rentcafe.com/average-rent-market-trends/us/ca/los-angeles/>

<https://jp-tok.dataplatform.cloud.ibm.com/analytics/notebooks/v2/8a834e45-b7cd-41bb-97d2-a2a747fd0d2c/view?access_token=6bf2f41d17fb979d3b9d9ee28bab69541d04afbfd14e6e7d088b2c8f96106a7f>

<https://medium.com/analytics-vidhya/the-battle-of-the-neighbourhoods-la-edition-152edcc72c53>

<https://github.com/Soumya44/Coursera_Capstone/blob/master/Final%20Report.ipynb>

<https://github.com/Jaya738/Coursera_Capstone/blob/master/Capstone%20Project%20-%20The%20Battle%20of%20Neighborhoods.md>

<https://github.com/gnokit/Coursera_Capstone/blob/master/Capstone%20Project%20-%20The%20Battle%20of%20Neighborhoods%20-%20Final.ipynb>

<https://github.com/AragondaJyosna/Applied-Data-Science-Capstone/blob/master/The%20Battle%20of%20Neighborhoods_Presentation.pdf>

<https://github.com/kunal-chhabra/Coursera_Capstone/blob/master/The%20Battle%20of%20Neighborhoods.pdf>