Best Restaurant Locations in Los Angeles:

Introduction:

Restaurant Business is a kind of business which not only runs on the quality of the food but rather more importantly the location, the ambience and the mood set by the environment around the customer. It is a place where people come to celebrate, socialize and even earn (business meets). Due to all this it is important for the business to be carefully planned at each step along the way especially while setting it up as one wrong move and you might end up being a place where barely customers come and go and could end up causing huge losses.

Problem:

As mentioned setting up the restaurant business similar to many other businesses plays a crucial part in it actually being able to compete and succeed among the competition. Due to this the problem raised by the customer is one where they have to set up their Restaurant business in the city of Los Angeles and need to find a valid location that would help their business thrive.

Data:

Acquiring Data:

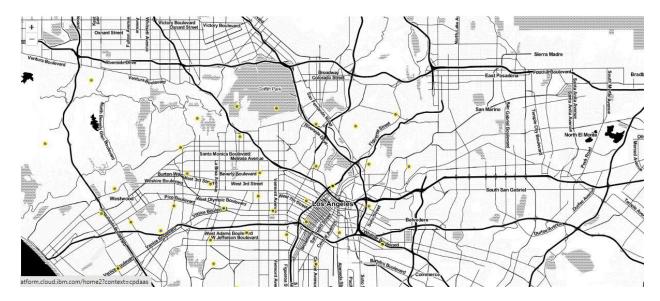
Data for this project was a bit tricky to get as getting it was not as similar as the previous projects I for one have worked on. The data required for this kind of project is the location data of the areas around the city. The problem that arose was that the data being provided was scattered and not in one place for instance the latitude and longitude data was provided with a postal code on Google's search page here which was completely separate from the dataset that linked the postal code which I got from here. However I managed to scrape the data from the sites and create a csv file which was then imported into the project to use.

Cleaning Data:

There was not much to be cleaned in the data as I had myself created the dataset however one thing to be noted is that there was some areas repeating in the data but as they had different postal codes and location it was appropriate to leave them that way to avoid complications further while doing Analysis.

Visualization:

To better understand the data and location there had to be some sort of visualization that was achieved by implementing folium map creating a map of Los Angeles and placing markers throughout the city according to the location data provided in the data frame.



Analysis:

To analyze the data was a relatively simple task as the criteria I chose to distinguish a good area for business from a bad one was the amount of and type of food and recreational businesses in the area. To do this I had to build a dataset with Foursquare API that would fetch the most popular areas though me importing the location from my previously imported data set. After this I implemented one hot encoding and had to merge it with the previous dataset to make a dataframe which would work in analyzing the data.

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Arleta	Fast Food Restaurant	Mexican Restaurant	Spa	Construction & Landscaping	Other Repair Shop	Business Service	Fried Chicken Joint	Middle Eastern Restaurant	Pizza Place	Gym / Fitness Center
1	Athens	Pizza Place	Insurance Office	Intersection	Convenience Store	Shop & Service	Gym / Fitness Center	Yoga Studio	Electronics Store	Food Truck	Food Court
2	Atwater Village	Grocery Store	Mexican Restaurant	Music Venue	Liquor Store	Fast Food Restaurant	French Restaurant	Fraternity House	Food Truck	Food Court	Food & Drink Shop
3	Baldwin Hills	Park	Trail	Yoga Studio	Electronics Store	French Restaurant	Fraternity House	Food Truck	Food Court	Food & Drink Shop	Food
4	Bel Air Estates	Plaza	Scenic Lookout	Cycle Studio	French Restaurant	Fraternity House	Food Truck	Food Court	Food & Drink Shop	Food	Filipino Restaurant
5	Boyle Heights	Convenience Store	Burger Joint	Mexican Restaurant	Thai Restaurant	Sandwich Place	Seafood Restaurant	Bookstore	Pizza Place	Food Truck	American Restaurant
6	Chatsworth	Mountain	Home Service	Asian Restaurant	Yoga Studio	Fast Food Restaurant	Fried Chicken Joint	French Restaurant	Fraternity House	Food Truck	Food Court
7	Cheviot Hills	Clothing Store	Sandwich Place	ATM	Japanese Restaurant	Mediterranean Restaurant	Shoe Store	Food Court	Chinese Restaurant	Lingerie Store	Light Rail Station
8	Civic Center	Chinese Restaurant	Pizza Place	Taco Place	Deli / Bodega	Art Gallery	Dive Bar	Recreation Center	Fast Food Restaurant	Sandwich Place	Grocery Store
9	Country Club Park	Mexican Restaurant	Coffee Shop	Bank	Furniture / Home Store	Grocery Store	Sandwich Place	Chinese Restaurant	Shipping Store	Clothing Store	Mobile Phone Shop
10	Cypress Park	Lounge	Scenic Lookout	Yoga Studio	Frozen Yogurt Shop	French Restaurant	Fraternity House	Food Truck	Food Court	Food & Drink Shop	Food

Once I had actually sorted the data into the way that is shown in the figure above all I had to do was pick the locations that had relatively more food craze and less competition. To choose among those areas was a challenge as the areas that drew the crowd from the city were higher in competition and vice versa. However I managed to pinpoint some locations that relatively had a good amount of competition but enough food craze and recreational areas thus making it a potential successful location.