Final Coursera Capstone Project Summary

A case study of Manila, Philippines

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1. Introduction to the Problem

Exploring restaurants in Manila, Philippines

Manila is the capital of the Philippines and a highly urbanized city. It is the most densely populated city proper in the world as of 2019.[1] For someone moving to Manilla, be it for a job or personal reasons, they might want to explore and have an idea of what they are to expect in the city. For a foodie, the choice of restaurant will be an important factor and can even determine where in Manila such person can reside.

For a person with an average salary, a very expensive restaurant might not be the best fit. Hence, there is need for him to find out the best restaurants that he can afford – and of course, provides excellent service. And for Philippines which is known for its rich food culture, it might be hard to the decide and find the right restaurant that fits the person's budgets.

In Manila, there are many restaurants (hotels and cafes also inclusive) which can be explored. This project studies information about them as data based on user ratings and average price of these venues are collected. In order to satisfy the aim of this research, this project involves the usage of data from both the Foursquare API and the Zomato API to gather sufficient information about these venues.

To provide clarity of information, a map of the venues with specific color attributes will be shown to highlight position, and other information about these venues. Such visualization is embedded with bountiful information in the form of their colored representations and location on the map. This enables any visitor to take a quick glance and decide what place to visit.

1.2 Target audience

The target audience of this project are basically people moving to or visiting the Manila City in Philippines. Also, food lovers looking to try out new places but want to be prudent about their spending can also make use of insights from this project. Anyone on a food or academic research can make use of this project to derive insight and use as a plus to their findings.

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[1] Source: Wikipedia.

Also, a company can use the information contained in this project in the creation of an application or a website. The information is continually updated from the sources and is will be effective for the business. Restaurants looking to establish restaurant where would be profitable might also make use of this information. Hence, this project might be important to those in the food industry.

Data

2.1 Data Sources

To get the location and other information about the venues in Manila, a combination of data from the 2 API sources will be used together.

Using the Foursquare's explore API, information of venues in Manila are fetched. This includes their names, categories and locations – using latitude and longitude. Also, using the name, latitude and longitude values, Zomato search API will be used to fetch venues from its database. This API allows us to find venues based on search criteria (usually the name), latitude and longitude values and others.

2.2 Data Cleaning

Data collected from the 2 data sources, will be cleaned to extract vital information and

then be used to solve the problem.

From Foursquare API, we will retrieve the following information

- Name: The name of venues.
- Category: The category type as defined by the API.
- Latitude: The latitude value of the venue.
- Longitude: The longitude value of the venue.

From Zomato API, we will retrieve the following for each venue:

- Name: The name of the venue.
- Address: The complete address of the venue.
- Rating: The ratings as provided by many users.
- Price range: The price range the venue belongs to as defined by Zomato.

- Price for two: The average cost for two people dining at the place.
- Latitude: The latitude value of the venue.
- Longitude: The longitude value of the venue.