COURSERA'S IBM APPLIED DATA SCIENCE CAPSTONE

Opening a new restaurant in Tagaytay City, Cavite, Philippines

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INTRODUCTION

Tagaytay City has been one of the most visited cities in Luzon during weekends and holidays. Most people come to Tagaytay to enjoy the breeze in the city. While enjoying the breeze of Tagaytay, most of the people took their time in spending their moments in Tagaytay on restaurants. Because of this, business owners are taking this opportunity to build more restaurants in the city. The question that lies here is where would be the ideal location if a business owner would try to open a new restaurant in the city where there would be a minimal competition.

BUSINESS PROBLEM

The objective of this capstone project is to know where would be the ideal location to open up a new restaurant in Tagaytay City using data science and machine learning technique such as clustering. This also answer to a business problem such as: where would be the ideal location to open up a restaurant with minimal competitions?

DATA

To solve the business problem, we shall need the following data:

1. List of barangays (suburbs) in Tagaytay City.
2. Latitude and Longitude coordinates of the barangays. This is to plot the map and get the venue data.
3. Venue data. This is the data of all landmarks or commercial establishments near a particular location.

Sources of data and methods to get them

1. Wikipedia page of Tagaytay City consists the list of all baranggays in it. We can extract them from the website using python and beautifulsoup packages.
2. Latitude and Longitude coordinates of the baranggays can be extracted from the Python geocoder package.
3. The venue data for a particular location can be extracted using the Foursquare api.