The Battle of Neighborhoods: Capstone Project

Introduction/Business Problem

The United States has been the destination for immigrants around the world. More than 100 years ago, Chinese Americans settled in Boston, Massachusetts and built a community in Chinatown. Since then, there has been a large Asian American community in Greater Boston. Even though asian have moved to many other parts of Massachusetts, most of Asian American still live in suburban towns near Boston. And the asian immigrants have made an influence over american's food. As a result, there are a lot of asian restaurants in Massachusetts, each belonging to different categories such as chinese cuisine, japanese cuisine, vietnamese cuisine, taiwan cuisine, etc.

So, in this project, we will use Foursquare API to analyze different neighborhoods and find a good location to open a bubble tea business. With major bubble tea franchises such as GongCha, Kungfu tea,... it is inevitable that there is a growing demand for this beverage. We look for a location which is closer to a lot of asian restaurants, but also the neighborhood should not be crowded with bubble tea shops to avoid competition.

Boston was chosen in this project due to the following reasons:
- Sixteen cities and towns in Greater Boston in 2016 had at least 4,000 Asian Americans
- Massachusetts is a destination for international students, in which China and India were the leading countries of origin for international students. Therefore, there is an ever-growing demand for asian restaurants.

Target Audience
- Investors: This project would be useful for investors who are interested in opening a bubble tea shop, or asian coffee shop, or even a particular asian restaurant such as vietnamese restaurant, thai restaurant, etc.
- International students or travellers who want to find a neighborhood full of asian food.

Data

In this project, we will need the following data:

1. Massachusetts data that contains a list of states, counties, cities, zip code, latitudes, longitudes and estimated population. This data set was sourced from https://data.healthcare.gov/resource/52wv-g36k.json. Some of the counties in

this dataset was missing; therefore, we have to look for the missing data in another dataset - "List of Massachusetts area code" downloaded from https://www.downloadexcelfiles.com/us_en/download-list-us-zip-codes-massachusetts-state#.YQNvVo5Kg2w.

2. Asian restaurants and bubble tea shops in "Suffolk" county, where Boston - the capital and most populous city of Massachusetts - belongs to. This "venue data" is derived from Foursquare API. By using Foursquare API, we will get all the venues in Suffolk county, then filter the asian restaurants and bubble tea shops for our purpose.