Neighborhood Battle-Week 1-Part 2

Title: Oyama City Restaurant Recommender System

Data Requirements:

Finding a solution to a question and building a recommender model requires a large amount of data. There are things that humans cannot do, but it takes time and there are mistakes. But computers are fast and make no mistake. Moreover, it is possible to answer the unexpected questions that we originally thought of because of the relationship between the data.

Consider a basic scenario:you

To know the size of a restaurant,need three things:

1. GPS information of the restaurant(latitude and longitude).
2. Population of the area with restaurants.
3. The average income of a neighborhood who knows the value of restaurant.

Let's take a closer look at each of these.

1. To know the exact location of a restaurant, you need to know its latitude and longitude. This allows you to create a map that points to those coordinates and shows all the restaurants and their labels.
2. Restaurant neighborhood of the population is a very important factor in determining the number of customers who came to eat with the growth of the restaurant. If there are many people near a restaurant, many people eat at that restaurant, and on the other hand, most people do not use the restaurant. In addition, restaurant ratings are credible as more people visit, more people with different preferences.
3. The income of neighbors is also a very important factor. Income is directly proportional to the wealth of the neighborhood. For example, if your neighbors earn above average income, the food you order at a restaurant can be

expensive. In other words, restaurant sales and neighborhood income are proportional.

Data collection:collection

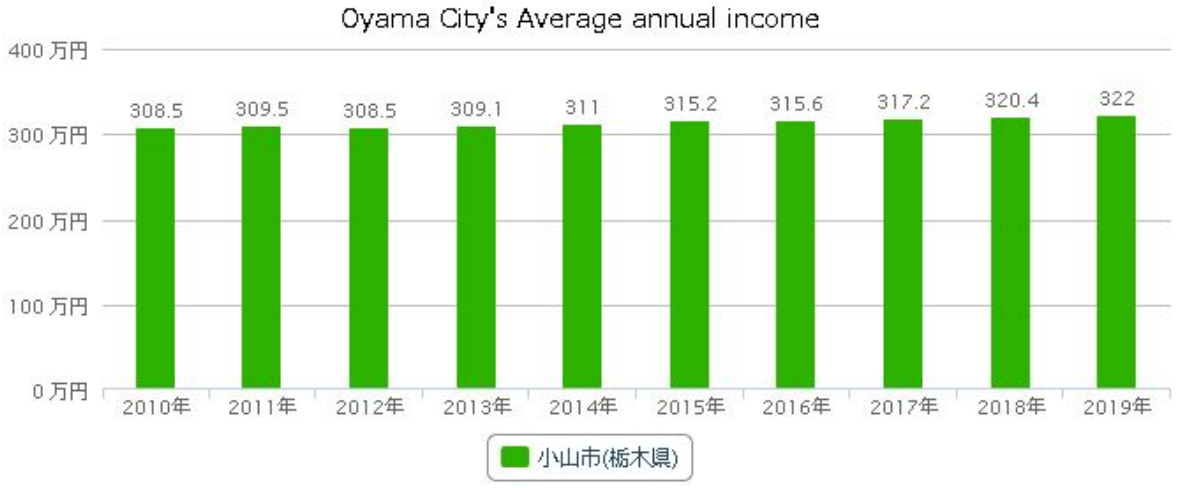
1. The restaurant GPS of the was found in Google Map, Tabelog, etc., so I will use it.

https://bit.ly/3aVBcBS

https://tabelog.com/tochigi/C9208/rstLst/

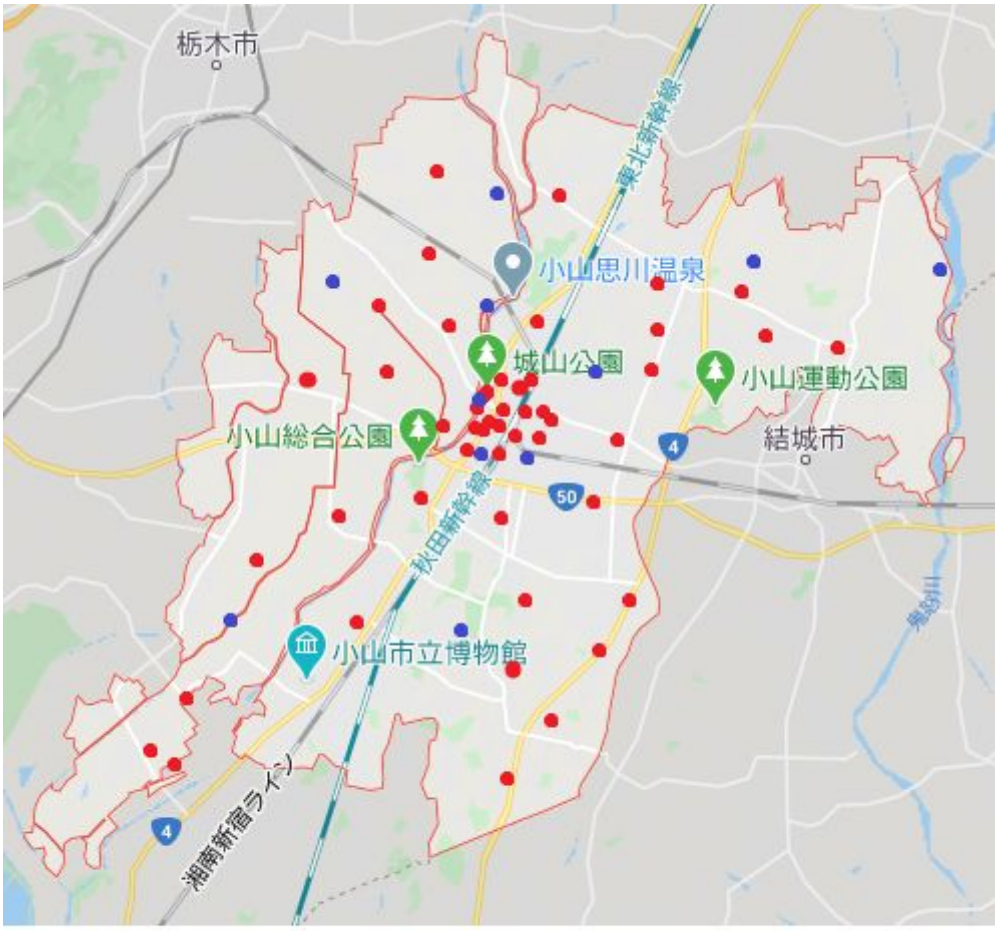
2. Oyama City Average income uses this.

https://bit.ly/2xynbMO



3. The use of foursquare focuses on fetching the nearest venue location so that it can be used to form a cluster. Foursquare api leverages the ability to find the closest restaurant within a radius (100m) and the corresponding coordinates, venue location and name.

When these are put together, a figure like this was made.



- Average income's restaurant
- high income's restaurant