

Suggesting cities with popular restaurant type

Introduction

Given a particular restaurant type, we are going to output the cities that are interested in that particular type of restaurant. Investors and businessmen looking to open restaurants in a particular city would find this information useful as they can see what is the city's interest in a particular cuisine and what type of restaurant would bring maximum profit. When a particular cuisine or restaurant type is given as an input to the system, the system would output the cities in the United States of America that are most likely interested in this type of cuisine or restaurant type. This information can help a lot of businessmen and small businesses to establish their restaurants based on the most popular cuisine. It would also help franchises to open a chain or modify their menu based on the likings of the people there in that particular area. It would also be helpful in estimating the popularity of a cuisine in the country.

Data

There were two types of data used:

1. **Foursquare** This was mainly used to get all the popular venues of the city to determine the most popular restaurant type in the city. Since a lot of calls were made to foursquare, it was hard to get all the venues again and again and had to wait for the next day to get the result of the code written.
2. **Kaggle** (https://www.kaggle.com/mahbubrob/usa-cities#usa_cities.csv) This was mainly used to get the list of cities in the United States of America to get the data from foursquare. These data together were combined to fine the final result that was mentioned earlier.

Methodology

The aim was to give the list of cities interested in a particular type of cuisine. Hence we needed Kaggle USA cities data to collect information about all the cities and foursquare data to get the restaurant data for all these cities. So there were four steps to it:

- Get city data
- Get foursquare data for these cities and store
- Take the input from the user for the type of restaurant
- Check which cities have this restaurant type as the most popular

To get the city data, the csv file was downloaded and the data from the csv file was extracted. This csv file had a lot of redundant data, so data cleaning was done and only the required data was stored. Then for each city, the foursquare data was extracted and stored. Since the foursquare data could have upper case or lower case or mix, they were converted to lower case and then stored. Then after taking the user input, the cities who have restaurant type same as the user's interest are returned.

Results

The result of this project is the list of cities who are interested in this cuisine type. If the restaurant type entered by the user is not present in the database, then we print that it's not one of the popular but if it's interesting, you can try it.

Discussion

If we could get the most popular cuisine of the country and state, that would be more useful as we would get a generic idea and pattern of eating habits of the people and how people's popular cuisine relates to the climate there. For example, icecream parlors may be more popular in Texas and Arizona than in Seattle (No, icecream parlors are popular everywhere)

Conclusion

In conclusion, this project is mainly focuses to help the businessmen, franchise owners as well as small businessmen looking to open a profitable restaurant in their city or help the tourists taste the most popular food of the city.