IBM Capstone

Applied Data Science

Project Goals

1) Demonstration of use Python learned over these 9 classes
2) Demonstration of Data Science Methods and Principles
3) Solving this fun business problem:

"What type of restaurant should we open in my bowling Alley?"

Project Notes and Technology

Google Drive

Github--Project URL-≫https://github.com/rjmclachlan/IBM-Capstone-Project

Python Version is 3.7.1 (I forgot to update it before starting)

nTeract for Julyper notebooks.

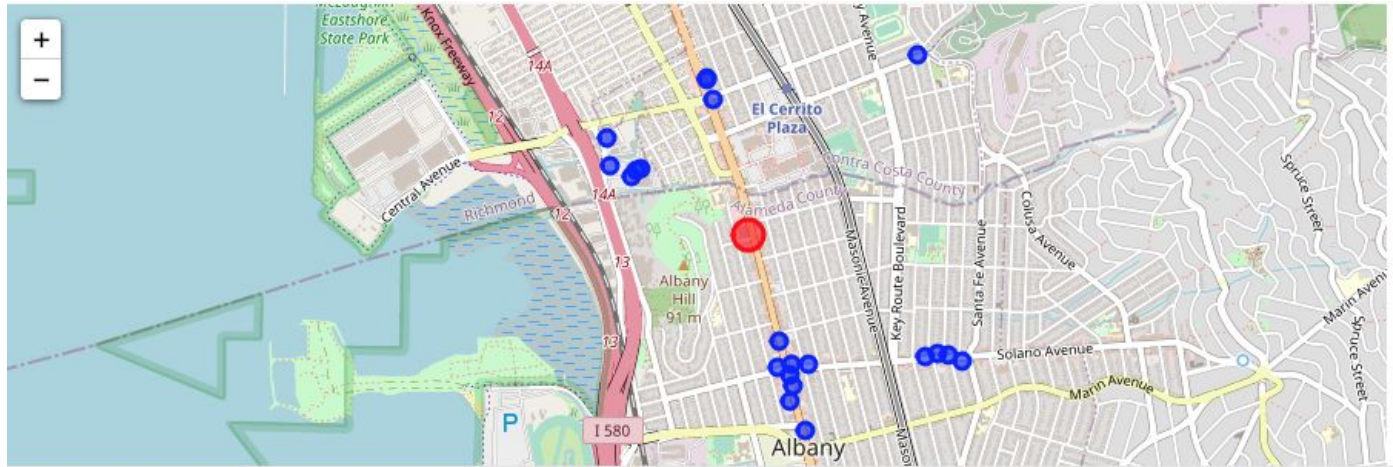Notebook URL-≫https://github.com/rjmclachlan/IBM-Capstone-Project/blob/master/albanyFoodData.ipynb

Buisness Problem and Introduction

The owner of the restaurant in my local bowling alley restaurant has retired. Since I am there all the time anyway, what type of restaurant should I open.

We are going to use what we have learned in this class to inspect and review neighboring restaurants within a half mile of the bowling alley.
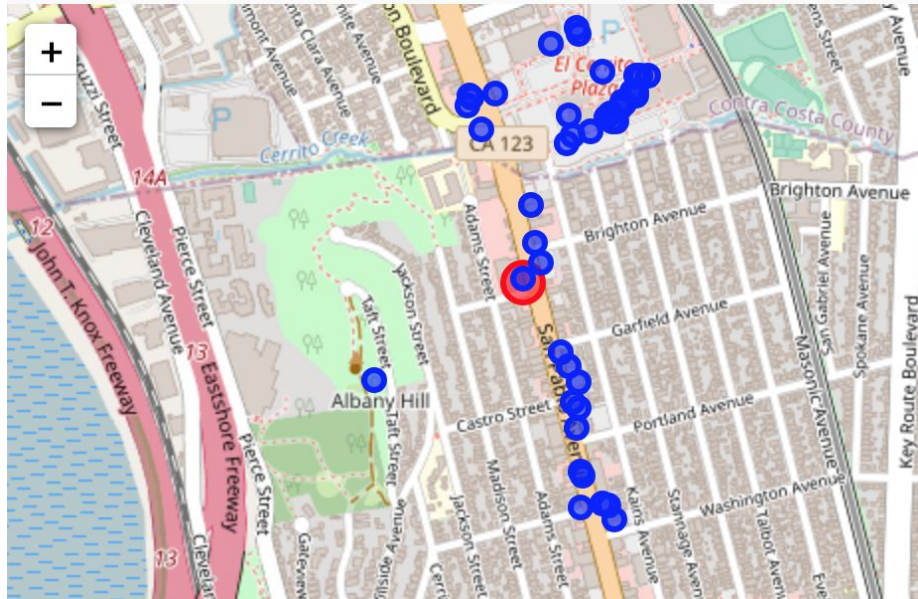
Data Overview

We are downloaded data using Foursquare devloper API. We first downloaded data using the search request. Here is what we generated:

What I noticed was the some of the restaurants were missing from the search request. So we also downloaded data using the top venues for the area.
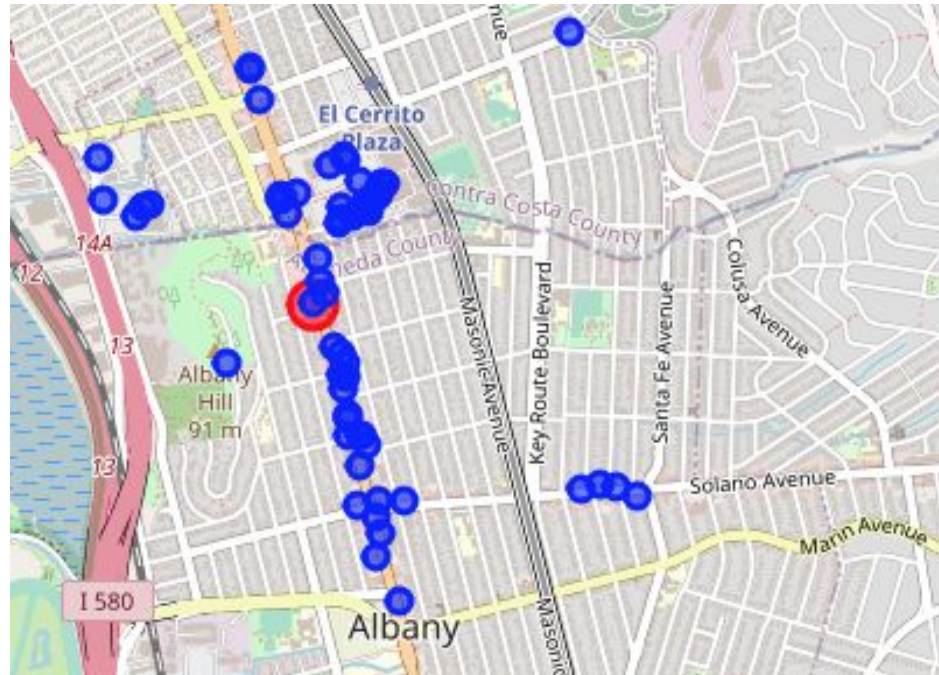
I then combined the data into a single dataframe and deleted the non restaurants.

We found this:

1) There are no trending restaurants in our area.
2) No fourquare tips either.
3) 63 results were returned
4) 32 are restaurants.

Consolidated map of everything

Now that we have the consolidated data we can look at specifics of the 32 restaurants:

2 Pizza, 4 Burger, 4 Mexican, 7 Chinese, 4 Japanese, 5 Vietinames, 2 Thai, 2 Breakfast, 1 Tapas, and 1 sit down italian

(in reality, I think this is missing about 30 restaurants, but I can't seem to pull it from Foursquare.)

Conclusion

If I were to open this restaurant, I would probably go with a dinner as there is not direct competition within the zone we are looking at it.

However, I would also look to use other sources of data as foursquare does not appear to be that accurate.

Thanks