

Predict Area to Open a French Restaurant in San Francisco

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Introduction

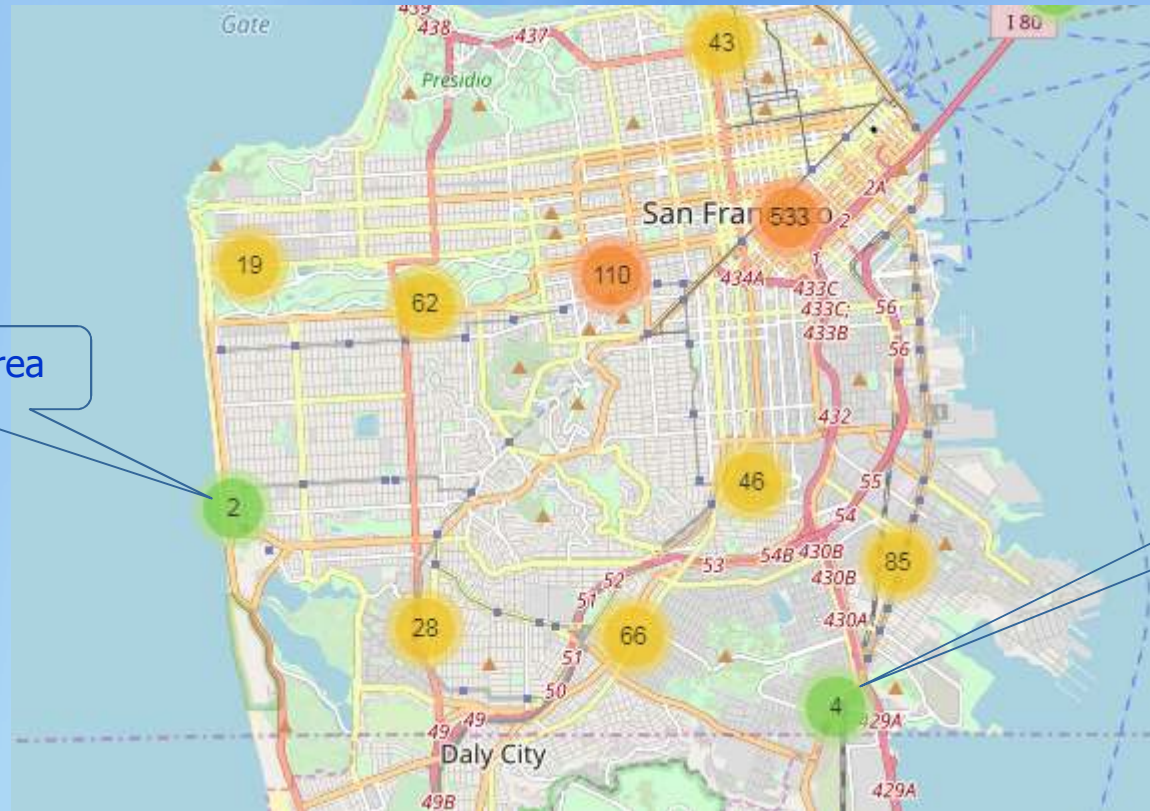
- A customer is interested to open a French restaurant in San Francisco.
- Customer's requirements:
 - Safe Areas
 - How many French restaurants exist in these safe areas.

Data Science Resources

- Data Source:
 - The data source for criminal rate from San Francisco police departments (https://s3-api.us-gio.objectstorage.softlayer.net/cf-courses-data/CognitiveClass/DV0101EN/labs/Data_Files/Police_Department_Incidents_-_Previous_Year_2016.csv).
 - Foursquare API data to search for French restaurants in a provided area.
- Data Cleaning: Limit the number of criminal records to 1000 to reduce the cost of calculation.

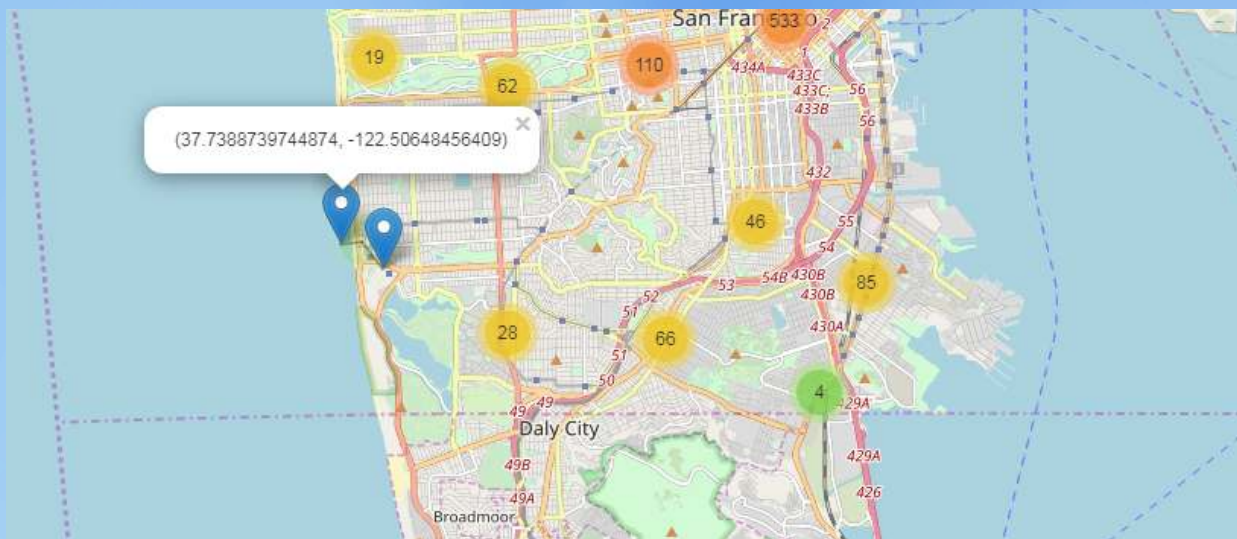
Exploratory Data Analysis

- Grouping criminal incidents and display them on San Francisco map



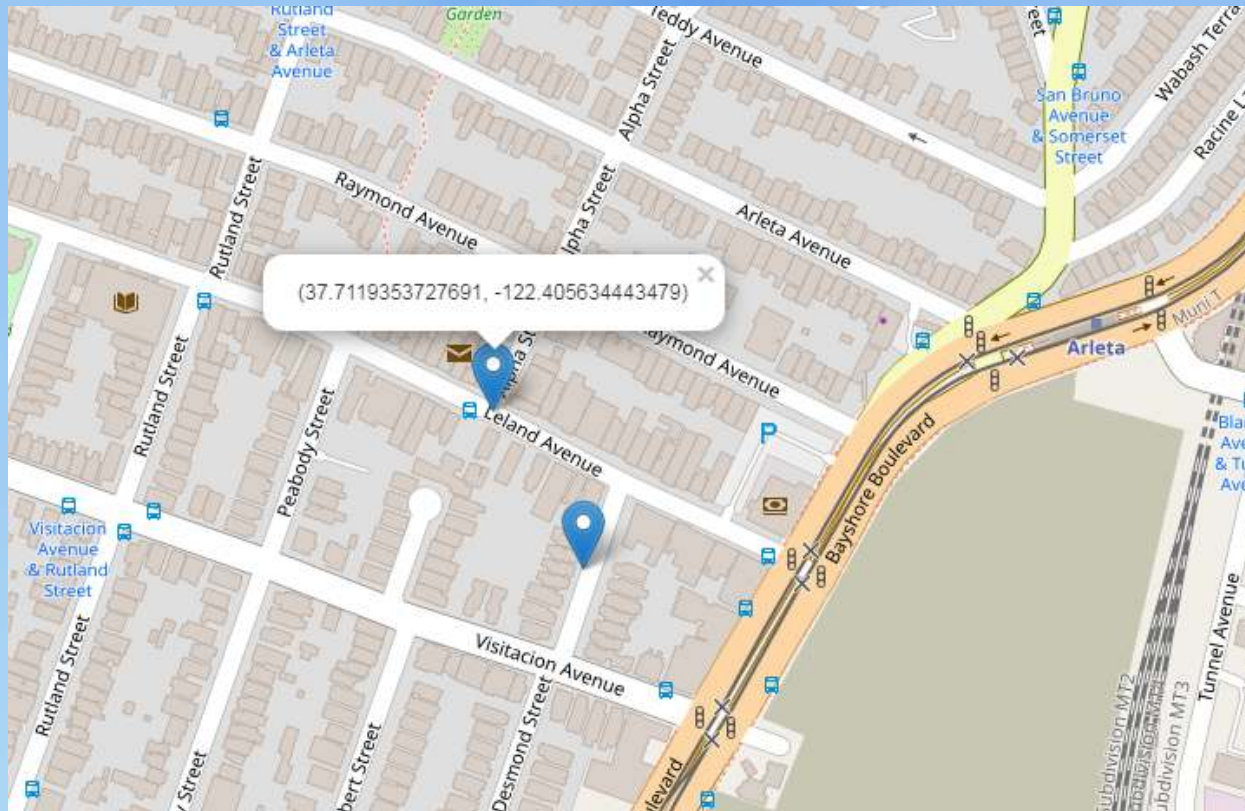
Exploratory Data Analysis (cont)

- Get latitude and longitude of the location with 2 incidents



Exploratory Data Analysis (cont)

- Get latitude and longitude of the location with 4 incidents



Search French Restaurants in selected areas

- Using Foursquare API to search two areas with lowest criminal rates.
- One area has 2 criminal incidents with location(latitude, longitude) (37.7388739744874 , -122.50648456409). The area has 5 restaurants.
- Perform the same things for the other area with 4 criminal incidents (37.7119353727691, -122.405634443479). This area has 3 French restaurants.