The battle of the Neighborhoods

What is the best neighborhood for opening a French Restaurant in Paris?

Where to open a French Restaurant?

The purpose of this project is to analyze venues in the central areas of Paris to find the best location of where to open a French Restaurant.
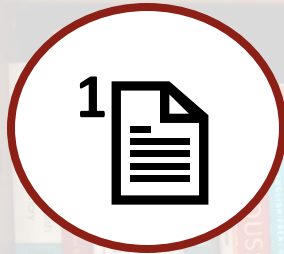
Criteria for a good neighborhood to open a French Restaurant in:

- There is a market for French Restaurants
- The number of inhabitants per French Restaurant is high
- Other French Restaurants nearby have relatively low ratings

What data will be used?

1

Json file of Paris Neighborhood data containing borough, neighborhood/district, latitude and longitude

This data will be used to cluster neighborhoods that have similar venues

2

Python geocoder library

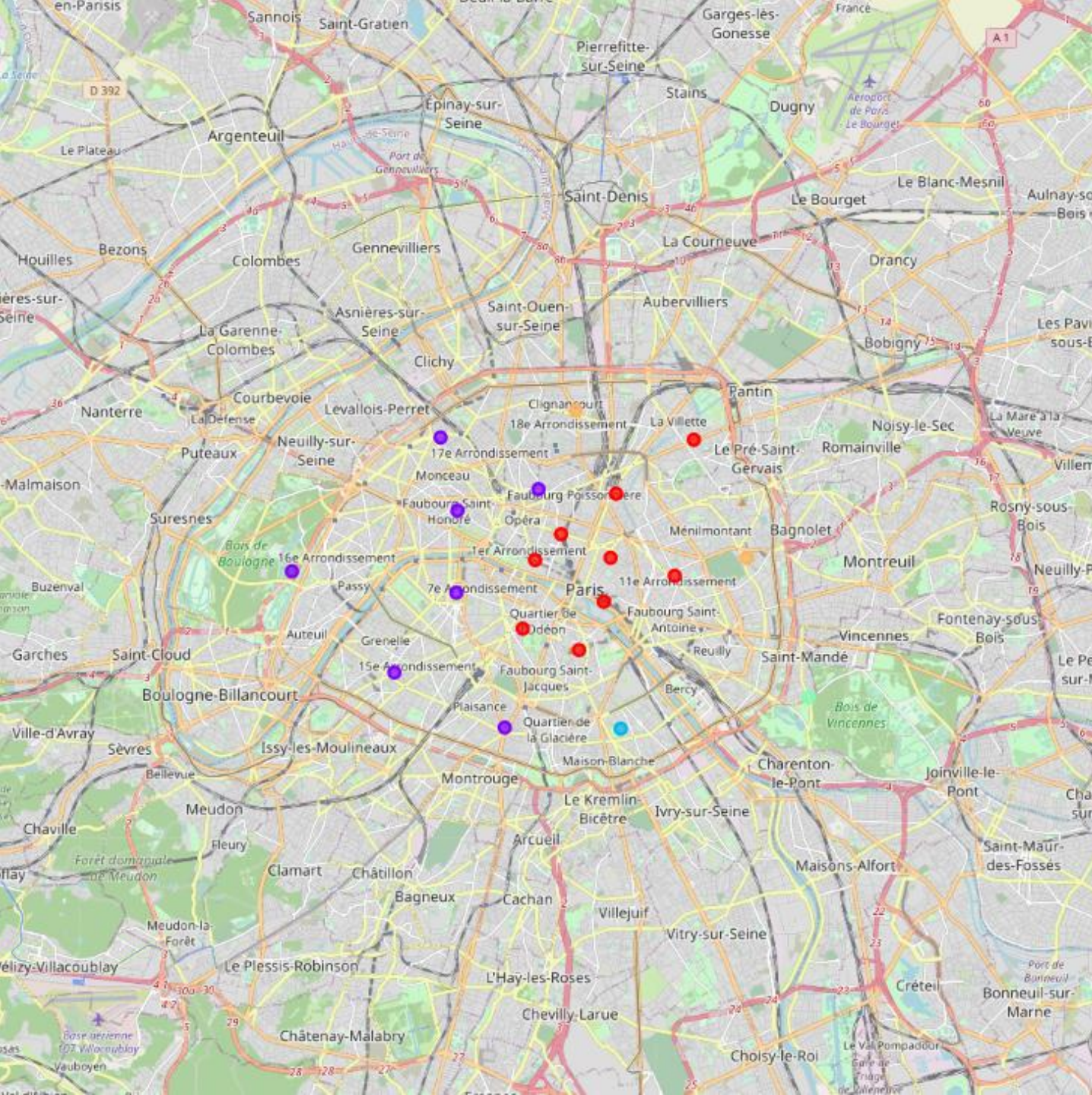This data will be used to get geographical coordinates of neighborhoods

3

Foursquare API

Will be used to get venues of every neighborhood in Paris

Neighborhoods in Paris

The map shows the neighborhoods in Paris which venues will be investigated

Paris consists of 20 "Arrondissement" that will act as our neighborhoods

The 100 most common venues of each neighborhoods will be examined. By using dummy variables and taking the mean of the aggregated value for each Category, a ranking of the most common venues will be created.

Clusters in Paris

The 20 neighborhoods was clustered into five clusters, based on the ten most common venues for each cluster

The machine-learning method k-means clustering was used. K-means clustering allocates every data point to the nearest cluster while keeping the cluster centroids as small as possible.

The blue marker (cluster 2) is neighborhood 13E and it differs from the other clusters as French Restaurants is not the most common venue here and due to the dissimilarity of the other ten most common venues.
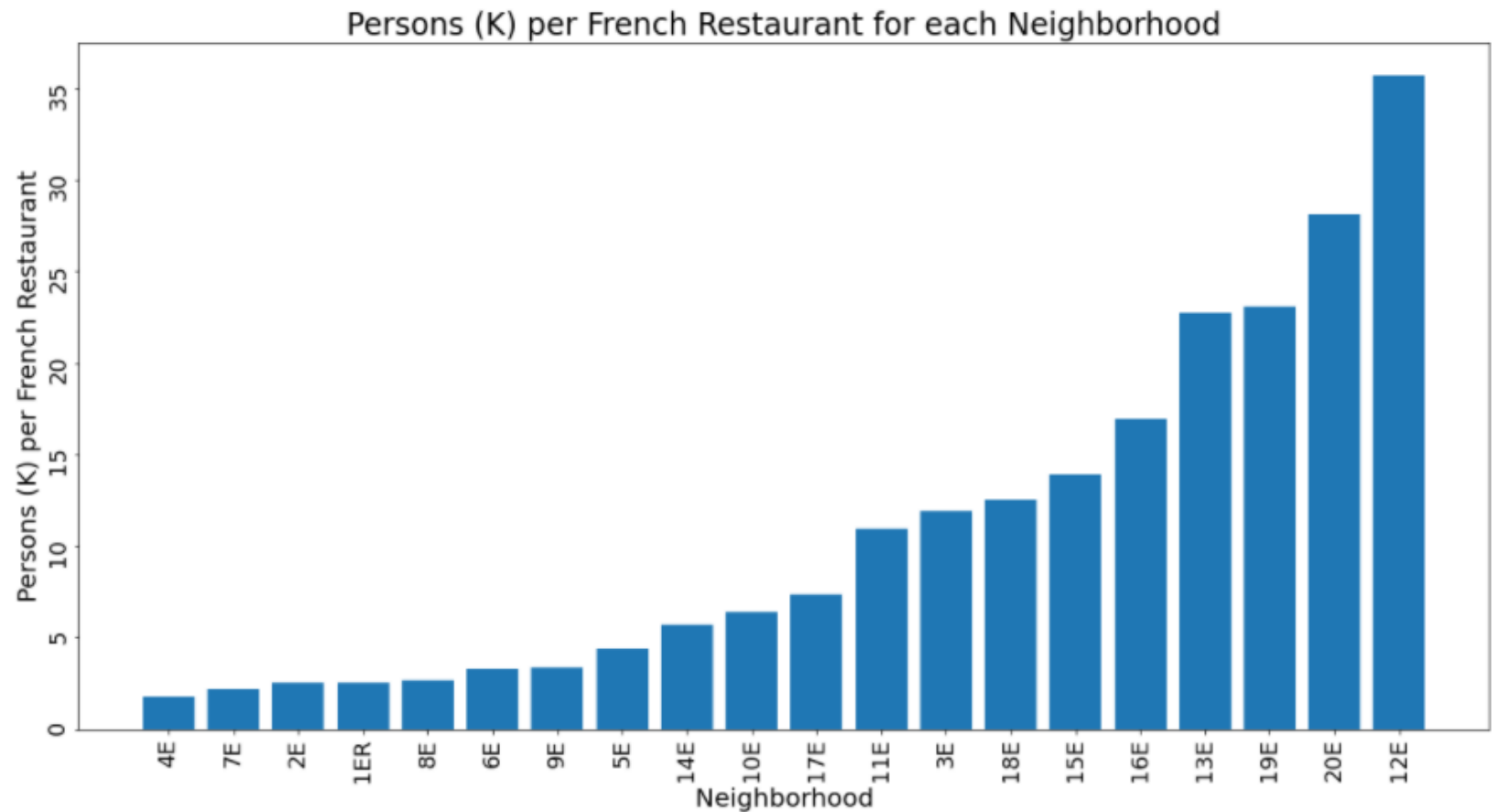
Ratings of other French Restaurants in cluster 2 was examined and the result was either rather low or no rating available

Higher value indicates higher opportunity to open a French Restaurant with successful result

The graph shows that the number of people per French Restaurant for neighborhood 13E, 19E, 20E and 12E is the highest.

This could mean that there is place on the market for more French Restaurants in this area.

This is only an indicator and more analysis must be in order to draw a more precise conclusion

Persons (K) per French Restaurant for each Neighborhood

Conclusion

Based on the analysis and data made in this project, neighborhood 13 E is the best neighborhood to open a French Restaurant

However, further analysis is recommended to get a more precise result. This could involve looking into average income per person for each neighborhood and investigate tourist data and patterns as Paris has a very high numbers of tourists visiting each year.