RESTAURANT ANALYSIS IN SAN FRANCISCO

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BUSINESS PROBLEM

- Many restaurants and fast foods are available in the city
- Different types of cuisines are available in the city
- All parts of city may not have easy access to restaurants
- All types of cuisines may not be available in all part of the city
- Too big city to manually analyze every neighborhood
- Need to find the right location to setup a restaurant

GOAL & AUDIENCE

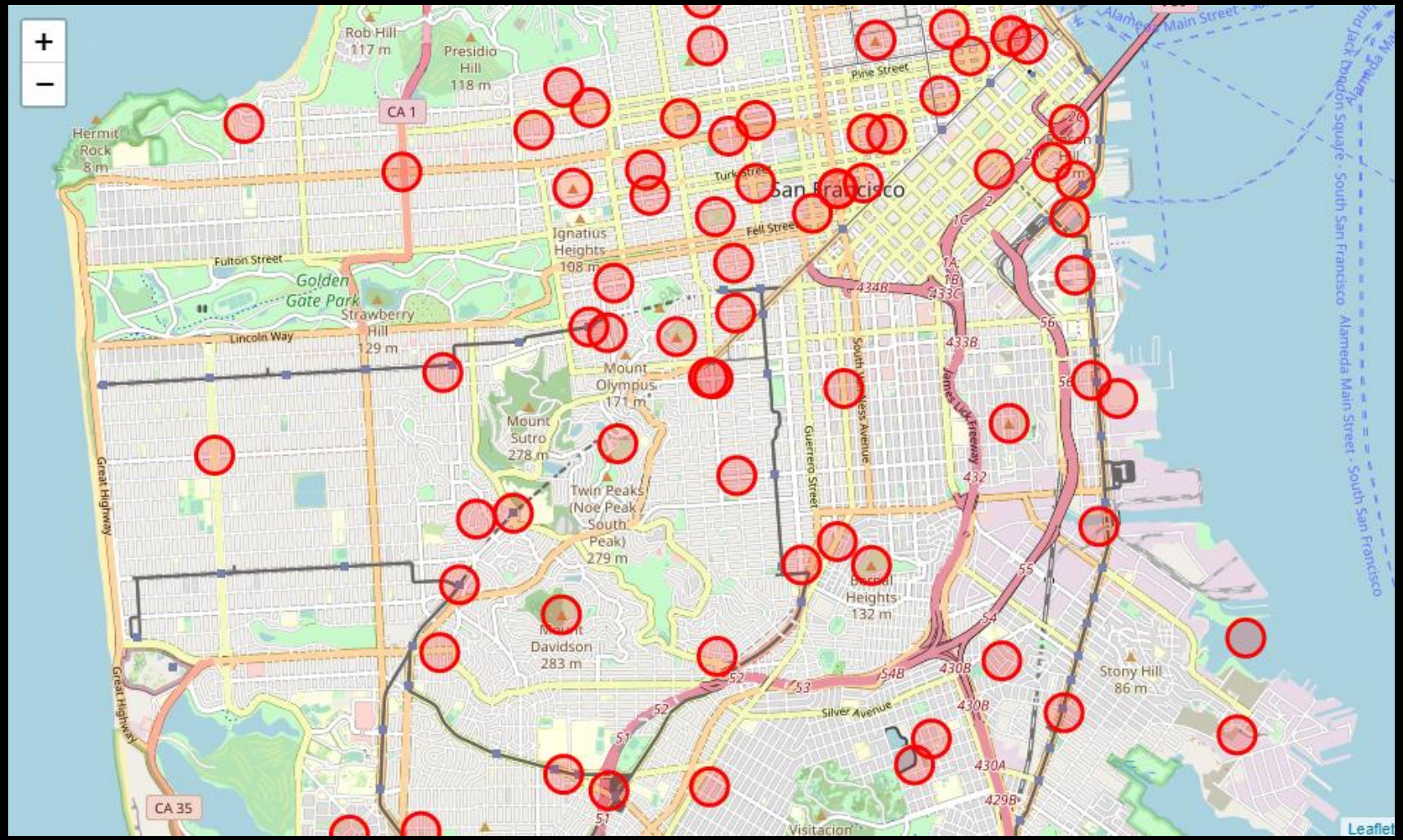
- The goal is to find the best location to setup a Chinese/Asian Restaurant to be successful by analyzing the neighborhoods in the city of San Francisco

- Target audience for this project is any one looking to setup a restaurant in the city of San Francisco or any stakeholders would like to explore the city

SFO NEIGHBORHOOD

- Wikipedia SFO Neighborhoods used to get the list of neighborhoods
- Total of 83 neighborhoods in SFO are considered for this analysis
- Radius of 200 meters surrounding the center of neighborhood is considered as part of neighborhood

SFO NEIGHBORHOOD MAP



SFO – FOOD VENUES

- 879 food venues in total in all neighborhoods
- 88 different categories of restaurants/fast foods
- 2 categories – Chinese and Asian are considered as key categories of interest
- 35 Chinese/Asian restaurants in all neighborhoods
- Some neighborhoods doesn't have any Chinese/Asian restaurants
- This data acts as out primary source of information to do this analysis

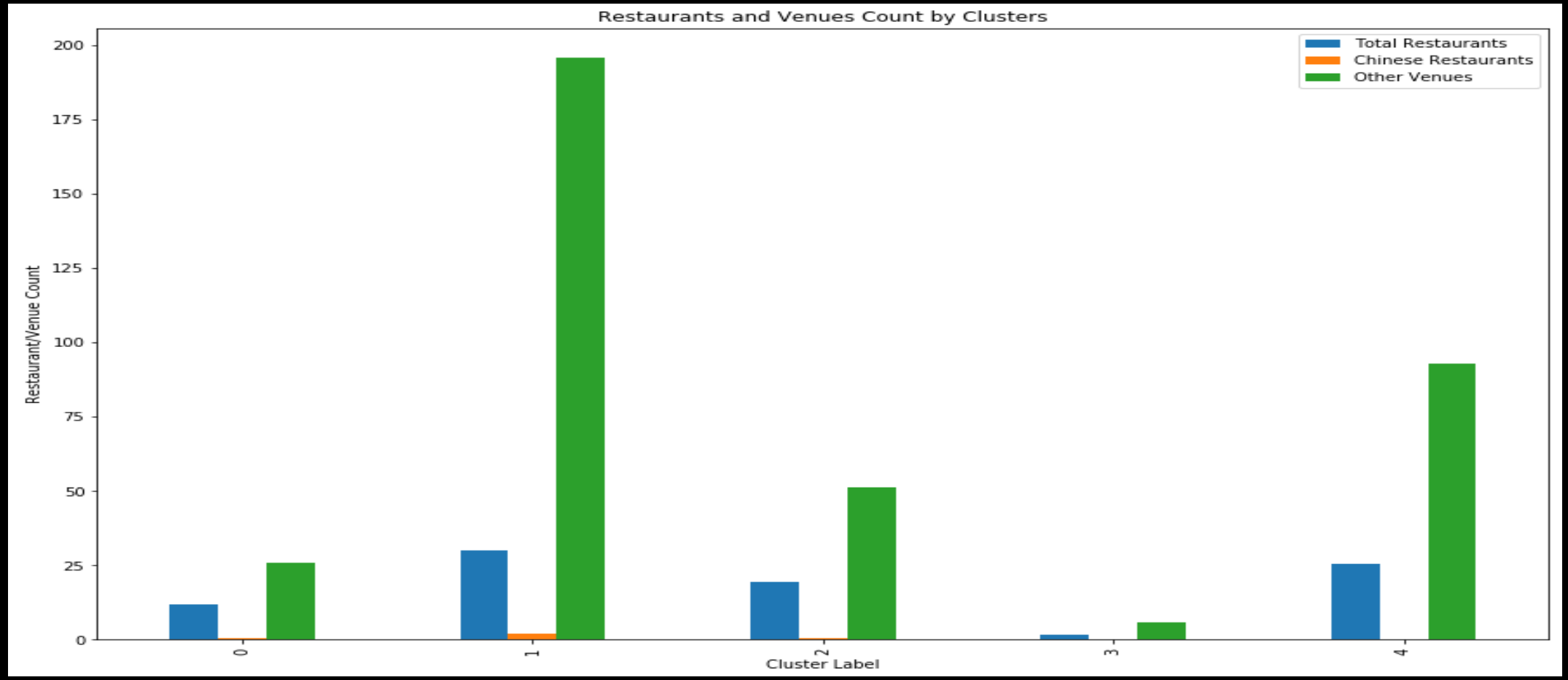
SFO – BUSY VENUES

- No one wants to setup a restaurant where no people come in
- Determine the people density based on the venues in the neighborhood
- Stadiums, Colleges, Parks & Recreations, Shops, Apartments/Residence, Hotels categories are considered as people venues
- There were approximately 3000 of these venues available in these categories in all neighborhoods
- Some neighborhoods have 100+ venues and some has <30 venues
- This acts as one of the primary criteria to determine the best neighborhood

GROUPING

- It is hard to analyze every one of the 83 neighborhood
- The neighborhoods are grouped into 5 clusters using the K-Means clustering process
- These 5 groups are analyzed to determine the best group to consider
- After selecting the best group, each neighborhood in that group is analyzed to pick the perfect neighborhood to setup a Chinese/Asian Restaurant

NEIGHBORHOOD GROUPS



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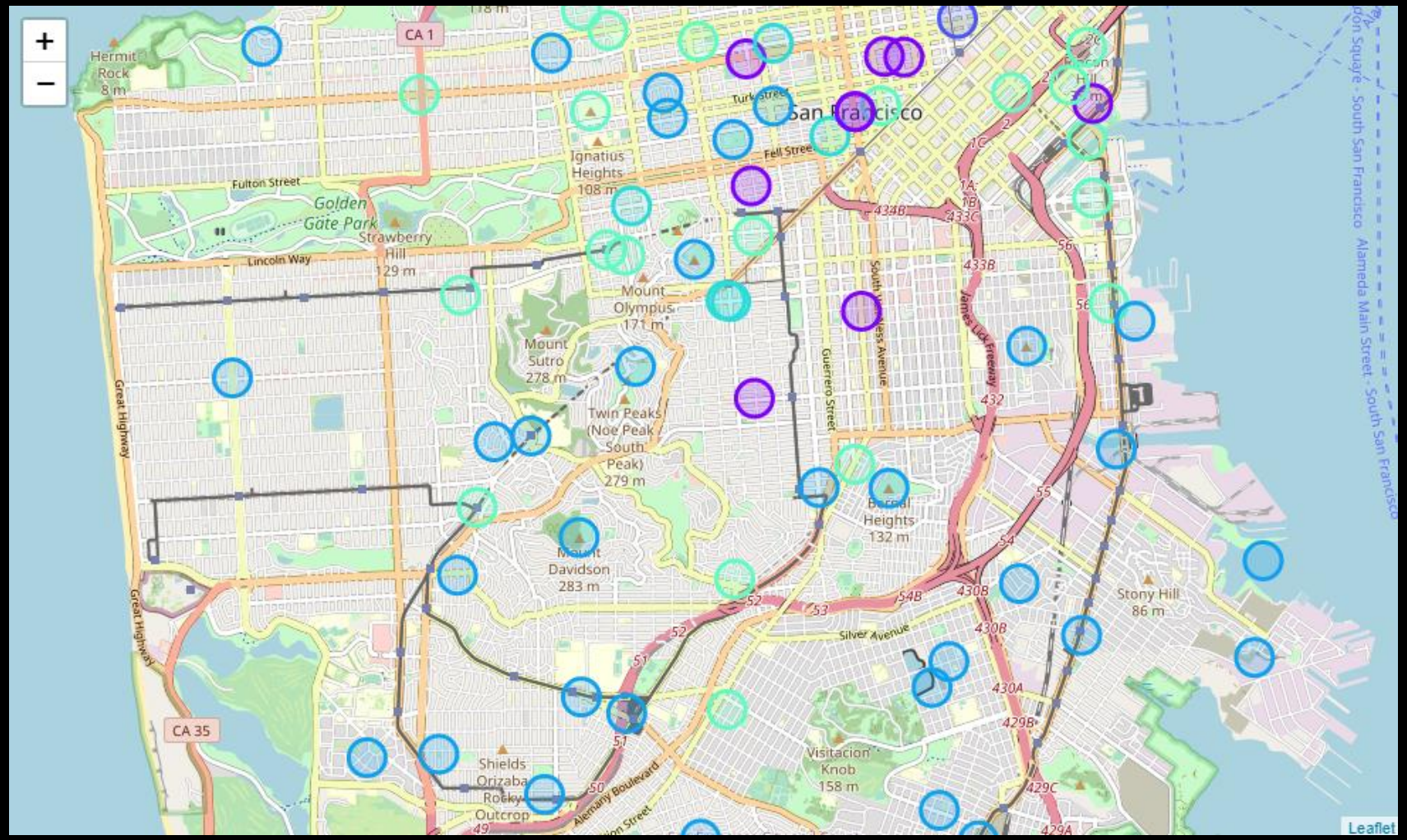
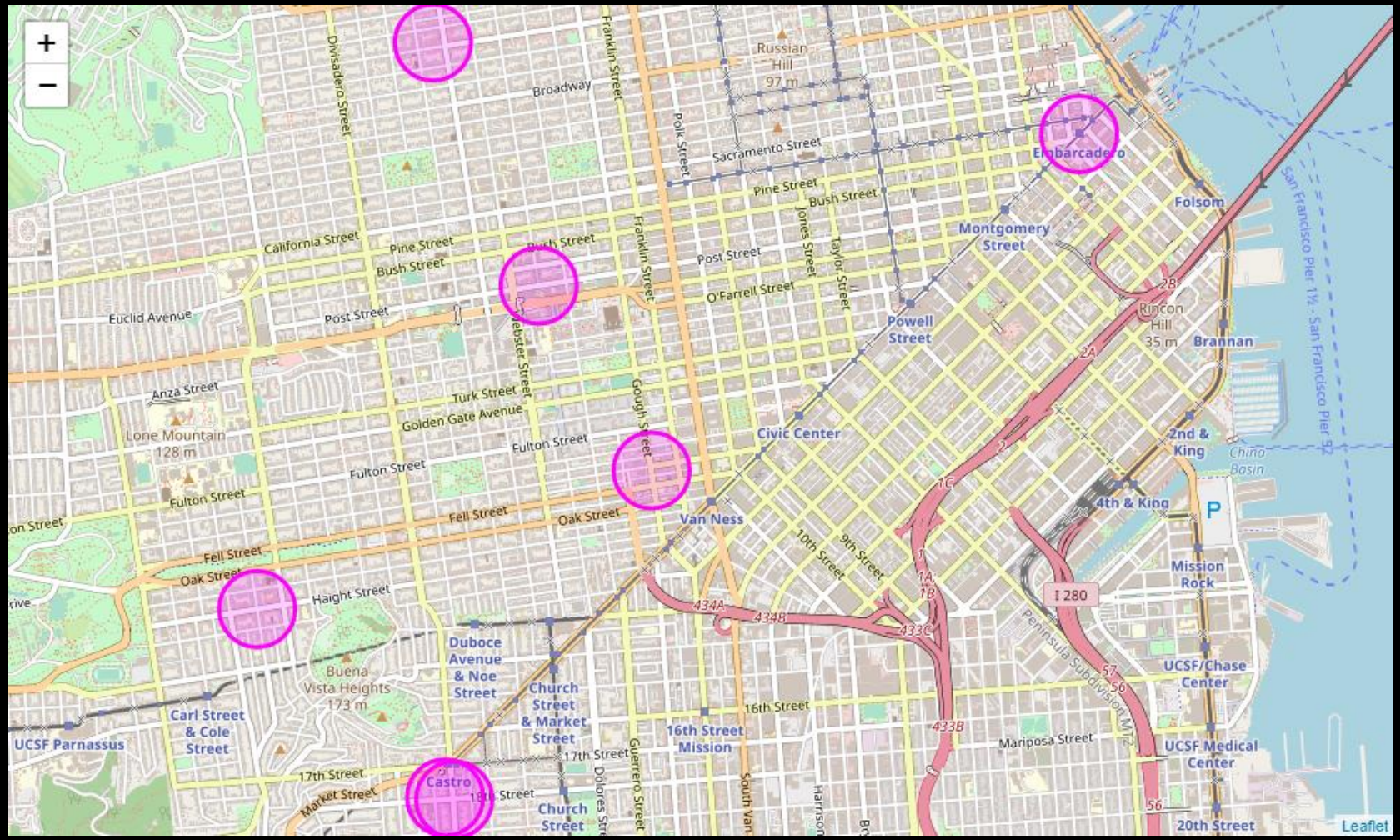


BEST GROUP OF NEIGHBORHOODS

Neighborhood	Total Restaurants	Chinese Restaurants	Other Venues
Castro	35	0	88
Cow Hollow	15	0	77
Embarcadero	3	0	110
Eureka Valley	34	0	85
Haight-Ashbury	13	0	102
Hayes Valley	37	0	108
Japantown	41	1	81

- These neighborhoods has no Chinese/Asian restaurants
- These neighborhoods have around 100 busy people venues
- There are many other restaurants in these neighborhoods which shows people interest for restaurants in these neighborhoods

LOCATIONS OF THE BEST GROUP



THANK YOU

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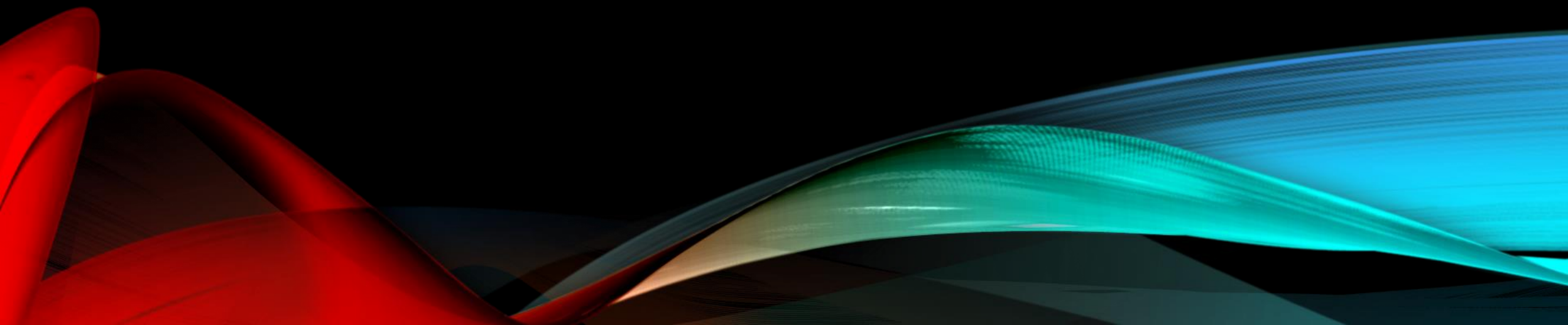

REFERENCES

Final Project Report:

https://github.com/sbeygan/Coursera_Capstone/blob/master/Final_Project_Report.pdf

Jupyter Notebook:

https://github.com/sbeygan/Coursera_Capstone/blob/master/Capstone_Project_Restaurant_Analysis_SanFrancisco_Final_Report.ipynb