

**WHERE IS THE BEST PLACE TO
OPEN A NEW ASIAN
RESTAURANT IN BOSTON**

INTRODUCTION

- This project is for people who plan to open an asian restaurant in boston. T
- His first thing to consider is the real estate rent price. We don't want it to be too expensive.
- The other factor is how many good restaurants there are in this neighborhood. If there are already a few good asian restaurant in this neighborhood, then the competition will be strong.

DATA ACQUISITION

- 24 neighborhoods in boston are selected.
- The average rent is obtained from zumper website showing 2019 winter information.
- The restaurant in each neighborhood and ratings are from foursquare api.

DATA ANALYSIS

- By combining the rent price and restaurant information, we can have a final score for each neighborhood. The detailed calculation method is below.
- $\text{Rentscore} = (\text{max} - \text{current}) / (\text{max} - \text{min})$
- The good rating for each restaurant is defined by rating equal or higher than 7. It returns a value of 0 (false) or 1 (true).
- Then I find the number of good rating restaurants in each neighborhood.
$$\text{Ratescore} = (\text{max } \# \text{ of good restaurant} - \text{current}\#) / (\text{max} - \text{min})$$
- $\text{Finalscore} = \text{rentscore}*0.6 + \text{ratescore}*0.4$

RESULT AND DISCUSSION

	Neighborhood	2019w	Latitude	Longitude	RentScore	GoodRatingRestaurant	RatingScore	FinalScore
19	Mattapan	1500	42.267566	-71.092427	1.000000	0	1.0	1.000000
18	Hyde Park	1625	42.255654	-71.124496	0.919355	0	1.0	0.951613
0	Roslindale	1700	42.291209	-71.124497	0.870968	0	1.0	0.922581
7	Roxbury	1780	42.324843	-71.095016	0.819355	0	1.0	0.891613
10	East Boston	1800	42.375097	-71.039217	0.806452	0	1.0	0.883871
17	West Roxbury	1810	42.279265	-71.149497	0.800000	0	1.0	0.880000
16	Brighton	1850	42.350097	-71.156442	0.774194	0	1.0	0.864516
20	Dorchester	1875	42.297320	-71.074495	0.758065	0	1.0	0.854839

- Here shows the neighborhoods that have a final score higher than 8 in descending order.

CONCLUSION

- The top three neighborhoods to open a good restaurant is Mattapan, Hyde park and Roslindale.