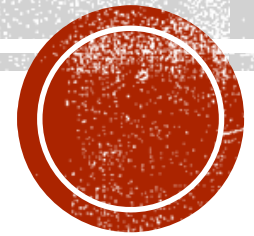
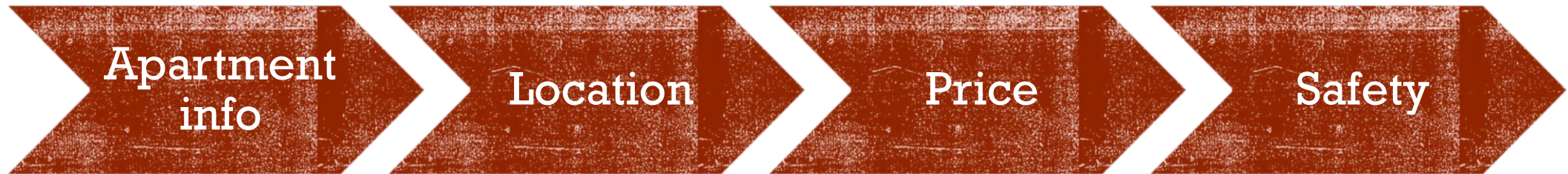


APARTMENTS HUNTING



FIND THE RIGHT ROOM AROUND COLUMBIA

What are students looking for:



Information we provide:



OVERVIEW OF THE STEPS

- 1. Get apartments data, yelp data and subway data in the area with zip code 10025,10026,10027
- 2. Compare the price, restaurant ratings and complaint type in the three area using different visualization methods
- 3. Deep dive into one area by looking into price, subway and restaurant



GET AND CLEAN DATA

Data Source: Web Scraping

- ❖ 1. Apartment Renting Data: 1500 rows of data from the below 5 websites.

address	price/\$	bdr	baths	link	latitude	longitude	zipcode
0							
805 Columb us Ave	7200	2	2	http://www.realtor.com/real-estateandhomes-detail/805-Columbus-Ave	40.79497 04	-73.9656124	10025

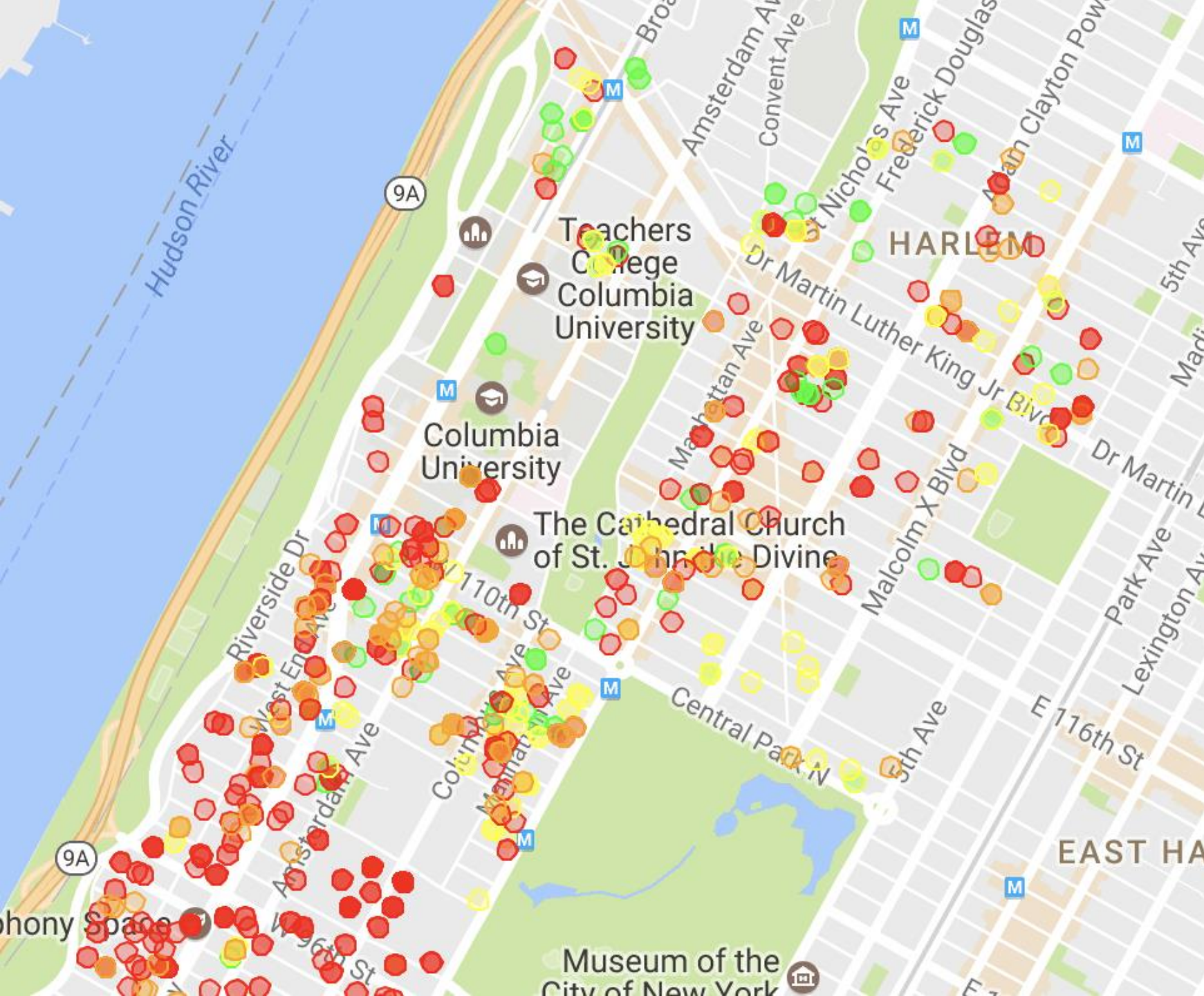
- ❖ 2. Yelp data

	restaurant_name	category	rating	neighborhood	address	zipcode
0	Sottocasa Pizzeria	Pizza	4.5	Harlem	227 Lenox AveNew York	10027

Data Source: Online Data

- ❖ Subway data: Subway Station Data of New York City: a JASON format data
 - <https://data.cityofnewyork.us/Transportation/Subway-Stations/arq3-7z49>
- ❖ Complaint data: 311.csv





MAP VISUALIZATION OF PRICING PER BEDROOM

Green	1200
Yellow	1200-1500
Orange	1500-1900
Red	>1900



COMPARE THE PRICE AND YELP REVIEWS IN THE THREE AREA

- The above graph is the price for apartments across 3 area
- The below graph is the ratings for restaurants in Yelp across 3 area



Complaints of 10025

	count
Complaint Type	
HEAT/HOT WATER	555
Noise - Residential	480
Homeless Person Assistance	417
Noise	344
Illegal Parking	247
UNSANITARY CONDITION	178
Noise - Street/Sidewalk	167
PAINT/PLASTER	149
Rodent	137
Street Condition	129
Noise - Commercial	126
PLUMBING	114
Water System	111
Elevator	102
DOOR/WINDOW	91
Noise - Vehicle	84
FLOORING/STAIRS	83
WATER LEAK	81

Complaints of 10026

	count
Complaint Type	
Noise - Residential	417
Noise - Street/Sidewalk	315
HEAT/HOT WATER	304
Homeless Person Assistance	127
Noise	116
PLUMBING	107
Rodent	87
UNSANITARY CONDITION	83
PAINT/PLASTER	70
Noise - Commercial	64
Street Condition	55
Illegal Parking	53
Water System	48
DOOR/WINDOW	48
WATER LEAK	45
Noise - Vehicle	44
Maintenance or Facility	43
GENERAL	37

Complaints of 10027

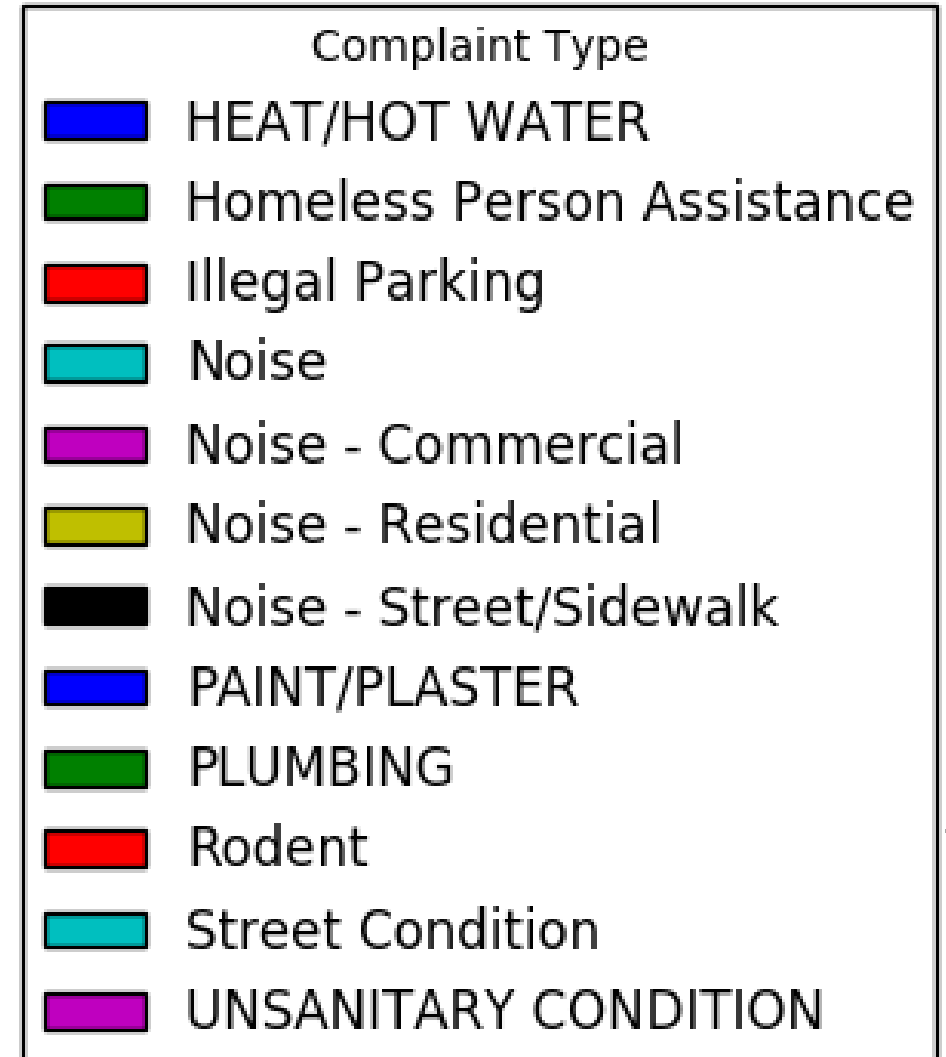
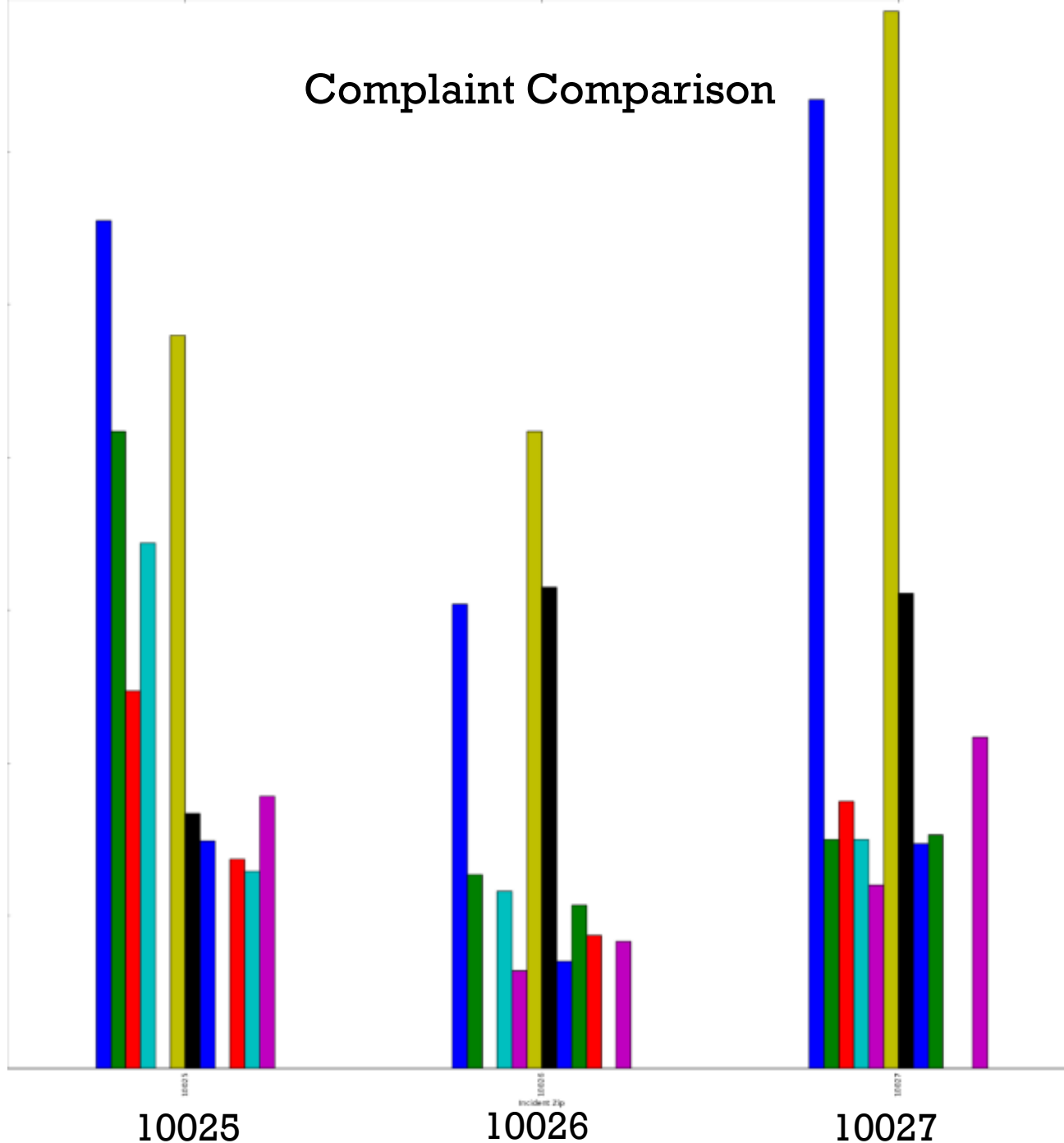
	count
Complaint Type	
Noise - Residential	692
HEAT/HOT WATER	634
Noise - Street/Sidewalk	311
UNSANITARY CONDITION	217
Illegal Parking	175
PLUMBING	153
Homeless Person Assistance	150
Noise	150
PAINT/PLASTER	147
Noise - Commercial	120
DOOR/WINDOW	115
WATER LEAK	93
Noise - Vehicle	90
General Construction/Plumbing	89
Water System	87
Street Condition	85
Rodent	76
GENERAL	75

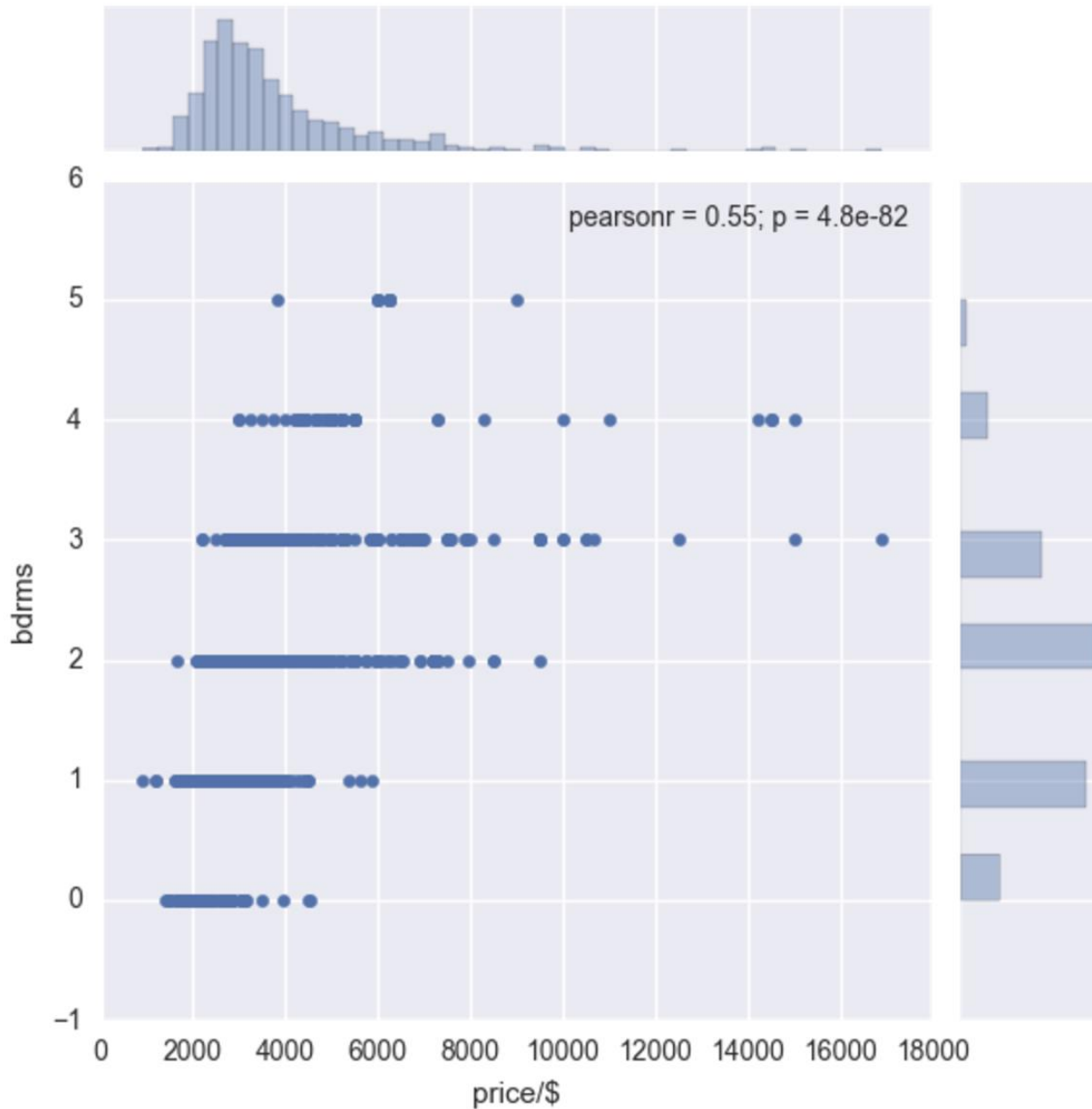
COMPARE THE COMPLAINT TYPE IN THE THREE AREA

- Both noise and heat water are the top complaint types in the three area



Complaint Comparison

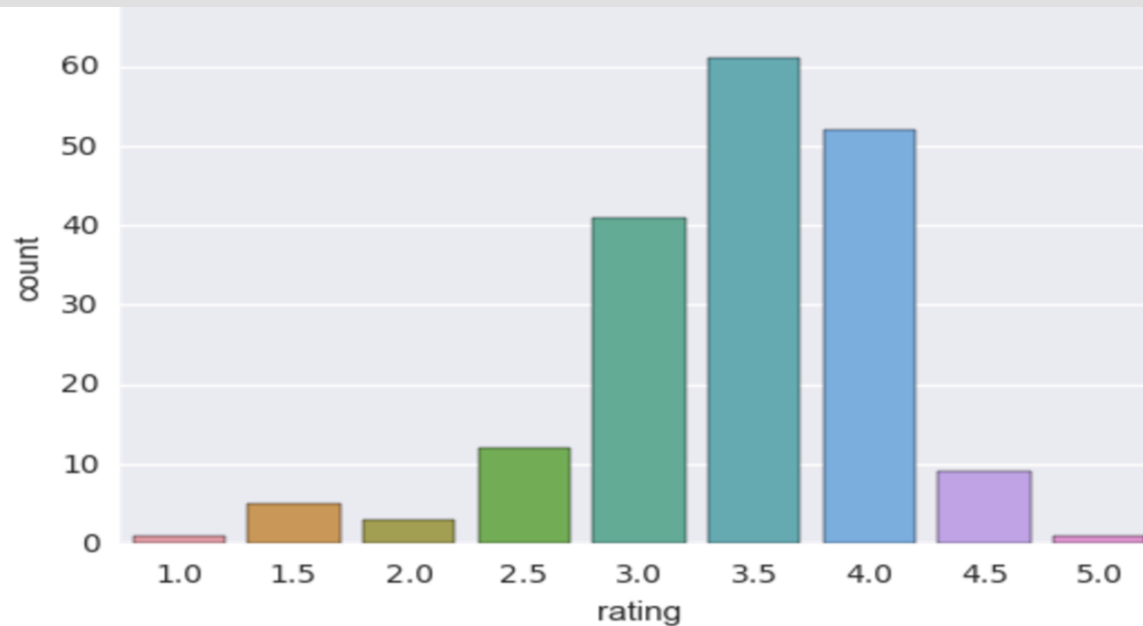
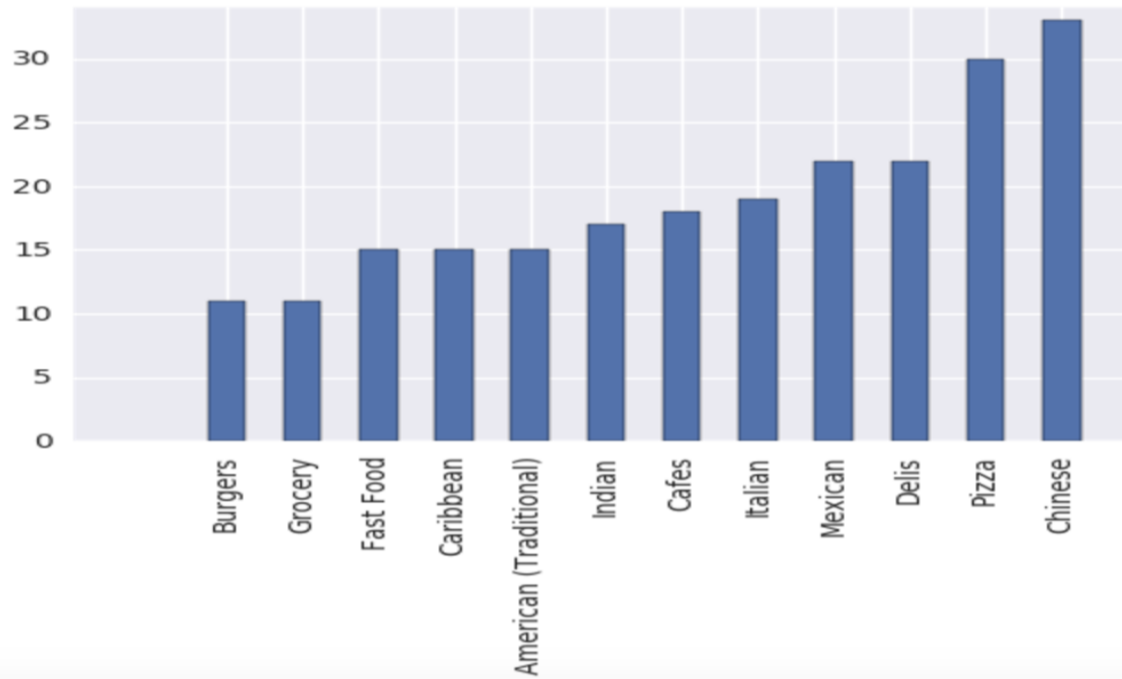




DEEP DIVE INTO ONE ZIP CODE: PRICE IN THE ZIP CODE YOU SELECT

- First graph shows a scatter plot of all our results
- Second graph shows a histogram of the number of bedrooms

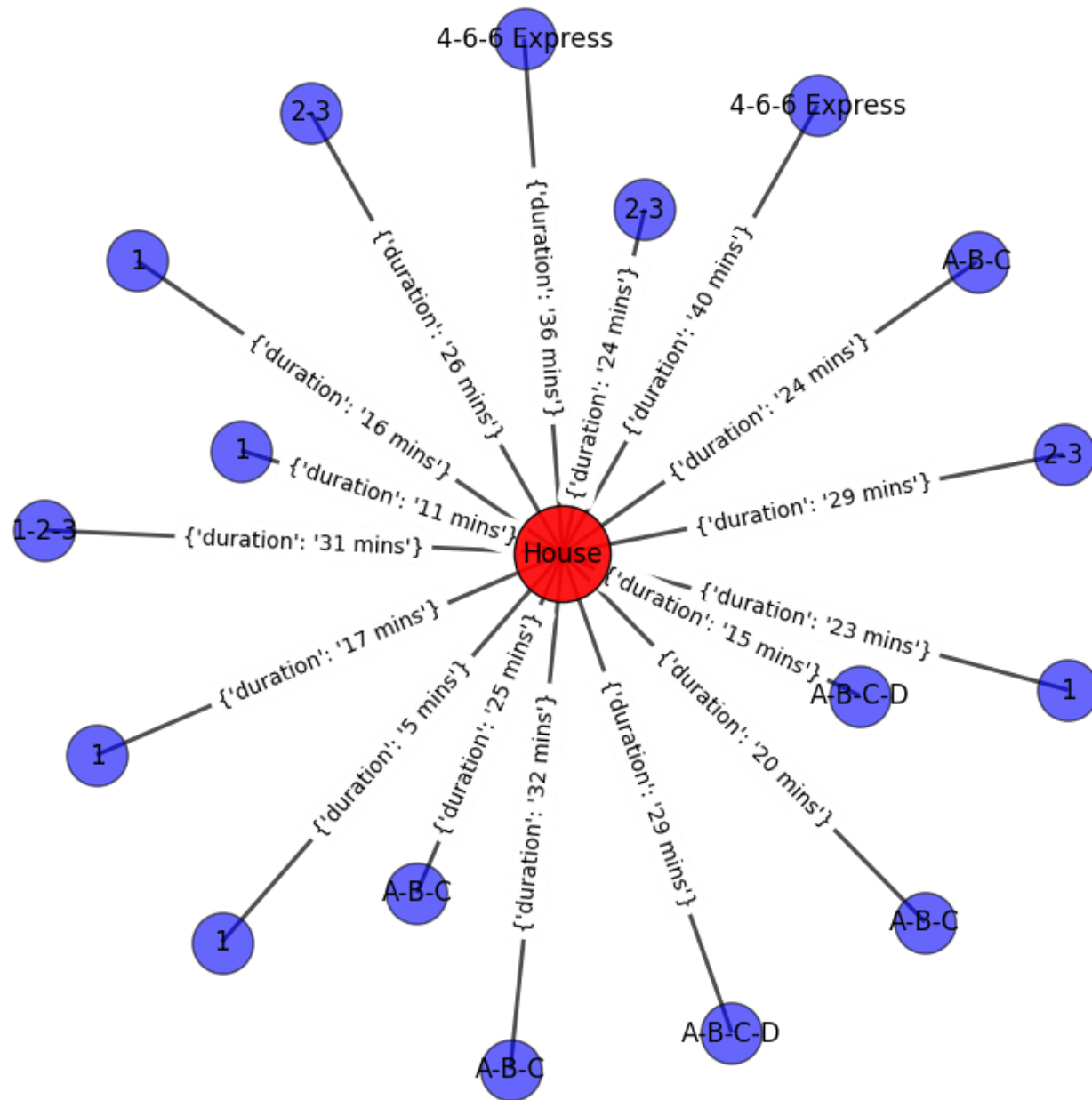




YELP DATA VISUALIZATION IN THE ZIP CODE YOU SELECT

Histogram of
restaurant rating
distribution in your
zip code



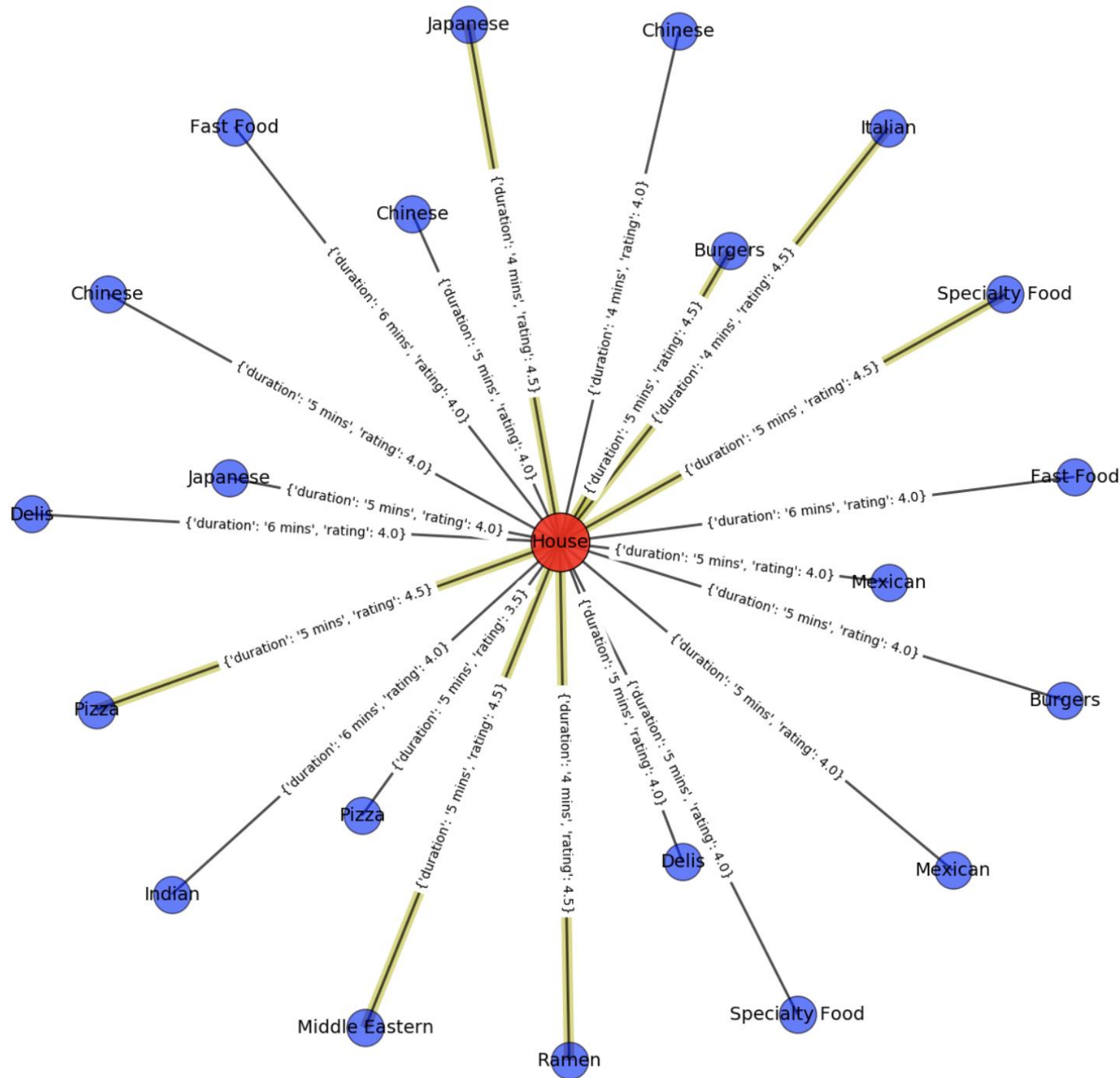


SUBWAY NETWORK IN THE ZIP CODE YOU SELECT

Using subway station data:

- Given an address of an apartment, we draw the subway network around it.
- Specify the line and walking time from the apartment to those subway stations



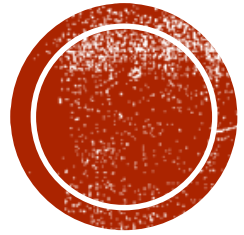


RESTAURANT NETWORK IN THE ZIP CODE YOU SELECT

Using data from yelp:

- Given an address of an apartment, we draw the restaurant around it, and labeling the category on the node.
- We also highlight the restaurant whose rating is more than 4.5.





THANK YOU!

