



The best Neighborhood  
for students in New York

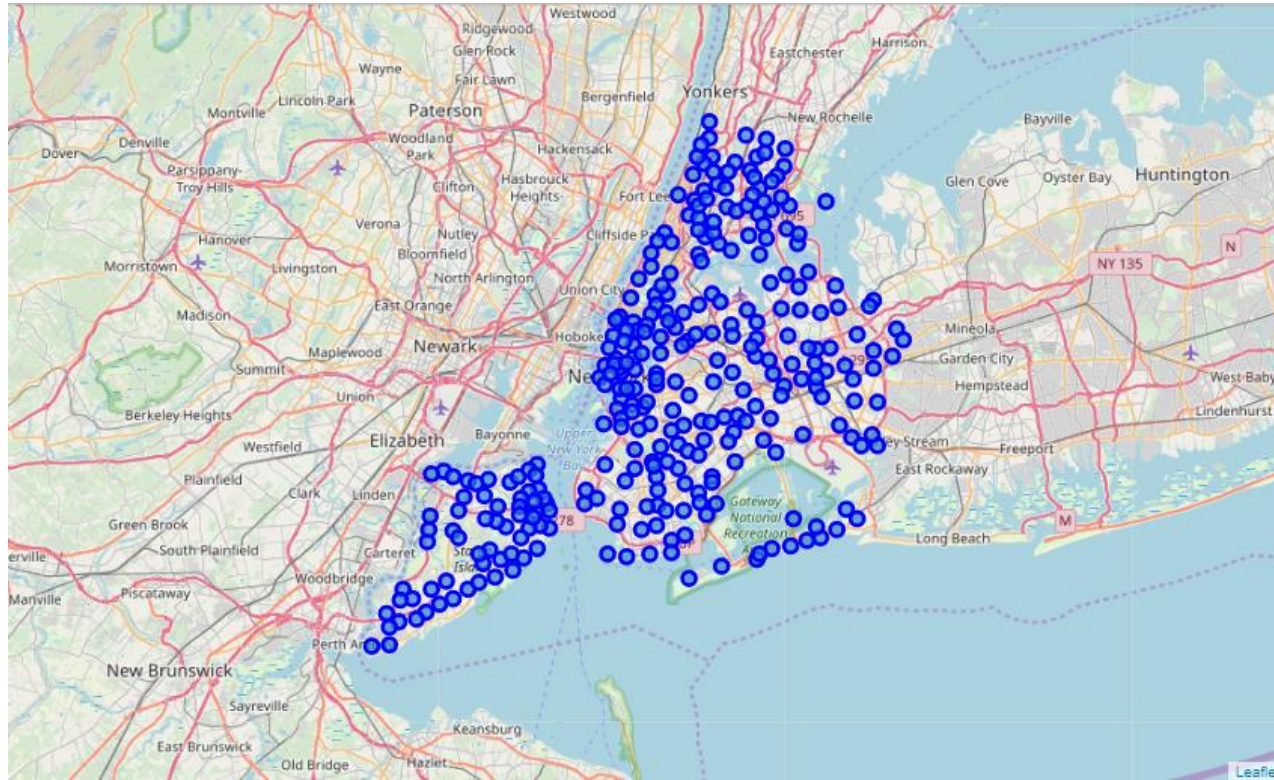
# Problem Statement

Choosing a place to live while studying can be a very complicated and exhausting task, as we must consider not only the cost and location but also if there are supermarkets, coffee shops, laundries and other establishments that we need almost daily. The purpose of this project is to present the best neighborhoods for students in New York considering these establishments and then the student will be able to choose where to live looking at a good neighborhood near his campus

# Data

- A dataset that contains the 5 borough and the neighborhoods that exist in each borough as well as the latitude and longitude coordinates of each neighborhood
- Geopy coordinate for obtain the latitude and longitude of New York
- Foursquare data to collect top 100 venues

# Map of the neighborhoods



# The neighborhoods and their most common venues

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
0	Allerton	Pizza Place	Chinese Restaurant	Supermarket	Deli / Bodega	Cosmetics Shop
1	Annadale	Pizza Place	Diner	Train Station	Sports Bar	Dance Studio
2	Arden Heights	Pharmacy	Deli / Bodega	Bus Stop	Coffee Shop	Home Service
3	Arlington	Bus Stop	Intersection	American Restaurant	Deli / Bodega	Women's Store
4	Arrochar	Bus Stop	Bagel Shop	Italian Restaurant	Deli / Bodega	Pizza Place

This is the top 5 of 306 venues

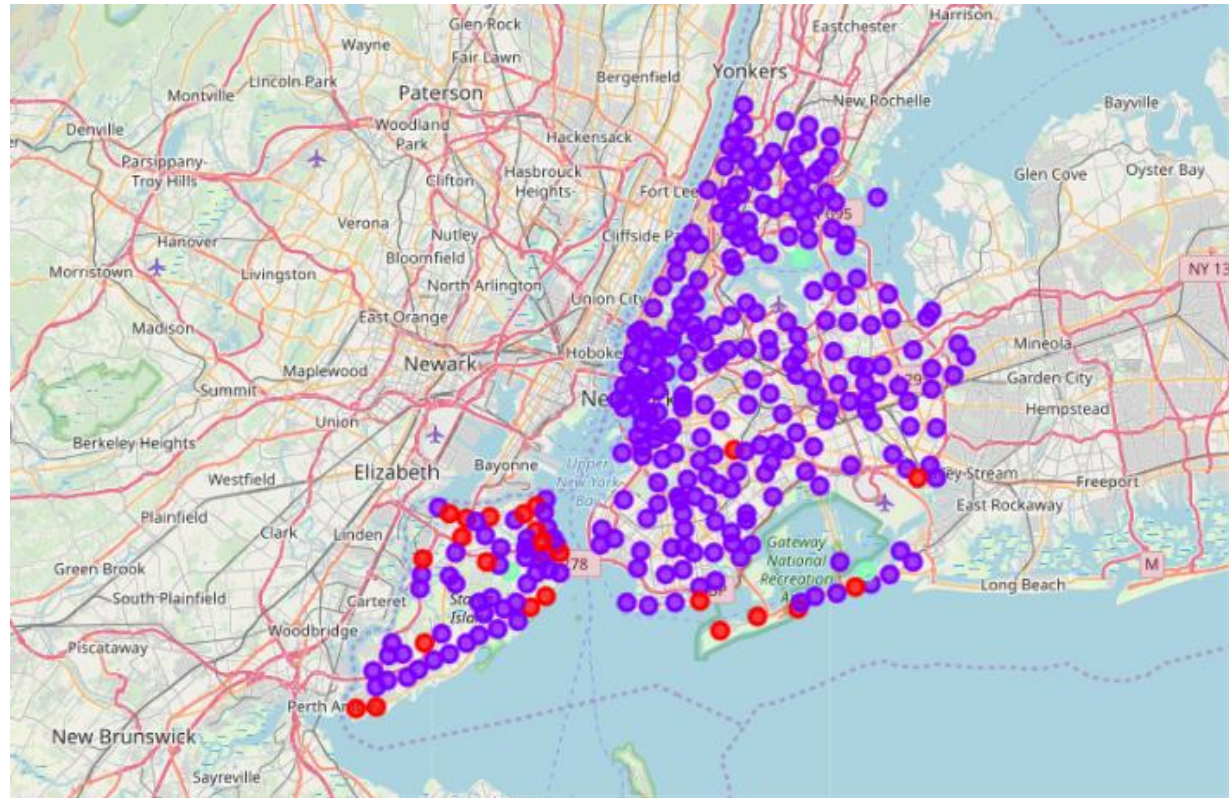
# Clusters

	Borough	Neighborhood	Latitude	Longitude	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
301	Staten Island	Egbertville	40.579119	-74.127272	1	Italian Restaurant	Cosmetics Shop	Smoke Shop	Bagel Shop	Clothing Store
302	Staten Island	Prince's Bay	40.526264	-74.201526	1	Pizza Place	Food Truck	Bank	Pet Store	Bagel Shop
303	Staten Island	Lighthouse Hill	40.576506	-74.137927	1	Café	Italian Restaurant	Trail	Spa	Art Museum
304	Staten Island	Richmond Valley	40.519541	-74.229571	1	Bank	Bubble Tea Shop	Sandwich Place	Deli / Bodega	Smoothie Shop
305	Staten Island	Fox Hills	40.617311	-74.081740	0	Sandwich Place	African Restaurant	Deli / Bodega	Bus Stop	Playground

Then we clustered the neighborhoods and labeled them based on how similar or different they are



# Map of the neighborhoods, now based on each cluster



# Conclusion

- As we can see, the most part of the neighborhoods offer all the basic needs and comodities that a student need. There are just a few neighborhoods that aren't recommended because they offer different types of services close by or because don't have enough services near the location