Visit Manhattan

FIND THE RIGHT ACCOMMODATION

Introduction

- Get helpful information to plan your trip to Manhattan, NYC
  - Information about accommodation like
    - Location
    - Price
    - Availability
    - Common venues
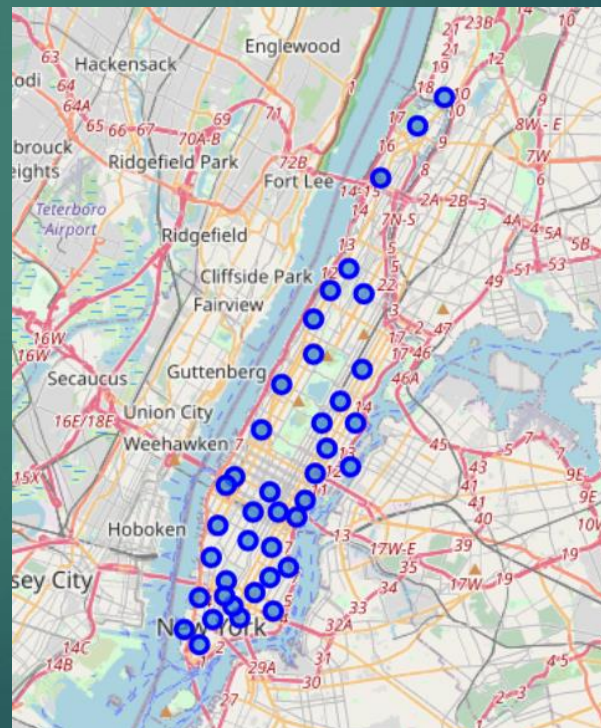   - Museums

Data

- **NYC Neighborhoods and Boroughs**
  - Overview about NYC
- **Airbnb NYC 2019**
  - Information about hosts, neighborhood the accommodation is located, room types, prices, review information and availability
- **Folium**
  - Visualization of Manhattan on a map
- **Foursquare API**
  - Information about venues

Methodology/Results – NYC data

- Get overview of New York City, especially Manhattan by looking at neighborhoods and boroughs and visualizing them on a map
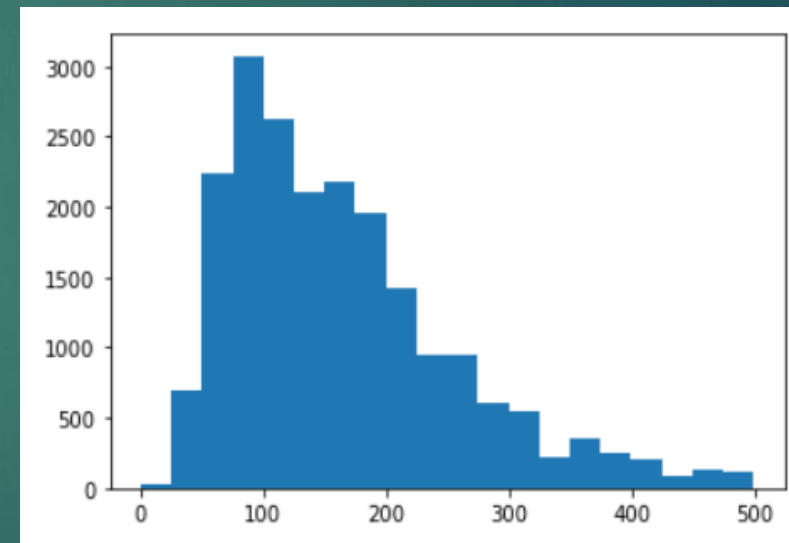
	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585

Methodology/Results – Airbnb data

- Get overview of prices, reviews and availability for all neighborhoods of Manhattan and the distribution of prices

	price	reviews_per_month	availability_365
neighbourhood			
Battery Park City	367.557143	0.675556	100.328571
Chelsea	249.738544	1.254698	113.995508
Chinatown	161.497283	1.369190	90.796196
Civic Center	191.942308	0.775667	68.269231
East Harlem	133.198747	1.672733	98.973142
East Village	186.083108	1.119732	74.623853
Financial District	225.490591	1.477485	191.536290
Flatiron District	341.925000	1.251207	123.050000
Gramercy	222.754438	1.120837	94.526627

Methodology/Results Foursquare

- By combining the Airbnb data with the Foursquare data, the customer will find an accommodation for a fair price that is surrounded by common venues

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Battery Park City	Park	Hotel	Coffee Shop	Memorial Site	Gym	Playground	Food Court	Gourmet Shop	Mexican Restaurant	Shopping Mall
1	Carnegie Hill	Coffee Shop	Italian Restaurant	Café	Yoga Studio	Bookstore	Wine Shop	Gym / Fitness Center	Gym	Grocery Store	Japanese Restaurant
2	Central Harlem	African Restaurant	Chinese Restaurant	Seafood Restaurant	American Restaurant	Bar	French Restaurant	Gym / Fitness Center	Café	Bookstore	Boutique
3	Chelsea	Coffee Shop	Art Gallery	American Restaurant	Ice Cream Shop	Café	French Restaurant	Italian Restaurant	Theater	Pizza Place	Market
4	Chinatown	Chinese Restaurant	Bakery	Dessert Shop	American Restaurant	Ice Cream Shop	Spa	Bar	Hotpot Restaurant	Vietnamese Restaurant	Bubble Tea Shop

- Neighborhoods of Manhattan that have a museum located

	Neighborhood	History Museum	Art Museum	Museum
0	Carnegie Hill	0	2	2
1	Chinatown	0	0	1
2	Financial District	0	0	1
3	Flatiron	1	0	0
4	Inwood	1	0	0
5	Murray Hill	0	0	1
6	Turtle Bay	0	0	1
7	Upper East Side	2	2	0

Discussion

Customers that would like to visit an Art Museum or a History Museum are recommended to look for an accommodation in Upper East Side

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Upper East Side	Italian Restaurant	Coffee Shop	Bakery	Juice Bar	Gym / Fitness Center	French Restaurant	Spa	Yoga Studio	Wine Shop	Salad Place

	Neighborhood	History Museum	Art Museum	Museum
0	Carnegie Hill	0	2	2
1	Chinatown	0	0	1
2	Financial District	0	0	1
3	Flatiron	1	0	0
4	Inwood	1	0	0
5	Murray Hill	0	0	1
6	Turtle Bay	0	0	1
7	Upper East Side	2	2	0

Theater District	248.013889	2.567027	201.871528
Tribeca	490.638418	0.834909	126.508475
Two Bridges	127.069444	2.395500	86.236111
Upper East Side	188.948276	1.084456	112.798109
Upper West Side	210.918316	1.003556	96.583460
Washington Heights	89.610679	1.215950	98.932147
West Village	267.682292	0.944508	85.459635

Conclusion

▶ Provided data help customers to find the right accommodation in Manhattan

▶ Considered information is

  ▶ Common venues

  ▶ Museums

  ▶ Prices

  ▶ Availability

  ▶ Reviews