

Introduction

This report is providing information for travelers visiting Manhattan, a borough of New York City, USA. It will support identifying the best neighborhood for finding an accommodation via Airbnb by taking into consideration nearby located restaurants and museums.

In 2008, Airbnb has started to convey accommodations. Airbnb itself is not owning any accommodation. They are acting as a broker. Hosts have the possibility to offer their accommodation to travelers via the platform of Airbnb. For travelers, Airbnb is an interesting opportunity to find a place to stay during the night.

This report gives an overview about accommodations in Manhattan showing average prices for the year 2019, the average availability and average number of reviews. Those figures will help the traveler to decide, which neighborhood is best to chose. To consider the need for having nice restaurants around, this report is furthermore having a look at good rated restaurants nearby. For travelers interested in sightseeing an overview is shown about museums in the same neighborhood as the accommodation.

Data section

To be able to provide needed information the following data will be used:

1) NYC Neighborhoods and Boroughs

This dataset includes information about neighborhoods and boroughs in New York City including location information and is available on this [website](#).

	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

2) Airbnb NYC 2019

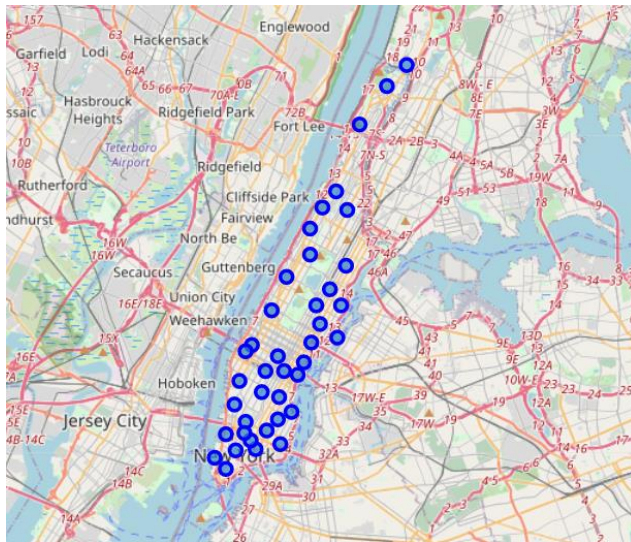
This dataset describes the listing activity and metrics in NYC, NY for 2019. The dataset is available on Kaggle (<https://www.kaggle.com/dgomonov/new-york-city-airbnb-open-data>). This public dataset is part of Airbnb, and the original source can be found on this [website](#).

The dataset provides information about hosts, neighborhood the accommodation is located, room types, prices, review information and availability.

id	name	host_id	host_name	neighbourhood_group	neighbourhood	latitude	longitude	room_type	price	minimum_nights	number_of_reviews	last_review	reviews_per_month	calculated_host_listings_count	availability_365
0	Clean & quiet apt home by the park	2787	John	Brooklyn	Kensington	40.64749	-73.97237	Private room	149	1	9	2018-10-19	0.21	6	365
1	Skyliit Midtown Castle	2845	Jennifer	Manhattan	Midtown	40.75362	-73.98377	Entire home/apt	225	1	45	2019-05-21	0.38	2	355
2	THE VILLAGE OF HARLEM...NEW YORK I	4632	Elisabeth	Manhattan	Harlem	40.80902	-73.94190	Private room	150	3	0	NaN	NaN	1	365
3	Cozy Entire Floor of Brownstone	4869	LisaRoxanne	Brooklyn	Clinton Hill	40.68514	-73.95976	Entire home/apt	89	1	270	2019-07-05	4.64	1	194
4	Entire Apt. Spacious Studio/Loft by central park	7192	Laura	Manhattan	East Harlem	40.79851	-73.94399	Entire home/apt	80	10	9	2018-11-19	0.10	1	0

3) Folium

Folium is used to visualize neighborhoods, points of interests and available accommodation on a map.



4) Foursquare API

To get information about points of interest like restaurants or museum that are nearby located to the accommodation, the Foursquare API will be used. Information pulled from the Foursquare API contain information about venues and their location

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Marble Hill	40.876551	-73.91066	Arturo's	40.874412	-73.910271	Pizza Place
1	Marble Hill	40.876551	-73.91066	Bikram Yoga	40.876844	-73.906204	Yoga Studio
2	Marble Hill	40.876551	-73.91066	Tibbett Diner	40.880404	-73.908937	Diner
3	Marble Hill	40.876551	-73.91066	Starbucks	40.877531	-73.905582	Coffee Shop
4	Marble Hill	40.876551	-73.91066	Dunkin'	40.877136	-73.906666	Donut Shop