1. Dataset

**Dataset:** NYC Airbnb Open Data

**Link:** https://www.kaggle.com/datasets/chadra/ab-nyc-2019/data

**Explanation:** This data set collects the situation of B&Bs on airbnb in New York in 2019. This data set includes B&B locations (neighborhood and latitude and longitude information), B&B prices, number of openings, etc.

**Reasons of choosing this dataset: T**his data set can display basic information about New York B&Bs, including the geographical location and price that most tourists are most concerned about. Using this data visualization, you can get the housing prices in different districts, the distribution of houses, etc., which will help tourists choose a suitable house.

|  |  |
| --- | --- |
| **Column Name** | **Description** |
| id |  |
| name |  |
| host\_id |  |
| host\_name |  |
| neighbourhood\_group |  |
| neighbourhood |  |
| latitude |  |
| longitude |  |
| room\_type | eg: Entire home, Private room |
| price |  |
| minimum\_nights | The minimum number of booking days required by the host |
| number\_of\_reviews |  |
| last\_review | Date of last comment |
| reviews\_per\_month |  |
| calculated\_host\_listings\_count | Number of listings posted by this landlord |
| availability\_365 | Rental days per year |

2. Purpose of Visualization

In this project, by observing the price and quantity of housing in each region, we can infer which area is more prosperous and has greater demand for housing. At the same time, by observing different factors, you can visually guess the influencing factors that affect the price and quantity of listings. The results can provide recommendations for tourists and hosts.

3. Visualization

1. price of the rooms in different neighborhood

地图

描述已自动生成

As a whole, we can see in the northwest of NYC, there are more high-price rooms and it is more rooms in north and west, less rooms in east and south.

地图

描述已自动生成

When we check the different neighborhood, we can see the high-price rooms are concentrated in Manhattan——the New York City's busiest area. Also, in this area the dots are most dense, showing that the room numbers are most here.

2. number of rooms in different part

图表, 条形图

描述已自动生成

It is interesting that in total, the more price is, the less available days the houses have. More than half of houses in the center of NYC have less than 50 days available.

3. number of rooms in different part

图表, 条形图

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The number of shared room id least. Also, except Manhattan, in other areas, there are more private rooms than entire rooms. It is also one of the reason that the price of houses in Manhattan is higher.