

# Airbnb Data Analysis

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# Project Overview



Listing properties in  
Singapore from Airbnb  
marketplace



The right properties will  
affect the number of rented  
rooms and profits that are  
earned

## Business Problem

- Renting the right properties in Singapore by implementing the best strategy that gives the maximum profits

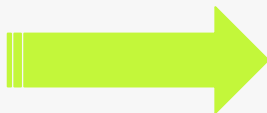
## Business Task

- Analyze Singapore Airbnb datasets to identify the qualifications of the right properties to rent

# Data Sources

- Airbnb Listings Properties Dataset
- Neighborhood Mapping Dataset
- Airbnb Listings Reviews History Dataset

**2018**  
January

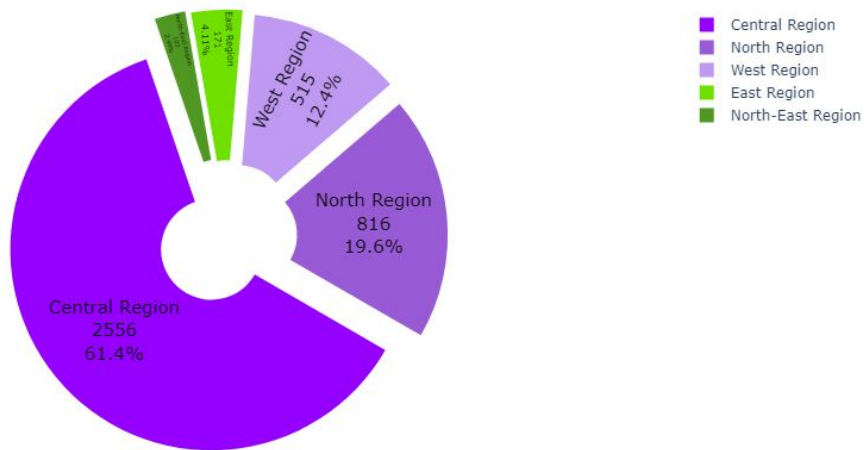


**2022**  
September

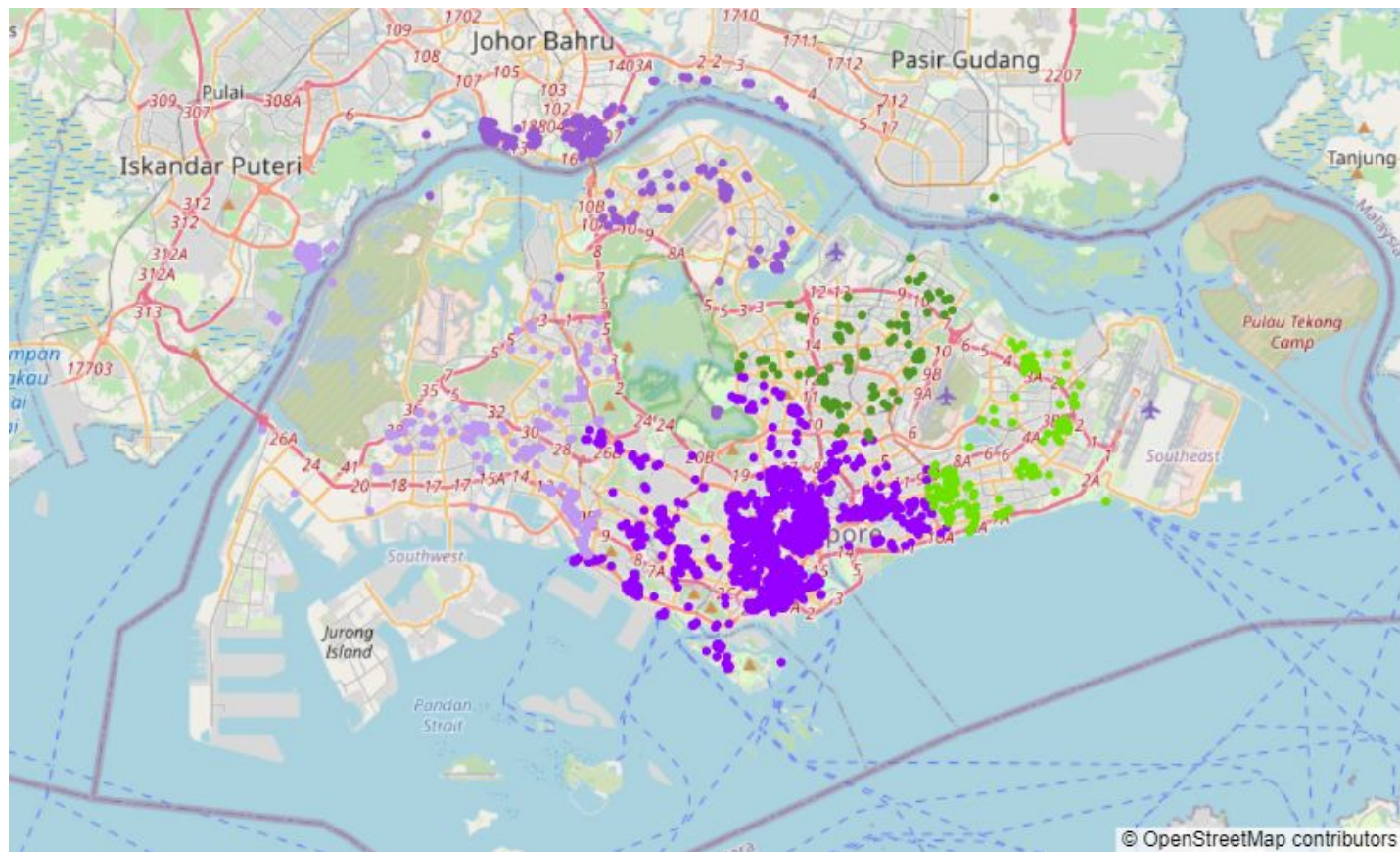
# Analysis Results

*Listing Properties*

Listing Distribution by Neighborhood Group



Airbnb listing properties in Singapore distributed mainly in Central Region, the metropolitan area followed by North Region which borders directly with neighbor country

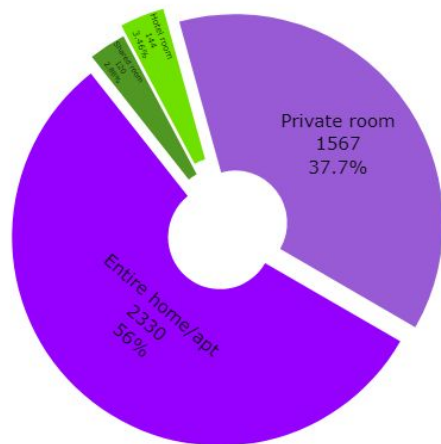


neighbourhood\_group

- Central Region
- East Region
- North-East Region
- North Region
- West Region



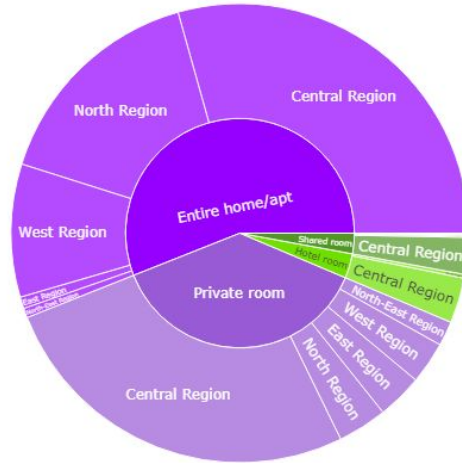
Listing Distribution by Room Type



- Entire home/apt
- Private room
- Hotel room
- Shared room

The most popular room type is the entire home/apt considering the difference in facilities and capacities provided

### Neighborhood Group with The Most Room Type Available



The most room type available for Central, North and West Regions is entire home/apt followed by private room, while for East and North-East Regions is the other way around

### Mean of Minimum Nights for Each Neighborhood Group

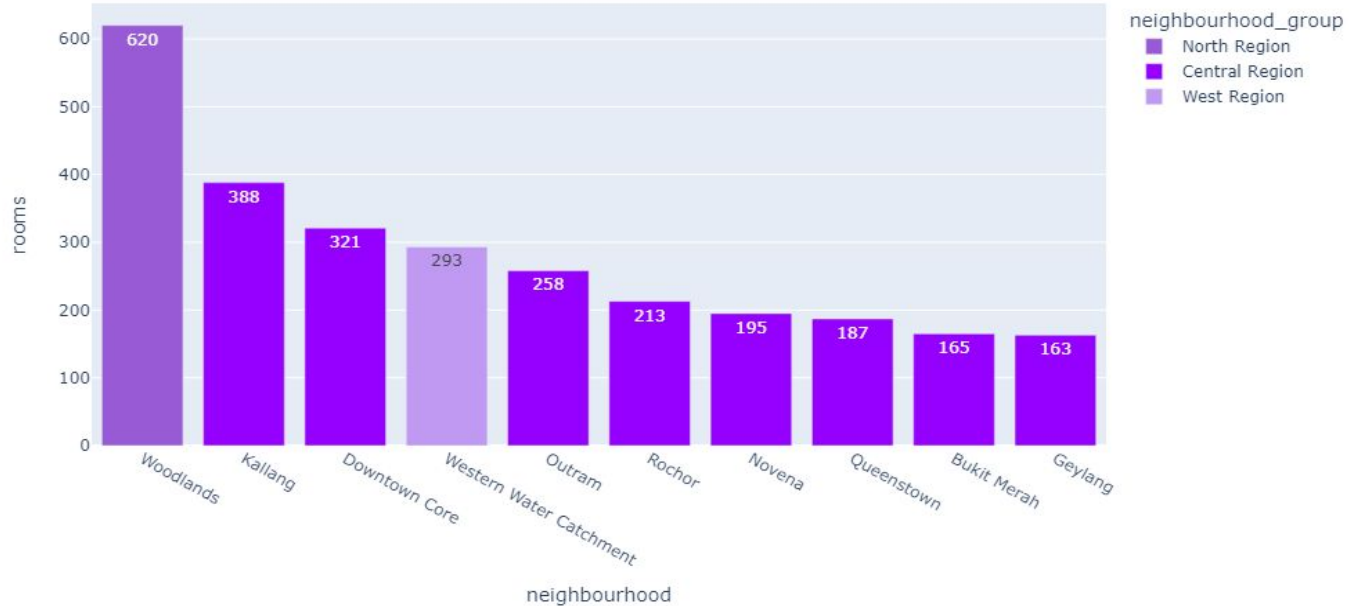


North region gives more flexible periods of rent by having the lowest mean of minimum nights of about 12 days

# Analysis Results

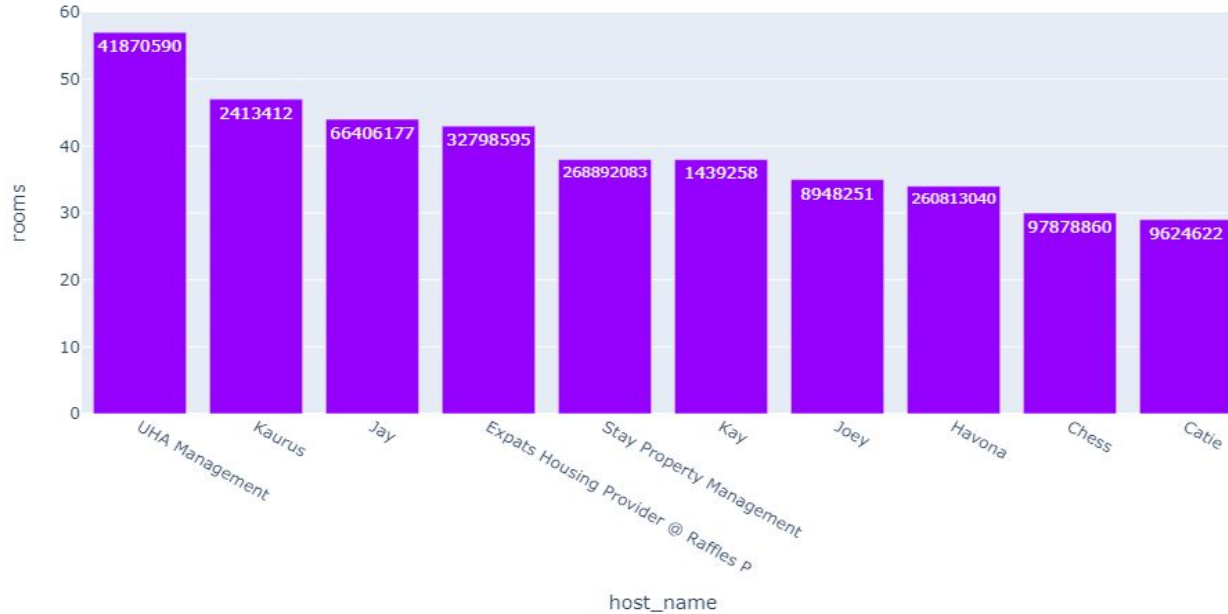
*Most Rooms & Hosts*

### Top 10 Neighborhood with The Most Rooms



Almost all of top neighborhood with the most rooms located in Central Region, yet the neighborhood with the most room is Woodlands in North Region

### Top 10 Host Name with The Most Rooms

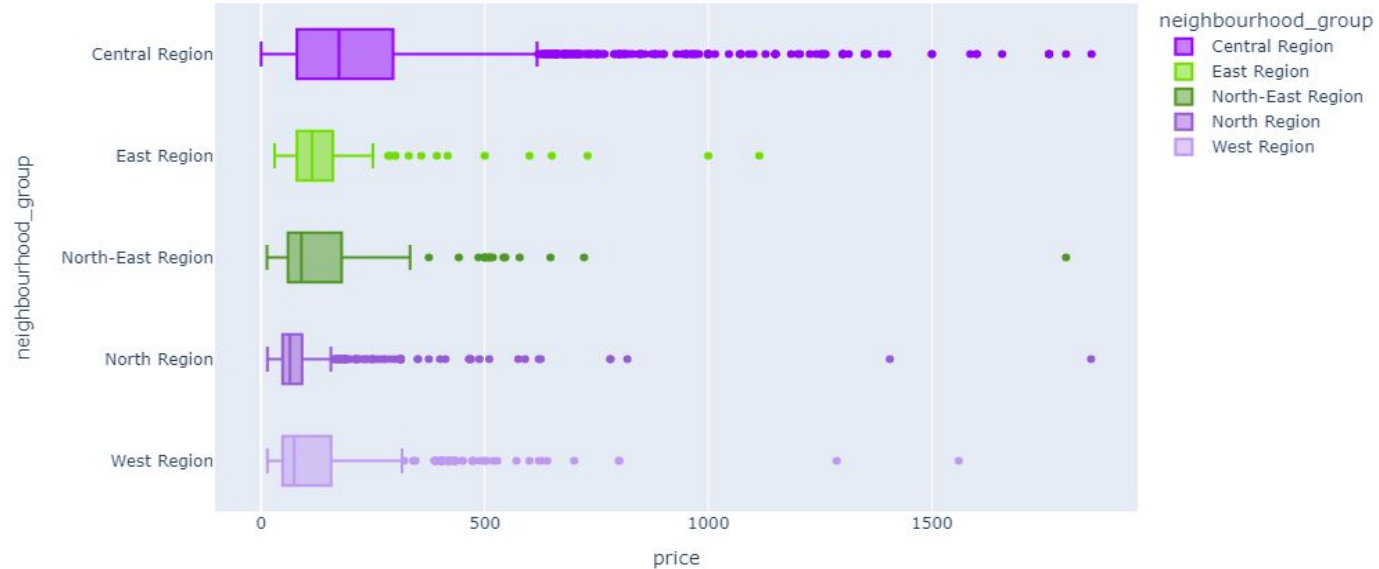


Host name with the most rooms is UHA Management that its properties also located in Woodlands, North Region

# Analysis Results

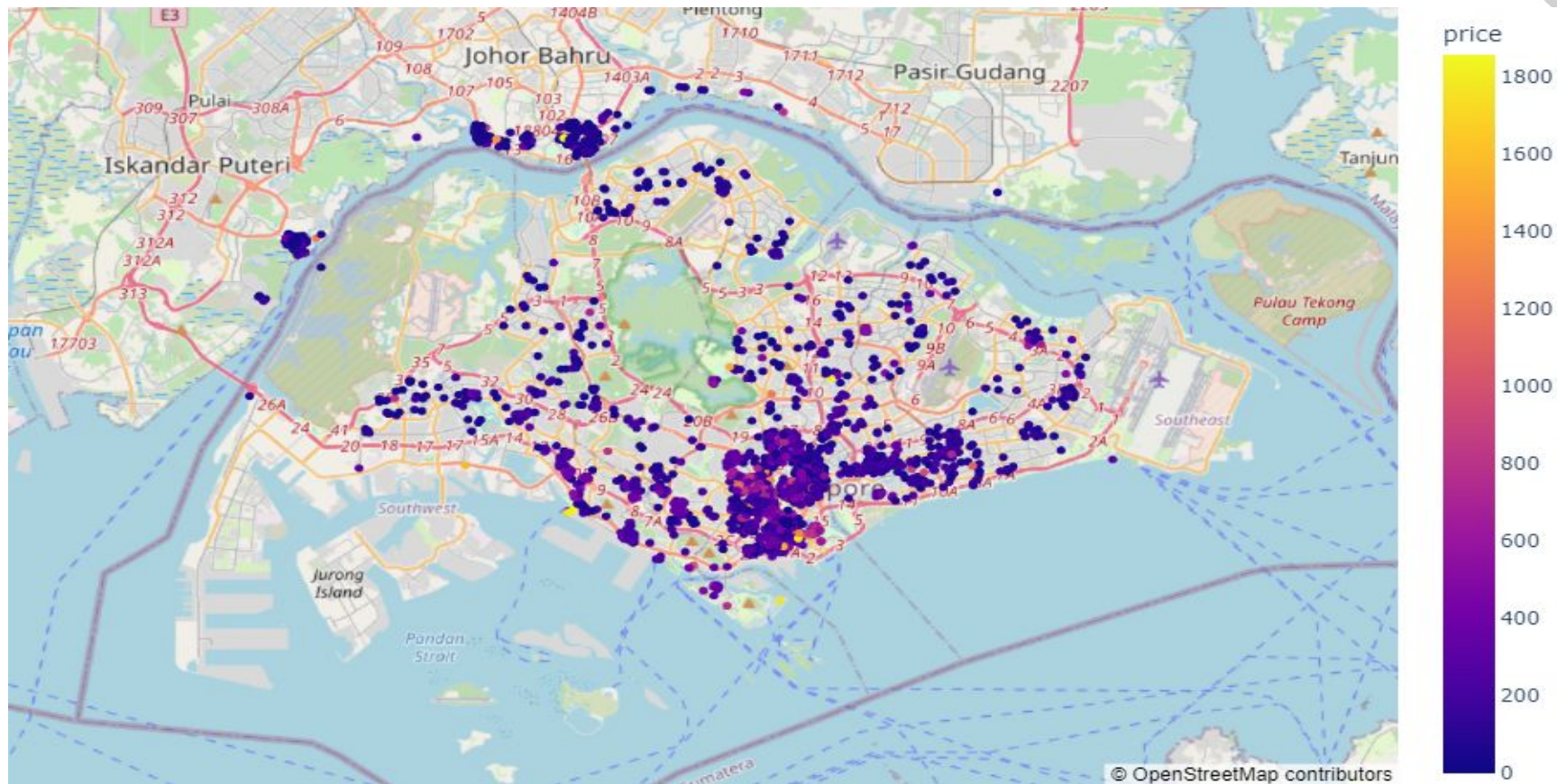
*Price*

### Price Distribution of Listing Based on Neighborhood Group (~\$2,000SGD)

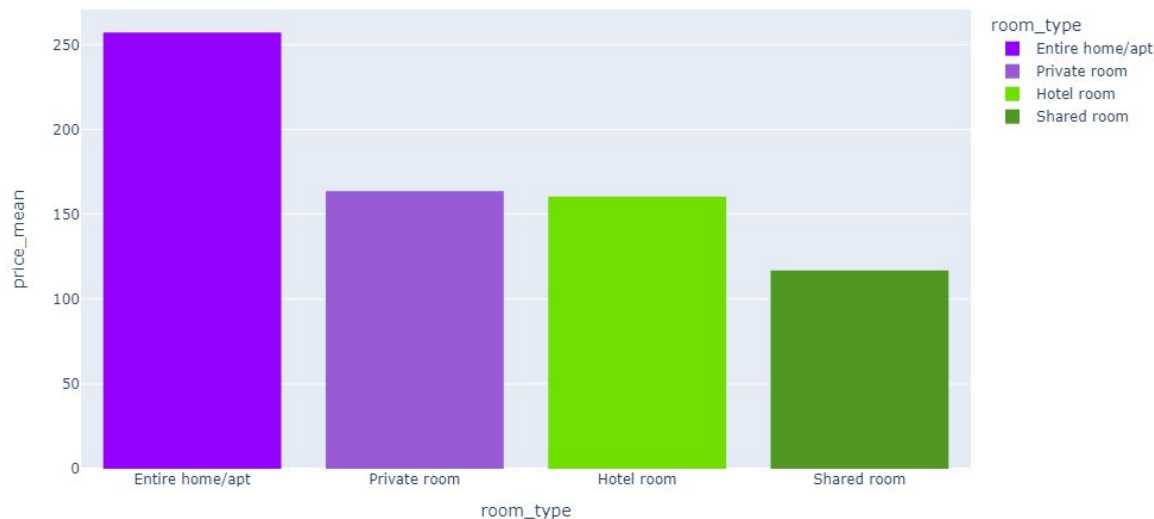


Meanwhile North Region has the lowest price, Central Region has more varied and higher price as metropolitan area in Singapore has higher economic rate than others





### Price Distribution Based on Room Type



The highest mean price is entire home/apt believed because of facilities and capacities provided are more complete and bigger

Private room and hotel room have slight difference around 3 dollars only

# Analysis Results

*Reviews History*



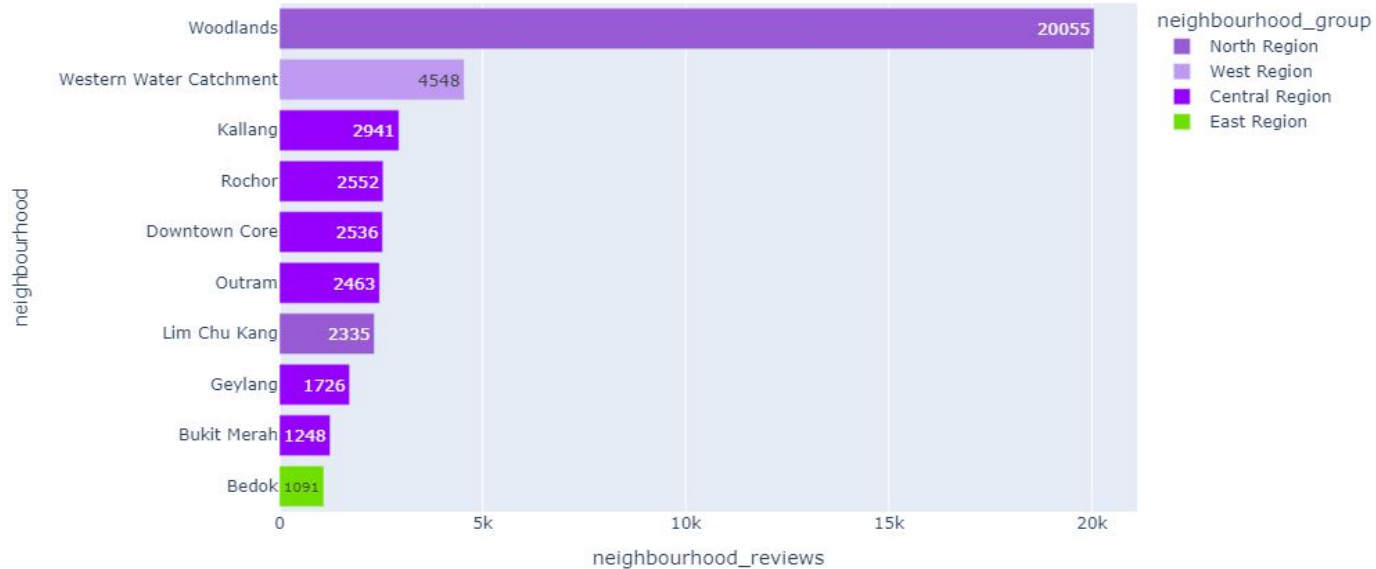
Reviews history showing the history of rented listing properties in Singapore from 2018, January to 2022, September. It increased to its peak in late 2019, but immediately decreased until 2022, March because of Covid-19 pandemic.

### Reviews History of Rented Listing Based on Month



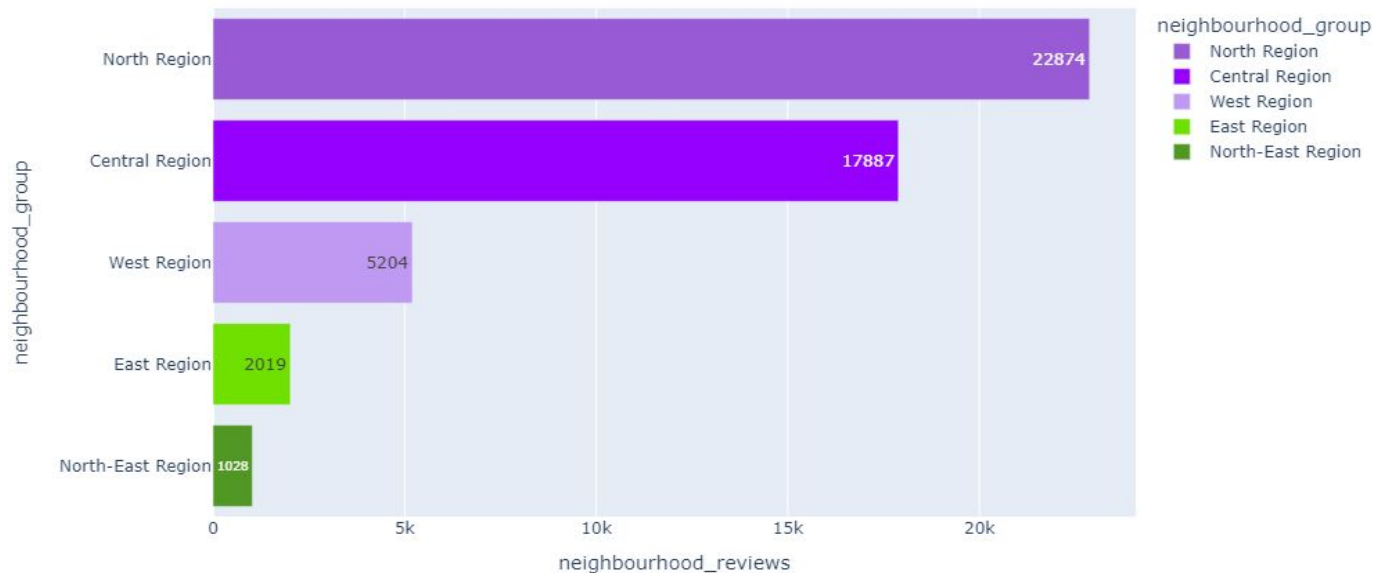
After the pandemic goes down, the reviews started increasing again in 2022, April with its peak from May to August assumed because of the holiday season in Singapore and neighboring country

### The Most Rented Listings Based on Neighborhood



Meanwhile North Region has the lowest price, Central Region has more varied and higher price as metropolitan area in Singapore has higher economic rate than others

### The Most Rented Listings Based on Neighborhood Group



The most rented listing properties located in Woodlands making North Region as neighborhood group with the most rented listing properties in Singapore.

## Top 10 Rented Listings Based on Reviews History



Top 10 listing properties with the most reviews known located in North Region with minimum nights rented is one day and priced lower than 50 dollars Singapore



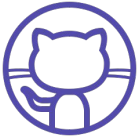
# Conclusion

The recommendations we could give to our clients is to consider Airbnb listing properties in North Region, especially Woodlands with qualifications as follows:

- Offering lower prices which reflecting lower cost and maintenance
- Having less minimum nights to rent
- Serving lots of rooms available with high reviews history
- Focusing with entire home/apt as the most popular room type

Further analysis may be needed especially the correlation of price and facilities provided that will help to make even more beneficial decision

# References



Github



Linkedin



Slides

*Thanks!*

