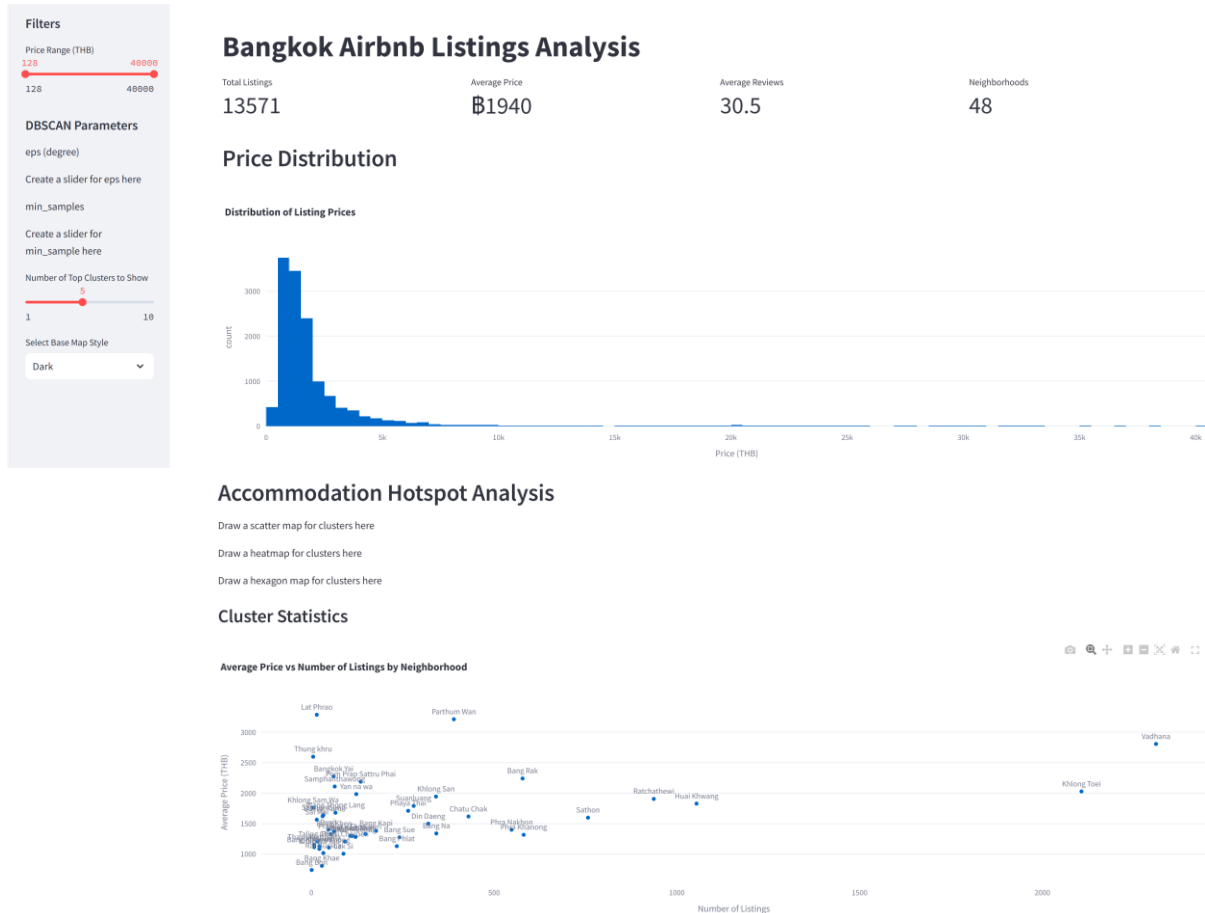


โปรแกรม `streamlit_airbnb.py` ที่ให้ มีส่วนที่เว้นไว้ให้เติม visualization ที่เขียนว่า “Create ... here” หรือ “Draw ... here”



ให้นิสิตแก้ไขโปรแกรมส่วนที่เว้นไว้ให้เติมทั้งหมด ให้เป็นโค้ดของ `plotly` เพื่อสร้าง visualization ที่เกี่ยวข้อง เพื่อให้ได้ผลลัพธ์ใกล้เคียงกับภาพตัวอย่างมากที่สุด

Filters

Price Range (THB)

128

40000

DBSCAN Parameters

eps (degree)

0.002

0.001

0.005

min\_samples

3

2

10

Number of Top Clusters to Show

5

1

10

Select Base Map Style

Dark

## Bangkok Airbnb Listings Analysis

Total Listings

13571

Average Price

฿1940

Average Reviews

30.5

Neighborhoods

48

### Price Distribution

Distribution of Listing Prices

The histogram displays the frequency of Airbnb listings across different price ranges in Bangkok. The x-axis is labeled 'Price (THB)' and ranges from 0 to 40,000 in increments of 5,000. The y-axis is labeled 'count' and ranges from 0 to 3,000 in increments of 1,000. The distribution is highly right-skewed, indicating that most listings are priced below 10,000 THB. The highest frequency occurs in the 0-2,000 THB range, with a count exceeding 3,000. The frequency drops sharply as the price increases, with very few listings exceeding 20,000 THB.

### Accommodation Hotspot Analysis

This map visualizes the geographic distribution of Airbnb listings in Bangkok. The map uses a color gradient where blue represents low density and red represents high density. The most intense hotspots (red) are located in the central part of the city, particularly in the areas around Sukhumvit and the city center. Other areas with moderate density (yellow and orange) are visible in the surrounding urban areas. The map includes labels for various neighborhoods and landmarks, such as the Chao Phraya River and Suvarnabhumi Airport.

This heatmap provides a smoothed view of the accommodation density in Bangkok. The color scale is consistent with the previous map, ranging from blue (low density) to red (high density). The heatmap shows a large, continuous area of high density (red and orange) in the central part of the city, indicating a high concentration of listings. The density decreases as one moves away from the center, with blue areas representing lower density. The heatmap helps to identify the overall pattern of accommodation distribution across the city.



## Cluster Statistics

Average Price vs Number of Listings by Neighborhood



สิ่งที่ต้องส่ง

- โปรแกรม `streamlit_airbnb.py` ที่แก้ไขแล้ว
- ภาพของแต่ละ map