AirBnB Story Analysis

This story gives an overall insight of the metrics and performance of the AirBnB listings across London. The goal is to explore trends, behaviors, and patterns in the short term rental market across the city using dashboards. The goal is to equip stakeholders — city planners, hosts, travelers, and researchers — with key insights into the dynamics of London's short-term rental landscape.

Dashboard Summaries

1. **Overview Dashboard**
    a. This dashboard gives a glimpse of the contents of Airbnb listings across London:
        ● **Bar charts** show rental volume by Price, Availability, and Neighborhood
        ● **Choropleth map** visualizes listing density by neighborhood.
        ● **Key Insight:** The majority of listings are concentrated in boroughs like **Bexley**, with "Entire home/apt" as the dominant room type.

2. **Seasonal Pricing and Occupancy Trends**
    a. This dashboard gives an overview of the seasonal prices and occupancy trends of the airbnb listings.
        i.   August is the most occupied month, with all weeks almost fully booked.
        ii. Most booked rooms are hotel rooms, while shared rooms have the lowest rate of occupancy.
        iii. Average prices for each room type are: 219.8 Euros for the entire home, 75 Euros for the hotel room, 82.5 euros for the private room, and 29.5 for the shared room.
3. **Host Performance**
    a. **Top Hosts:** Max And Billie and James lead in total Airbnb reviews.
    b. **Listings Share:** Sarah has the most listings but fewer reviews per listing.
    c. **Popular Room Type:** Entire home/apt dominates among top-reviewed hosts.
    d. **Seasonal Trends:** Reviews peak in 2018, 2022, and early 2024.
    e. **Wide Distribution:** Hosts and reviews are spread across many London boroughs.
4. **Price Tier by Neighbourhood Group**
    a. Neighborhoods are grouped into Low, Medium, and High price tiers.
    b. A map displays spatial pricing patterns, while a bar chart compares the number of neighborhoods in each tier across boroughs.
    c. **Key Insight:** Boroughs such as Islington and Westminster have a large share of high-priced areas, while outer boroughs show more affordable options.
5. **Average Price Analysis**

a. Displays **average prices** segmented by **borough** and **room type**.

b. A second chart ranks **individual neighborhoods** by average price.
c. **Key Insight**: "Entire home/apt" listings command the highest prices, especially in central boroughs. Neighborhoods like Westminster and Islington are among the most expensive.

6. **Rentals**
   a. A **bar chart** displays the percentage of Top Neighbourhoods by Rentals
   b. A **pie chart** displays the percentage of Rentals by Borough
   c. A **stacked chart** displays the mix of room types per borough.
   d. **Key Insight**: Central boroughs dominate both in total listings and variety of room types. Shoreditch and Camden Town lead in private room offerings.

7. **Reviews**
   a. A **line chart** shows growth of reviews from 2010–2024.
   b. **Monthly bar chart** reveals seasonality, peaking in summer months.
   c. A **room type × borough bar chart** shows review engagement patterns.
   d. A **ranked table** highlights the top 10 hosts by review count, with average price and location.
   e. **Key Insight:** Reviews have grown steadily post-2015, and hosts offering affordable private rooms in outer boroughs often receive consistent guest feedback.

8. **Availability & Minimum Nights**
   a. **A histogram** displays listing availability in 30-day bins.
   b. **A bar chart** segments listings into defined availability types: 10-90 Nights, Less than 10 nights, and More than 90 nights.
   c. **A pie chart and stacked bar** analyze rental length requirements across room types.
   d. **Key Insight:** Most listings are available more than 90 days per year and require fewer than 10 nights minimum, favoring short-term stays.