AIRBNB IN US

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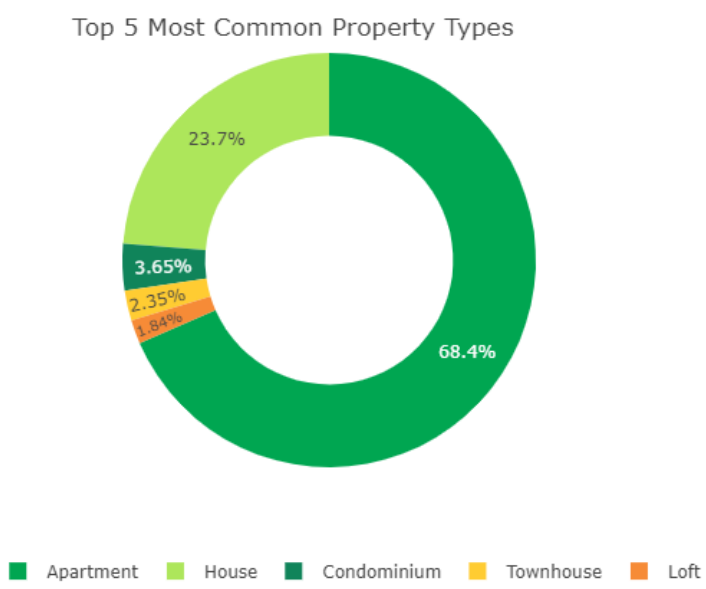
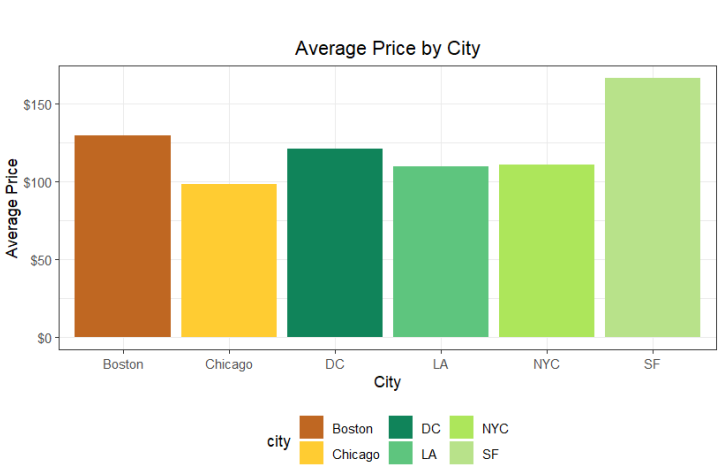
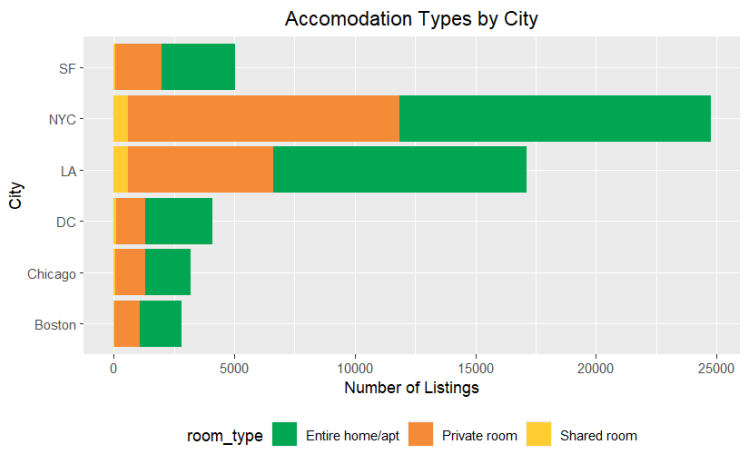
The **"AirBnB listings in major US cities"** dataset contains information on AirBnB listings across various US cities with **74,516 records** with information such as the property type, the number of bedrooms and bathrooms, price, host's name, the neighborhood, amenities, reviews and many more. This infographic was created using various techniques on the dataset such as data reading, data cleaning, and data visualization. To create the visualization, suitable R functions from the ggplot, ggplot2, and plotly libraries were utilized.

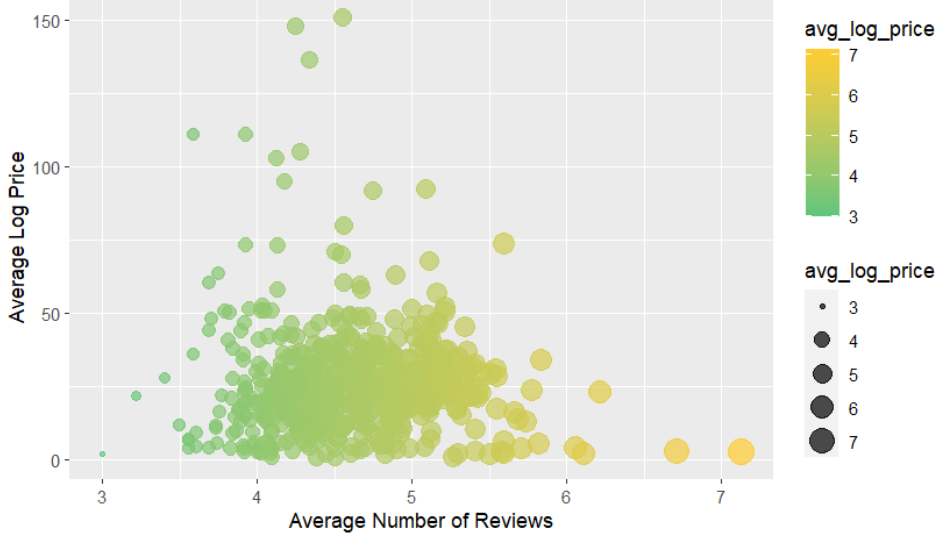




The top 5 most common property types in the United States on Airbnb were analyzed, as depicted in the **donut chart**. It was observed that apartments were the most common type of property, comprising 43.8% of all Airbnb rentals, followed by houses at 36.2%. Meanwhile, other types of properties such as condominiums, townhouses, and lofts accounted for the remaining 20% of Airbnb rentals.

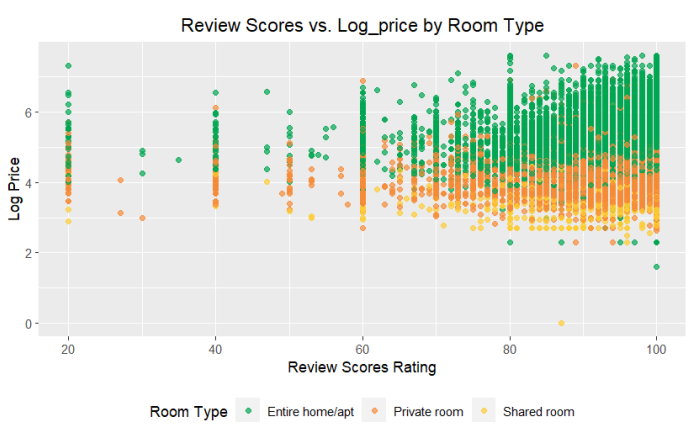
The above **bar chart** presents the **average price of Airbnb listings in six major cities**. It can be observed that San Francisco has the highest average price per night for Airbnb rentals, followed by Boston and New York. Lower average prices are reported for Los Angeles, Chicago, and Washington DC, when compared to the other three cities. It is inferred that **location plays a significant role in determining the price** of Airbnb rentals.

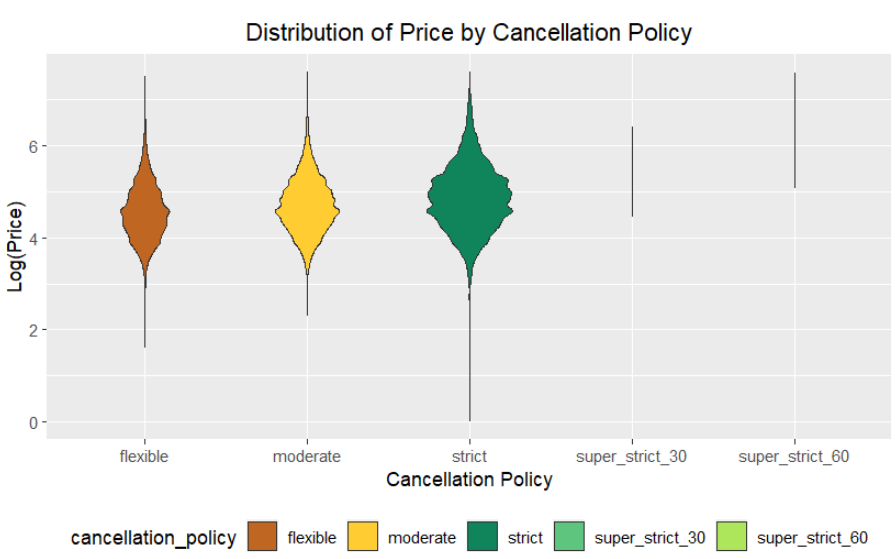




The above **horizontal bar chart** shows that the most common type of accommodation in each city is an entire home or apartment. In New York, more than 50% of Airbnb listings are for entire homes or apartments, while LA, and San Francisco have the next highest percentages. It is interesting to note that private rooms are also a popular option in these cities compared to other, with a minor portion of listings falling into this category.

The above **bubble scatter plot** indicates that lower-priced rentals tend to have higher numbers of reviews, while higher-priced rentals have relatively fewer reviews.
The side **scatter plot** shows that entire homes/apartments tend to be more expensive than private rooms and shared rooms. The plot also suggests that private rooms and shared rooms tend to have similar price ranges.





It can be observed that the median price for listings with a super strict cancellation policy is the highest, followed by the strict policy. Listings with flexible and moderate policies have lower median prices in comparison. The spread of prices is widest for the flexible policy, with some listings having very low prices while others have very high prices.

Analysis showed that rental **prices are significantly influenced by location, property types, reviews, and cancellation policy.** EDA was used to extract insights, patterns, and relationships among the dataset features. This approach can help companies target specific audiences and offer tailored recommendations based on customer preferences and behavior.

https://www.kaggle.com/datasets/rudymizrahi/airbnb-listings-in-major-us-cities-deloitte-ml
https://www.tidyverse.org/blog/2020/03/ggplot2-3-3-0/
https://www.canva.com/