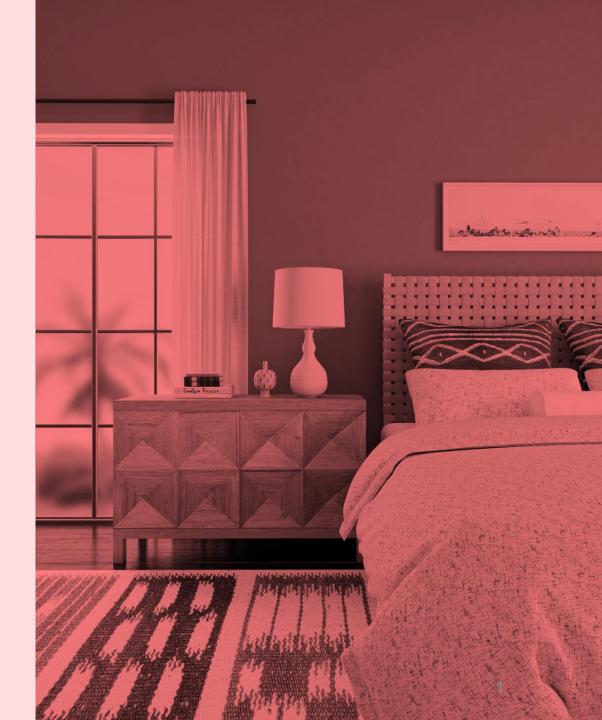


Discover the Best Airbnb
Listings: An Interactive Data
Analysis Tool



### **Airbnb**



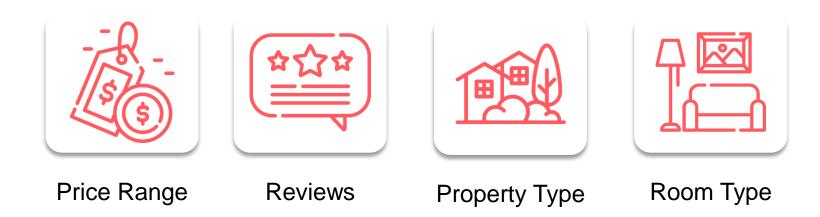
A web platform where users can rent out their space to host travelers to





# Challenge

Helping customers to have a more informed decision when choosing from Airbnb listings by providing a visual overview and a tool to filter based on customers needs including:





## **About the Data**

The observations in this data set represents some of the best Airbnb listings in 10 different cities.



200,000+

Observations



33

Variables



1,000+

**Null Values** 

## Variables of Interest



#### City

City the Listing is in. 10 different cities (String)



#### **Property Type**

More than 100 different properties (String)



#### Host is super host

Binary field to determine if the Host is a Superhost (Boolean)



#### Price

Listing price per night, reported in each country's currency (Number)



#### Neighborhood

Neighborhood the Listing is in. 660 different neighborhoods (String)



#### **Room Type**

4 different room types (String)



#### **Amenities**

Listed amenities provided by the host



#### **Review score rating**

Listing's overall rating out of 100. (Number)

# Data Cleaning & Preparing

#### **Pivot Data**

#### **New Fields**

 To calculate new information based on in-field data ("Amenities" & "Reviews")

# Calculated Field

#### Several calculated fields

- Price in dollar: Converting "Prices" from local to USD
- Negative sentiment: Interpreting the "review scores"
- Splitting data: Splitting "Amenities" values into multiple fields

# Missing Data

#### **Null Values**

Discovering, Deleting or Replacing







#### An overview of sample Airbnb data which is collected from:

Maven Analytics Data Playground (All prices converted to USD)

















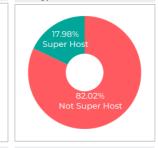
Sydney is the most expensive city by average price (US\$)

expensive city

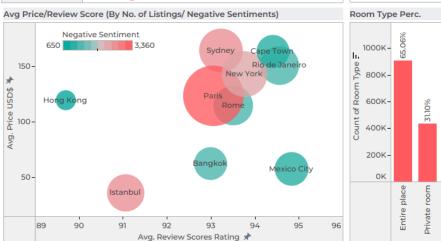
The most

# Geographic Locations by No. of Listings (Size) and Avg. Price Avg. Price .. 30.0 © 2022 Mapbox © OpenStreetMap Avg. prices offered by hosts





Host Type Perc.



#### **Paris**



Paris is the city with both highest no. of listings and highest no. of negative reviews.

#### **Super Hosts**



In all cities (except for Paris) avg. prices offered by Super Hosts are lower than other hosts.

#### Avg. Price of Room Types in Each City

Super Host

Cape Town

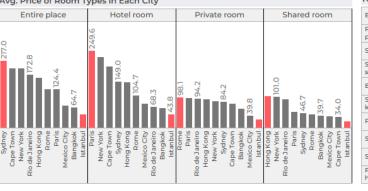
New York

Hong Kong

Bangkok Mexico City Istanbul

Rio de Janeiro

Not Super H..



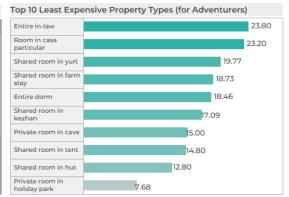
100

Price per night (USD\$) \*

120

140

160







# Why Sydney? High-end Sydney's Story Neighborhoods **Expensive Properties Amenities**

Why Sydney? High-end Expensive Amenities
Neighborhoods Properties

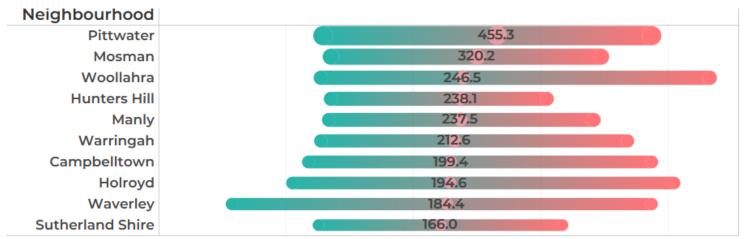
#### Average price per night (USD\$)



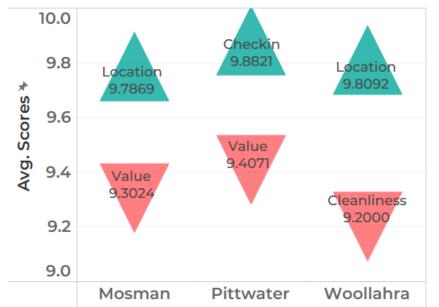
#### Sydney as the most expensive city:



#### Sydney's Top 10 Expensive Neighbourhoods Avg. Price Distribution



#### The Highest and Lowest Reviews for Top 3 Most Expensive Neighboorhoods in Sydney



#### Interpretation:

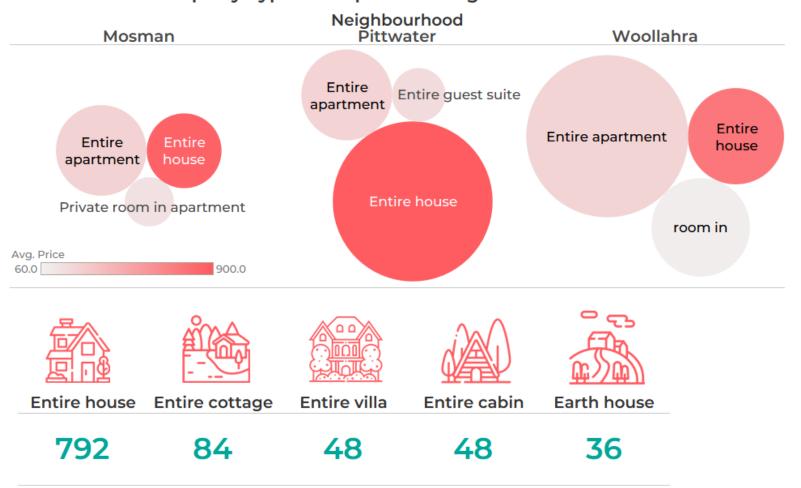
The top 3 most expensive neighbourhoods (by average price) scored highest on:

- Location, Check-in

and lowest on:

- Value, Cleanliness

#### Most Available Property Types in Expensive Neighborhoods



#### Amenities of High Priced Listings in The Top 3 Neighbourhoods

"TV with Netflix" "Breakfast" "Private entrance" "Iron" "Free parking on premises"

"Smoke alarm""Bathtub"



"Hair dryer" "Coffee maker" "Dryer"





"Ironing board" "Shampoo" "TV" "High chair" "Pets allowed"

"Lockbox""Heating""Washer" "Baking sheet"























High-end property types in the top 3 expensive neighbouhoods in Sydney mostly have "Garden or Backyard".

"Patio or balcony", "Shampoo" and "Hair dryer" are other most common amenities in these listings in Airbnb.

### Resources

Data

Airbnb listings & reviews > https://www.mavenanalytics.io/data-playground?page=2

**Pictures** 

https://content.r9cdn.net/rimg/dimg/43/4b/72c43e11-city-2258-17a3a42c3ab.jpg?crop=true&width=1366&height=768&xhint=1597&yhint=1522

https://blog.modsy.com/wp-content/uploads/2021/04/tr\_29432b84-4b1b-437e-9b22-33184408a39a\_729765\_13\_elsie\_userview\_5-scaled.jpg

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# **Credits**

**Maryam Aliakbari** 

**Farzin Valiloo** 

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# Thanks For Your Attention