


AIRBNB PRICE PREDICTION

Problem Statement

- The purpose of this project is to explore the data and predict the price of an Airbnb listing from features extracted from the listings.
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- A series of white lines of varying lengths and slopes are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

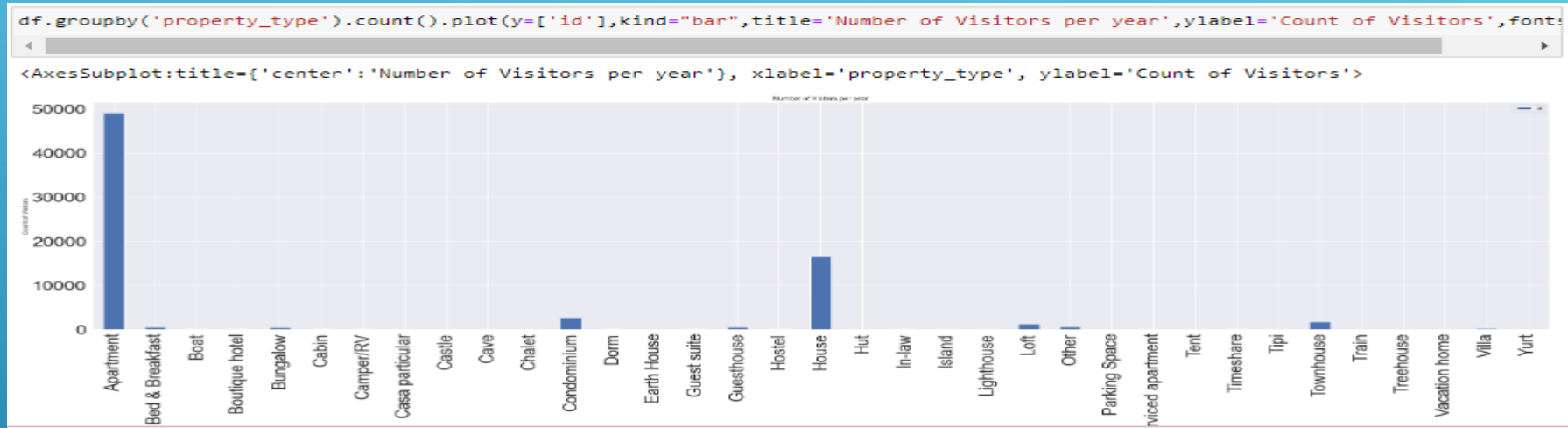
Data Source

- <https://www.kaggle.com/stevezhenghp/airbnb-price-prediction>
 - Number of columns : 29
 - Number of Rows : 74112
 - Dataset Size: 99MB
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- A series of several parallel white diagonal lines extending from the bottom right corner towards the center of the slide.

Data Types of the Dataset variables

```
df.dtypes
id                int64
log_price         float64
property_type     object
room_type         object
amenities         object
accommodates      int64
bathrooms         float64
bed_type          object
cancellation_policy object
cleaning_fee      bool
city              object
description        object
first_review       object
host_has_profile_pic object
host_identity_verified object
host_response_rate object
host_since         object
instant_bookable  object
last_review        object
latitude          float64
longitude          float64
name              object
neighbourhood      object
number_of_reviews  int64
review_scores_rating float64
thumbnail_url      object
zipcode           object
bedrooms          float64
beds              float64
dtype: object
```

Bar graph and pivot table to visualize the count of visitors for each property type




```
table = pd.pivot_table(df, values='id', columns=['property_type'], aggfunc='count', fill_value=0)
```

table

Apartment	Bed & Breakfast	Boat	Boutique hotel	Bungalow	Cabin	Camper/RV	Casa particular	Castle	Cave	...	Serviced apartment	Tent	Timeshare	Tipi	Townhouse	Train
49003	462	65	69	366	72	94	1	13	2	...	21	18	77	3	1692	2

Proposed Solution

- EDA will be performed through pyspark.
 - Conclude whether the price of the Airbnb listing is based on the ratings or not.
 - Check whether the price of the Airbnb listing is based on the property type and amenities.
 - Average rating of the Airbnb listing based on the number of hosts reviewed.
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- Three parallel white lines of varying lengths are positioned in the bottom right corner of the slide, slanted diagonally upwards from left to right.