Presentation Content: Walking in Paris Team

- 1 Objective:
- 2 | Identify the attributes that make Airbnb "Successful"
- 3 Find the best place to stay in Hawaii

4

- 1 Hypothesis:
- 2 Ho:
- 3 The number of properties rented out by a host has no impact on rating.

4

- 5 Null Hypothesis:
- 6 H1:
- None of the factors we are analyzing (neighborhood, number of listings per host, room type, price, keywords in description, how long the host has been hosting, and certain amenities) have an impact on the overall rating.

8

- 1 Potential:
- 2 Use Google Places API to see if there is a relationship between "Major attraction", beach, and high bookings

Cleanning the data:

```
In [ ]:
              1
                 List of the variables on the dataset. Comprise 106 columns, 23,746 rows.
              2
                 The column named "id" is similar than the index.
              3
              4
              5
                     listing_url
              6
                     scrape_id
                                    --> Values not required
              7
                     last scraped --> Values not required
              8
              9
                     summary
             10
                     space
             11
                     description
                     experiences_offered
             12
                                              --> Values not required
             13
                     neighborhood_overview
             14
                     notes
             15
                     transit
             16
                     access
             17
                     interaction
             18
                     house_rules
             19
                     thumbnail_url
                                       ---> Column in blank
                     medium url
                                       ---> Column in blank
             20
                     picture url
                                       ---> Values not required
             21
                                       ---> Column in blank
             22
                     xl_picture_url
             23
                     host id
                                       --> Values not required
             24
                     host_url
             25
                     host_name
                     host since
             26
             27
                     host location
             28
                     host_about
             29
                     host_response_time
                     host_response_rate
             30
             31
                     host acceptance rate
                                              ---> Column in blank
                     host_is_superhost
             32
                     host_thumbnail url
             33
                                            --> Values not required
                     host picture url
                                            --> Values not required
             34
             35
                     host neighbourhood
                     host listings count
             36
                                            --> Data duplicate on column host total listin
             37
                     host_total_listings_count
                     host_verifications
             38
                                               ---> Column in blank
             39
                     host has profile pic
                     host identity verified
             40
             41
                     street
             42
                     neighbourhood
             43
                     neighbourhood cleansed
                     neighbourhood_group_cleansed
             44
             45
                     city
             46
                     state
             47
                     zipcode
             48
                     market
             49
                     smart_location
                                       --> Values not required
             50
                                        --> Values not required
                     country_code
             51
                     country
             52
                     latitude
             53
                     longitude
             54
                     is location exact --> Values not required
             55
                     property_type
             56
                     room_type
```

```
57
         accommodates
 58
         bathrooms
         bedrooms
 59
 60
         beds
 61
         bed type
                     --> Values not required
 62
         amenities
 63
         square feet
 64
         price
 65
         weekly_price
 66
         monthly_price
 67
         security deposit
         cleaning_fee
 68
 69
         guests included
 70
         extra_people
 71
         minimum_nights
 72
         maximum nights
 73
         minimum minimum nights
 74
         maximum_minimum_nights
 75
         minimum maximum nights
         maximum maximum nights
 76
 77
         minimum_nights_avg_ntm
 78
         maximum nights avg ntm
         calendar updated
 79
                             --> Values not required
 80
         has availability
                            --> Values not required
 81
         availability_30
                            --> Values not required
         availability 60
                            --> Values not required
 82
 83
         availability_90
                            --> Values not required
         availability_365
                            --> Values not required
 84
                                 --> Values not required
 85
         calendar last scraped
         number_of_reviews
 86
 87
         number_of_reviews_ltm
 88
         first review
 89
         last_review
 90
         review scores rating
 91
         review scores accuracy
 92
         review scores cleanliness
 93
         review scores checkin
 94
         review scores communication
 95
         review scores location
 96
         review scores value
 97
         requires license
                            --> Values not required
 98
         license
                            --> Values not required
 99
         jurisdiction names --> Values not required
         instant bookable
                            --> Values not required
100
         is business travel ready
                                     --> Values not required
101
102
         cancellation policy
103
         require guest profile picture --> Values not required
         require guest phone verification --> Values not required
104
105
         calculated host listings count
         calculated host listings count entire homes
106
         calculated host listings count private rooms
107
108
         calculated_host_listings_count_shared_rooms
         reviews per month
109
110
111
112
113
```

114

```
In [ ]: |
```

```
Cleaning raw data (airbnb) to delete the column with not values, columns
 2
    1.- The following columns has been drop from the analysis:
 3
        "thumbnail url",
 4
        "picture_url",
        "medium_url",
 5
 6
        "xl picture url",
 7
        "host_url",
 8
        "host_thumbnail_url",
 9
        "host picture url",
        "scrape_id",
10
        "host_listings_count", # There is a host_total_listings_count that i
11
        "host_acceptance_rate", # NaN
12
        "calendar_last_scraped",
13
        "bed_type",
14
15
        "last scraped",
        "calendar_updated",
16
17
        "has_availability",
        "availability_30",
18
        "availability_60"
19
20
        "availability_90",
21
        "availability_365",
        "license"
22
23
24
    2.- Drop the row on the columns "number of reviews" equal to zero or bla
        'review_scores_rating',
25
        'review_scores_accuracy',
26
27
        'review scores cleanliness',
        'review_scores_checkin',
28
29
        'review_scores_communication',
        'review_scores_location',
30
        'review scores value'
31
32
```

Analysis: Identify the variable that has more impact in the best value and best price. Variable to be evaluate: neighborhood, type of place,

```
1 Meg:
```

- 2 Evaluate the relationship between "age of property" and review_scores_rating
- 3 Evaluate the relationship between "price" and review scores rating
- 4 Evaluate the relationship between "how many properties someone has" and review scores rating
- 5 Evaluate the relationship between "number of bedrooms" and review_scores_rating
- 1 Armon:
- 2 Evaluate the relationship between "neighborhoods" and review_scores_rating

- 1 Lance:
- 2 Evaluate the relationship between "Island" and review_scores_rating
- 3 Evaluate the relationship between "Type of place" and review_scores_rating
- 1 Edith:
- 2 Build Logistic Regression
- 3 Consolidate Power Point
- 4 Consolidate Notebook
- 5 Write bullet point for cleansing data
- 6
- 1 Scott:
- 2 Audit the code and Technical review of the code
- 3 check the code is running and make any necessary adjustment
- 1 Edith and Meg prepare the final presentation with the input from the team
- 1 Team:
- 2 Write conclusions and recommendations
- 3 Each member write observationes from their own analysis

Type *Markdown* and LaTeX: α^2