Data Methodology

Airbnb Dataset Analysis

PPT 1

- We conducted a thorough analysis of the Airbnb Data. The process included:
  - Collection of data in the form of excel file and importing data in Python
  - Get an overview of data and columns

```
AB_NYC_2019_Cleaned=pd.read_csv(r"D:\Drive\Upgrad\Story Telling Case Study\AB_NYC_2019 (1).csv")
```

```
AB_NYC_2019_Cleaned.head()
```

ood	latitude	longitude	room_type	price	minimum_nights	number_of_reviews	last_review	reviews_per_month	calculated_host_listings_count	availability_365
gton	40.64749	-73.97237	Private room	149	1	9	19-10-2018	0.21	6	365
own	40.75362	-73.98377	Entire home/apt	225	1	45	21-05-2019	0.38	2	355
rlem	40.80902	-73.94190	Private room	150	3	0	NaN	NaN	1	365
Hill	40.68514	-73.95976	Entire home/apt	89	1	270	05-07-2019	4.64	1	194
rlem	40.79851	-73.94399	Entire home/apt	80	10	9	19-11-2018	0.10	1	0

- Cleaning the data and handling missing values using python and its libraries.
- Setting up the correct datatypes for the provided entries.
- Saving the cleaned and corrected dataset for further use

```
AB_NYC_2019_Cleaned.isnull().sum()
```

```
id                                 0
name                              16
host_id                            0
host_name                         21
neighbourhood_group                0
neighbourhood                      0
latitude                           0
longitude                          0
room_type                          0
price                              0
minimum_nights                     0
number_of_reviews                  0
last_review                    10052
reviews_per_month              10052
calculated_host_listings_count     0
availability_365                   0
dtype: int64
```
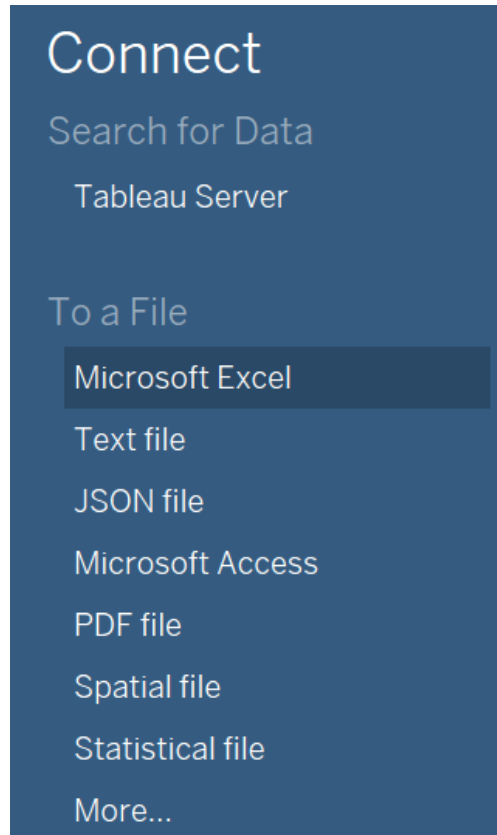
```
AB_NYC_2019_Cleaned['last_review'] = pd.to_datetime(AB_NYC_2019_Cleaned['last_review'])
```

```
AB_NYC_2019_Cleaned=AB_NYC_2019_Cleaned.dropna()
```

```
AB_NYC_2019_Cleaned.to_csv(r'D:\Drive\Upgrad\Story Telling Case Study\AB_NYC_2019_Cleaned.csv', index=False)
```

- Importing the data in Tableau to create charts and visuals

- Preparing visuals and charts to carry on EDA.

- Presenting the observations in the form of a report for the understanding of stackholders

PPT 2

- We conducted a thorough analysis of the Airbnb Data. The process included:
  - Data was first acquired through our customer database
  - Separate parameters were analysed based on customer preferences and convinience
  - Trends and observations gathered were reported in the ppt to provide actionable insights