**Summary Of the Project**

Airbnb is a global community of Hosts and Travelers since 2008 which helps to find vacation rentals, cabins, beach houses, unique homes, and experiences around the world made possible by hosts on it. Our team mainly focused on understanding the behaviors of the customers and hosts. We try to identify the factors that influence customers to choose a specific listing and what are the motivations of the hosts to list their properties on Airbnb. We also try to find out how Airbnb can improve the customer experience and increase the number of bookings.

Overall, the goal as a data analyst is to use data to understand the behaviors of customers and hosts so that the company can improve its services.

We have finished our project in several steps. At first, we have to investigate the dataset and its features. We did a descriptive analysis of the numerical features of Airbnb. From there we have slightly information about our dataset.

Then we performed the data cleaning where we handled null and missing data values and removed the column with more number missing and null values. In the price column, there are lots of outliers present, we handled it through the Inter Quartile Range (IQR) method. There are also other columns with lots of outliers, but we didn’t remove them because they could remove the dataset's essence.

After the data cleaning, we went through the data analysis by visualization. We find the relation, pattern, and trend in the features columns and find the correlation through the heatmap.

We tried hard to get the answer to the questions we have asked to the dataset and found the top-performing host and nonperforming host and neighborhood groups and their rooms types, and the reason behind why some of the room types and their pricing strategy.

After that, we talked about the challenges and obstacles faced during the competition of the project.

We did conclude the entire project and future work related to it…

Contribution Roles:

1. Ashokanand Chaudhary

1. Defining the Problem statement

2. Data Cleaning

3. Descriptive Analysis

4. Data Visualization (i.e donut plot and co-ordinates plot)

5. Data Analysis

6. Conclusion

2. Alok Bhoi

1. Defining the Problem statement

2. Data Cleaning

3. Defined more question

4. Added more visualization Graph (i.e pie plot and better coloring of the graphs)

5. Explored more data

6. Conclusion

3. Madhusudan Mahapatra

1. Defining the Problem statement

2. Data Cleaning

3. Reason behind the relationship of the host with other features

5. Defined more questions

6. Conclusion

4. Akshay Kambli

1. Defined problem statement and objectives of the projects

2. Handled outliers

3. EDA

4. Visualization

5. Conclusion

**Github** Link:https://github.com/maxashoka3/Machine-learning/blob/master/EDA.ipynb

**Drive** Link:https://drive.google.com/drive/folders/1qpWrSy8DBBAwqFjpg8x8ahiMt4Q5StB6?usp=sharing