**Airbnb Bookings Analysis**

**Instructions:**

i) Please fill in all the required information.

ii) Avoid grammatical errors.

|  |
| --- |
| **Team Member’s Name, Email and Contribution:** |
| Name:- Vikas Panchal  Email id :- [panchalvicky501@gmail.com](mailto:panchalvicky501@gmail.com)   1. Find a project topic 2. Matches dataset 3. Find most listing words in our dataset 4. Find highest listing neighbourhood. 5. count of Neighbourhood. 6. Find Area vs Number of reviews 7. Find Room types and their relation 8. Find total no. nights spend as per location 9. Create a ppt with my team member   Name:- Naveen Kumar Batta  Email id:- [naveenbatta4587@gmail.com](mailto:naveenbatta4587@gmail.com)   1. Find project resources 2. Neighbourhood group Frequency. 3. Total count of each room types as per listing. 4. Find Minimum no’s of nights stayed and preferred rooms 5. Find Price vs Number of Reviews 6. Dataset observation 7. Create a ppt with my team member 8. Find a problem statement |
| **Please paste the GitHub Repo link.** |
| GitHub Link:- <https://github.com/vickypanchal501/airbnb-booking-analysis> |
| **Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)** |

|  |
| --- |
| **Problem statement:**  Our biggest problem as hosts is with guests who don’t READ the listing. We make it very clear - as in, repeating it several times in the listing - that these are two private ROOMS in the boss’ home. She lives their full time. And yet we still have people show up thinking they booked the entire house for $80/night.  The other biggest problem is the last minute “Do you mind if we add one more person” requests. Again, our listing is VERY clear that there are three beds, with a total guest potential of 6 people. That’s all. And yet, at least once a month, the day before the guests are scheduled to arrive, we get an email asking if it’s okay if they bring one, two, or even three more people! The boss does have a blow-up mattress, and she’s willing to add one more person sometimes, but not two or three. We had one person book the rooms once, and 6 adults and 3 children showed up! She accommodated them but sent AirBnb a message about this and advising the company that in future, if someone pulled this crap, she’d be sending them away. Airbnb agreed with her that she would be perfectly within her rights to do so.  We need to explore and analyze the data to discover key understandings (not limited to these) such as:   * What can we learn about different hosts and areas? * What can we learn from predictions? (ex: locations, prices, reviews) * Which hosts are the busiest and why? * Is there any noticeable difference of traffic among different areas and what could be the reason for it?   **Approaches:**  Build Community and Loyalty Through Targeted Outreach  Airbnb has a difficult balance to strike; they need to reach both customers looking to use their service to book accommodations and hosts looking to advertise their accommodations on the platform.  As such, the company has found ways to target these markets in specific, strategic ways.  For hosts, Airbnb uses community/civic outreach to share how community members can use them to make a second source of income. They also use content marketing tactics to share ways hosts can make the most of their partnership with Airbnb.  **Conclusion:**  From the entire analysis, it can be concluded that,   * Most visitors don’t prefer shared rooms, they tend to visit private room or entire home. * Manhattan and Brooklyn are the two distinguished, expensive & posh areas of NY * Some properties are having Minimum Nights to stay is more than 365 Days which can be favorable among Students, Low-Income Employees & Immigrants. * Though location of property has high relation on deciding its price, but a property in popular location doesn’t mean it will stay occupied in most of the time. * Performing a regression on this dataset may result in high error rate, as the features given in this dataset, are of very poor quality in deciding the property valuation. We can see this by looking at correlation heatmap. We would need more features like bedrooms, bathroom, property age (guessed it’d be a very important one), tax rate applicable on land, room extra amenities, distance to nearest hospital, stores or schools. These features might have a high relation with price. * Time series analysis is possible to make prediction related to occupancy rate at particular time of a month, or particular time of a season. * It’d be a better if we had avg guest ratings of a property, that would be beneficial in understanding the property more and could also be a factor in deciding price. A low rated property tends to lower their price. |