Project: Analysis of Airbnb Data Using Power BI

Airbnb, headquartered in San Francisco, California, operates a popular online marketplace specializing in short-term accommodations and experiences. Established in 2008 by founders Brian Chesky, Nathan Blecharczyk, and Joe Gebbia, the name Airbnb is derived from its original moniker, AirBedandBreakfast.com. *iVision* analytics firm has been provided with datasets related to *Airbnb* listings and reviewer scores worldwide. The objective is to gain a deeper understanding of *Airbnb's* operations and draw meaningful insights from the data. As a *BI Analyst* at *iVision*, your role is to create informative reports by conducting a thorough analysis of the data using powerful tools like PowerBI.

Data Description:

- The necessary data and data dictionaries are available as CSV files.

- The *Reviews (Reviews.csv)* dataset contains information about reviews left for Airbnb listings, while the *Listings (Listings.csv)* dataset contains all relevant details about the listed stays. Comprehensive descriptions of each column can be found in their respective data dictionary files *(Listings_data_dictionary.csv and Reviews_data_dictionary.csv)*

Software/Tools:

- Power BI

Business Objective:

- The primary objective is to analyze Airbnb data to reveal insights into user experiences and satisfaction levels with the numerous listed stays, all accomplished using Power BI.

Project Goals:

- **Assessing District Location Scores:** The aim is to pinpoint the location in the district with the least favorable location scores.
- **Examining Host Response Time Impact**: The goal is to delve into the relationship between host response times and the overall ratings of Airbnb listings providing valuable insights.
- **Visualizing Airbnb Listing Prices**: The objective is to create visual representations of Airbnb listing prices across different cities and summarize any noteworthy trends or variations.

- **Analyzing Composite Scores:** The task involves creating a composite score that integrates check-in experience and host communication for various districts with subsequent analysis and insights.
- **Calculating Listing Age and Host Tenure**: This objective entails computing the age of Airbnb listings and identifying hosts who have accumulated more than ten years of hosting expertise.

- **Property Type Price Analysis:** The task involves the creation of a visual tree map that displays average prices for various room and property types with specific attention given to the property type associated with the highest prices for entire places.
- **Crafting a Comprehensive City Insights Report:** This objective entails the creation of a comprehensive report that presents listing prices, guest ratings, and visitor trends for multiple cities, with a particular focus on assessing changes in visitor trends in 2020 in contrast to earlier years.

Artifacts to be generated (For Learners):

- Power BI File (.pbix)
- Presentation (Slides) summarizing the project
    - Learner needs to present this to Faculty (Viva-Voice)
    - Presentation time: 10 Mins
- Artifacts generated needs to be submitted in vLearn on or before deadline
- Create a zip file of Power BI File and Presentation file
    - Zip file name: <LearnerName>_ABADS_<Batch>.zip
    - Eg: KartikMudaliar_ABADS_B10.zip

Grading Criteria (For Faculty & Learners):

Learners will be graded on below mentioned parameters(20 points for each):

1. Relevance and approach of Analysis
2. Quality of Output
3. Overall presentation
4. Response to Questions
5. Creativity & Innovation

Total Points: 100