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| e<PROJECT NAME> Executive Summary |
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# Abstract

A 100 to 150 word executive summary of your findings. Do this last.

# Introduction

This report provides a brief overview of the data analysis conducted from the period 14 August 2023 to 8 October 2023. The analysis encompasses various tasks aimed at gaining insights from the chosen Sydney Airbnb dataset. The objectives of this analysis are stated as below:

1. Data exploration
2. Pricing trend analysis
3. Data visualization

The results from these tasks will be presented in this report, illuminating the major patterns, correlations, and trends found in the Airbnb dataset. Additionally, it will make suggestions based on the trends and insights seen to assist with decision-making and additional research. The software offers a versatile toolkit to handle .CSV files format, conduct keyword searches on the listings, and create informative graphs for the given properties retrieved from the files. The core features and funtionalities of this software is to highlighting important data all based in Sydney and provides a fully data driven decision making for marketing and analysis. This software grips datasets for a particular date, allowing real estate professionals and even individuals to access and explore valuable insights. Users can easily navigate rental trends and perform targeted searches, including cleanliness and assessments in order to have the deeper insight of property market.

# **Analysis 1 <Monthly Rental Trend>**

Here, we will analyze the accommodation trends in the Sydney Airbnb dataset, focusing on monthly rental trends during the 12-month period from December 2018 to December 2019.

Results:

* Prices have exhibited fluctuations based on rental property demand, peaking during periods of high demand, and decreasing during times of lower demand.
* The analysis reveals that each month exhibited a relatively consistent percentage of Airbnb rentals. However, February stood out with the lowest number of bookings compared to the other months. This lower booking activity during February may be attributed to various factors.

# **Analysis 2 <Property Type Trend>** In this analysis, we have examined property type trends within the dataset in order to understand the popularity of different accomdation types.

Results:

* The dataset reveals that ‘Home’ & ‘Apartments’ are the most frequently listed property types. This indicates that these are high in demand and private accomodation is much more preferable for most of the people living there.
* ‘Private rooms’ has also shown its huge presence in the data set, While ‘shared rooms’ are relatively less common. These insights can guide estate agents and property owners in tailoring their listings and assist them align with the preferences of airbnb users.

# **Analysis 3 <Seasonal Price Variation Trend>**

In this analysis, we will delve into all the seasonal price variations among all the airbnb listings in Sydney,

Resutls:

* During peak hours and peak holiday vacation days, prices tends to increase overtime, hosts expect highe demand and changing their rates accordingly and there are off-peak discounts in winter and shoulder months, hosts offering affordable rental options.
* The fluctuation is all because of the huge play of supply and demand in different times of the year and this also tends to change in weekends and long weekends. Property owners usually do conisder offering long-term rentals as per the dataset, to maintain and occupancy and consistent incomes.

# **Analysis 4 <Cleanliness Impact>**

In this specific analysis, we have noticed that more than half of the property tenants and hosts giving utmost impotance to the cleanliness, as many airbnb users would first conisder the cleanliness before renting and the most convenient way of checking would be reviews and as per the data retrieved from the reviews file, it is concluded that it is one of the essential matters to be conisdered the most.

Results:

* Properties with higher cleanliness ratings consistently received more bookings and due to high in demand, commanded higher rental prices. Cleanliness emerged as a critical factor and ultimately infleuncing user choices.
* Positive renters and guests most oftenly emphasized on the cleanliness when giving reviews. This also boosts the integirty of the hosts as well as of the property. By investing in regular cleaning and maintanence, can result in having higher occupancy rates.