## **Report on London Housing Dataset Analysis**

**Student Name: Durga Prasad Rao Mannem** 

Student ID: 23072455

**Dataset Link:** <a href="https://www.kaggle.com/datasets/oktayrdeki/houses-in-london">https://www.kaggle.com/datasets/oktayrdeki/houses-in-london</a>

GitHub Link: <a href="https://github.com/Durga-DS1566/Final-Visualisation-Report.git">https://github.com/Durga-DS1566/Final-Visualisation-Report.git</a>

## Introduction

The London housing dataset consists of detailed information about properties, including their price, size, neighbourhood, property type, and additional features such as garden, garage, and balcony availability. This report analyses the dataset through various tables and plots to uncover trends and insights that help understand the housing market in London. The analysis focuses on key numerical and categorical variables, linking them to market behaviours and neighbourhood characteristics.

Neighbourhood	Apartment	Detached House	Semi-Detached
Camden	30	35	41
Chelsea	24	33	37
Greenwich	31	35	31
Islington	27	36	34
Kensington	38	28	48
Marylebone	38	47	28
Notting Hill	28	38	30
Shoreditch	35	29	25
Soho	27	32	37
Westminster	28	36	34

**Table 1: Property Data by View Type** 

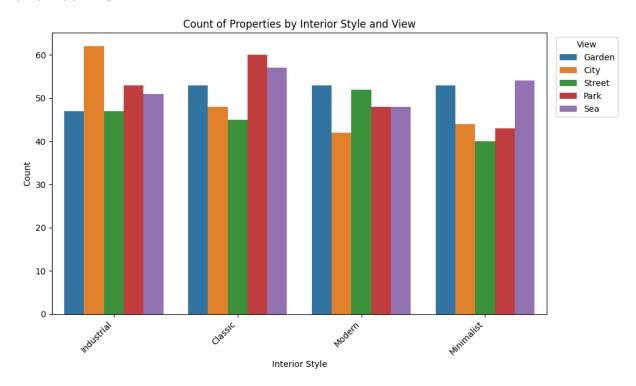
The Table 1 provides a breakdown of properties based on their view type, including total properties, average price, and total price. Properties with a sea view command the highest total price at £394.48 million, highlighting their premium appeal. City views follow closely, reflecting their desirability among urban buyers. Park and street views exhibit slightly lower average prices, appealing to affordability-focused buyers. The table demonstrates how views significantly influence property pricing and demand in the London housing market.

View	<b>Total Properties</b>	Average Price (£)	Total Price (£)
City	196	1912561.4	374862034
Garden	206	1830933.8	377172362
Park	204	1765154.37	360091492
Sea	210	1878492.5	394483426
Street	184	1816293.28	334197964

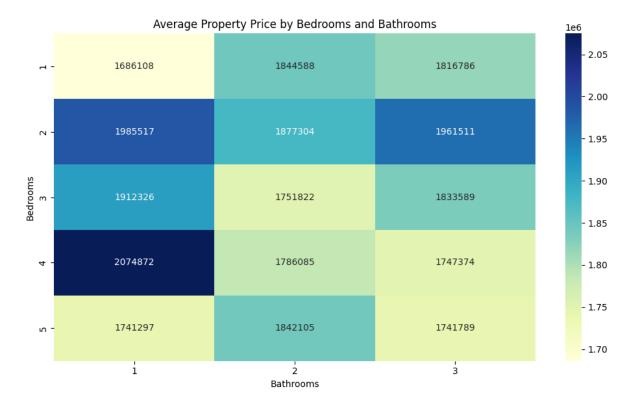
**Table 2: Total and Average Price by View Type** 

The Table 2 provides insights into the total and average price of properties segmented by view type. Properties with a sea view maintain the highest total price, emphasizing their premium nature and high demand. City views, while slightly lower in total price, showcase their strong appeal for urban buyers. Garden views, despite a slightly lower average price, have a high total value due to their popularity. Park and street views cater to buyers seeking affordability, as reflected in their average

price levels. This table highlights how view types influence both total market value and individual property pricing.



The first plot highlights the relationship between interior style and views. For instance, industrial-style properties with city or garden views are highly sought after, as reflected in their high count. Modern styles also exhibit balanced popularity across all view types, appealing to a broad range of buyers.

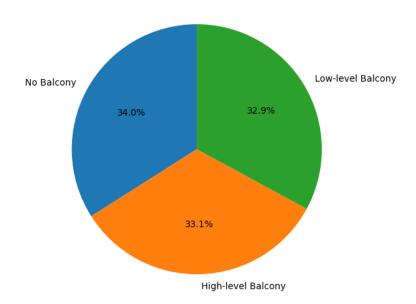


The second uploaded plot provides a heatmap that visualizes the relationship between bedrooms, bathrooms, and average prices. Properties with three or four bedrooms and two bathrooms tend to command the highest prices, indicating these configurations are highly desirable among families.



The third uploaded plot illustrates average property prices across different building age groups. Interestingly, older properties (51-100 years) show the highest average prices, reflecting their prime locations and potential historic value. In contrast, newer properties tend to be more affordable, catering to buyers seeking modern designs at reasonable prices.

Proportion of Properties with Balconies



The fourth uploaded plot is a pie chart showing the distribution of properties with different types of balconies. High-level balconies appear slightly more common than low-level ones, suggesting a preference for properties offering premium views. Properties without balconies constitute a significant proportion, underscoring that balconies remain a luxury feature in many areas.

## Conclusion

The London housing market showcases remarkable diversity in terms of price, size, and features based on neighbourhood and property type. The tables and plots collectively reveal how factors like building age, interior style, and balcony availability influence buyer preferences and property values. Key takeaways include the prominence of premium neighborhoods in commanding higher prices, the value added by features like gardens and balconies, and the role of property configuration in determining desirability. This analysis offers a comprehensive view of the housing market, leveraging the uploaded data to uncover trends and inform buyers, sellers, and policymakers.