Project Development Phase

Model Performance Test

Date	23/06/25
Team ID	LTVIP2025TMID50773
Project Name	Visualizing housing market trends: an analysis of sale prices and features
Maximum Marks	

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Screenshot / Values
1.	Data Rendered	The dataset used contains housing sales data with fields such as Sale Price, Number of Bedrooms, Bathrooms, Flat Area, Lot Area, Basement Area, House Age, Condition, Renovation Status, Zipcode Group, and others. The data was provided in .csv format and includes derived and transformed columns suitable for advanced analytics and visualizations in Tableau.
2.	Data Preprocessing	Before importing the data into Tableau, preprocessing was done using Python (Pandas). The following steps were performed: • Removed null or missing values. • Renamed columns for clarity (e.g., "No of Bedrooms" → "Bedrooms"). • Created calculated fields like "TotalAreaSqft" (sum of flat, lot, and basement areas). • Generated dummy variables for house conditions and renovation status. • Transformed categorical fields to improve Tableau usability. The final cleaned dataset was stored and imported into Tableau for visualization.

3.	Utilization of Filters	Multiple filters were implemented in Tableau to improve interactivity and user exploration. These include: • Number of Bedrooms • Number of Bathrooms • House Condition • Renovation Status (Yes/No) • Zipcode Group • Sale Price Bins These filters allow users to drill down and compare trends across different property types and regions.
4	Calculated Fields Used	Several calculated fields were created in Tableau to enhance analysis and interactivity: • TotalAreaSqft → [FlatAreaSqft] + [LotAreaSqft] + [BasementAreaSqft] • SalePriceBin → Binning Sale Price into ₹100,000 intervals • Condition_Excellent, Condition_Good, etc. → Dummy fields (0/1) • Ever_Renovated_Yes → Dummy field to identify renovated homes • AvgPrice → AVG([SalePrice]) for grouped insights • HouseAge → Difference between year built and sale date if available (or derived field if pre-calculated) These fields enable comparisons across pricing, condition, and space utilization.

5	Dashboard	 Sheet 1 Sale.. Sheet 2 Bedrooms Avg. Sale.. 500K 0K 0 2 4 6 8 10 Sheet 3 Avg. .. 0.4M 0K 5K 10K 15K Avg. TotalAreaSqft Sheet 4 Avg. .. 0.4M 0 200 400 600 800 EverRenovated Sheet 5 ZipcodeGroup1 Avg. SalePrice 400K 200K 0K 00000 00001 Sheet 6 Avg. SalePrice 400K 200K 0K 1K 10K 0K 5K 100 Condit.. Condit.. Condit.. Condit. Sheet 7 Avg. SalePr.. 400K 200K 0K 0 100 200 300 400 500 600 700 800 900 EverRenovated

6	Story Design