

Project Development Phase Model Performance Test

Date	23/06/25
Team ID	LTVIP2025TMID60702
Project Name	Visualizing housing market trends: an analysis of sale prices and features
Maximum Marks	

Model Performance Testing:

Project teams 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, LotArea,BasementArea,House Age, Condition, Renovation Status, Zip code 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: <ul style="list-style-type: none">• Removed null or missing values.• Renamed columns for clarity (e.g.,“No of Bedrooms”→ “Bedrooms”).• Created calculated fields like“Total AreaSqft”(sum offlat,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	<p>Multiple filters were implemented in Tableau to improve interactivity and user exploration. These include:</p> <ul style="list-style-type: none"> • Number of Bedrooms • Number of Bathrooms • House Condition • Renovation Status(Yes/No) • Zip code Group • Sale Price Bins <p>These filters allow users to drilldown and compare trends across different property types and regions.</p>
4	Calculated Fields Used	<p>Several calculated fields were created in Tableau to enhance analysis and interactivity:</p> <ul style="list-style-type: none"> • Total Area Sqft→[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 • Avg Price→AVG([SalePrice])for grouped insights • House Age→Difference between year built and sale date if available (order derived field if pre-calculated) <p>These fields enable comparisons across pricing, condition, and space utilization.</p>

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Dashboard





