

Data Visualization & Preprocessing Documentation

1. Dataset Used

Housing Dataset used for analyzing house sale prices, house age, renovation history, and house features such as bedrooms, bathrooms, floors, and basement area.

2. Data Preprocessing Steps Performed

- 1 Loaded dataset into analysis environment (Python / Tableau).
- 2 Handled missing values by removing null rows or replacing with appropriate values.
- 3 Converted data types (example: dates, numeric sale price, renovation year).
- 4 Removed duplicate records to maintain data consistency.
- 5 Created calculated columns such as Years Since Renovation and House Age.
- 6 Performed binning on Sale Price for better visualization grouping.
- 7 Checked and handled outliers in Sale Price and Area columns.
- 8 Standardized column names and cleaned unwanted characters.

3. Business Questions with Visualization

- 1 How does house age impact sale price?
- 2 Does renovation increase house sale price?
- 3 How do bedrooms, bathrooms, and floors influence house value?
- 4 What is the distribution of sale price ranges?
- 5 How renovation history impacts house demand and sales count?

4. Key Insights

- 1 Renovated houses generally show better sale price distribution.
- 2 Houses with more bedrooms and bathrooms show higher value trends.
- 3 Most sales occur between mid price bins (350K – 500K).
- 4 Recent renovations positively influence property demand.