

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	27 June 2025
Team ID	LTVIP2025TMID49598
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub-Requirement (Story / Sub-Task)
FR-01	Data Collection and Import	System must allow importing housing dataset from Excel/CSV.
FR-02	Data Cleaning and Transformation	Must calculate house age and years since renovation; handle missing or invalid data.
FR-03	Visualization of Key Metrics	Dashboard must display KPIs such as average price, total houses, and basement area.
FR-04	Sales Analysis by Renovation	Create a histogram that groups total sales based on years since renovation.
FR-05	Feature-based House Age Distribution	Display grouped bar charts showing house age versus bathrooms, bedrooms, and floors.
FR-06	Renovation Status Visualization	Show proportion of renovated vs. non-renovated houses using pie charts.
FR-07	Dashboard Interactivity	Enable users to filter dashboard by house age, renovation status, bedrooms, bathrooms, and floors.
FR-08	Reporting and Export	Allow export of visualizations in PDF or image format for reporting and presentations.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description (Non-Functional Requirements)
NFR-01	Usability	Dashboard must be intuitive and easy to navigate for non-technical stakeholders.
NFR-02	Performance	Dashboard should load within 5 seconds with a dataset of up to 10,000 records.
NFR-03	Scalability	The system should be able to accommodate additional features or larger datasets in the future.
NFR-04	Accessibility	Visuals must be readable on standard desktop and tablet screens.
NFR-05	Maintainability	The solution must be easily updatable if new scenarios or charts are added.
NFR-06	Security (if hosted online)	Only authorized users should be able to access or modify the dashboard if published to a secure server.
NFR-07	Compatibility	Dashboard should be compatible with Tableau Public and Tableau Desktop versions used by the team.