

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	
Team ID	
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-1	Dashboard Access	User accesses interactive Tableau dashboard via web browser.
FR-2	Geographic Price Map	Display neighborhood avg sale prices on interactive color-coded map.
FR-3	Data Filtering	Filter by price range, bedrooms, bathrooms, neighborhood, and sale year.
FR-4	Feature Correlation Plot	Scatter plot of GrLivArea vs SalePrice; box plots by quality rating.
FR-5	Market Trend Analysis	Line chart of year-over-year avg sale price with seasonal patterns.
FR-6	Heat Map Visualization	Avg prices segmented by number of bathrooms and garage capacity.
FR-7	KPI Summary Panel	Show total properties, avg sale price, min price, max price, avg area.
FR-8	Export / Sharing	Share dashboard via Tableau Public link; allow screenshot/PDF export.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Dashboard should be intuitive and easy to navigate for all users.
NFR-2	Security	Data access should be secure and protected against unauthorized use.
NFR-3	Reliability	The dashboard should load and function consistently without failure.
NFR-4	Performance	Visualizations should load within 2 seconds of filter application.
NFR-5	Availability	The dashboard should be accessible 24/7 via Tableau Public with minimal downtime.
NFR-6	Scalability	The system should handle increasing data volume and users efficiently.