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

Date	23 February 2026
Team ID	LTVIP2026TMIDS37725
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	4 Marks

Solution Requirements of the Housing Market Visualization:

The proposed solution aims to develop a web-based system that analyzes and visualizes housing market data using interactive dashboards. The system combines Flask for backend integration and Tableau for advanced data visualization to help users understand housing price trends and market patterns easily.

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Data Upload & Management	Upload housing dataset (CSV/Excel) Data validation and cleaning Store dataset in system/database
FR-4	Data Visualization	Display Tableau dashboards Show charts, graphs, and maps Visualize price trends and comparisons
FR-5	Dashboard Interaction	Filter data by location Filter by price range Select property type and year
FR- 6	Web Interface Navigation	Home page access Dashboard page navigation Responsive webpage design
FR- 7	Data Analysis Insights	Show market trends Compare housing prices Provide visual summaries
FR-8	User Access Management	Secure login/logout Authorized dashboard access

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The system should provide an easy-to-use interface with simple navigation and interactive dashboards understandable to non-technical users.
NFR-2	**Security**	User data and datasets must be protected using authentication and secure access control.
NFR-3	**Reliability**	The system should consistently display correct visualizations without data loss or crashes.
NFR-4	**Performance**	Dashboards and webpages should load quickly and respond smoothly to user filters and interactions.
NFR-5	**Availability**	T he system should be accessible anytime through a web browser with minimal downtime.
NFR-6	**Scalability**	The system should support increasing datasets and multiple users without performance degradation.