**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 31 January 2025 |
| Team ID | LTVIP2025TMID20843 |
| 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.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | Data Upload | Upload housing dataset (CSV format).  Validate structure of dataset. |
| FR-2 | Data Cleaning & Transformation | Handle missing values in Tableau Prep.  Calculate Age of House and Years Since Renovation.  Generate new metrics like total basement area. |
| FR-3 | KPI Visualization | Display Count of Records, Average Sale Price, and Total Area.  Format KPIs for clarity (bold, centered, large text). |
| FR-4 | Dashboard Interactivity | Filter views by Renovation Status, Bathroom/Bedroom/Floor Count.  Highlight changes dynamically based on selected filters. |
| FR-5 | Story Navigation | Enable step-by-step storytelling in Tableau Public. |
| FR-6 | Output & Sharing | Allow dashboards to be shared or downloaded |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Dashboard should be intuitive and accessible to non-technical users. |
| NFR-2 | **Security** | Ensure secure access to dashboard (limited sharing if private). |
| NFR-3 | **Reliability** | Visuals must render consistently without errors across devices. |
| NFR-4 | **Performance** | Dashboards must load quickly, even with larger datasets. |
| NFR-5 | **Availability** | Dashboards should be publicly accessible or shared via Tableau links. |
| NFR-6 | **Scalability** | Should support future expansion (e.g., more KPIs, charts, datasets). |