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

| Date          | 17/06/25   |
|---------------|--|
| Team ID       | LTVIP2025TMID48268   |
|               | Visualizing housing market trends: an analysis of sale prices and features |
| Maximum Marks | 4 Marks  |

## **Functional Requirements:**

Following are the functional requirements of the proposed solution.

|        | 1                              |   |
|--------|--------------------------------|---|
| FR No. | Functional Requirement (Epic)  | Sub Requirement (Story /<br>Sub-Task)   |
| FR-1   | Data Import                    | Import data from CSV Live database integration (MySQL)                              |
| FR-2   | Data Cleaning & Transformation | Clean missing values Add calculated fields like Year, Lockdown                      |
| FR-3   | Data Visualization             | Create Tableau worksheets<br>Build multiple dashboards                              |
| FR-4   | User Interaction               | Filter by region, year View comparative bar charts Analyze pre/post lockdown trends |
| FR-5   | User Access                    | Role-based view (Analyst,<br>Policy Maker, Developer)<br>Download/export insights   |
| FR-6   | Feedback Loop                  | Stakeholders review and request changes Implement revision cycle                    |

## **Non-functional Requirements:**

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

| FR No. | Non-Functional<br>Requirement | Description  |
|--------|-------------------------------|--|
| NFR-1  | Usability                     | Intuitive Tableau<br>dashboard with clear<br>filters and legends |
| NFR-2  | Security                      | Role-based access and secure database connection                 |
| NFR-3  | Reliability                   | System handles unexpected data formats and ensures accuracy      |
| NFR-4  | Performance                   | Fast load times and responsiveness of visualizations             |
| NFR-5  | Availability                  | Dashboard is accessible across devices with minimal downtime     |
| NFR-6  | Scalability                   | Supports increasing data volume and new features                 |