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

| Date | 17/06/25 |
|---------------|--|
| Team ID | LTVIP2025TMID47597 |
| Project Name | 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.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / 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 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, Policy Maker, Developer) 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 Requirement | Description |
|--------|-------------------------------|--|
| NFR-1 | Usability | Intuitive Tableau dashboard with clear 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 |