

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

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| Date | 21 June 2025 |
| Team ID | LTVIP2025TMID48542 |
| 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 | Data Upload | Upload CSV/Excel of housing market data |
| FR-2 | Data Cleaning | Remove missing or inconsistent values |
| FR-3 | Feature Engineering | Add derived metrics (e.g., price/sq. ft) |
| FR-4 | Interactive Visualization | Filter data by region, price range, features |
| FR-5 | Trend Analysis | Time-based trends in housing prices |
| FR-6 | Data Export | Export selected visual insights to image/PDF |

Non-Functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | The dashboard must be intuitive and simple to use for non-technical users. |
| NFR-2 | Security | Local-only access; data not shared externally; no login needed. |
| NFR-3 | Reliability | Should handle file errors and missing data gracefully. |
| NFR-4 | Performance | Should render visualizations for medium datasets (~10,000 records) quickly. |

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| NFR-5 | Availability | Works offline on local Tableau Desktop software. |
| NFR-6 | Scalability | Suitable for scaling up to slightly larger datasets if needed in future. |