

Project Design Phase-II

Solution Requirements (Functional s Non-functional)

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|---------------|---|
| Date | 20 February 2025 |
| Team ID | LTVIP2026TMIDS35233 |
| Project Name | Visualizing Housing Market Trends: 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 | User Registration | Registration through Form (Email & Password) |
| | | Registration through Gmail |
| | | Registration through LinkedIn |
| FR-2 | User Confirmation | Confirmation via Email |
| | | Confirmation via OTP |
| | | Account activation after verification |
| FR-3 | User Login & Authentication | Login using Email & Password |
| | | Login using Gmail |
| | | Forgot Password option |
| | | Logout functionality |
| FR-4 | Dashboard Access | Access dashboard after login |
| | | View housing price trends |
| | | View renovation impact analysis |
| | | View sales distribution charts |
| FR-5 | Data Filtering | Filter by bedrooms |
| | | Filter by location |
| | | Filter by renovation status |
| | | Filter by price range |
| FR-6 | Data Visualization | Interactive Tableau dashboard embedding |
| | | Real-time chart updates |
| FR-7 | Admin Management | Upload housing dataset |
| | | Manage registered users |
| | | Update/Delete dataset |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|---------------|-----------------------------------|--|
| NFR-1 | Usability | Users can easily view and filter housing dashboard. |
| NFR-2 | Security | Login system protects user accounts and data. |
| NFR-3 | Reliability | Dashboard shows correct housing price data without errors. |
| NFR-4 | Performance | Tableau dashboard loads fast inside Flask app. |
| NFR-5 | Availability | Web application is accessible anytime online |
| NFR-6 | Scalability | System supports more housing data and users in future. |