

The following are the **functional** and **non-functional requirements** based on the user needs and system goals.

◆ **Functional Requirements:**

- User registration and login (with email verification)
- Complaint submission form (with details like issue type, description, location, attachments)
- Complaint status tracking (submitted, in progress, resolved, rejected)
- Admin dashboard (assign, monitor, manage complaints)
- Agent dashboard (view assigned complaints, update status)
- Internal chat between user and assigned agent
- Feedback form for users after resolution
- Notification system (email or SMS)

◆ **Non-Functional Requirements:**

- High performance (low-latency UI and fast API responses)
- Secure authentication (JWT token-based login)
- Role-based access control (user, agent, admin)
- Data encryption for sensitive fields
- Responsive UI for mobile and desktop
- Scalable database and backend API architecture

Data Flow Diagram

Here is a simplified **Data Flow Diagram** representing how data flows between users, agents, and the backend system.

[User]

| --Register/Login--> [Frontend Interface]

| --Submit Complaint--> |

| <--View Complaint Status--|

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[Backend Server-Express.js]

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