

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

Date	23 February 2026
Team ID	LTVIP2026TMIDS90304
Project Name	ONLINE COMPLAINT REGISTRATION AND MANAGEMENT SYSTEM
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 Email & Password form
		Duplicate email validation
FR-2	User Confirmation	Email verification link confirmation
		OTP verification via email
		Resend verification option
FR-3	User Login & Authentication	Login via email & password
		Logout functionality
FR-4	User Profile Management	View profile details
FR-5	Dashboard Management	View user dashboard
		View recent activities
FR-6	Search & Browse	Search functionality with filters
FR-7	Order / Service Management	Status tracking
FR-8	Customer Support	Chat with support executive
FR-9	Admin Management	Admin login
		User management (activate/deactivate)
		Role management

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
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NFR-1	Usability	The system shall provide an intuitive UI with minimal learning curve. All major features must be accessible within 3 clicks. Mobile responsive design required.
NFR-2	Security	The system shall implement HTTPS, JWT-based authentication, password encryption (bcrypt), OAuth2 for social login, protection against SQL Injection, XSS, CSRF, and rate limiting for APIs.
NFR-3	Reliability	The system shall maintain data consistency and ensure zero data loss. System shall handle unexpected failures with proper error handling and logging.
NFR-4	Performance	The system shall support response time under 2 seconds for 95% of requests under normal load. Page load time shall be under 3 seconds.
NFR-5	Availability	The system shall maintain 99.5% uptime excluding scheduled maintenance. Deployed on cloud infrastructure with redundancy.
NFR-6	Scalability	The system shall support horizontal scaling and handle increasing user traffic without performance degradation. Cloud auto-scaling support recommended.
NFR-7	Maintainability	The system shall follow modular architecture, documented APIs, and version control practices to allow easy updates and enhancements.
NFR-8	Compatibility	The application shall support latest versions of Chrome, Firefox, Edge, Safari, and Android/iOS mobile devices.
NFR-9	Data Integrity	Database transactions must ensure ACID compliance. Regular backups shall be scheduled daily.
NFR-10	Compliance	The system shall comply with relevant data protection regulations (e.g., GDPR if applicable).