

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

Date	31 January 2025
Team ID	LTVIP2026TMIDS81521
Project Name	SmartDoc Appointment 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 form (Name, Email, Password)
		Registration through Gmail (OAuth)
		Doctor registration with specialization & experience
FR-2	User Authentication	Login using email & password
		Email confirmation after registration
		Password reset via email
FR-3	Profile Management	Update personal details
		Upload profile picture
		Manage doctor specialization & availability
FR-4	Doctor Search & View	Search doctors by specialization
		Filter doctors by availability
		View doctor profile details
FR-5	Appointment Management	Book appointment
		Cancel appointment
		Reschedule appointment
		View appointment history
FR-6	Doctor Appointment Handling	View appointment requests
		Approve / Reject appointment
		Manage time slots
FR-7	Admin Management	Approve doctor registrations
		Manage users (block / remove)
		Monitor all appointments
FR-8	Notifications	Email confirmation after booking

		Appointment reminder notifications
FR-9	Dashboard & Reports	Patient dashboard view
		Doctor dashboard view
		Admin dashboard analytics

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system must provide a simple, user-friendly interface accessible on mobile and desktop devices.
NFR-2	Security	User passwords must be encrypted. Authentication must use secure JWT tokens. Role-based access control must be implemented.
NFR-3	Reliability	The system must ensure accurate appointment booking without duplication or data loss.
NFR-4	Performance	The system should respond to user requests within 2–3 seconds under normal load conditions.
NFR-5	Availability	The system should be available 24/7 with minimal downtime.
NFR-6	Scalability	The system should handle increasing users and appointments efficiently by scaling database and server resources.
NFR-7	Maintainability	The system should follow modular architecture (MERN) for easy updates and debugging.
NFR-8	Compatibility	The system should work on major browsers (Chrome, Edge, Firefox) and mobile devices.