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

Date	31 January 2025
Team ID	LTVIP2026TMIDS88461
Project Name	DocSpot — Seamless Appointment Booking for Health
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 Form
		Registration through Gmail (OAuth)
		Registration through Facebook (OAuth)
		Registration through LinkedIn (OAuth)
		Password strength validation
		Duplicate email prevention
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP (SMS)
		Email resend functionality
FR-3	User Authentication & Login	Login using Email & Password
		Remember Me functionality
		Account lock after 5 failed attempts
		JWT token generation
FR-4	Password Management	Password reset via email
		Reset link expiry validation
		Change password in profile
FR-5	User Profile Management	View and edit profile details
		Upload profile picture
		Delete account (soft delete)
FR-6	Doctor Registration	Doctor registration with credentials
		Upload medical license documents
		Add specialization & experience
FR-7	Doctor Approval	Admin approval/rejection workflow
		Doctor notification on status change
FR-8	Doctor Search & Discovery	Search by specialization
		Filter by ratings and experience
FR-9	Appointment Booking	Select doctor & available slot
		Prevent double booking
		Validate booking time
FR-10	Appointment Management	View appointments
		Reschedule appointment
		Cancel appointment
FR-11	Notifications	Email confirmation
		SMS reminders
		Push notifications
FR-12	Admin Dashboard	View users, doctors, appointments
		Generate reports & analytics

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	System must be easy to use and complete booking within 2 minutes
NFR-2	Security	Password hashing (bcrypt), JWT authentication, HTTPS encryption
NFR-3	Reliability	99.5% uptime and automatic backup every 6 hours
NFR-4	Performance	API response time < 2 seconds for 95% of requests
NFR-5	Availability	System accessible 24/7 with minimal downtime
NFR-6	Scalability	Support 1000+ concurrent users
NFR-7	Maintainability	Modular code with proper documentation
NFR-8	Compatibility	Works on Chrome, Firefox, Edge, Safari
NFR-9	Data Integrity	Prevent duplicate bookings and ensure valid data
NFR-10	Compliance	GDPR and healthcare data protection compliance