

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	23-06-2025
Team ID	LTVIP2025TMID52550
Project Name	DocSpot: Seamless Appointment Booking for Health
Maximum Marks	4 Marks

Functional and Non-Functional Requirements Documentation

1.Functional Requirements:

Functional Requirements describe what the system should do — the specific features, services, and tasks the application must perform to meet user needs.

- **User Authentication (FR-1):** Allows users to sign up, log in, and reset passwords securely using JWT tokens.
- **Appointment Booking (FR-2):** Users can book, reschedule, or cancel appointments with doctors.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Authentication	Sign up, Login, Password Reset
FR-2	Appointment Booking	Search doctors by specialty, location, and availability Book, reschedule, and cancel appointments
FR-3	Calendar & Schedule Management	Freelancers apply to jobs View upcoming and past appointments
FR-4	Notifications & Reminders	Automated SMS/email reminders for upcoming appointments

2.Non-Functional Requirements:

Non-Functional Requirements define how the system performs — these include quality attributes such as performance, security, usability, and scalability.

- **Security (NFR-2):** Uses JWT for authentication and bcrypt for password encryption.
- **Usability (NFR-1):** UI built with React, MUI, and Bootstrap for a smooth, responsive user experience.

NFR No.	Non-Functional Requirement Description
NFR-1	Usability: The platform should provide a simple, clean UI for all users, including patients and healthcare providers.
NFR-2	Security: All patient and appointment data must be encrypted. Implement role-based access and secure authentication.
NFR-3	Reliability: Appointment booking, notifications, and telehealth services must always be available and dependable.
NFR-4	Performance: Pages and booking actions should be loaded within 2 seconds; reminders and notifications should be timely.
NFR-5	Availability: The system should ensure 99.9% uptime with minimal downtime.
NFR-6	Scalability: Support a growing number of users, providers, and concurrent bookings without degradation.