Project Design Phase-II

Solution Requirements for "Book A Doc"

Field	Details
Date	10 April 2025
Team ID	SWTID1743701170
Project Name	Book A Doc

Functional Requirements

Requirement ID	Description
FR-001	Allow Patients to register and log in with email and password.
FR-002	Enable Patients to search for available doctors, book appointments, and manage their schedules.
FR-003	Permit Doctors to log in, view appointments, update profiles, and check earnings via a dashboard.
FR-004	Allow Admins to log in, manage doctor profiles, approve/reject appointments, and oversee operations.
FR-005	Integrate Stripe for secure online payment processing during booking confirmation.
FR-006	Provide email notifications to users (Patients, Doctors, Admins) for bookings and payments.

Non-functional Requirements

Requirement ID	Description
NFR-001	Performance: The system must handle 100 concurrent users with a response time of less than 2 seconds per request.
NFR-002	Scalability: The application should support up to 10,000 users with the ability to scale using cloud infrastructure (e.g., AWS).
NFR-003	Security: All data transmissions must use HTTPS, with JWT tokens encrypted using AES-256 and role-based access control.

Requirement ID	Description
NFR-004	Usability: The UI must be responsive across devices (desktop, tablet, mobile) with a load time of less than 3 seconds.
NFR-005	Reliability: The system must achieve 99.9% uptime, with automatic failover for database and server issues.
NFR-006	Maintainability: The codebase should follow MERN best practices, with modular structure and comprehensive documentation.