

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	23-06-2025
Team ID	LTVIP2025TMID58987
Project Name	DocSpot: Seamless Appointment Booking for Health
Maximum Marks	4 Marks

Technical Architecture:

DocSpot is designed with a scalable 3-tier architecture consisting of:

- **Presentation Layer (Frontend):** User-friendly interface for patients and healthcare providers to book and manage appointments.
- **Business Logic Layer (Backend):** Handles appointment scheduling, notifications, user management, and telehealth integration.
- **Data Storage Layer:** Secure storage of user profiles, appointment records, and healthcare provider details.

Table 1: Components & Technologies

S. No	Component	Description	Technology
1	User Interface	Web and mobile-friendly interface for patients and providers	HTML, CSS, JavaScript / React.js
2	Application Logic-1	Appointment booking, calendar management, reminders	Node.js, Express.js
3	Application Logic-2	Admin panel, provider management, reporting	React.js, Node.js
4	Database	Stores user profiles, appointments, provider data	MongoDB

Table 2: Application Characteristics

S. No	Characteristics	Description	Technology
5	Open-Source Frameworks	Frontend frameworks	React.js, Node.js, Bootstrap, Tailwind CSS
6	Scalable Architecture	3-tier architecture with RESTful APIs	Microservices

References:

[React.js Documentation](#)

[Node js Best Practice](#)

[JSON Web Server Referance](#)

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>