Project Design Phase-II Technology Stack (Architecture & Stack)

Date	23-06-2025		
Team ID	LTVIP2025TMID58986		
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,	MongoDB
		appointments,	
		provider data	

Table 2: Application Characteristics

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

References:

React.js Documentation

Node js Best Practice JSON

Web Server Referance

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecturediagrams-2d20c9fda90d