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

Date	18-02-2026
Team ID	LTVIP2026TMIDS82466
Project Name	DocSpot
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.

The platform integrates with third-party APIs for notifications (SMS/email) and telehealth services to enhance usability.

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 etc.
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 datas	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