

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

Date	20 February 2025
Team ID	LTVIP2026TMIDS35287
Project Name	Docspot - Seamless Appointment Booking System
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

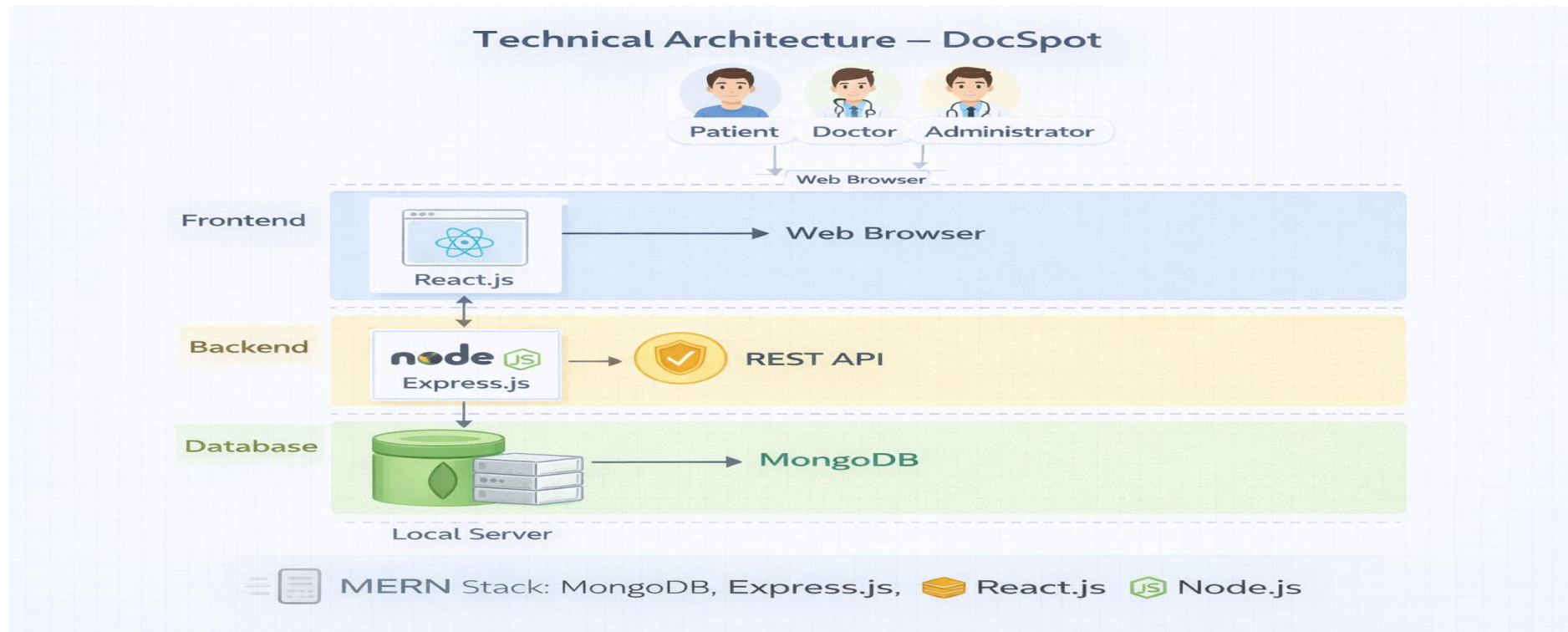


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web interface for patients, doctors, and admin	React.js, HTML, CSS, JavaScript
2.	Application Logic-1	Backend REST API handling requests	Node.js, Express.js
3.	Application Logic-2	Authentication & Authorization	JWT (JSON Web Token)
4.	Database	Stores user, doctor, and appointment data	MongoDB
5.	File Storage	Stores uploaded medical documents	Local Filesystem
6.	Infrastructure	Application deployed locally during development	Local Server (Node.js runtime)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Uses open-source frontend & backend frameworks	React.js, Node.js, Express.js
2.	Security Implementations	Password hashing and token-based authentication	bcrypt, JWT
3.	Scalable Architecture	Three-tier architecture (Frontend, Backend, Database)	MERN Stack
4.	Availability	Accessible via web browser	Web-based deployment
5.	Performance	Fast API communication and efficient database queries	REST APIs, MongoDB