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

Date	20 February 2026
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
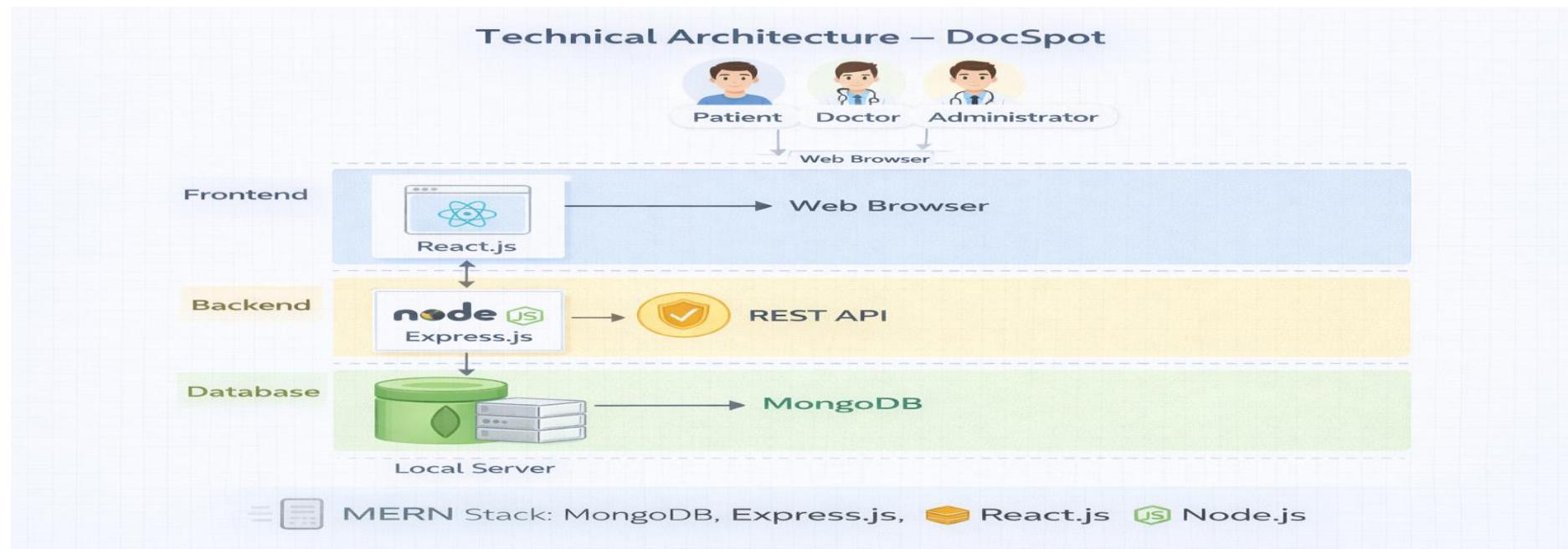
Table-1 : Components & Technologies:

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
4.	File Storage	Stores uploaded medical documents	Filesystem
5.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
6.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
7.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
8.	Infrastructure (Server / Cloud)	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

S.No	Characteristics	Description	Technology
4.	Availability	Accessible via web browser	Web-based deployment
5.	Performance	Fast API communication and efficient database queries	REST APIs, MongoDB