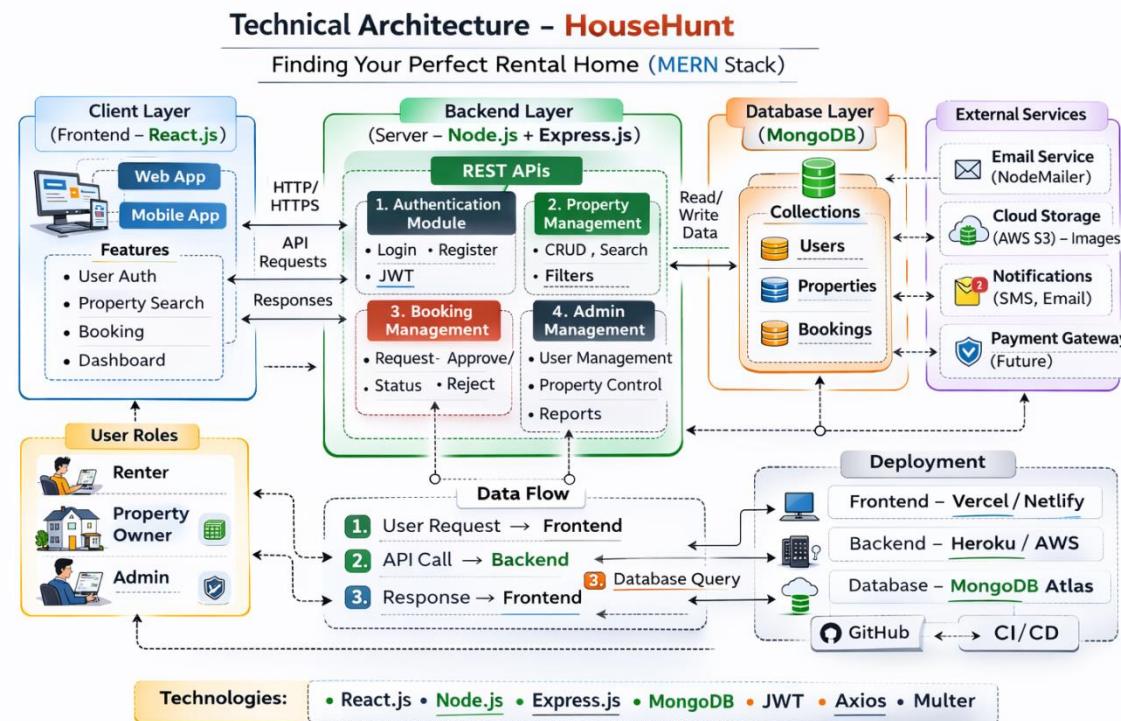


## Technology Stack

Date	31 January 2026
Team ID	LTVIP2026TMIDS38973
Project Name	HouseHunt: Finding Your Perfect Rental Home
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	Frontend framework to build responsive user views, dashboards, pages	React.js
2.	API Development	Backend framework to create RESTful APIs and route handling	Express.js
3.	Server Platform	Server runtime that executes backend code	Node.js
4.	Database	NoSQL database to store users, properties, and bookings	MongoDB
5.	Authentication	Token-based security for login sessions and protected routes	JSON Web Tokens (JWT)
6.	UI Libraries	UI component libraries for clean layout and interactive design	Bootstrap, Material UI, AntD
7.	HTTP Client	For frontend to backend API communication	Axios
8.	File Upload	Handles property image uploads and storage	Multer
9.	Middleware	Enables secure cross-origin requests and request parsing	CORS, Body-Parser
10.	Security	Hashes passwords to secure user credentials	bcryptjs

**Table-2: Application Characteristics:**

S.No	Characteristics	Description & Technology
1.	Performance	The system responds quickly with minimal delay in property search (< 2 seconds) and navigation throughout the app
2.	Scalability	Handles increasing numbers of users and properties without performance impact due to MERN stack and modular design
3.	Security	Implements secure login, data encryption, hashed passwords, role-based access control (admin, owner, renter)
4.	Usability	The interface is intuitive, responsive, and easy to use on both desktop and mobile devices

5.	Availability	The application is designed to be highly available, reliable, and accessible 24/7
6.	Maintainability	Clean modular code with proper directory structure for easier updates, debugging, and feature enhancements
7.	Compatibility	Works across modern web browsers (Chrome, Firefox, Edge, Safari) and devices
8.	Reliability	Ensures consistent data updates and safe storage, with proper error handling and fail-safes