

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

Date	24 Feb 2026
Team ID	LTVIP2026TMIDS80333
Project Name	Freelancerfinder : Discovering Opporutunities , Unlocking Potential
Maximum Marks	4 Marks

☐ **Technical Architecture:**

SB Works is designed with a scalable 3-tier architecture consisting of:

1. Presentation Layer (Frontend):

A user-friendly interface for freelancers, clients, and admins to register, post or bid on projects, and communicate effectively.

2. Business Logic Layer (Backend):

Handles user authentication, project management, bidding logic, profile handling, chat integration, and admin controls.

3. Data Storage Layer:

Stores user profiles, project listings, bids, messages, reviews, and transaction details securely.

The platform also integrates with third-party tools for notifications and uses JWT for secure user authentication.

☐ **Table-1: Components & Technologies**

S.N o	Component	Description	Technology
1	User Interface	Web interface for freelancers, clients, and admin	HTML, CSS, JavaScript, React.js
2	Application Logic-1	User registration/login, profile management, project posting/bidding	Node.js, Express.js

3	Application Logic-2	Admin panel, project approval, user monitoring, reports	React.js, Node.js
4	Chat & Notifications	Enables communication and real-time updates	Socket.IO / REST APIs / Axios
5	Database	Stores users, projects, chats, bids, feedback	MongoDB

□ **Table-2: Application Characteristics**

S.N o	Characteristics	Description	Technology
1	Open-Source Frameworks	Built with modern open-source JS libraries	React.js, Node.js, Express.js
2	Scalable Architecture	3-tier architecture with RESTful APIs	Microservices, REST APIs
3	Responsive Design	Supports web and mobile browsing	Bootstrap, Material UI, Tailwind CSS
4	Secure Authentication	Role-based access, token-based login	JWT (JSON Web Tokens)
5	Real-time Features	Real-time messaging and dynamic updates	Socket.IO / WebSockets
6	Modular Codebase	Separate frontend and backend modules for maintainability	Client-Server Architecture