

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

Date	26.06.2025
Team ID	SWUID20250170870
Project Name	Freelancing Application Mern
Maximum Marks	4 Marks

Technical Architecture:

The SB Works platform uses a scalable client-server architecture built with the MERN stack (MongoDB, Express.js, React.js, Node.js). The system has three main layers:

- Frontend: A responsive React.js interface where users can register, post projects, bid, chat, and manage their profiles in real time.
- Backend: A Node.js and Express.js server that handles application logic, user authentication with JWT, role-based access, and secure API communication.
- Database: MongoDB stores all user data, projects, bids, messages, and transactions securely and flexibly.

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	Interactive web interface for clients, freelancers, and admins	HTML, CSS, JavaScript / React JS etc.
2	Application Logic-1	Project bidding, submission, and collaboration features.	Node.js, Express.js
3	Application Logic-2	Admin dashboard, project monitoring, and user notifications	Node.js, React.js
4	Database	Stores user profiles, projects, applications and chat history	MongoDB Atlas

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Based on MERN stack	React.js, Node.js
2	Scalable Architecture	3Client-server model with RESTful APIs	Microservices-friendly

References:

- [React.js Official Documentation](#)
- [Node.js Best Practices](#)
- [Express.js Documentation](#)
- [MongoDB Documentation](#)