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

Date	26-05-2025
Team ID	SWUID20240000985
Project Name	Freelancing (SB Works)
Maximum Marks	4 Marks

Technical Architecture: The **Freelancing (SB Works)** application follows a scalable **3-tier architecture** that includes:

1. **Presentation Layer (Frontend)** – Developed using React.js for responsive UI and role-based navigation.
2. **Application Layer (Backend)** – Built using Express.js and Node.js to handle job posting, messaging, and APIs.
3. **Data Layer (Database)** – Powered by MongoDB to store user info, jobs, applications, and chat history.

The platform is designed to support real-time messaging (Socket.io), RESTful APIs, and future integration with payment gateways like Stripe.

Table 1: Components & Technologies

S.No	Component	Description	Technology
1	User Interface	Web interface for freelancers and clients	HTML, CSS, JavaScript, **React.js**
2	Application Logic – 1	Job posting, dashboard, proposals, chat, filters	**Node.js**, **Express.js**
3	Application Logic – 2	Admin panel, project status updates, reporting	React.js, Node.js
4	Database	Stores users, projects, messages, and application data	**MongoDB**

Table 2: Application Characteristics

S.No	Characteristics	Description	Technology
5	Open-Source Frameworks	UI & server built on modern open frameworks	React.js, Node.js, Bootstrap, Tailwind CSS
6	Scalable Architecture	3-tier architecture with modular REST APIs	Microservices-ready backend, Socket.io support