Full Stack Development with MERN – Project Documentation

# 1. Introduction

Project Title: SB Works – Freelancing Application

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# 2. Project Overview

Purpose:

* SB Works is a modern freelancing platform that connects clients with skilled freelancers through an intuitive interface. It streamlines project posting, bidding, collaboration, and delivery.

Features:

* Project posting and bidding system
* Secure profile management for freelancers and clients
* Integrated chat system for communication
* Admin panel for platform moderation
* Project submission and revision flow
* Real-time updates and notifications

# 3. Architecture

Frontend: Built using React.js with UI enhancements via Bootstrap and Material UI. Axios is used for API communication.

Backend: Node.js with Express.js framework to manage RESTful APIs and server logic.

Database: MongoDB for storing user details, project listings, chat messages, submissions, and reviews.

# 4. Setup Instructions

Prerequisites:

* Node.js
* MongoDB
* Git

Installation:

git clone [your\_repo\_url]  
cd sbworks  
cd client && npm install  
cd ../server && npm install

Create a .env file with MongoDB URI and secret keys

# 5. Folder Structure

Client:

* /src/components – React components
* /src/pages – Page-level views
* /src/services – Axios API calls
* /src/assets – Images and styling files

Server:

* /routes – API routes
* /controllers – Request logic
* /models – Mongoose schemas
* /middleware – Authentication & authorization

# 6. Running the Application

Frontend:

cd client  
npm start

Backend:

cd server  
npm start

# 7. API Documentation

To be added: Include endpoints like POST /login, GET /projects, POST /submit, etc.

# 8. Authentication

* Token-based authentication using JWT
* Secure login for freelancers, clients, and admins
* Authorization middleware restricts access to protected routes

# 9. User Interface

* Homepage with featured projects
* Freelancer and client dashboards
* Chat system UI
* Project bidding and submission interface

(\*Add screenshots here\*)

# 10. Testing

Manual testing for core flows

Tools used: Postman (API testing), Chrome DevTools

# 11. Screenshots or Demo

(\*Add screenshots or link to hosted demo or walkthrough video\*)

# 12. Known Issues

* Real-time chat may lag on slow networks
* UI bugs on small screen devices

# 13. Future Enhancements

* Integrate payment gateway (e.g., Stripe/PayPal)
* Add rating and review filters
* Enable real-time video calls for interviews