# Project Documentation

## 1. Introduction

• Project Title: store manager keep track of inventory  
• Team ID: NM2025TMID37258

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## 2. Project Overview

• Purpose: SB Works connects clients and freelancers through project postings, bidding, and real-time communication.  
  
• Features:  
 – Project posting and bidding  
 – Secure chat system  
 – Feedback and review system  
 – Admin control panel

## 3. Architecture

• Frontend: React.js with Bootstrap and Material UI  
• Backend: Node.js and Express.js managing server logic and API endpoints  
• Database: MongoDB stores user data, project information, applications, and chat messages

## 4. Setup Instructions

• Prerequisites:  
 – Node.js  
 – MongoDB  
 – Git  
 – React.js  
 – Express.js  
 – Mongoose  
 – Visual Studio Code  
  
• Installation Steps:  
 # Clone the repository: git clone <repo-url>  
 # Install client dependencies: cd client && npm install  
 # Install server dependencies: cd ../server && npm install

## 5. Folder Structure

SB-Works/  
 ├── client/ # React frontend  
 │ └── components/  
 │ └── pages/  
 ├── server/ # Node.js backend  
 ├── routes/  
 ├── models/  
 ├── controllers/

## 6. Running the Application

• Frontend:  
 cd client  
 npm start  
  
• Backend:  
 cd server  
 npm start  
  
• Access: Visit http://localhost:3000

## 7. API Documentation

• User:  
 – /api/user/register  
 – /api/user/login  
  
• Projects:  
 – /api/projects/create  
 – /api/projects/:id  
  
• Applications:  
 – /api/apply  
  
• Chats:  
 – /api/chat/send  
 – /api/chat/:userId

## 8. Authentication

• JWT-based authentication for secure login  
• Middleware protects private routes

## 9. User Interface

• Landing Page  
• Freelancer Dashboard  
• Admin Panel  
• Project Details Page

## 10. Testing

• Manual testing during milestones  
• Tools: Postman, Chrome Dehttps://drive.google.com/drive/folders/ Tools

## 11. Demo link

https://drive.google.com/drive/folders/1-0LSMEAv9Ul1cTIMQsCCF9qm\_OdD4Y5E?usp=sharing

## 12. Known Issues

* Limited error handling in frontend forms
* Chat system lacks file sharing support
* No email verification during user registration
* Admin panel features are minimal
* Mobile responsiveness needs improvement

## 13. Future Enhancements

* File Sharing in Chat: Allow users to share documents, images, and code files within the chat system.
* Mobile Application: Develop Android and iOS apps for freelancers and clients.
* AI-based Matching: Use machine learning to recommend freelancers for projects based on skills and past performance.
* Payment Gateway Integration: Add secure payment handling directly within the platform.
* Advanced Admin Panel: Include detailed analytics, fraud detection, and user activity monitoring.
* Notification System: Real-time email and push notifications for project updates and messages.
* Improved Security: Add two-factor authentication and stronger password policies.