

Project Documentation

Full Stack Development with MERN

1. Introduction

- **Project Title:** Freelancing Platform
- **Team Leader:** Medara Akshitha
- **Team Members:**
 - Lingamgunta Arjun
 - Lingala Pujitha
 - Lakkimsetty Nandini

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 https://github.com/YOUR_USERNAME/SB-Works.git
cd SB-Works
```

```
# 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 Dev Tools

11. Screenshots or Demo

- **Demo Video:** <https://drive.google.com/file/d/1erdcudF8D00QyHEf0aMKioTAqWa2AjdB/view?usp=sharing>

12. Known Issues

- Minor bugs in chat feature
- Admin page styling incomplete

13. Future Enhancements

- Add payment gateway integration
- Implement ratings and reviews
- Enable real-time messaging with Socket.io