

Full Stack Development Project Report

FreelanceFinder – SB Works

1. Introduction

FreelanceFinder (SB Works) is a full-stack web application designed to bridge the gap between freelancers and clients. The platform allows clients to post projects, while freelancers can bid on these projects, submit work, communicate, and receive feedback – all within a secure and streamlined environment.

2. Objectives

- Build an intuitive freelancing platform with role-based access
 - Allow clients to post projects and review freelancer proposals
 - Enable freelancers to submit proposals, work, and communicate
 - Facilitate secure messaging and efficient feedback
 - Provide admin-level control for managing platform integrity
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3. Target Users

1. **Freelancers** – Can bid, communicate, and submit work
 2. **Clients** – Can post projects, choose freelancers, and provide feedback
 3. **Admins** – Monitor user activity, resolve conflicts, and maintain system policies
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4. Scenario-Based Use Case

Sarah signs up as a freelancer and applies for a logo design posted by "Sugar Rush" bakery. After being selected, she collaborates with the client using the platform's integrated chat. Once complete, she submits the work and receives feedback – boosting her profile reputation and opening new opportunities.

5. Technical Architecture

- **Frontend:** React.js, Axios, Bootstrap, Material UI
 - **Backend:** Node.js, Express.js
 - **Database:** MongoDB
 - **Communication:** RESTful API, JWT Authentication
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6. Backend Development

Technologies: Node.js, Express.js, Mongoose, JWT

Modules:

- User management (registration, login)
 - Project posting & listing
 - Application handling
 - Chat between freelancer and client
 - Optional admin management
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7. Frontend Development

Technologies: React.js, Axios, Bootstrap

Pages Implemented:

- Home
- Login
- Register
- Dashboard
- Project Details
- Submit Proposal

Components Created:

- Navbar

- Project Card
 - Chat Box
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8. Application Flow

Freelancers:

- Submit high-quality work
- Communicate actively
- Manage time efficiently

Clients:

- Post detailed project descriptions
- Respond to freelancers promptly
- Pay fairly upon project completion

Admins:

- Maintain data integrity
 - Enforce platform policies
 - Handle conflict resolution
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9. Security Measures

- JWT authentication for protected routes
 - Encrypted passwords
 - CORS configuration
 - Role-based access control
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10. Testing

- Frontend tested manually for user interactions
- Console logs and alerts used for debugging

11. Results & Features Achieved

- User Registration/Login
- JWT Authentication & Protection
- Project Posting & Bidding System
- Proposal Management
- Real-time Messaging (Basic)
- Basic Admin Monitoring
- Fully Functional React Frontend

12. Future Enhancements

- Realtime chat via **Socket.io**
- File upload and preview support
- Payment gateway integration (e.g., Razorpay/Stripe)
- Admin dashboard with analytics
- Notification and alert system

13. Conclusion

FreelanceFinder delivers a complete full-stack freelancing platform, showcasing proficiency in MERN stack development, API integration, secure user authentication, and dynamic frontend user experience design. This project highlights practical skills in building real-world web applications with role-specific features and scalable architecture.