

FREELANCING APPLICATION MERN

1. INTRODUCTION :

Project Title: Freelancing Application MERN

Team Members and Roles:

1. MRIDULA P

(NM Id : 1AF77A4BDA3D73A9CB1440328FA25FCC) - Project Manager – Oversees the project workflow, manages the team, and ensures timely delivery.

2. ANISH M

(NM Id : 45BCF039856BC93A08A4142418873FAE) - Frontend Developer – Focuses on the design and functionality of the frontend, implementing user-friendly and responsive interfaces.

3. MAHALAKSHMI B

(NM Id : 4CBA483B781A78AB2A04DE123520B606) - Backend Developer – Works on server-side logic, API creation, and database integration. QA and Testing Specialist – Develops and implements testing strategies, identifies bugs, and ensures quality assurance.

4. SABITHA S

(NM Id : 8EC39033C632D6A8391427D9BEAD9573) - Database Administrator – Manages MongoDB structure, ensures data integrity, and optimizes database performance.

2. PROJECT OVERVIEW :

Purpose: SB Works is designed to simplify and secure the freelancing experience by connecting clients with freelancers through a robust and intuitive platform. It enables clients to post projects and find skilled freelancers, while freelancers can bid on projects suited to their expertise.

Key Features:

Project Posting and Bidding: Clients can post projects with specific requirements, and freelancers can submit proposals.

Profile Management: Freelancers can create detailed profiles, showcase their skills, and build portfolios.

Secure Communication: Built-in chat for clients and freelancers to discuss project specifics.

Admin Oversight: Platform administrators ensure security, review project activity, and maintain quality control.

3. ARCHITECTURE :

Frontend:

Framework: React is used to create a dynamic and responsive interface.

Styling Libraries: Bootstrap and Material UI provide a polished, modern look.

Data Fetching: Axios library is used for seamless API requests to communicate with the backend.

User Interface Features: Includes interactive forms for project posting, a dashboard for managing bids, and notifications for realtime updates.

Backend:

Framework: Node.js with Express.js for handling server-side processes.

API Endpoints: RESTful APIs to support various platform functionalities, including project posting, bidding, messaging, and profile management.

Security Measures: Middleware for input validation, error handling, and token-based authentication to secure API routes.

Database:

Database Management System: MongoDB, a NoSQL database ideal for handling complex data relationships.

Collections: Structured data collections for users, projects, bids, and chat messages.

Optimization: Indexed frequently queried fields to improve retrieval speeds and overall performance.

4. SETUP INSTRUCTIONS :

Prerequisites:

Node.js installed on your machine.

MongoDB set up and running locally or through a cloud provider (e.g., MongoDB Atlas).

Installation:

Cloning the Repository: Run `git clone <repository-url>` to download the project.

Installing Dependencies:

Navigate to the frontend (client) and backend (server) directories, then run npm install to install dependencies.

Environment Variables: Configure .env files with API keys, database URLs, and authentication secrets.

Configuration:

Set up environment variables for MongoDB URI, JWT secrets, and any third-party API integrations.

5. FOLDER STRUCTURE :

Client Directory:

Components Folder: Contains React components for modular UI building.

Pages Folder: Individual pages such as Home, Profile, and Project Details.

Services Folder: Manages API calls via Axios for data handling.

Server Directory:

Routes Folder: Defines all API endpoints (e.g., /api/users, /api/projects).

Models Folder: Schema definitions for MongoDB collections (e.g., User, Project).

Controllers Folder: Business logic and CRUD operations for each endpoint.

6. Running the Application :

Frontend Command:

Navigate to the client directory and run npm start to launch the frontend on a local server (typically on port 3000).

Backend Command:

Navigate to the server directory and run npm start to launch the backend (usually on port 5000).

7. API DOCUMENTATION :

Endpoints:

Users: /api/users – Register, authenticate, and manage user profiles.

Projects: /api/projects – CRUD operations for project listings.

Bids: /api/bids – Submit and view bids on projects.

Chat: /api/chat – Facilitates communication between clients and freelancers.

Example Request and Response:

Detailed example showing JSON requests and responses for each endpoint.

8. AUTHENTICATION :

Methodology: JSON Web Token (JWT) is used to manage authentication and maintain secure user sessions.

Roles: User roles include client, freelancer, and admin, with different access levels.

Security Protocols: Tokens are validated on each request to secure endpoints from unauthorized access.

9. USER INTERFACE :

Core Pages:

Homepage: Overview of platform features, latest projects, and quick links.

Dashboard: Personalized dashboard for clients and freelancers.

Project Posting Form: Allows clients to post projects with detailed requirements.

Profile Page: View and edit profile, upload portfolio items.

Visual Examples: Include images of the interface, showcasing essential features like project listings, bidding options, and messaging.

10. TESTING :

Testing Strategy:

Unit Tests: Focus on individual components and backend functions.

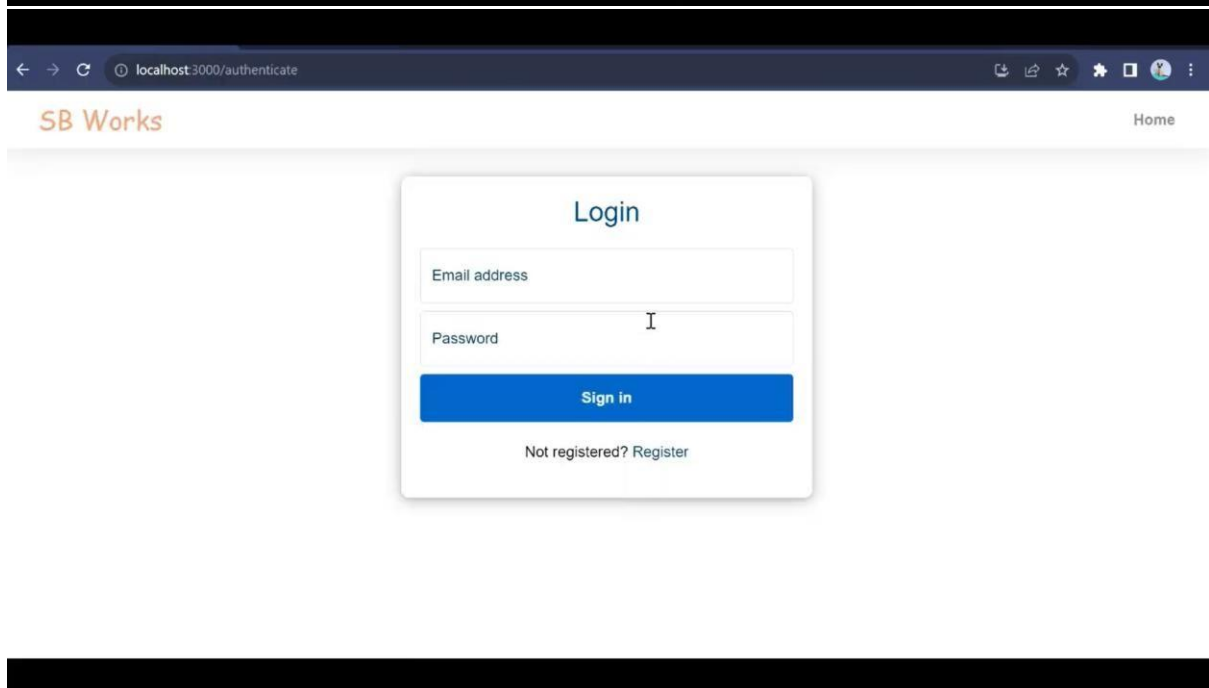
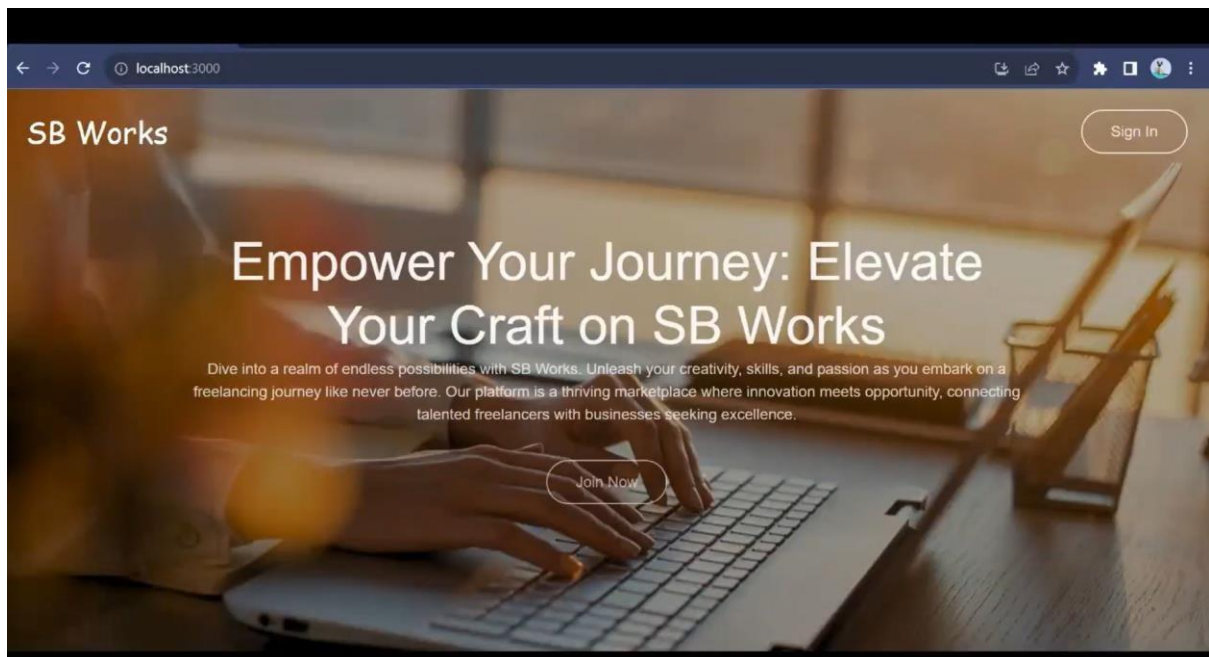
Integration Tests: Test API endpoints and frontend-backend interactions.

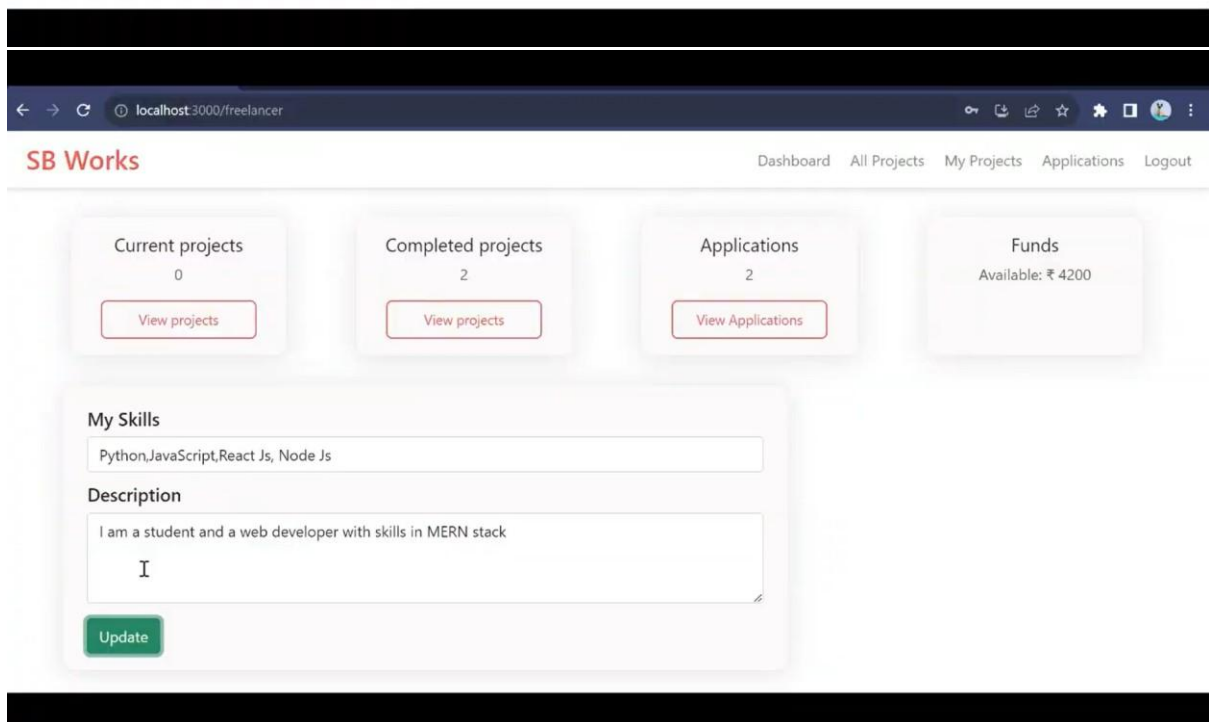
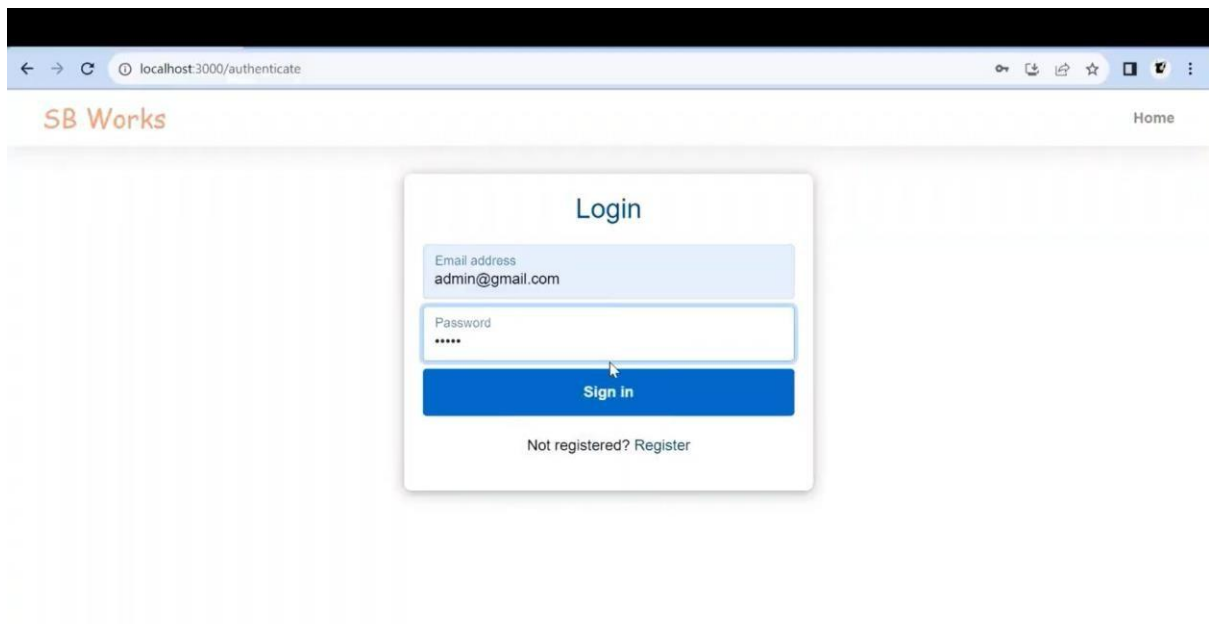
End-to-End Testing: Ensures user flows work as expected (e.g., logging in, posting a project, bidding).

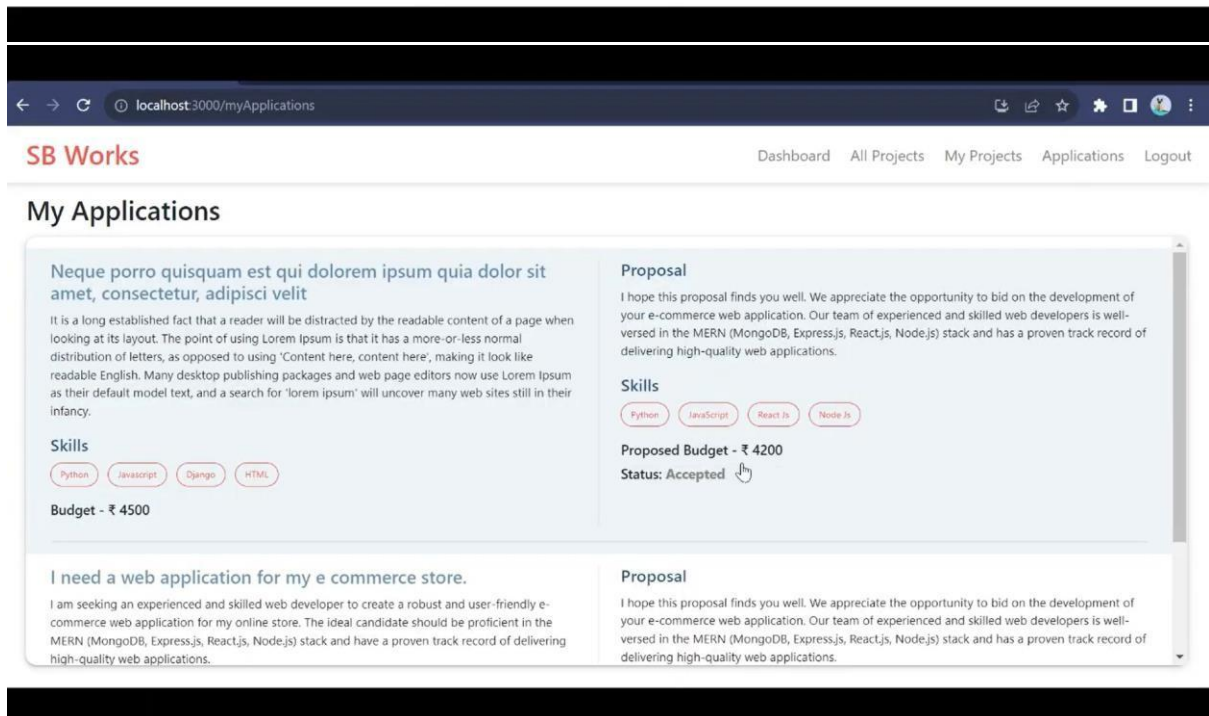
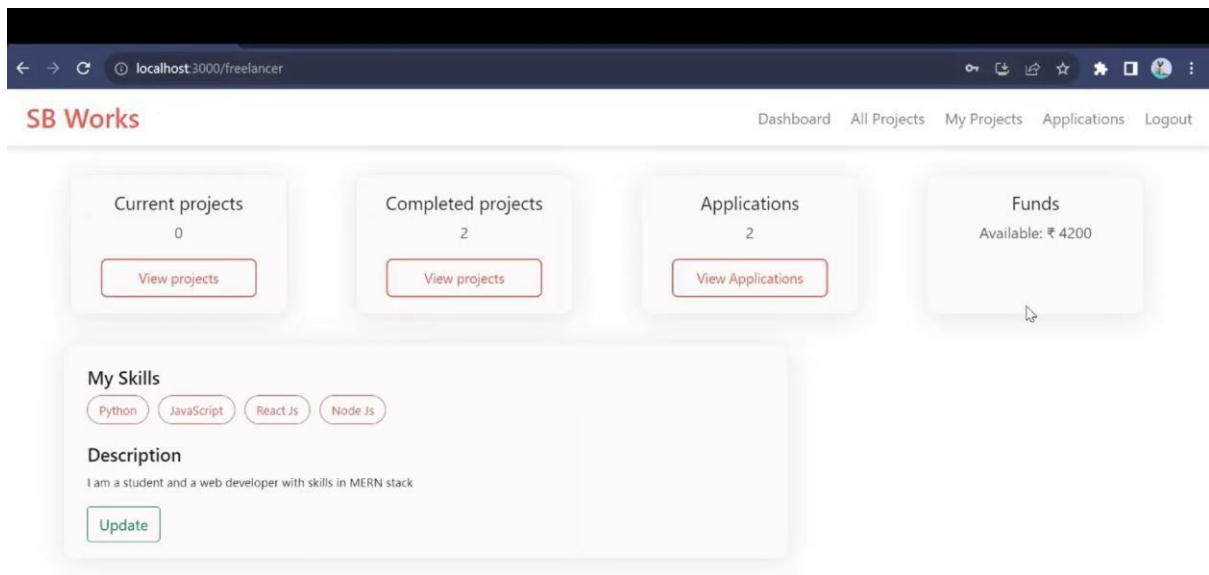
Tools Used: Jest for JavaScript testing, Postman for API testing.

11. SCREENSHOTS AND DEMO :

Screenshots:







← → ↻

localhost:3000/all-projects

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SB Works

Dashboard All Projects My Projects Applications Logout

Filters

Skills

☐ Python

☐ Javascript

☐ Django

☐ HTML

☐ MongoDB

☐ Express.js

☐ React.js

☐ Node.js

All projects

Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit

Mon Dec 04 2023 20:41:23

Budget ₹ 4200

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of using Lorem Ipsum is that it has a more-or-less normal distribution of letters, as opposed to using 'Content here, content here', making it look like readable English. Many desktop publishing packages and web page editors now use Lorem Ipsum as their default model text, and a search for 'lorem ipsum' will uncover many web sites still in their infancy.

Python

Javascript

Django

HTML

1 bids ₹ 4200 (avg bid)

I need a web application for my e commerce store.

undefined

Budget ₹ 8000

← → ↻

localhost:3000/project/656dec1be33bd5b3a9e3e054

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SB Works

Dashboard All Projects My Projects Applications Logout

Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit

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Required skills

Python

Javascript

Django

HTML

Budget

₹ 4200

Submit the project

Project completed

Chat with the client

Hello

12-04 - 16:00:28

how are you.

12-04 - 16:01:01

I'm doing greater

12-04 - 16:00:51

Ohh reallyyy??

12-04 - 16:03:07

Enter something...

Send

← → ↻ localhost:3000/new-project

SB Works

DashboardNew ProjectApplicationsLogout

Post new project

Project title

Description

Budget (in ₹)

Required skills (seperate each with ,)

Submit

← → ↻ localhost:3000/new-project

SB Works

DashboardNew ProjectApplicationsLogout

localhost:3000 says
new project added!!

OK

Post new project

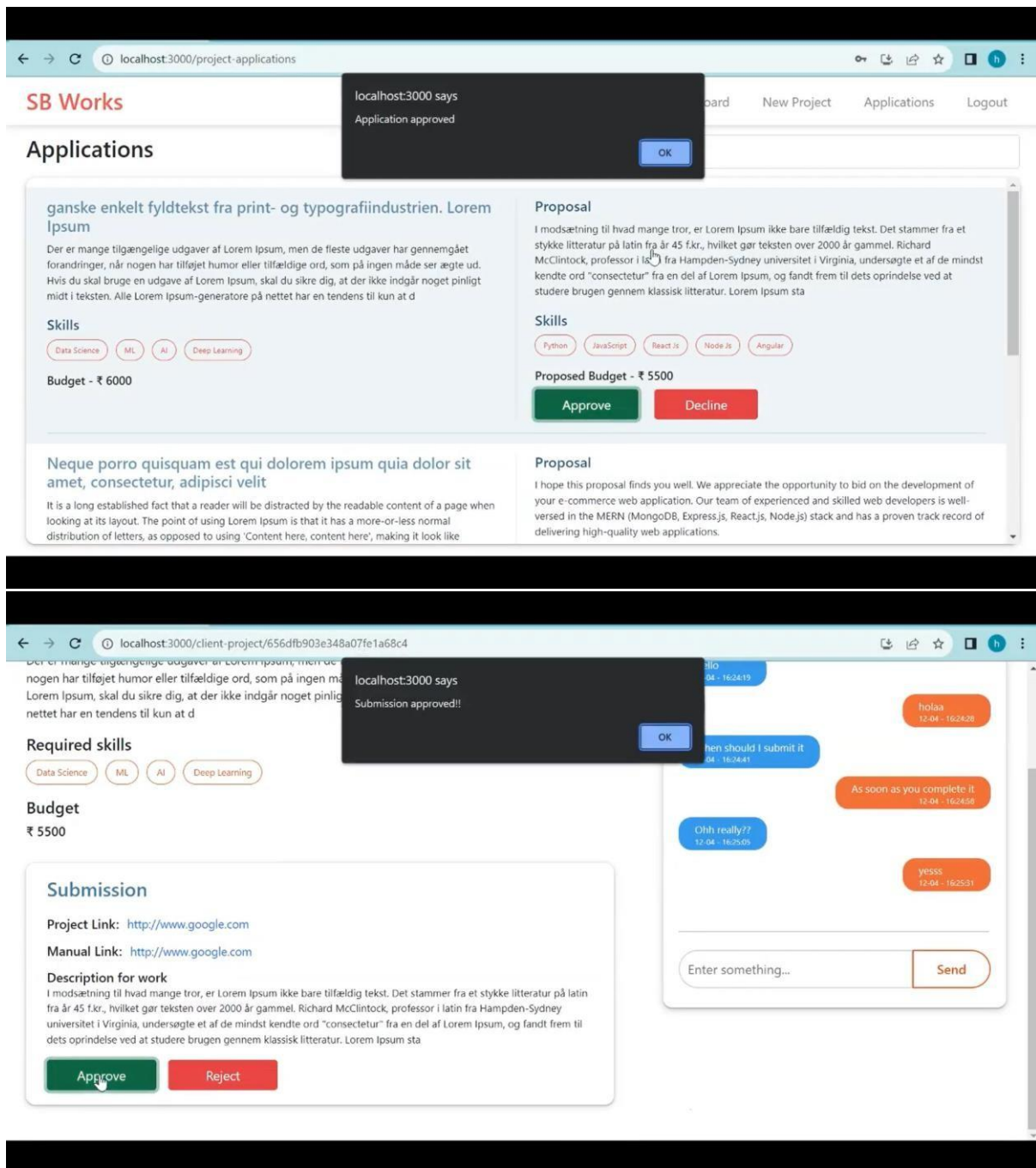
Project title
ganske enkelt fylde tekst fra print- og typografiindustrien. Lorem Ipsum

Description
Der er mange tilgængelige udgaver af Lorem Ipsum, men de fleste udgaver har gennemgået forandringer, når nogen har tilføjet humor eller tilfældige ord, som på ingen måde ser ægte ud. Hvis du skal bruge en udgave af Lorem Ipsum, skal du sikre dig, at der ikke indgår noget pinligt midt i teksten. Alle Lorem Ipsum-generatore på nettet har en tendens til kun at d

Budget (in ₹)
6000

Required skills (seperate each with ,)
Data Science, ML, AI, Deep Learning

Submit



Demo Link :

<https://drive.google.com/file/d/1tSVPSpTe5Z8nJ7Lr4dcGuKEV2IYFHT9/view?usp=drivesdk>

12. KNOWN ISSUES :

Bug Tracking: Current bugs documented in a bug-tracking system or as inline comments in the code.

Examples:

Inconsistent layout on smaller screen sizes.

Occasional delays in real-time updates for notifications.

13. FUTURE ENHANCEMENTS :

Potential Features:

Advanced Filtering: Improved search and filtering options for projects and freelancers.

Payment Integration: Add secure payment options to streamline transactions on the platform.

AI-Based Matching: Integrate AI to recommend projects to freelancers based on skills and history.

User Ratings and Reviews: Allow clients to rate freelancers, and freelancers to provide feedback on clients.;page