Project Report Format

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Source Code(if any)

Dataset Link

GitHub & Project Demo Link

1.INTRODUCTION

1.1 Project Overview:

SB Works – A Seamless Freelancing and Collaboration Platform is a full-stack web application designed to simplify and digitize the process of connecting clients with skilled freelancers. In traditional freelancing environments, users often face challenges such as lack of transparency, communication gaps, difficulty in verifying freelancer credibility, delayed project tracking, and inefficient workflow management.

SB Works addresses these challenges by providing a centralized online platform where clients can post projects and freelancers can browse, bid, and deliver work efficiently in real time. The platform ensures a structured project lifecycle—from project posting and proposal submission to collaboration, final submission, and feedback.

Clients can explore freelancer profiles, review portfolios, compare proposals, and select the most suitable candidate based on skills, experience, and ratings. Freelancers can showcase their expertise, submit competitive bids, communicate directly with clients, and upload completed work securely within the system.

Admins oversee overall platform operations, monitor user activities, enforce platform policies, and ensure system integrity and security.

1.2 Purpose:

The primary purpose of the **SB Works** application is to enhance efficiency, transparency, and trust in the freelancing ecosystem through a digital platform.

The project focuses on reducing communication barriers, improving project tracking, and creating a secure collaboration space between clients and freelancers.

Key Objectives of the System:

- Providing an intuitive platform where clients can post projects and hire skilled freelancers.
- Allowing freelancers to discover opportunities and build professional portfolios.
- Enabling administrators to maintain platform governance and ensure secure operations.
- Delivering real-time updates, communication, and project status tracking.
- Creating a scalable and user-friendly freelancing system using modern full-stack technologies.

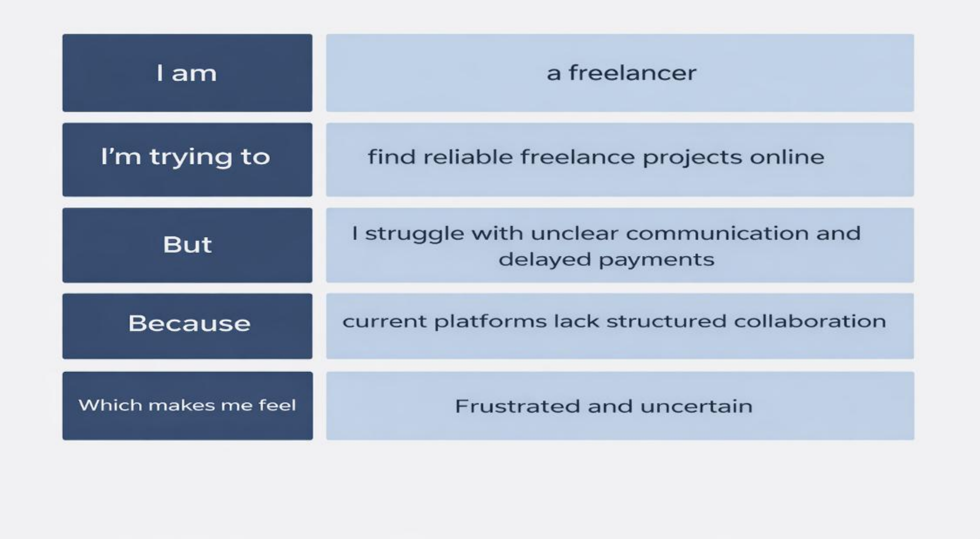
Overall, the project aims to bridge the gap between opportunity and talent by offering a reliable, structured, and efficient freelancing management solution that improves user experience and platform credibility.

2.IDEATION PHASE

2.1 Problem Statement:

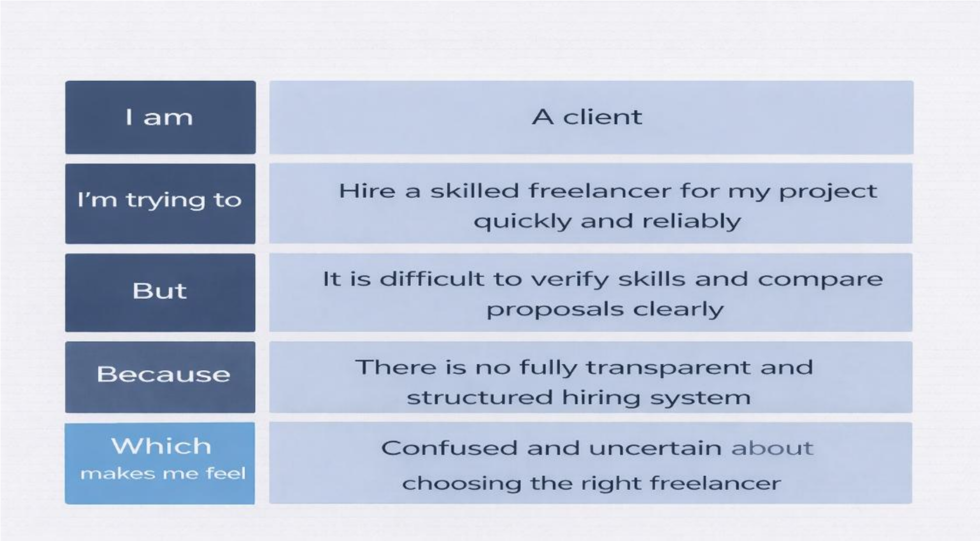
In today’s freelancing industry, connecting clients with reliable freelancers can be challenging. Traditional methods often lack structured communication, transparent workflows, and proper project tracking. This results in misunderstandings, delayed deliveries, and reduced trust between users. Freelancers struggle to find genuine opportunities, while clients face difficulty identifying skilled professionals. Many systems do not provide secure and centralized collaboration. **SB Works** aims to solve these issues by offering a streamlined digital platform for efficient project management and secure freelance collaboration.

Problem Statement -1 :



I am	a freelancer
I’m trying to	find reliable freelance projects online
But	I struggle with unclear communication and delayed payments
Because	current platforms lack structured collaboration
Which makes me feel	Frustrated and uncertain

Problem statement -2 :

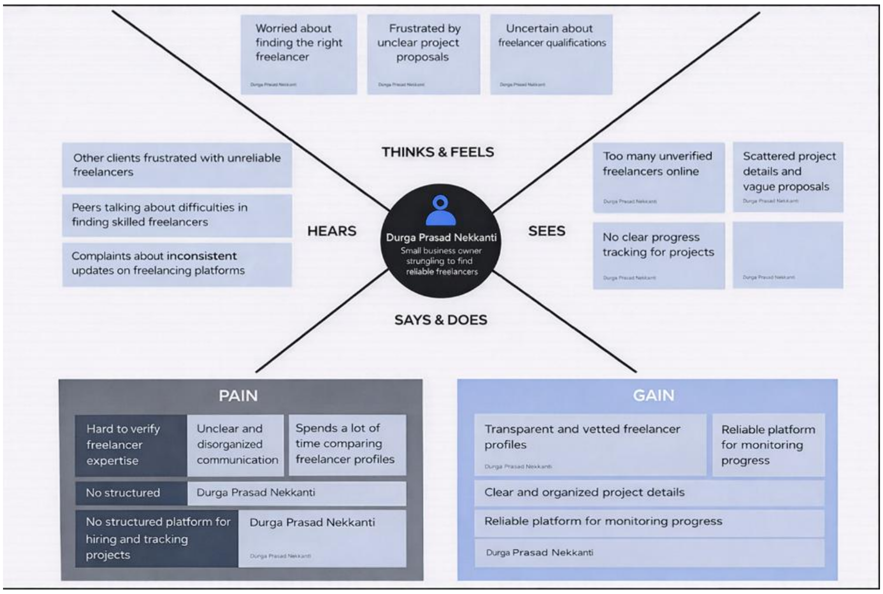


I am	A client
I’m trying to	Hire a skilled freelancer for my project quickly and reliably
But	It is difficult to verify skills and compare proposals clearly
Because	There is no fully transparent and structured hiring system
Which makes me feel	Confused and uncertain about choosing the right freelancer

Problem Statement (PS)	I am	I'm trying to	But	Because	Which makes me feel
PS-1	A freelancer	Find genuine projects and manage my work efficiently	Project details are unclear and communication is scattered	There is no centralized and transparent collaboration system	Frustrated and uncertain
PS-2	A client	Hire a skilled freelancer quickly and reliably	It is difficult to verify skills and compare proposals clearly	There is no fully transparent and structured hiring system	Confused and uncertain

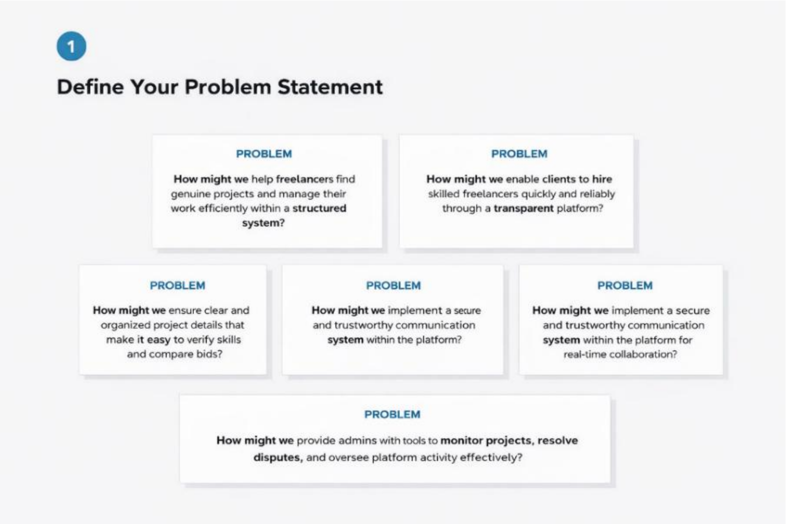
2.2 Empathy Map:

User : Durga Prasad Nekkanti (Working Professional Seeking Reliable Freelance Services for Business Projects)


Worried about finding the right freelancer
Frustrated by unclear project proposals
Uncertain about freelancer qualifications
THINKS & FEELS
Other clients frustrated with unreliable freelancers
Peers talking about difficulties in finding skilled freelancers
Complaints about inconsistent updates on freelancing platforms
HEARS
Durga Prasad Nekkanti
Small business owner strungling to find reliable freelancers
SEES
Too many unverified freelancers online
Scattered project details and vague proposals
No clear progress tracking for projects
SAYS & DOES
PAIN
Hard to verify freelancer expertise
Unclear and disorganized communication
Spends a lot of time comparing freelancer profiles
No structured
Durga Prasad Nekkanti
No structured platform for hiring and tracking projects
Durga Prasad Nekkanti
GAIN
Transparent and vetted freelancer profiles
Reliable platform for monitoring progress
Clear and organized project details
Reliable platform for monitoring progress
Durga Prasad Nekkanti

2.2 Brainstorm & Idea Prioritization:-

Step-1: Team Gathering, Collaboration and Select the Problem Statement



1

Define Your Problem Statement

PROBLEM

How might we help freelancers find genuine projects and manage their work efficiently within a structured system?

PROBLEM

How might we enable clients to hire skilled freelancers quickly and reliably through a transparent platform?

PROBLEM

How might we ensure clear and organized project details that make it easy to verify skills and compare bids?

PROBLEM

How might we implement a secure and trustworthy communication system within the platform?

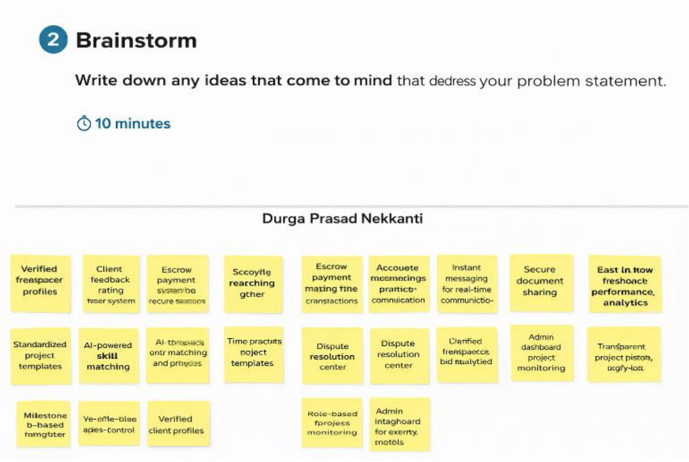
PROBLEM

How might we implement a secure and trustworthy communication system within the platform for real-time collaboration?

PROBLEM

How might we provide admins with tools to monitor projects, resolve disputes, and oversee platform activity effectively?

Step-2: Brainstorm, Idea Listing and Grouping



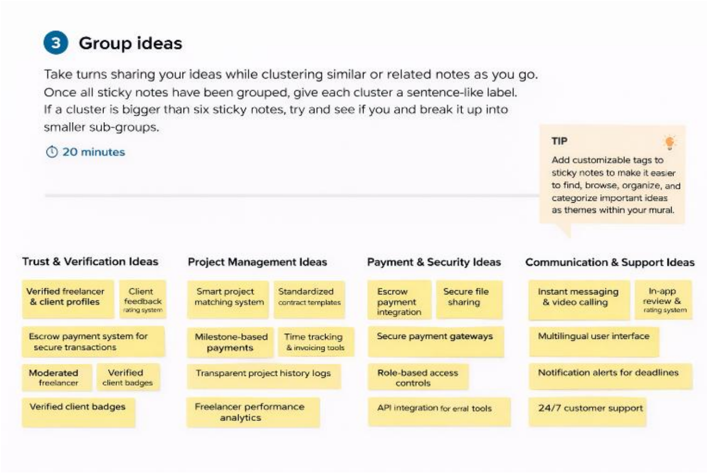
2 Brainstorm

Write down any ideas tnat come to mind that dedress your problem statement.

10 minutes

Durga Prasad Nekkanti

Verified freespacer profiles
Client feedback rating feser system
Escrow payment systenbe recure seacons
Sccoyfle rearching gther
Escrow payment mating fihe cranstactions
Accouete mesmecings prattict- comnuication
Instant messaging for real-time communictio-
Secure document sharing
East in ttow freshoace performance, analytics
Standardized project templates
AI-powered skill matching
AI-tbrnpacs ontr matching and prhydes
Time practuts noject templates
Dispute resolution center
Dispute resolution center
Clarified frenspaecce bid ftbalytied
Admin dashboard project monitoring
Transparent project pistoh, ucgfy-lott
Milestone b-based fumgtiter
Ye-efle-blee apies-control
Verified client profiles
Role-based fprojess monitoring
Admin intaghoard for exerty motols



3 Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

20 minutes

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

Trust & Verification Ideas

Verified freelancer & client profiles
Client feedback rating system
Escrow payment system for secure transactions
Moderated freelancer
Verified client badges
Verified client badges

Project Management Ideas

Smart project matching system
Standardized contract templates
Milestone-based payments
Time tracking & invoicing tools
Transparent project history logs
Freelancer performance analytics

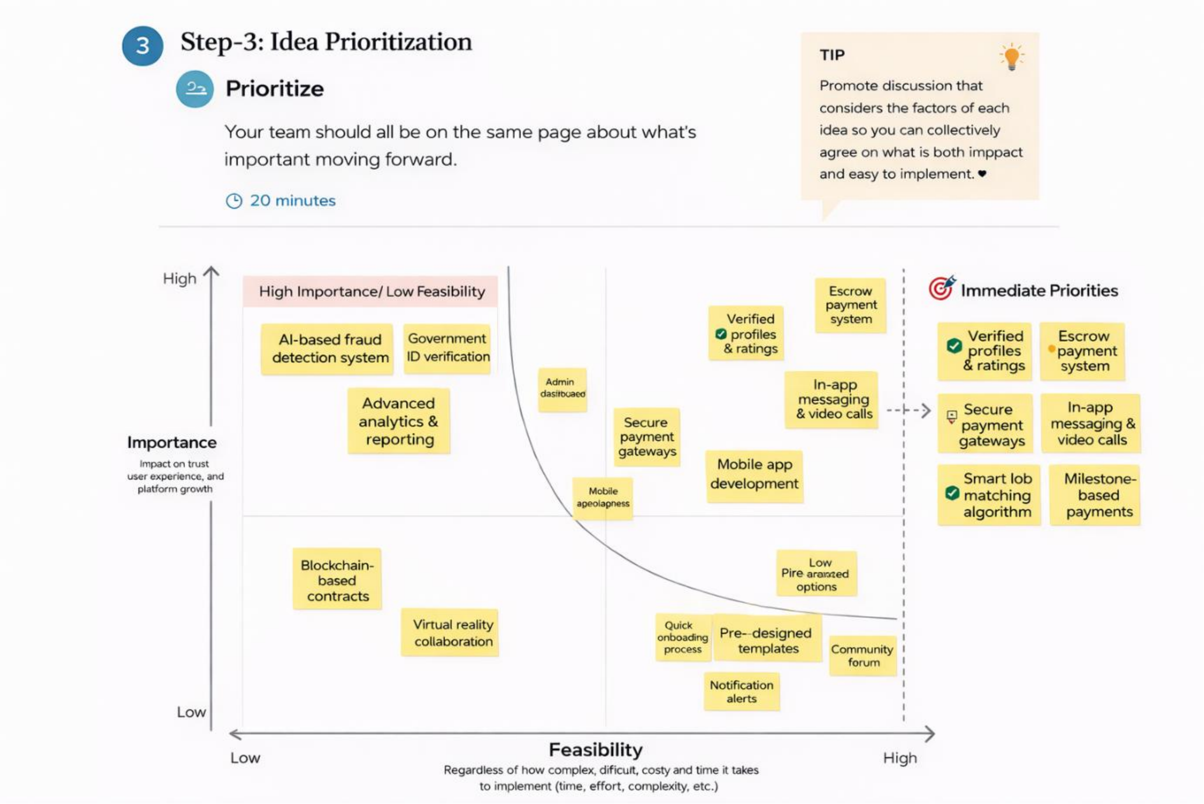
Payment & Security Ideas

Escrow payment integration
Secure file sharing
Secure payment gateways
Role-based access controls
API integration for erral tools

Communication & Support Ideas

Instant messaging & video calling
In-app review & rating system
Multilingual user interface
Notification alerts for deadlines
24/7 customer support

Step-3: Idea Prioritization



3 Step-3: Idea Prioritization

Prioritize

Your team should all be on the same page about what's important moving forward.

20 minutes

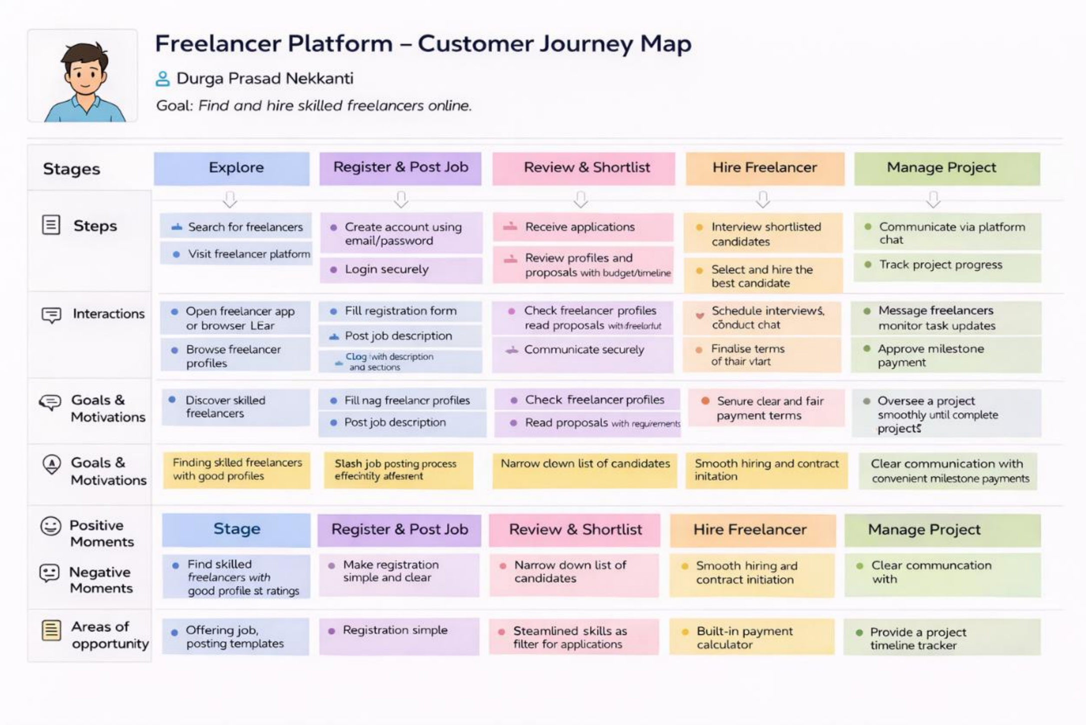
TIP

Promote discussion that considers the factors of each idea so you can collectively agree on what is both imppact and easy to implement. ❤

High
Importance
Impact on trust user experience, and platform growth
Low
High Importance/ Low Feasibility
AI-based fraud detection system
Government ID verification
Advanced analytics & reporting
Blockchain-based contracts
Virtual reality collaboration
Admin dasitbuaed
Mobile apeolapness
Secure payment gateways
Verified profiles & ratings
Escrow payment system
In-app messaging & video calls
Mobile app development
Low Pire aranzed options
Quick onboading process
Pre--designed templates
Community forum
Notification alerts
Immediate Priorities
Verified profiles & ratings
Escrow payment system
Secure payment gateways
In-app messaging & video calls
Smart lob matching algorithm
Milestone-based payments
Low
Feasibility
Regardless of how complex, dificult, costy and time it takes to implement (time, effort, complexity, etc.)
High

3. REQUIREMENT ANALYSIS

3.1 Customer Journey map: -



Freelancer Platform – Customer Journey Map

Durga Prasad Nekkanti

Goal: *Find and hire skilled freelancers online.*

Stages	Explore	Register & Post Job	Review & Shortlist	Hire Freelancer	Manage Project
Steps	Search for freelancers Visit freelancer platform	Create account using email/password Login securely	Receive applications Review profiles and proposals with budget/timeline	Interview shortlisted candidates Select and hire the best candidate	Communicate via platform chat Track project progress
Interactions	Open freelancer app or browser LEar Browse freelancer profiles	Fill registration form Post job description Clog with description and sections	Check freelancer profiles read proposals with freelorlut Communicate securely	Schedule interviewś, cōnduct chat Finalise terms of thair vtart	Message freelancers monitor task updates Approve milestone payment
Goals & Motivations	Discover skilled freelancers	Fill nag freelancr profiles Post job description	Check freelancer profiles Read proposals with requirements	Senure clear and fair payment terms	Oversee a project smoothly until complete projectś
Goals & Motivations	Finding skilled freelancers with good profiles	Slash job posting process effecintily affesrent	Narrow clewn list of candidates	Smooth hiring and contract initation	Clear communication with convenient milestone payments
Positive Moments	Stage	Register & Post Job	Review & Shortlist	Hire Freelancer	Manage Project
Negative Moments	Find skilled *freelancers with* good profile st ratings	Make registration simple and clear	Narrow down list of candidates	Smooth hiring ard contract initiation	Clear communcation with
Areas of opportunity	Offering job, posting templates	Registration simple	Steamlined skills as filter for applications	Built-in payment calculator	Provide a project timeline tracker

3.2 Solution Requirement

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through form Role selection (Client / Freelancer / Admin) Secure password creation
FR-2	User Authentication	Login using Email & Password JWT-based authentication
FR-3	Project Posting (Client)	Create project with title & description Set budget & deadline Attach documents
FR-4	Freelancer Browsing & Search	View project listings on dashboard Filter by category / budget / skills
FR-5	Bidding System	Submit proposal with quotation Attach portfolio samples Track bid status

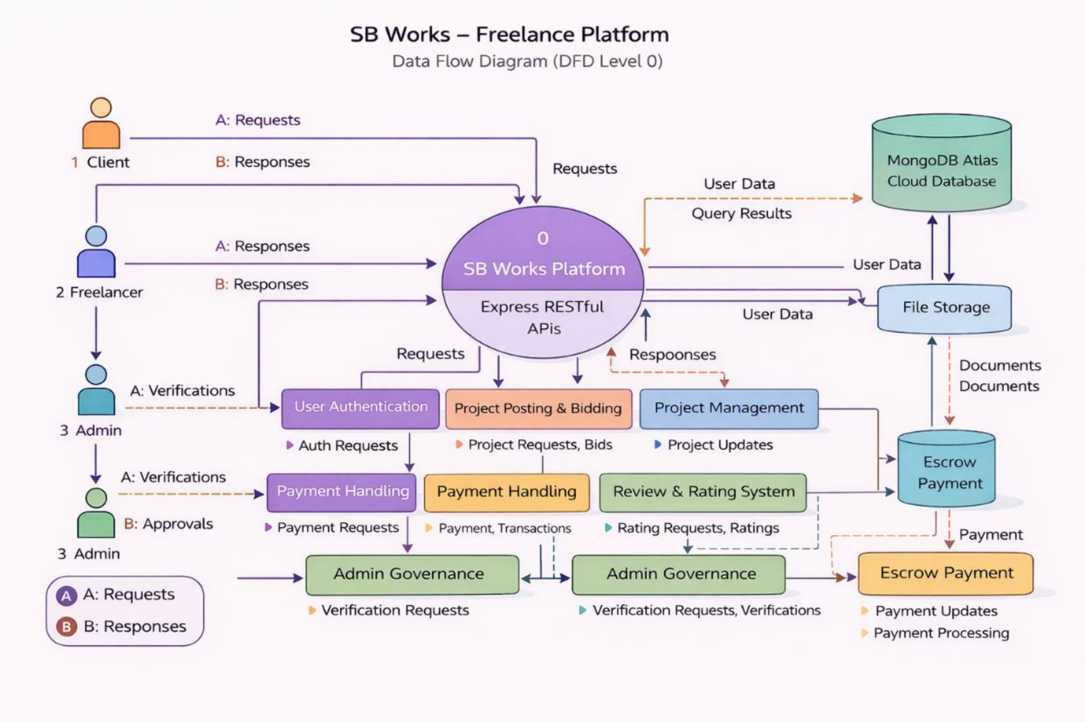
FR-6	Project Management	Client selects freelancer Milestone-based project tracking Update project status (Pending / Ongoing / Completed)Accept / Reject / Reschedule bookings
FR-7	Communication System	In-platform chat between client & freelancer Real-time messaging & file sharing
FR-8	Admin Governance	Approve user accounts if needed Monitor platform activity Handle disputes

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	**Non-Functional Requirement**	**Description**
NFR-1	**Usability**	Simple, intuitive interface allowing clients to post projects and freelancers to bid easily without technical complexity.
NFR-2	**Security**	JWT authentication, encrypted passwords, secure payment gateway integration, and protected file uploads.
NFR-3	**Reliability**	Accurate bid tracking, secure transaction handling, and consi data loss.
NFR-4	**Performance**	Fast dashboard loading and smooth API communication between React frontend and Express backend.
NFR-5	**Availability**	Platform accessible 24/7 for clients, freelancers, and admins.
NFR-6	**Scalability**	MERN stack architecture allows expansion to support large numbers of users and projects.

3.3 Data Flow Diagram: -



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Client (Web User)	Registration	USN-1	As a user, I can register using email and password	Account created & dashboard accessible	High	Sprint-1
Client / Freelancer	Authentication	USN-2	As a user, I can log in securely	Successful login redirects to dashboard	High	Sprint-1
Client	Project Posting	USN-3	As a client, I can post a new project with details	Project appears in project listing dashboard	High	Sprint-1
Freelancer	Project Browsing	USN-4	As a freelancer, I can view available projects	Project list loads from database	High	Sprint-2
Freelancer	Bidding System	USN-5	As a freelancer, I can submit a proposal for a project	Proposal saved and visible to client	High	Sprint-2
Client	Freelancer Selection	USN-6	As a client, I can select a freelancer from proposals	Selected freelancer status updated to “Assigned”	High	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Freelancer	Project Management	USN-7	As a freelancer, I can update project status	Status updates to Ongoing / Completed	High	Sprint-3
Client	Review & Rating	USN-8	As a client, I can rate a freelancer after completion	Rating saved and displayed on freelancer profile	Medium	Sprint-4
Admin	User Monitoring	USN-9	As an admin, I can monitor platform activity	Admin dashboard shows user and project data	Medium	Sprint-5

3.4 Technology Stack: -

The SB Works application is developed using modern full-stack technologies based on the MERN stack architecture.

1. **Frontend Technologies**
   - React.js – For building dynamic and responsive user interfaces
   - Bootstrap & Material UI – For designing attractive and responsive UI components
   - Axios – For handling HTTP requests and communicating with backend APIs
2. **Backend Technologies**
   - Node.js – Server-side runtime environment
   - Express.js – Web framework for building RESTful APIs
   - JWT (JSON Web Token) – For secure authentication and authorization
   - Multer – For handling file uploads (project documents, attachments)
3. **Database**
   - MongoDB – NoSQL database for storing user data, project details, bids, transactions, and reviews

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Web interface for Clients, Freelancers, and Admin dashboards	React.js, HTML, CSS, Bootstrap, Material UI
2.	Application Logic-1	Authentication & Role Management (Client / Freelancer / Admin)	Node.js, Express.js, JWT
3.	Application Logic-2	Project Posting, Bidding & Management	Express.js REST APIs

4.	Application Logic-3	Notification, Review & Status Management	Node.js Controllers
5.	Database	Stores users, projects, bids, reviews, and transactions	MongoDB, Mongoose
6.	Cloud Database	Cloud-hosted NoSQL database for storing user profiles, project data, bids, and notifications with remote access and scalability	MongoDB Atlas
7.	File Storage	Project document upload & attachment storage	Local Filesystem / Cloud Storage Service
8.	External API-1	HTTP communication between frontend & backend	Axios
9.	External API-2	Payment Gateway Integration (if implemented)	__
10.	Machine Learning Model	Not used in this project	__
11.	Infrastructure (Server / Cloud)	Local development deployment & backend hosting	Node.js Local Server

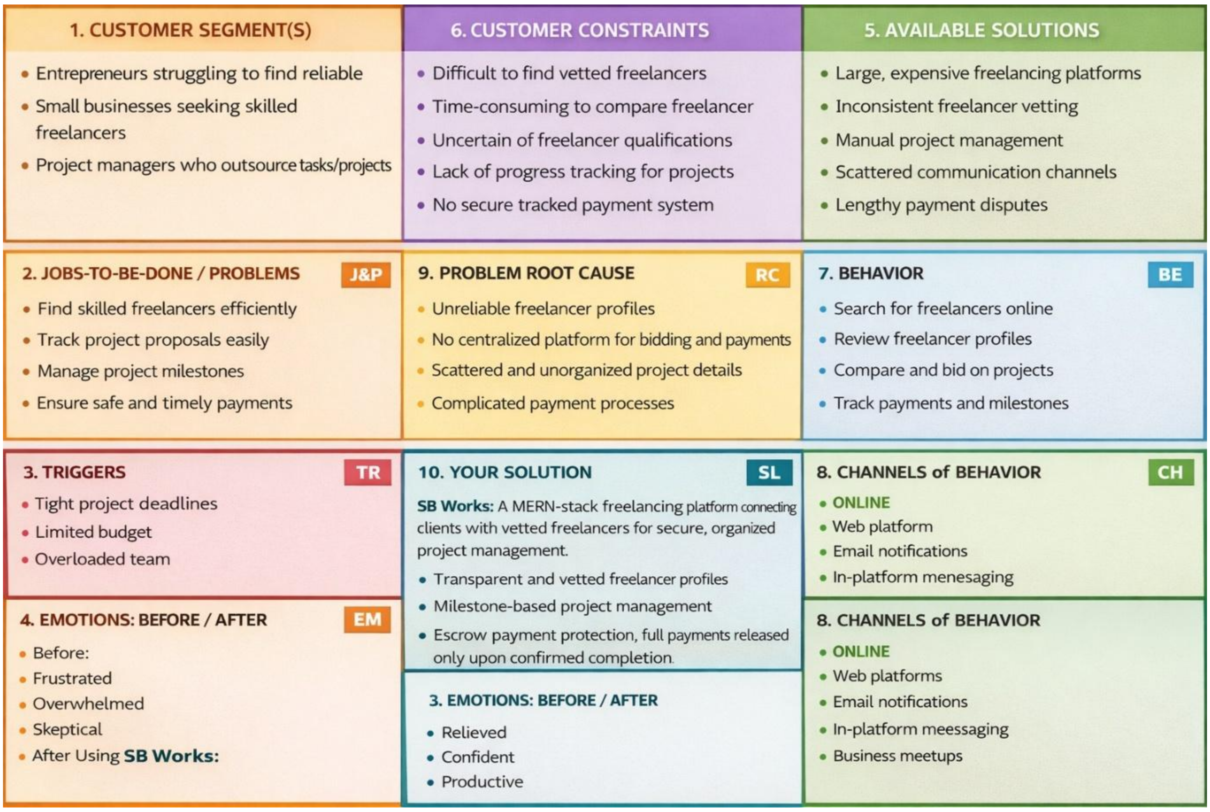
Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1	Open-Source Frameworks	Frameworks used to build frontend UI and backend REST APIs	React.js, Express.js, Node.js
2	Security Implementations	Role-based authentication (Client / Freelancer / Admin), encrypted passwords, protected routes	JWT, bcryptjs, Middleware
3	Scalable Architecture	3-Tier architecture separating frontend, backend logic, and database layer	REST Architecture, MongoDB
4	Availability	Web application accessible anytime via browser for clients, freelancers, and admins	Node.js Server

S. No	Characteristics	Description	Technology
5.	Performance	Fast API responses, asynchronous data handling, and smooth frontend-backend communication	Axios, Express.js

4. PROJECT DESIGN

4.1 Problem Solution Fit : -



1. CUSTOMER SEGMENT(S)

- Entrepreneurs struggling to find reliable
- Small businesses seeking skilled freelancers
- Project managers who outsource tasks/projects

6. CUSTOMER CONSTRAINTS

- Difficult to find vetted freelancers
- Time-consuming to compare freelancer
- Uncertain of freelancer qualifications
- Lack of progress tracking for projects
- No secure tracked payment system

5. AVAILABLE SOLUTIONS

- Large, expensive freelancing platforms
- Inconsistent freelancer vetting
- Manual project management
- Scattered communication channels
- Lengthy payment disputes

2. JOBS-TO-BE-DONE / PROBLEMS J&P

- Find skilled freelancers efficiently
- Track project proposals easily
- Manage project milestones
- Ensure safe and timely payments

9. PROBLEM ROOT CAUSE RC

- Unreliable freelancer profiles
- No centralized platform for bidding and payments
- Scattered and unorganized project details
- Complicated payment processes

7. BEHAVIOR BE

- Search for freelancers online
- Review freelancer profiles
- Compare and bid on projects
- Track payments and milestones

3. TRIGGERS TR

- Tight project deadlines
- Limited budget
- Overloaded team

4. EMOTIONS: BEFORE / AFTER EM

- Before:
- Frustrated
- Overwhelmed
- Skeptical
- After Using **SB Works:**

10. YOUR SOLUTION SL

SB Works: A MERN-stack freelancing platform connecting clients with vetted freelancers for secure, organized project management.

- Transparent and vetted freelancer profiles
- Milestone-based project management
- Escrow payment protection, full payments released only upon confirmed completion.

3. EMOTIONS: BEFORE / AFTER

- Relieved
- Confident
- Productive

8. CHANNELS of BEHAVIOR CH

- ONLINE
- Web platform
- Email notifications
- In-platform menesaging

8. CHANNELS of BEHAVIOR

- ONLINE
- Web platforms
- Email notifications
- In-platform meessaging
- Business meetups

4.2 Proposed Solution : -

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Clients face difficulty finding reliable freelancers due to scattered communication, lack of transparency, and unverified profiles. Freelancers struggle to secure genuine projects and manage work efficiently. Admins require a centralized and secure system to monitor activities and maintain platform trust.
2.	Idea / Solution description	**SB Works** is a MERN-stack web application that connects clients and freelancers through a centralized freelancing platform. It provides role-based dashboards (Client, Freelancer, Admin), project posting and bidding system, real-time communication, JWT-based secure authentication, document upload, project status tracking, and REST APIs integrated with MongoDB Atlas.
3.	Novelty / Uniqueness	Role-based freelancing workflow, transparent bidding system, admin monitoring, milestone-based project tracking, secure document sharing, and a simplified user-friendly collaboration interface.
4.	Social Impact / Customer Satisfaction	Encourages fair work opportunities, supports small businesses and independent professionals, ensures secure transactions, improves transparency, and enhances trust in the freelancing ecosystem.
5.	Business Model (Revenue Model)	Commission-based transaction model, subscription plans for premium freelancers, featured project listings, and future integration of escrow-based secure payments.
6.	Scalability of the Solution	Built using 3-tier MERN architecture (React frontend, Express backend, MongoDB Atlas cloud database), allowing scalable performance, secure data handling, and easy expansion to support more users and project categories.

4.3 Solution Architecture:

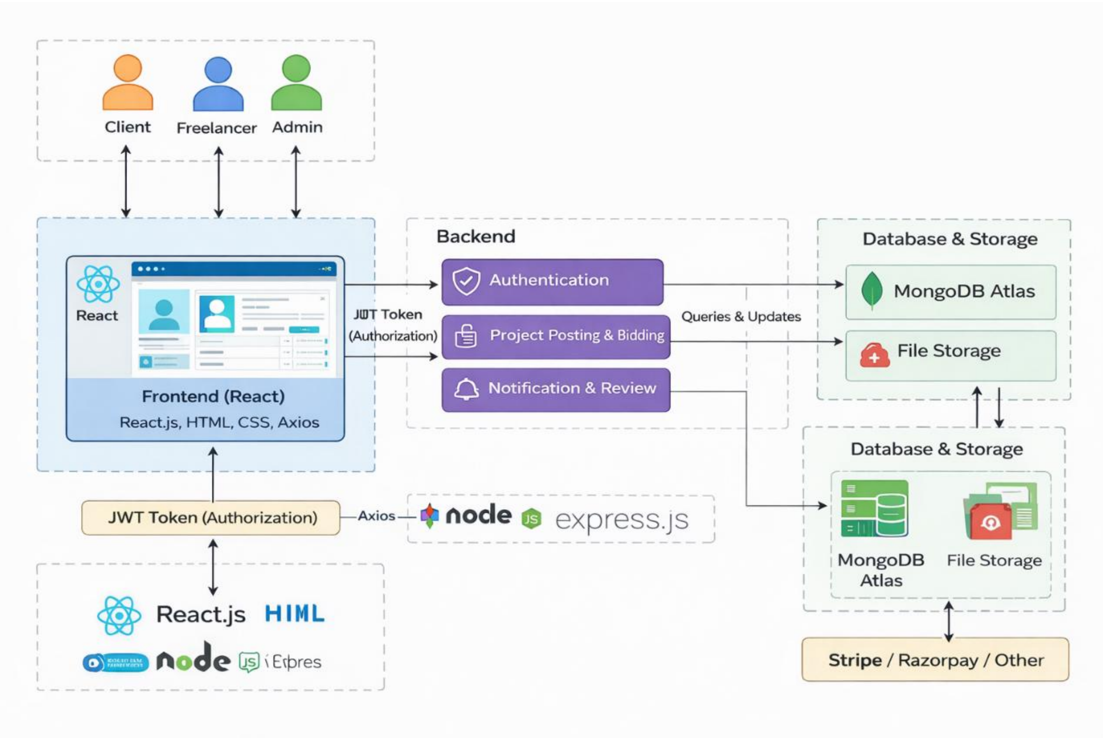


Figure-1: Architecture and Data Flow of the SB Works Freelancing Platform

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning : -

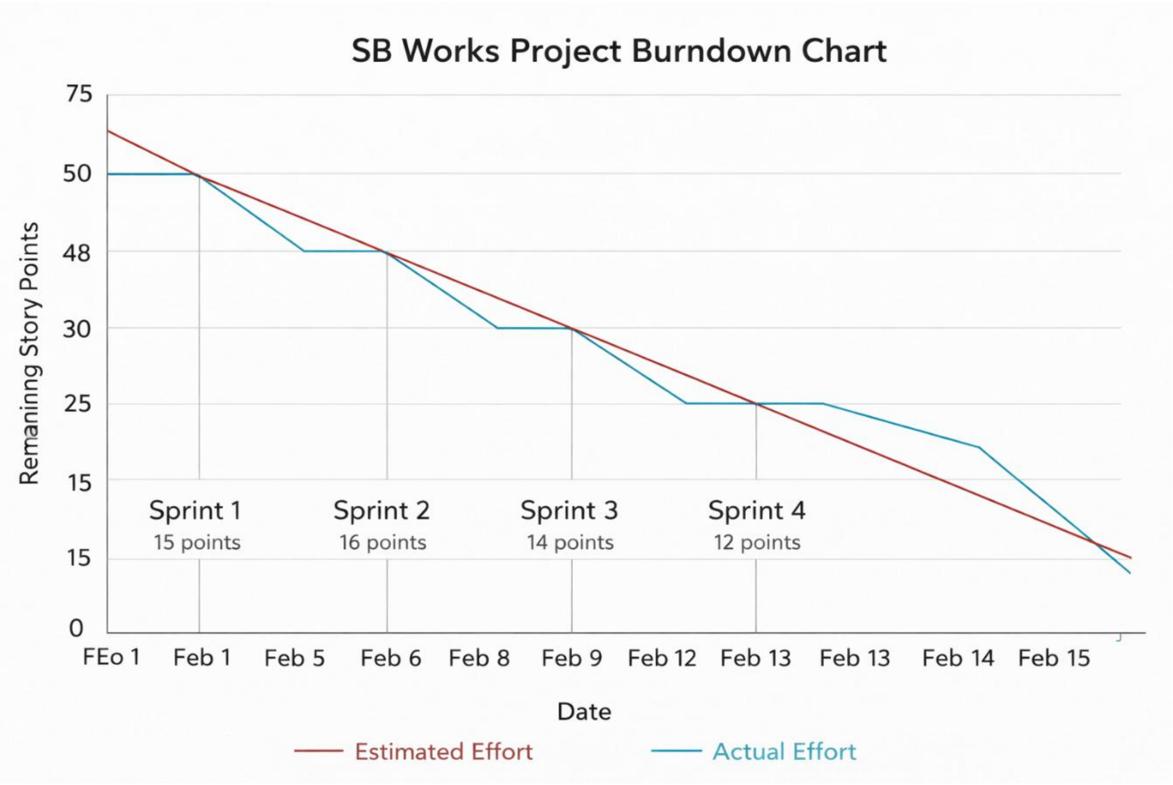
Product Backlog, Sprint Schedule, and Estimation :

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register using email and password	2	High	Team
Sprint-1	Authentication	USN-2	As a user, I can log in securely using JWT authentication	2	High	Team
Sprint-1	Dashboard	USN-3	As a user, I can view projects (Client/Freelancer) on dashboard	3	High	Team
Sprint-2	Project Posting	USN-4	As a client, I can post a project with title, description, budget & deadline	5	High	Team

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Proposal Submission	USN-5	As a freelancer, I can submit a proposal for a project	3	Medium	Team
Sprint-3	Project Management	USN-6	As a freelancer, I can update project status (Ongoing / Completed)	5	High	Team
Sprint-3	Admin Panel	USN-7	As an admin, I can monitor users and manage platform activities	4	High	Team
Sprint-4	Notifications	USN-8	As a user, I receive project status and proposal updates	3	Medium	Team
Sprint-4	Project History	USN-9	As a user, I can view and manage project history	3	Medium	Team

Project Tracker, Velocity & Burndown Chart:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	15	4 Days	01 Feb 2025	04 Feb 2025	15	04 Feb 2025
Sprint-2	16	4 Days	05 Feb 2025	08 Feb 2025	16	08 Feb 2025
Sprint-3	14	4 Days	09 Feb 2025	12 Feb 2025	14	12 Feb 2025
Sprint-4	12	3 Days	13 Feb 2025	15 Feb 2025	12	15 Feb 2025


SB Works Project Burndown Chart
75
50
48
30
25
15
15
0
Remaninng Story Points
Sprint 1
15 points
Sprint 2
16 points
Sprint 3
14 points
Sprint 4
12 points
FEo 1
Feb 1
Feb 5
Feb 6
Feb 8
Feb 9
Feb 12
Feb 13
Feb 13
Feb 14
Feb 15
Date
Estimated Effort
Actual Effort

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

Test Scenarios & Results

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
FT-01	User Registration	Enter valid & invalid user details	Valid registration succeeds; errors for invalid input	Registration works correctly	Pass
FT-02	User Login	Enter correct & incorrect credentials	Login success for valid; error for invalid	Authentication works	Pass
FT-03	Role-Based Access	Login as Client / Freelancer / Admin	User redirected to respective dashboard	Role-based dashboard loads correctly	Pass
FT-04	Project Listing	Load project dashboard	Projects fetched from database	Projects displayed correctly	Pass
FT-05	Project Posting (Client)	Create new project with details	Project stored in DB & visible to freelancers	Project added successfully	Pass
FT-06	Proposal Submission (Freelancer)	Submit bid for a project	Proposal stored & visible to client	Proposal submitted successfully	Pass
FT-07	Project Status Update	Update project status (Ongoing/Completed)	Status updated in DB & reflected in UI	Status updated correctly	Pass

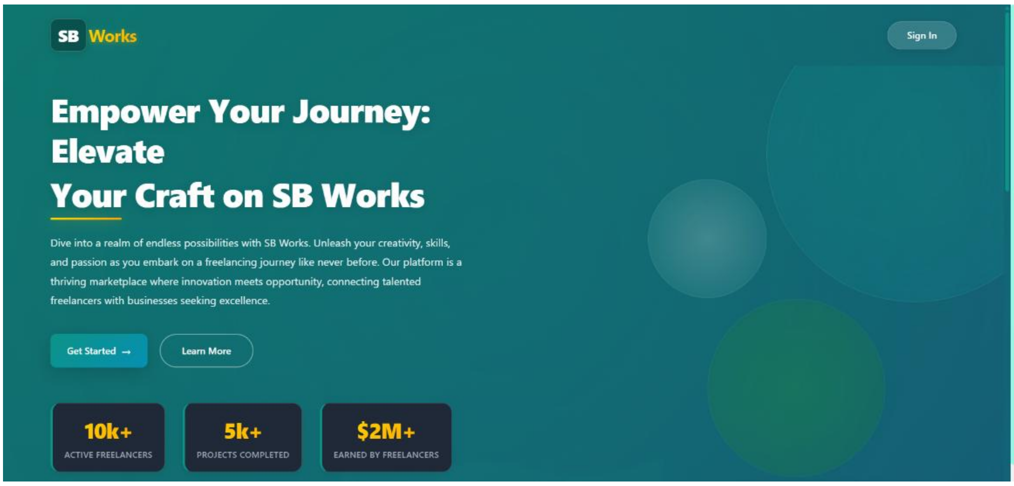
FT-08	Review & Rating	Submit rating after project completion	Rating saved & displayed on profile	Rating recorded successfully	Pass
FT-09	Notification System	Trigger project update event	User receives notification in dashboard	Notification displayed correctly	Pass
FT-10	File Upload	Upload project document/attachment	File stored & accessible	File uploaded successfully	Pass

Performance Testing

Test Case ID	**Scenario**	**Test Steps**	**Expected Result**	**Actual Result**	**Pass/Fail**
PT-01	Page Load Time	Load homepage/products	< 2 seconds	~1.5 sec	Pass
PT-02	API Response	Fetch products API	Fast response	Stable	Pass
PT-03	Concurrent Users	Multiple users post projects / submit bids simultaneously	No crash	Stable	Pass
PT-04	DB Query Speed	Search/filter projects	Quick retrieval	Fast	Pass
PT-05	Order Processing Load	Multiple payment simulations (if integrated)	Transactions stored correctly without failure	Stable	Pass

7. RESULTS

7.1 Output Screenshots



Empower Your Journey: Elevate
Your Craft on SB Works

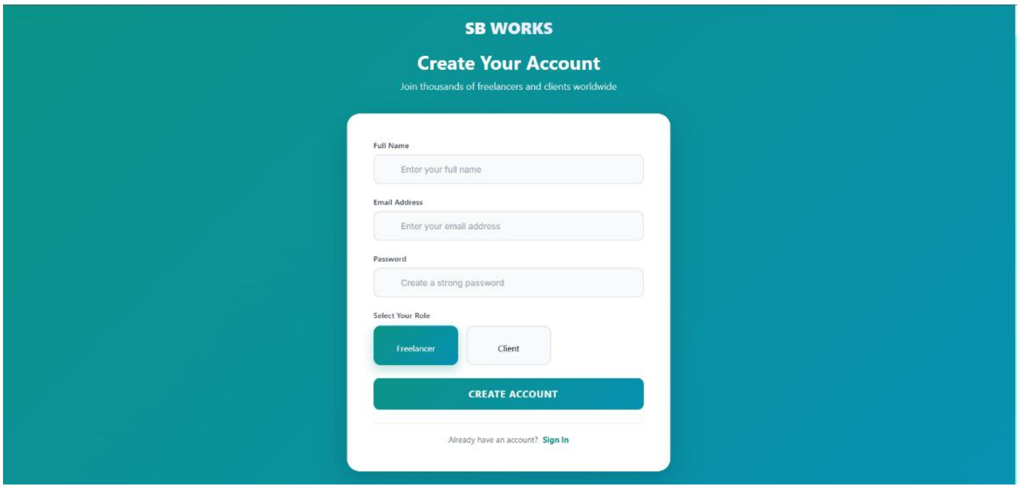
Dive into a realm of endless possibilities with SB Works. Unleash your creativity, skills, and passion as you embark on a freelancing journey like never before. Our platform is a thriving marketplace where innovation meets opportunity, connecting talented freelancers with businesses seeking excellence.

10k+ ACTIVE FREELANCERS

5k+ PROJECTS COMPLETED

$2M+ EARNED BY FREELANCERS

Fig 1 : Sbworks Home Page



Create Your Account

Join thousands of freelancers and clients worldwide

Full Name: Enter your full name

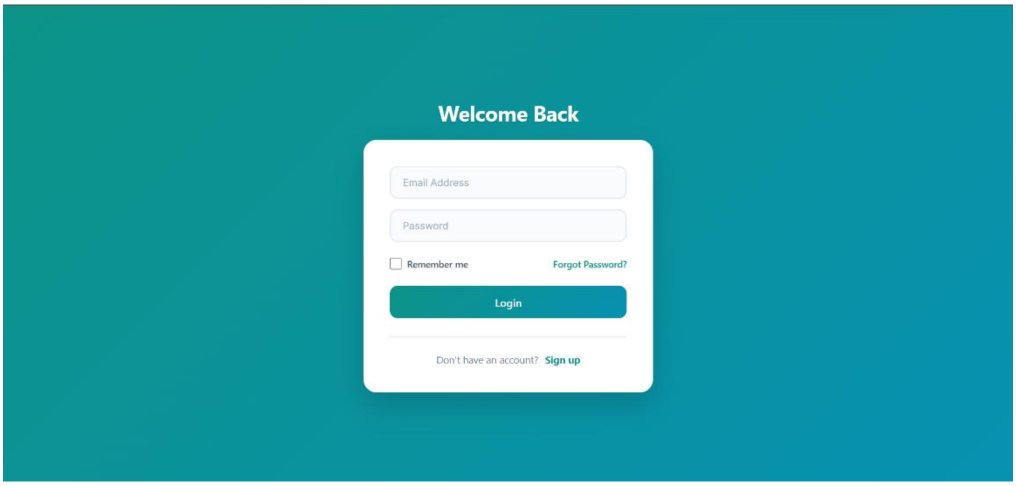
Email Address: Enter your email address

Password: Create a strong password

Select Your Role

Already have an account? Sign In

Fig 2 : Registration Page


Welcome Back

Email Address

Password

□ Remember me

Don't have an account? Sign up

Fig 3 : Login Page

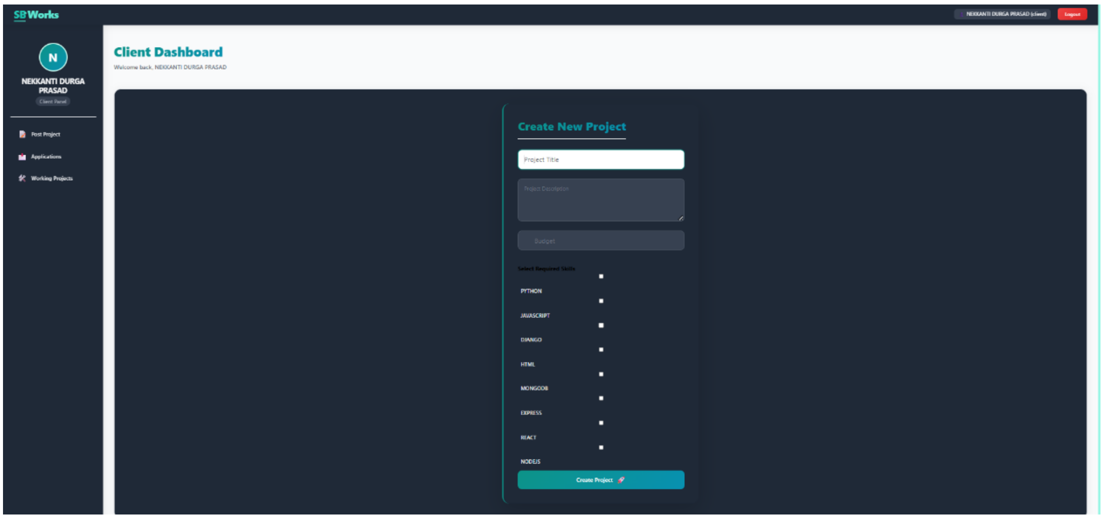
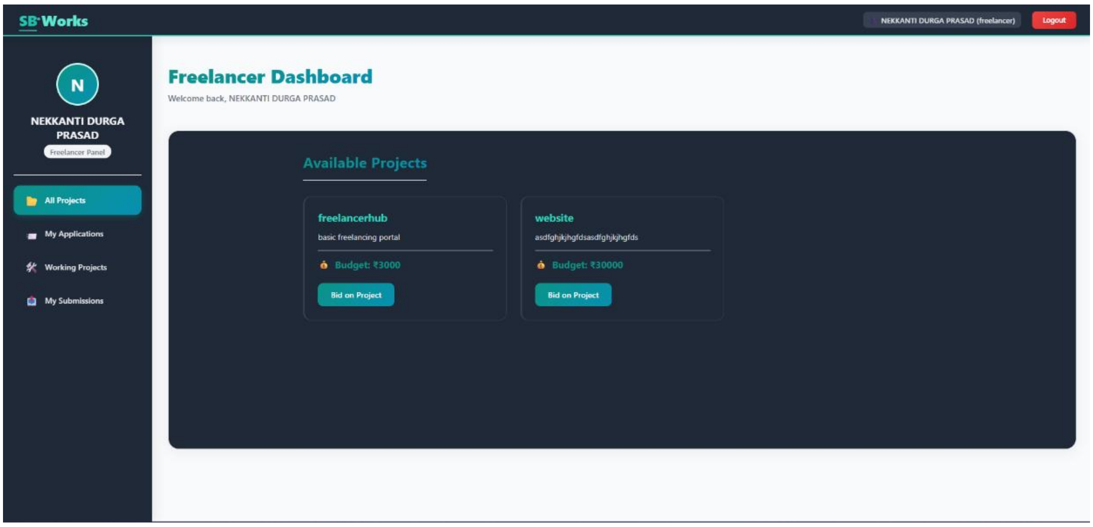


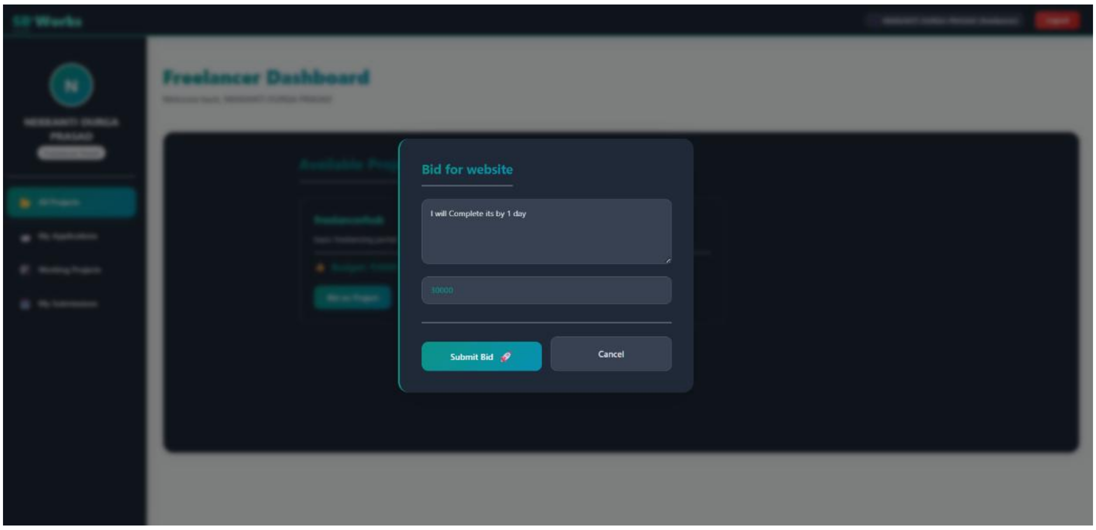
Fig 4 : Client Dashboard



freelancerhub
basic freelancing portal
Budget: ₹3000

website
asdfghjkjhgfdsasdfghjkjhgfds
Budget: ₹30000

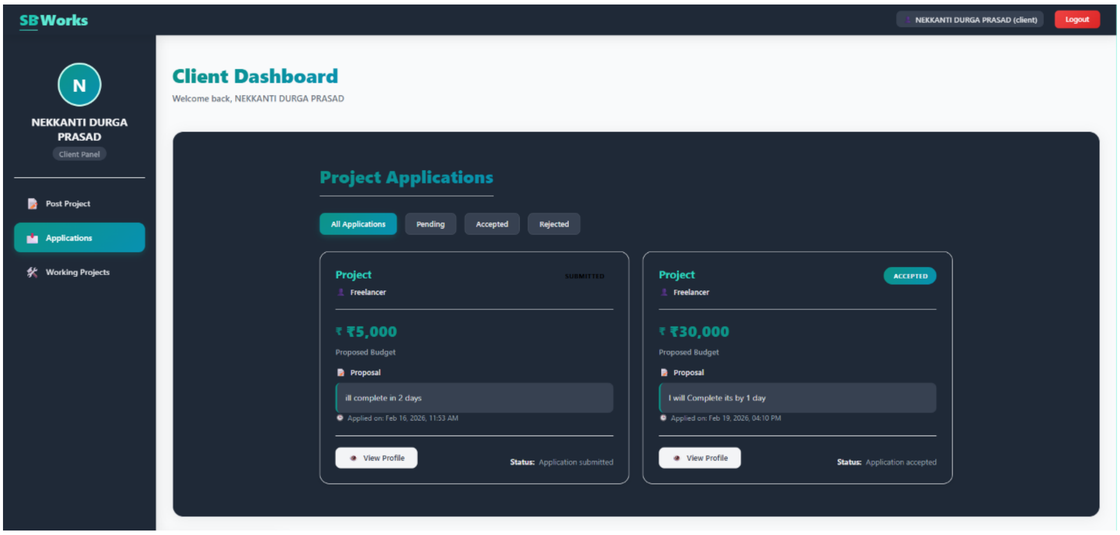
Fig 5 : Freelancer Dashboard



I will Complete its by 1 day

30000

Fig 6 : Project Bidding Page



Client Dashboard

Welcome back, NEKKANTI DURGA PRASAD

Project Applications

Project SUBMITTED

Freelancer

₹ ₹5,000

Proposed Budget

Proposal

ill complete in 2 days

Applied on: Feb 16, 2026, 11:53 AM

Status: Application submitted

Project ACCEPTED

Freelancer

₹ ₹30,000

Proposed Budget

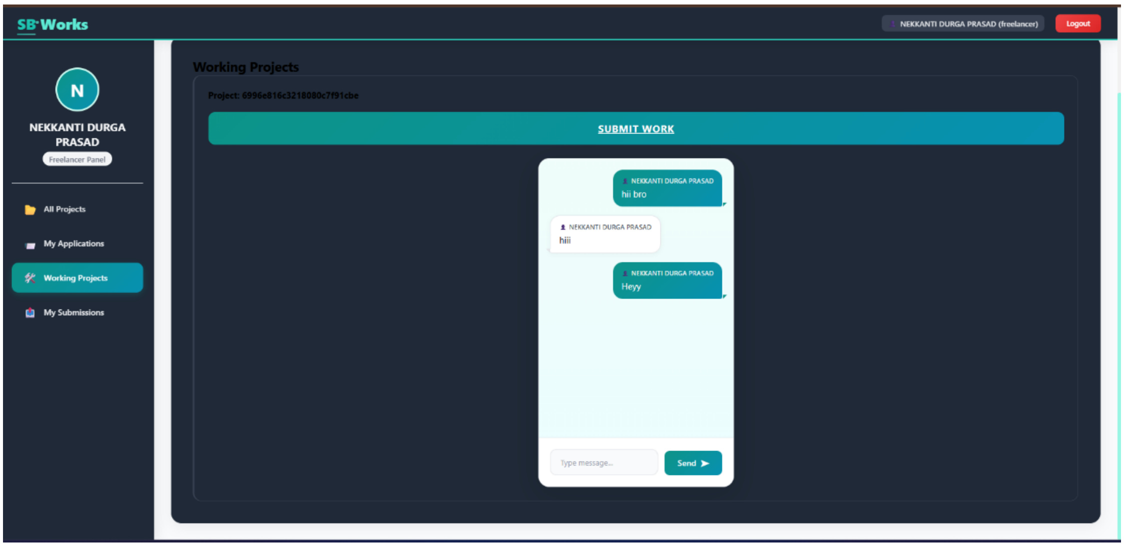
Proposal

I will Complete its by 1 day

Applied on: Feb 19, 2026, 04:10 PM

Status: Application accepted

Fig 7 : Bidding Approval Page



Working Projects

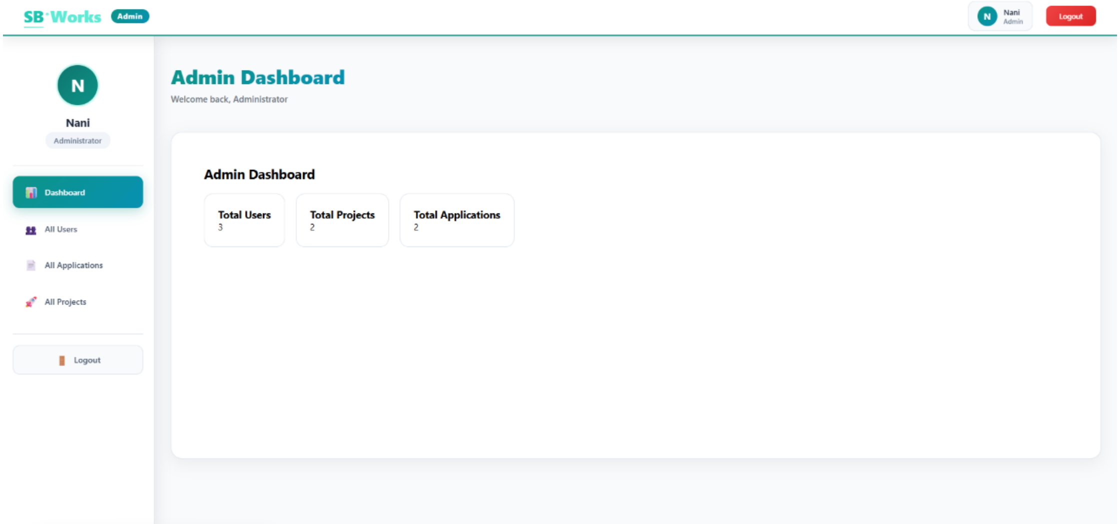
Project: 6996e816c3218080c7f91cbe

NEKKANTI DURGA PRASAD
hii bro

NEKKANTI DURGA PRASAD
hiii

NEKKANTI DURGA PRASAD
Heyy

Fig 8 : Chating page



Admin Dashboard

Welcome back, Administrator

Admin Dashboard

Total Users	Total Projects	Total Applications
3	2	2

Fig 9 : Admin Dashboard

8. ADVANTAGES & DISADVANTAGES

Advantages of the SB Works Project

1. Full-Stack MERN Implementation

The project demonstrates complete frontend and backend integration using the MERN stack (MongoDB, Express.js, React.js, Node.js), providing real-world full-stack development experience.

2. Role-Based Access Control

Separate roles for Client, Freelancer, and Admin ensure secure access control and proper authorization for project posting, bidding, and platform management.

3. Scalable Architecture

The modular structure and RESTful API design make the application easy to maintain, extend, and scale for future enhancements.

4. Secure Authentication

JWT-based authentication ensures secure and stateless communication between frontend and backend.

5. Structured Freelancing Workflow

Features such as project posting, proposal submission, project status tracking, and review & rating system provide a smooth collaboration experience.

6. Admin Governance System

The admin dashboard enables monitoring of users, projects, and platform activities to maintain trust and security.

7. Academic and Practical Learning Value

The project covers authentication, API development, database schema design, role-based authorization, and frontend routing, making it a strong academic and industry-relevant project.

Disadvantages of the SB Works Project

1. Limited Payment Gateway Integration

If real escrow/payment gateway is not fully implemented, it limits production-level deployment.

2. Basic UI/UX Design

The interface focuses primarily on functionality rather than advanced professional UI/UX design standards.

3. Token Storage in Local Storage

JWT stored in local storage may present security risks in large-scale applications.

4. Limited Performance Optimization

No advanced optimization techniques such as caching, load balancing, or microservices architecture are implemented.

5. Limited Real-Time Features

Notifications and project updates may not be fully real-time (no WebSocket integration).

6. No Automated Testing Framework

The system primarily relies on manual testing rather than automated unit and integration testing tools.

7. Limited DevOps & Deployment Configuration

Advanced deployment strategies such as CI/CD pipelines, Docker containerization, and cloud scaling are not implemented.

9. CONCLUSION

The **SB Works** project successfully demonstrates the design and implementation of a full-stack freelancing web application using the MERN stack (MongoDB, Express.js, React.js, and Node.js). The system was developed with the objective of creating a secure, transparent, and structured platform that connects clients and freelancers efficiently while maintaining proper role-based access control.

Throughout the development process, emphasis was placed on clean architecture, modular coding practices, and efficient database design to ensure scalability, maintainability, and performance. The platform enables users to register, log in securely, post projects, submit proposals, manage project workflows, and provide reviews and ratings in a streamlined manner. On the administrative side, the dashboard provides centralized monitoring of users, projects, and system activities to maintain platform integrity.

JWT-based authentication ensures secure communication between the frontend and backend, while middleware-based authorization enforces role-based access restrictions. The integration between React frontend and Express backend through RESTful APIs demonstrates effective client-server communication. Proper validation, error handling, and structured project organization enhance system reliability and usability.

Although advanced features such as real-time notifications, full escrow-based payment integration, cloud deployment, and automated testing frameworks can be implemented in future versions, the current system effectively meets the core requirements of a freelancing platform.

In conclusion, **SB Works** stands as a scalable and well-structured freelancing solution that reflects a strong understanding of modern full-stack development principles. With further enhancements, the platform has the potential to evolve into a fully production-ready and commercially viable freelancing ecosystem.

10. FUTURE SCOPE

The SB Works platform has a strong foundational architecture and can be further enhanced with advanced features and improvements to make it production-ready and commercially scalable. The following are potential future developments:

1. Secure Payment & Escrow Integration

The system can be integrated with secure online payment gateways such as UPI, credit/debit cards, and digital wallets. Implementing an escrow-based payment system will ensure secure milestone payments between clients and freelancers, increasing trust and reliability.

2. Advanced User Interface and Experience

Future improvements can focus on enhancing UI/UX using modern design systems and responsive layouts. Features such as interactive dashboards, animations, dark/light themes, enhanced profile pages, and improved project browsing filters can significantly improve user engagement.

3. Real-Time Communication & Notifications

Implementing real-time notifications using technologies like WebSockets or Socket.io will allow users to receive instant updates about:

- New proposals
- Project status changes
- Payment confirmations
- Admin announcements

4. AI-Based Freelancer Recommendation

Machine learning algorithms can be integrated to recommend suitable freelancers based on:

- Skill matching
- Past performance
- Ratings
- Project requirements

This would enhance hiring efficiency and platform intelligence.

5. Enhanced Security Measures

Security can be strengthened by:

- Storing JWT tokens in HTTP-only cookies
- Implementing refresh tokens
- Adding multi-factor authentication (MFA)
- Applying rate limiting and advanced validation
- Implementing fraud detection mechanisms

6. Mobile Application Development

A dedicated mobile application using technologies like React Native or Flutter can expand the platform to Android and iOS users, increasing accessibility and user engagement**.**

11. APPENDIX

My Project Source code Files are available at :

https://drive.google.com/drive/folders/1SnRDtdutRNMhwjNX7WkuEJye0rVkL8P3?usp=sharing

My project Demo Video link is available at :

https://drive.google.com/file/d/15VNxpXmzW4HsSYiBJqAcp6atDuzQD0PS/view?usp=sharing

Github Resopitory Link :

https://github.com/Durgaprasad3002/Freelance-Finder-Discovering-Opportunities-Unlocking-Potential-