

Project Documentation

Inventory-management-frontend

1. Introduction

- **Project Title:** Store Manager: Keep track of inventory
- **Team ID:** NM2025TMID39934
- **Team Leader:** VIGNESH .S (rajkumarlakshmi007@gmail.com)
- **Team Members:**
 - Vishal .B(vishal271005@gmail.com)
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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

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

- **Project**
 - /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

```
PS C:\Users\BCA_30\Downloads\inventory-management-frontend-20250917T031143Z-1-001\inventory-management-frontend> npm install

up to date, audited 1329 packages in 3s

266 packages are looking for funding
  run `npm fund` for details

18 vulnerabilities (3 low, 6 moderate, 8 high, 1 critical)

To address issues that do not require attention, run:
  npm audit fix
```

```
npm audit fix --force

Run `npm audit` for details.
PS C:\Users\BCA 30\Downloads\inventory-management-frontend-20250917T031143Z-1-001\inventory-management-frontend> npm start

> client@0.1.0 start
> react-scripts start

Browserslist: browsers data (caniuse-lite) is 9 months old. Please run:
  npx update-browserslist-db@latest

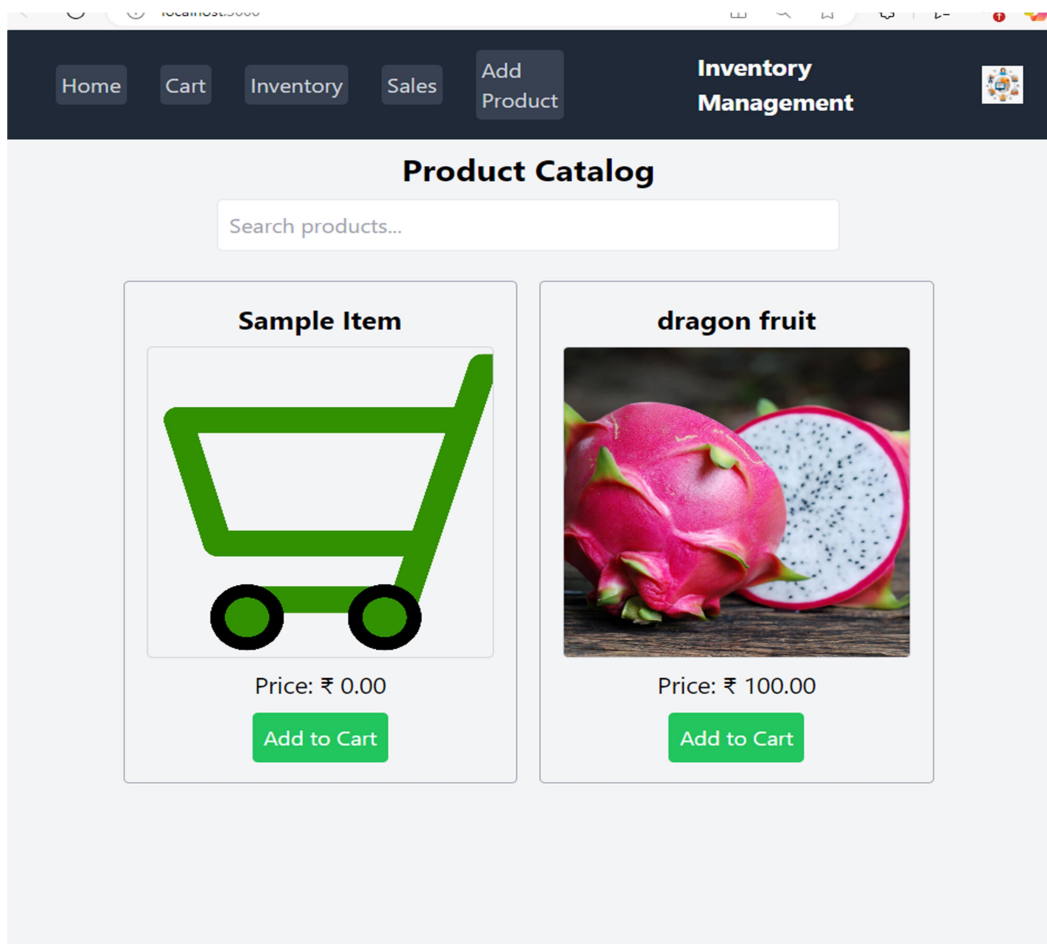
PS C:\Users\BCA 30\Downloads\inventory-management-frontend-20250917T031143Z-1-001\inventory-management-frontend> npm start
Compiled successfully!

You can now view client in the browser.

Local:      http://localhost:3000
On Your Network:  http://192.168.1.196:3000

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
```



12. Known Issues: Nil

13. Future Enhancements

- **Mobile Application Support** – Develop Android and iOS apps for wider accessibility.
- **AI-Powered Matching** – Use machine learning to suggest the best freelancer for each project.
- **Payment Gateway Integration** – Enable secure online payments and escrow services.
- **Video & Voice Calls** – Add real-time communication features beyond chat.
- **Advanced Analytics** – Provide project performance, freelancer success rates, and client satisfaction dashboards.
- **Internationalization (i18n)** – Support multiple languages and currencies.
- **Freelancer Skill Verification** – Automated tests or certifications for freelancers.
- **Project Recommendation Engine** – Personalized project suggestions based on user activity.
- **Automated Dispute Resolution** – Smart system to resolve conflicts between clients and freelancers.
- **Cloud Deployment** – Migrate to scalable cloud infrastructure (AWS, Azure, or GCP) for better performance.