# **Project Documentations**

CookBook: Your Virtual Kitchen Assistant

### 1. Introduction

• CookBook: Your Virtual Kitchen Assistant

• Team ID: NM2025TMID46903

• Team Leader: M. Oviya & oviya9385@gmail.com

• Team Members:

| S.No | Name          | Email ID                       |
|------|---------------|--------------------------------|
| 1.   | V. Mageshwari | magimageshwari345@gmail.com    |
| 2.   | S. Malini     | malinisaravanan2007@gmail.com  |
| 3.   | S. Monisha    | monishakumar4377@gmail.com     |
| 4.   | V. Monisha    | monishaverrasamy2006@gmail.com |

### 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/              |                   |  |
| L pages/                 |                   |  |
| server/                  | # Node.js backend |  |
| routes/                  |                   |  |
| models/                  |                   |  |
| controllers/             |                   |  |

### 6. Running the Application

• Frontend:

cd client

npm start

• Backend:

cd server npm

start

• Access: Visit <a href="http://localhost:3000">http://localhost:3000</a>

### 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

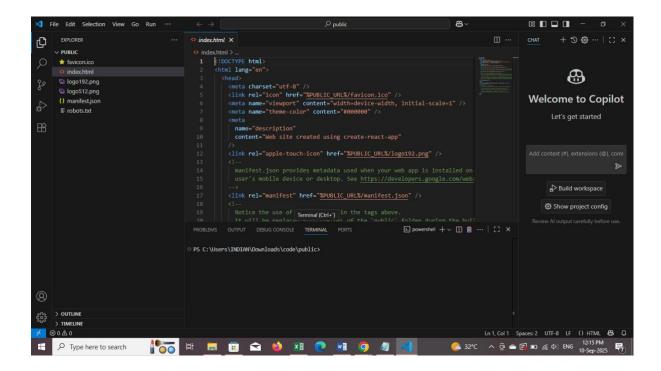
- Landing Page
- Freelancer Dashboard
- Admin Panel

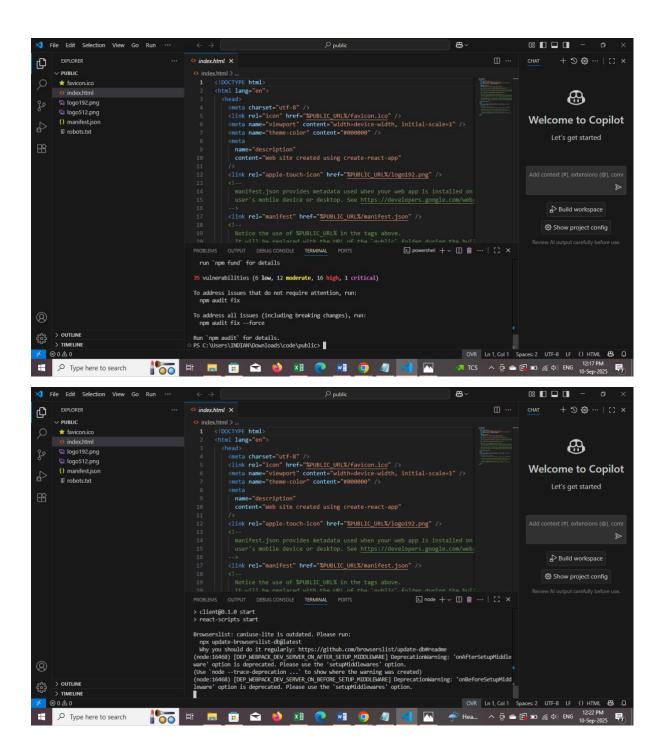
• Project Details Page

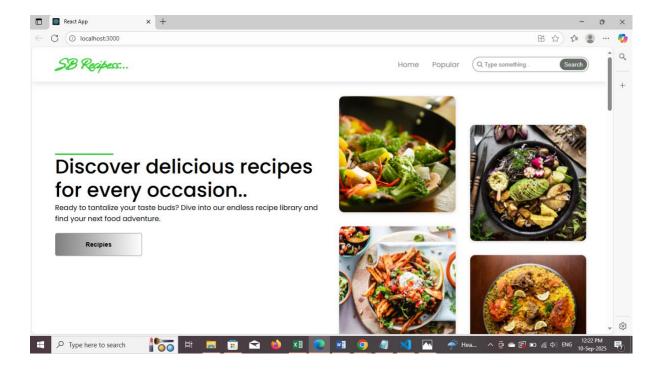
## 10. Testing

- Manual testing during milestones
- Tools: Postman, Chrome Dev

### 11. Screenshots or Demo







### 12. Known Issues

- 1. Meal planning and organization
- 2. Finding recipes based on dietary restrictions or preferences
- 3. Generating grocery lists
- 4. Step-by-step cooking instructions
- 5. Reducing food waste
- 6. Discovering new recipes

#### 13. Future Enhancements

#### **Features**

- 1. Personalized recipe suggestions: Based on dietary preferences, cooking history, and nutritional needs.
- 2. Smart meal planning: Automatically generates meal plans based on seasonal ingredients, sales, and dietary needs.
- 3. Voice assistant integration: Allows users to interact with the app hands-free while cooking.
- 4. Recipe customization: Enables users to modify recipes based on ingredient availability, dietary needs, and personal preferences.

5. Social sharing: Allows users to share favorite recipes and cooking experiences with friends and family.

### **Technical Enhancements**

- 1. Image recognition: Enables the app to recognize ingredients, dishes, and cooking techniques.
- 2. Machine learning: Improves recipe suggestions and meal planning based on user behaviour and preferences.
- 3. Integration with smart kitchen devices: Enables seamless control of kitchen appliances and gadgets.