

Project Documentation

Project Title

1. Introduction

- **Project Title:** fitflex
- **Team ID:** NM2025TMID41008
- **Team Leader:** Karthikeyan s || 24bca20acas@gmail.com
- **Team Members:**
 - Name & Mail id: Harishkumar R || 24bca13acas@gamil.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

- **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

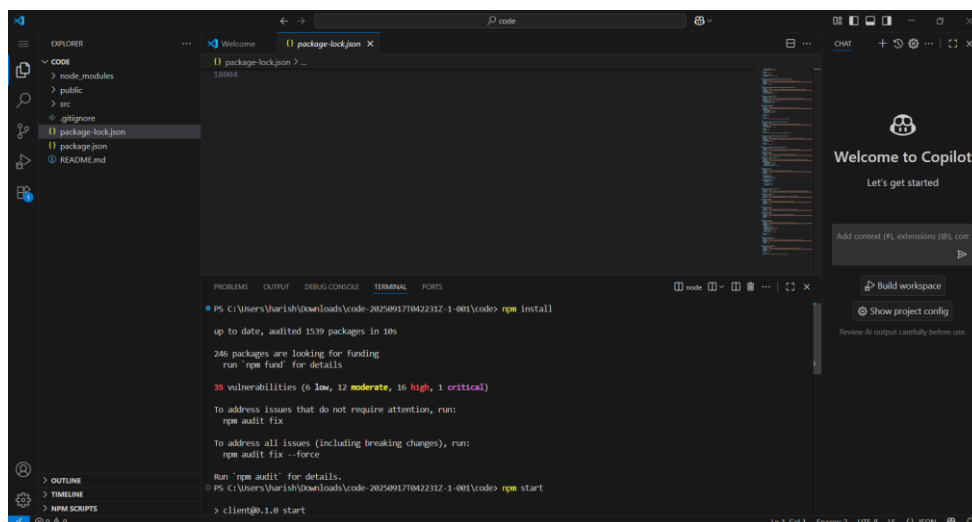
9. User Interface

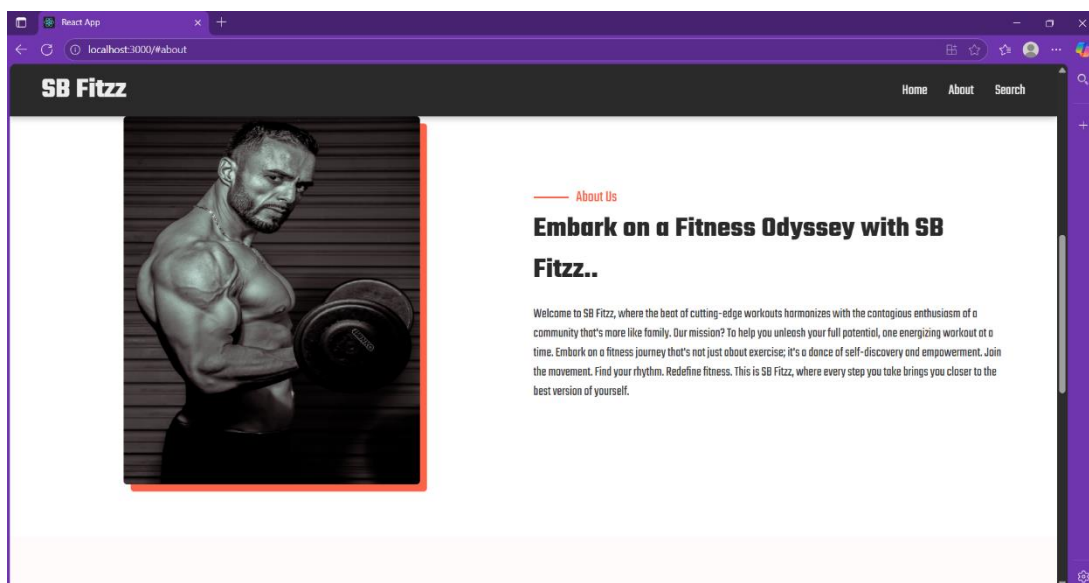
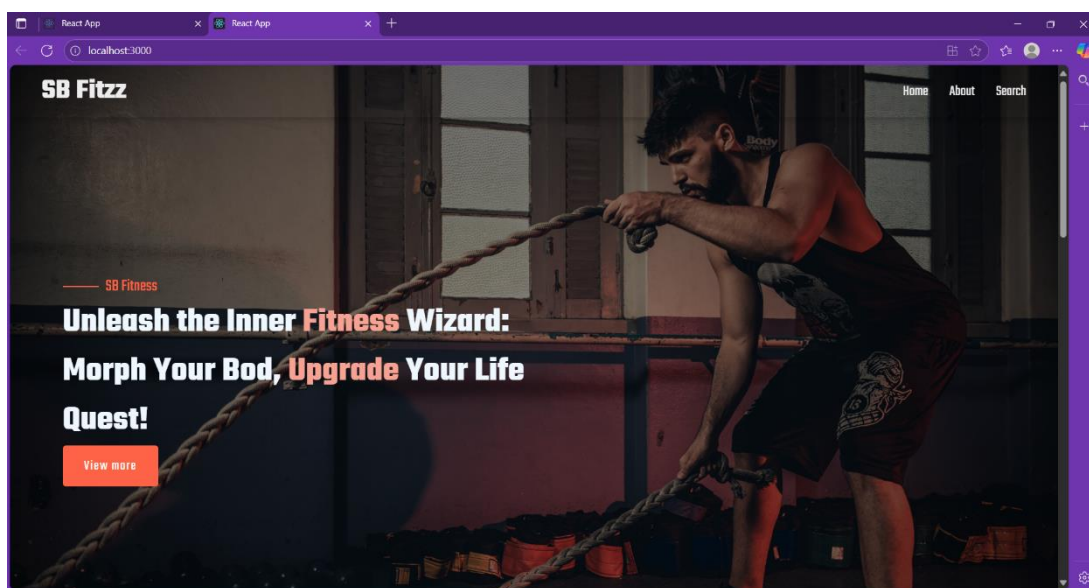
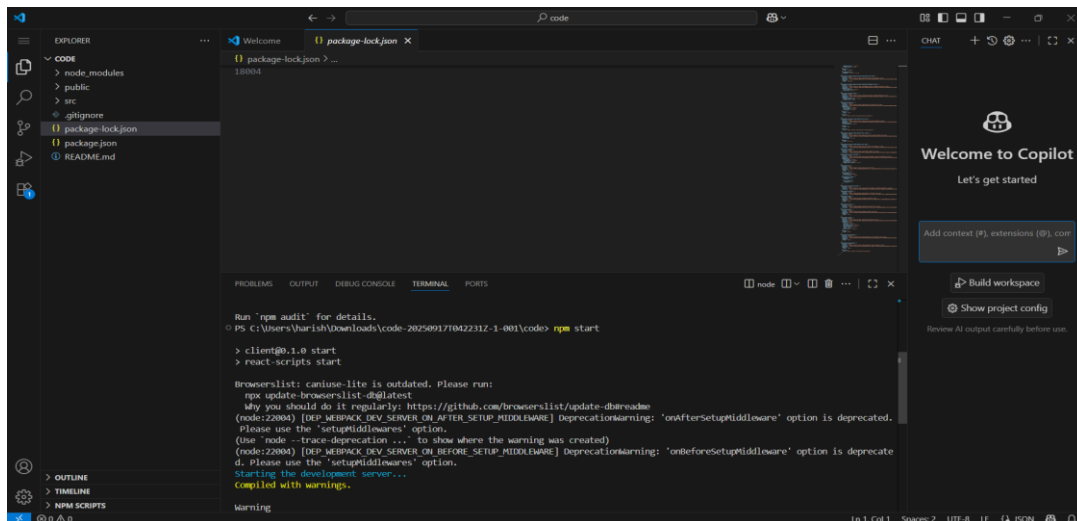
- Landing Page
- Freelancer Dashboard
- Admin Panel
- Project Details Page

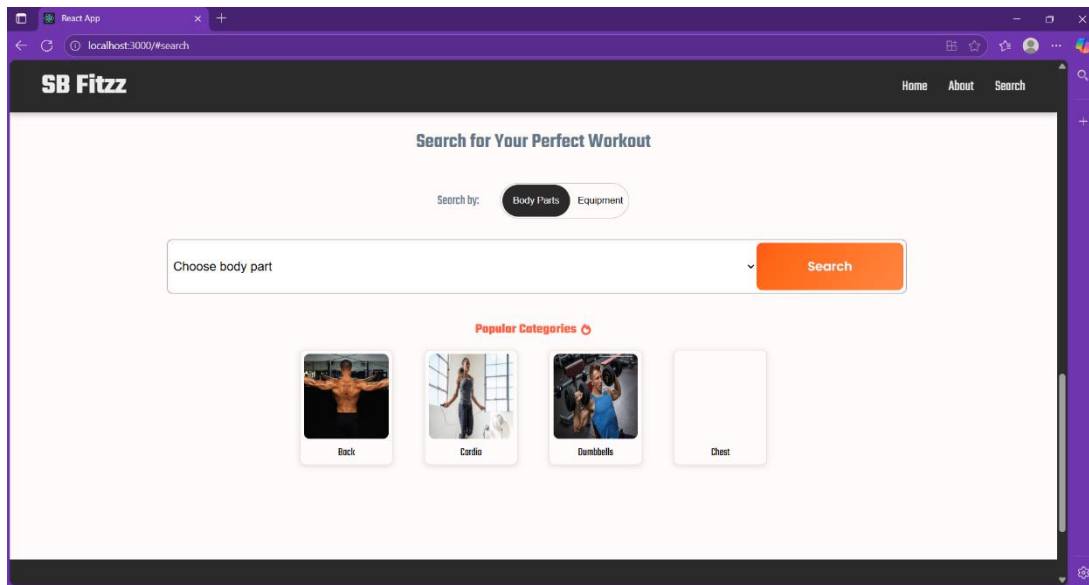
10. Testing

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

11. Screenshots or Demo







12. Known Issues

13. Future Enhancements

- Add payment gateway integration
- Implement real-time notifications
- Mobile app version
- AI-based project matching system