

Project Documentation

Fitflex : Your Personal Fitness Companion

1.Introduction

- *Project Title : Fitflex -Your Personal Fitness Companion*
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2.Project Overview

- *Purpose:*

SB works connects clients and freelancers through project posting, 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 used 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 backbend

| __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*

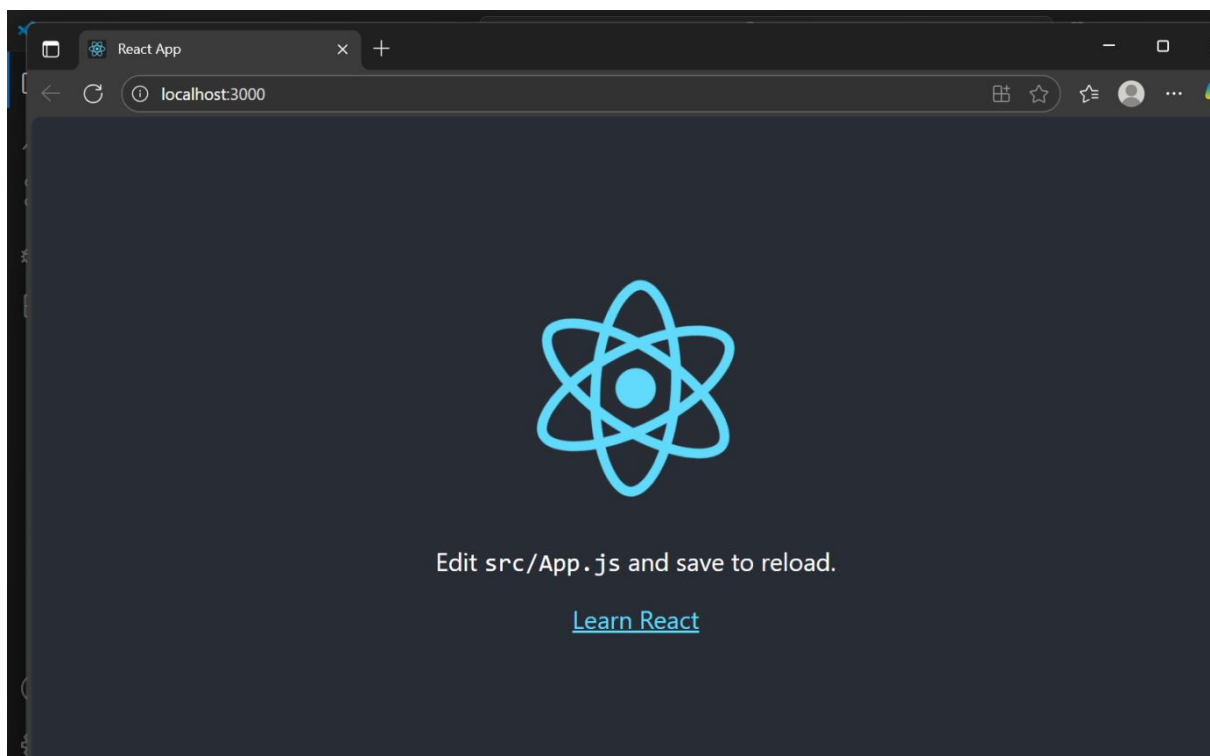
9.User interface

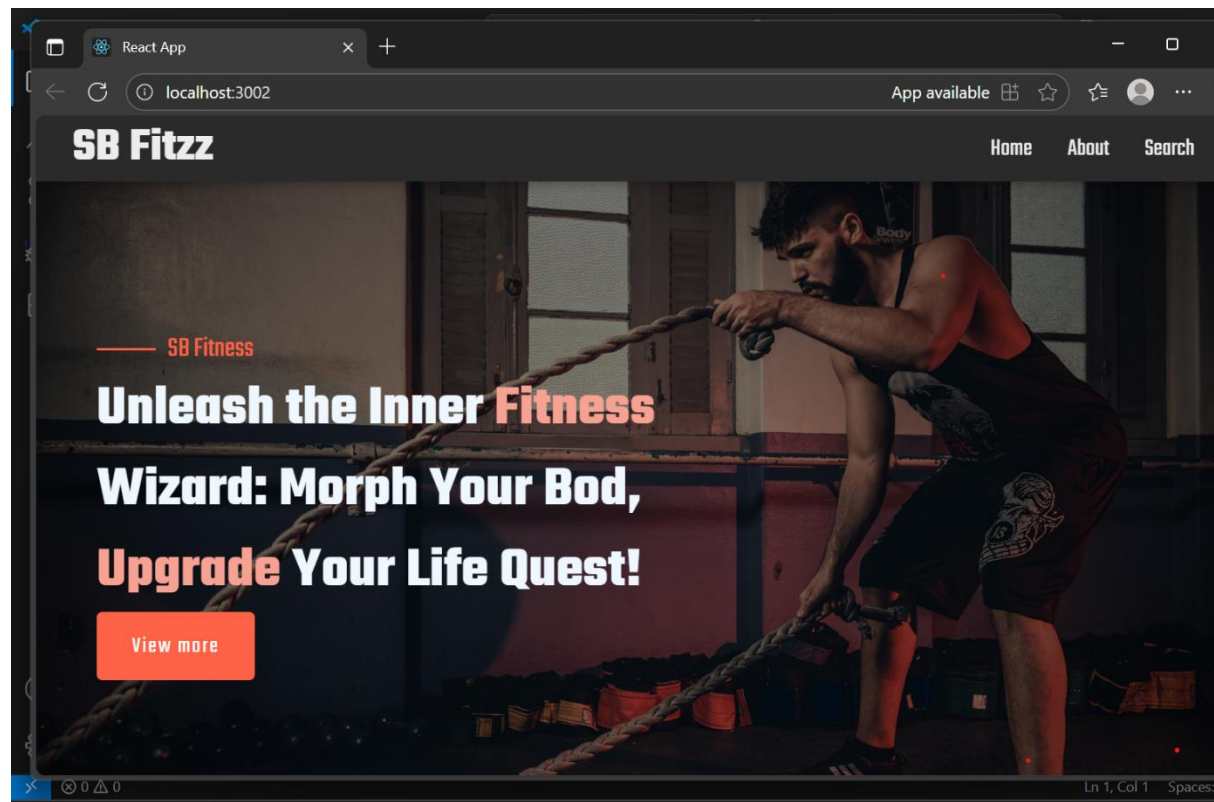
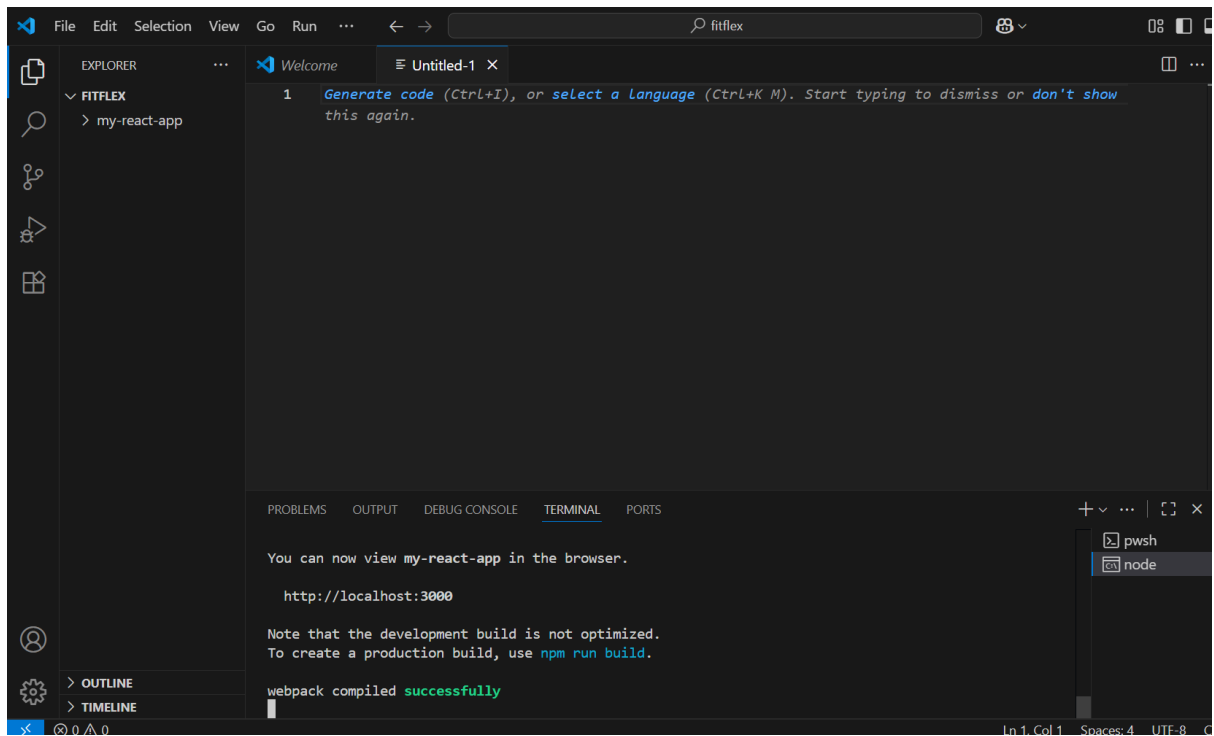
- *Landing Page*
- *Freelancer Dashboard*
- *Admin Panel*
- *Project Details Page*

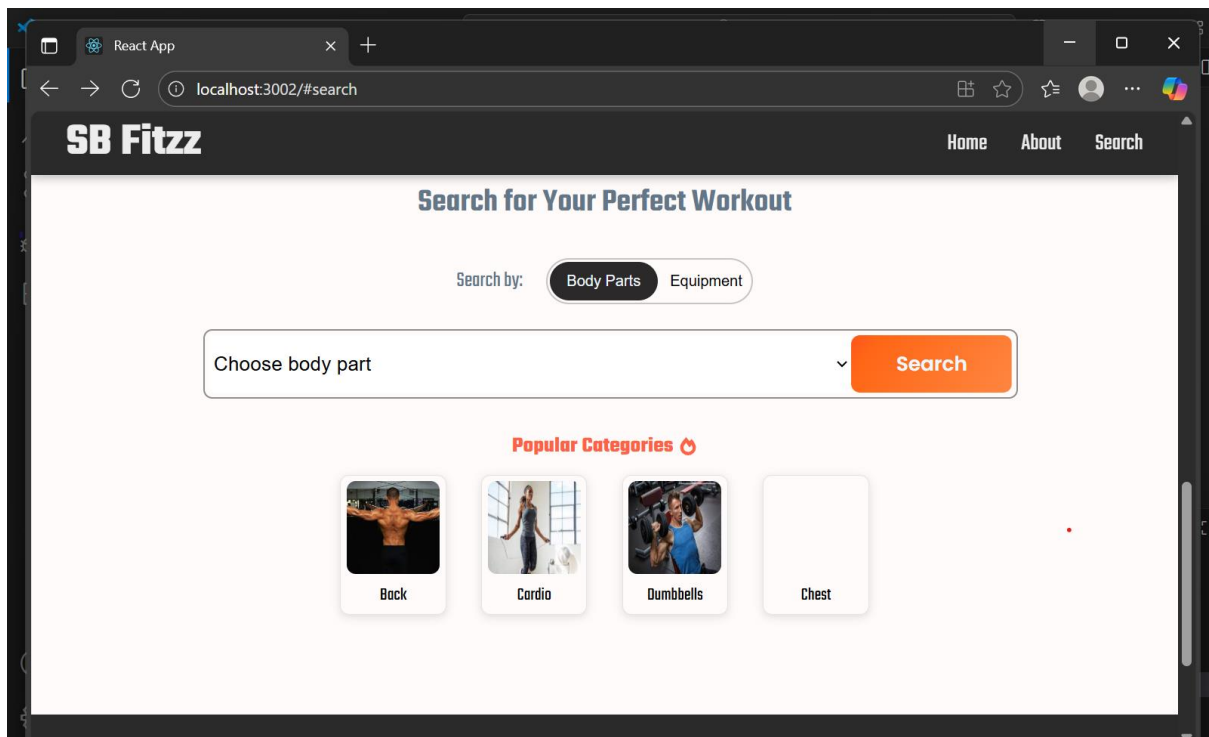
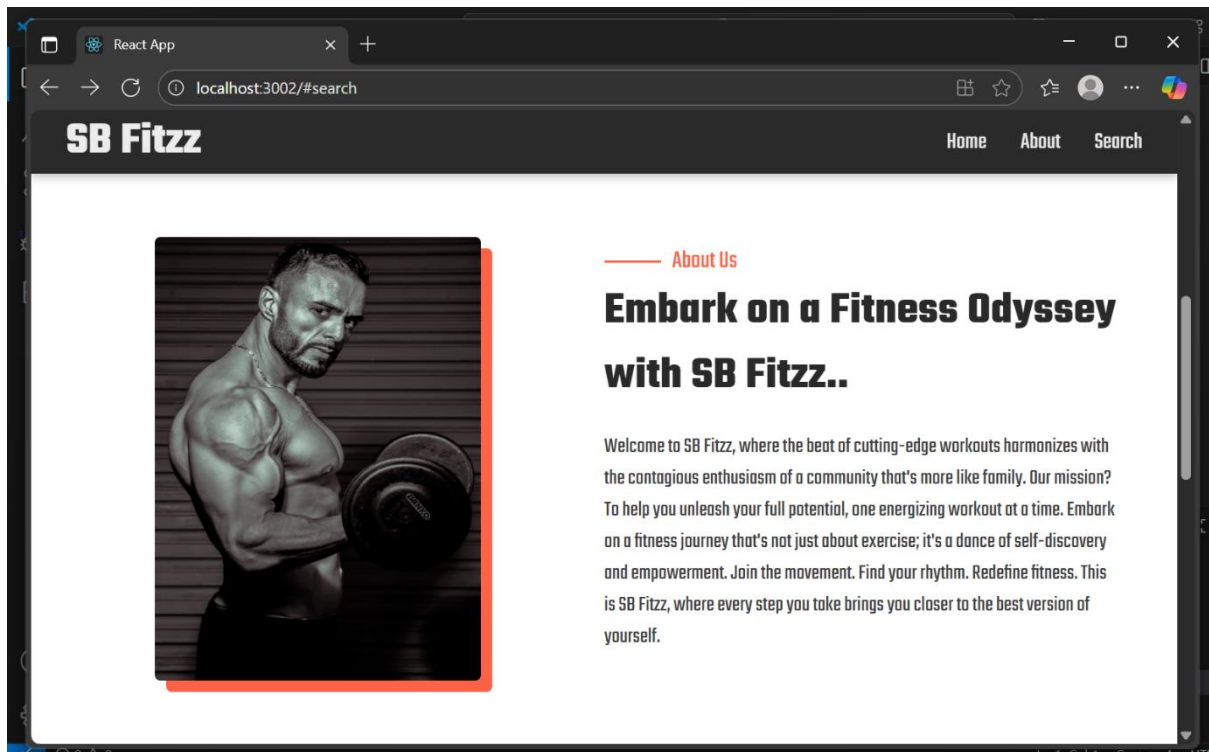
10.Testing

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

11.Screenshots or Demo







12. Known Issues

✦ Limited Dataset

The app currently supports only a few exercise categories (e.g., Cardio, Strength, Yoga).

- ✦ **Exercise details** (steps, videos, equipment info) are not fully comprehensive.

All exercise data is fetched from static files / third-party API calls, so there is no persistent user profile.

- ✦ **Mobile Responsiveness**

While the app works on desktop browsers, some layouts (exercise cards, navigation bar) break on small-screen devices.

- ✦ **Search & Filter Limitations**

Search is case-sensitive and sometimes fails if spelling doesn't match exactly.

Filtering exercises by difficulty/equipment is not yet available.

- ✦ **Performance Issues**

First-time loading of images/videos may be slow due to no lazy-loading or caching implemented.

If API calls fail, the app does not gracefully show fallback messages.

- ✦ **Error Handling**

Limited error messages when API/data fetch fails (sometimes blank screen instead of error prompt).

- ✦ **No offline mode** – the app requires an internet connection at all times.

13.Future Enhancements

- ✦ **Expanded Exercise Library**

Add more categories (Strength, HIIT, Pilates, Flexibility, Meditation).

- ✦ **Provide detailed instructions**

GIF/video demos, and equipment recommendations.

User Authentication & Profiles

Implement secure login/signup (JWT-based).

Let users create personalized workout plans and save progress.

- ✦ **Workout Tracking & Analytics**

Track sets, reps, calories burned, and workout history.

Provide weekly/monthly progress dashboards.

✦ **Smart Recommendations**

Suggest workouts based on fitness level, goals (e.g., weight loss, endurance, muscle gain).

AI-driven recommendations from user history and preferences.

✦ **Improved Search & Filtering**

Add filters for difficulty (Beginner/Intermediate/Advanced), duration, and equipment.

Implement fuzzy search (ignore spelling errors).

✦ **Mobile Responsiveness & PWA Support**

Fully responsive design for all screen sizes.

Convert app into a Progressive Web App (PWA) so it works offline.