Project Documentation

FITFLEX: YOUR PERSONAL FITNESS COMPANION

1. INTRODUCTION

• Project Title: FitFlex – Your Personal Fitness Companion

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2. PROJECT OVERVIEW

Purpose:

FitFlex is designed to help users track workouts, manage diet plans, and monitor their fitness journey. The platform acts as a digital fitness companion, providing personalized guidance for

maintaining a healthy lifestyle.

Features:

Personalized workout planner

🎗 Nutrition and diet tracking

& Activity and progress monitoring

🙎 Fitness dashboard with statistics 💪 User authentication and profile management

Admin control for managing content and users

3. ARCHITECTURE

• Frontend: React.js with Bootstrap / Material UI

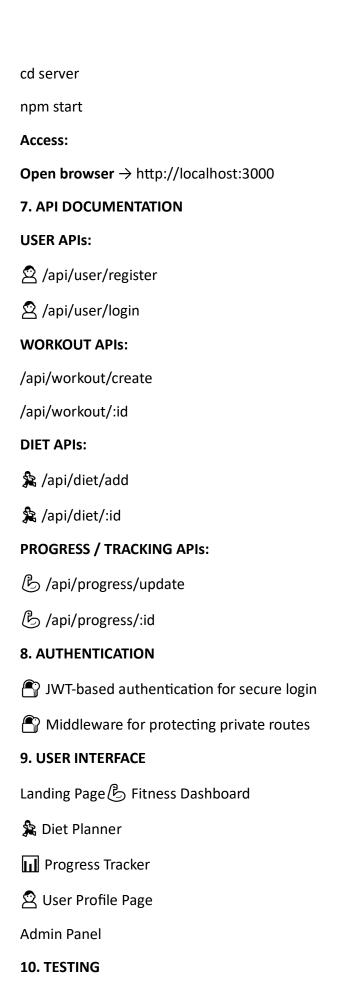
• Backend: Node.js with Express.js (APIs, server logic)

• Database: MongoDB for storing user data, workouts, and nutrition info

4. SETUP INSTRUCTIONS

Prerequisites:

Node.js
A MongoDB
₿ Git
React.js
🏖 Express.js, Mongoose
🖒 Visual Studio Code
Installation Steps:
Clone the repository
git clone <repo-link></repo-link>
Install client dependencies
cd client
npm install
Install server dependencies
cd/server
npm install
5. FOLDER STRUCTURE
FitFlex/
client/ # React frontend
│
— pages/ server/ # Node.js backend
└── routes/
│
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6. RUNNING THE APPLICATION
Frontend:
cd client
npm start
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Manual testing at each milestone

Tools: Postman (API testing), Chrome Dev Tools (frontend debugging)

11. SCREENSHOT/DEMO

https://drive.google.com/file/d/10_Amdu2_MhY_Rx6MfguL5KNg1afNnnno/view?usp=drive link

12. KNOWN ISSUES

Limited workout and diet dataset

Some UI elements may not be fully mobile responsive

Basic dashboard visualization (needs more polish)

13. FUTURE ENHANCEMENTS

- \$\dagger AI-based personalized workout & diet recommendations
- 1 Integration with wearable fitness devices (smartwatch, fitness bands)
- ☆ Mobile app version (Android/iOS)
- ∜ Voice commands for workout guidance
- Social features connect with friends, share progress
- ♦ Offline access to workout and diet plans

🏂 THANK YOU 🏂