# **Project Documentation**

FITFLEX: YOUR PERSONAL FITNESS COMPANION

#### 1. INTRODUCTION

• Project Title: FitFlex – Your Personal Fitness Companion

Team ID: 23CB89477D3627586AB4420E3942CB7F

• Team Leader: SUBIKSHA V Email: 202400620@sigc.edu

• Team Members:

🙎 Abirami I (**Mail ID:**[202400084@sigc.edu])

**A** Nivetha K (**Mail ID:**[202400840@sigc.edu])

Sathyapriya S (Mail ID:[202400191@sigc.edu])

X Vishali V (Mail ID:[202400433@sigc.edu])

### 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:

B Personalized workout planner

🙎 Nutrition and diet tracking

🖒 Activity and progress monitoring

 $\mbox{\ensuremath{\mbox{\boldmath$\&$}}}$  Fitness dashboard with statistics  $\mbox{\ensuremath{\mbox{\boldmath$\&$}}}$  User authentication and profile management

Admin control for managing content and users

## 3. ARCHITECTURE

• Frontend: React.js with Bootstrap / Material UI

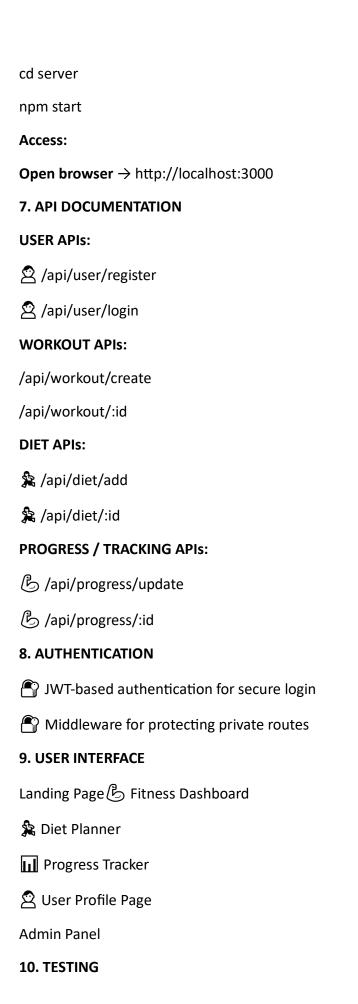
• Backend: Node.js with Express.js (APIs, server logic)

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

#### 4. SETUP INSTRUCTIONS

## Prerequisites:

Node.js
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/
└── models/
│
6. RUNNING THE APPLICATION
Frontend:
cd client
npm start
ļ



Manual testing at each milestone

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

## 11. SCREENSHOT/DEMO

https://drive.google.com/file/d/10lxLSEcQ41NZJD1p1MQPvKUWlckSjrxL/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**

- ☆ 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 🏂