Project Documentation

# Project Title: FitFlex – Fitness and Wellness App

1. Introduction

- Project Title: FitFlex

- Team ID: NM2025TMID34847

-Team Leader:

VISWANATHAN B-24ucs572@avasctnj.edu.in

- Team Members:

VISHAL R [-24ucs568@avasctnj.edu.in](mailto:-24ucs568@avasctnj.edu.in)

VEERAMANI S [-24ucs566@avasctnj.edu.in](mailto:-24ucs566@avasctnj.edu.in)

SIVAGURUNATHAN T- [24ucs557@avasctnj.edu.in](mailto:%20-%2024ucs557@avasctnj.edu.in)

2. Project Overview

FitFlex is a fitness and wellness platform that helps users create custom workout plans, track nutrition, monitor goals, and stay motivated.

- Purpose: Promote healthy habits and lifestyle

- Features:

- Workout planning

- Diet and calorie tracker

- Weekly reports

- Mobile-responsive design

3. Architecture

- Frontend: ReactJS with Bootstrap

- Backend: Node.js, Express.js – REST API

- Database: MongoDB for storing users, workouts, meals, goals

4. Setup Instructions

- Prerequisites:

- Node.js

- MongoDB

- Tools:

- Git

- ReactJS

- MongoDB Compass / VS Code

- Installation Steps:

1. Clone repository

2. Run npm install

3. Set up .env

4. Start both servers

5. Folder Structure

FitFlex/

│

├── /frontend/

├── /backend/

│ ├── /models/

│ ├── /routes/

│ └── /controllers/

6. Running the Application

- Frontend:

npm start

- Backend:

npm run dev

- Runs on: http://localhost:3000

7. API Documentation

- User:

- POST /api/user/register

- POST /api/user/login

- Workout:

- POST /api/workout/add

- GET /api/workout/view

8. Authentication

- JWT-based secure login

- Middleware for protected routes

9. User Interface

- Pages:

- Login

- Dashboard

- Workout Tracker

- Nutrition Page

- Profile

10. Testing

- Manual UI and API testing

- Tools: Postman, DevTools

11. Screenshots or Demo

(Add screenshots of login, dashboard, API responses)

12. Known Issues

- Delay in loading stats

- No push notifications

13. Future Enhancements

- Sync with fitness devices

- Add community & challenges

- Weekly …