

Project Title: FitFlex - Fitness and Wellness App

1. Introduction

- Project Title: FitFlex
- Team ID: [NM2025TMTD34848]
- Team Leader : SIVA SAKTHI S - 24ucs558@avasctnj.edu.in
- Team Members:
 - MATHAN KUMAR A - 24ucs528@avasctnj.edu.in
 - NANDHAKRISHNAN S - 24ucs533@avasctnj.edu.in
 - PONVASAN V - 24ucs536@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

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 health tips