Fit Flex – Frontend Documentation

1. Introduction

Project title: FitFlex
Team Id:NM2025TMID37535
Team leader: Y. Hasna: hasnarose954@gmail.com

Team members:
Y. Hasna: hasnarose954@gmail.com
V.D. Akshaya:akshayadhanapal5@gmail.com
V. Archana bai: archanabai154@gmail.com
S. Hemavathy: vijihema845@gmail.com

2. Project Overview

Purpose:
Fit Flex is a fitness and lifestyle web application designed to help users track workouts, monitor progress, and stay motivated through an interactive user interface.

Features:
- User authentication (login/signup)
- Dashboard to view fitness stats
- Workout planner with add/edit/delete functionality
- Progress tracking with charts
- Responsive design for mobile and desktop

3. Architecture

Component Structure:
App.js, Navbar, Home, Dashboard, WorkoutPlanner, Profile, Footer

State Management:
Context API for global state, useState/useReducer for local states

Routing:
Implemented with react-router-dom; Routes: /, /login, /signup, /dashboard, /workout, /profile

4. Setup Instructions

Prerequisites: Node.js (>=18.x), npm (>=9.x)

Installation:
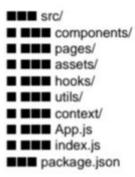git clone [repository-link]
cd fit-flex
npm install

Environment Variables:
REACT_APP_API_URL=https://api.fitflex.com

5. Folder Structure

fit-flex/
■■■ public/

```
■■■ src/
■ ■■■ components/
■ ■■■ pages/
■ ■■■ assets/
■ ■■■ hooks/
■ ■■■ utils/
■ ■■■ context/
■ ■■■ App.js
■ ■■■ index.js
■■■ package.json
```

6. Running the Application

npm start
Runs the app in development mode at http://localhost:3000

7. Component Documentation

Key Components:
Navbar, WorkoutPlanner, Dashboard

Reusable Components:
Button, Modal

8. State Management

Global State: Context API

Local State: useState for form inputs, modals

9. User Interface

Responsive layout optimized for mobile and desktop.
(Insert screenshots here)

10. Styling

CSS Frameworks/Libraries: Tailwind CSS

Theming: Custom theme with light/dark mode

11. Testing

Testing Strategy:
- Unit tests with Jest

- Component tests with React Testing Library
- E2E tests with Cypress

Code Coverage: jest --coverage

12. Screenshots or Demo

Add screenshots or hosted demo link (Netlify/Vercel).

13. Known Issues

- Mobile performance optimization needed
- Minor UI misalignment in workout cards

14. Future Enhancements

- AI-based personalized workout recommendations
- Gamification (badges, streaks)
- Social features (share progress)
- Integration with wearables