

Fit Flex – Frontend Documentation

1. Introduction

Project Title:Fit flex

Team iD:NM2025TMID37518

Team Leader:Charu hasini. V

Team members:

Charuhasini. V charuhasini216@gmail.com

Divya. S divya.sathish0510@gmail.com

Gifty alsida. A giftysida156@gmail.com

Lavanya. R lavanyaraman947@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 ($\geq 18.x$), npm ($\geq 9.x$)

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