

Fitflex -Project Documentation

Introduction

Project Title:

Fitflex

Team Members:

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Project Overview

Purpose:

Fitflex is a comprehensive fitness tracking platform designed to help users monitor their workouts, nutrition, and progress over time.

Features:

Personalized workout plans

Exercise tracking with progress visualization

Nutrition and calorie tracking

Goal setting and achievement tracking

User authentication

Community forum for user interactions

Integration with smart fitness devices

Architecture

Component Structure:

Header: Navigation bar

Dashboard: User progress overview

Workout Tracker: Logging workouts and exercises

Nutrition Tracker: Monitoring food intake and calorie consumption

Goals & Achievements: Setting and tracking fitness goals

Community Forum: User discussions and support

State Management:

Using Redux Toolkit for global state management.

Routing:

Implemented with React Router:

Home (/)

Workout Tracker (/workouts)

Nutrition Tracker (/nutrition)

Goals (/goals)

Community (/community)

Setup Instructions

Prerequisites:

Node.js

npm or yarn

React.js

Redux Toolkit

Installation:

1. Clone the repository:

```
git clone https://github.com/your-repo/fittrack.git
```

2. Navigate to the project directory:

```
cd fittrack
```

3. Install dependencies:

```
npm install
```

4. Configure environment variables (if required).

Folder Structure

```
/fittrack
```

```
├── /src
|   ├── /components
|   ├── /pages
|   ├── /redux
|   ├── /utils
|   └── /assets
├── package.json
└── README.md
```

Running the Application

To start the development server:

```
npm start
```

Component Documentation

Key Components:

WorkoutCard: Displays an overview of a specific workout

NutritionLog: Tracks daily calorie intake

ProgressChart: Visualizes user progress

CommunityFeed: Displays user discussions and posts

Reusable Components:

Button: Customizable button component

Loader: Loading animation component

State Management

Global State: Managed using Redux Toolkit

Local State: Managed with React's useState Hook

Styling

Using Tailwind CSS with a custom theme for a modern UI.

Testing

Testing Strategy:

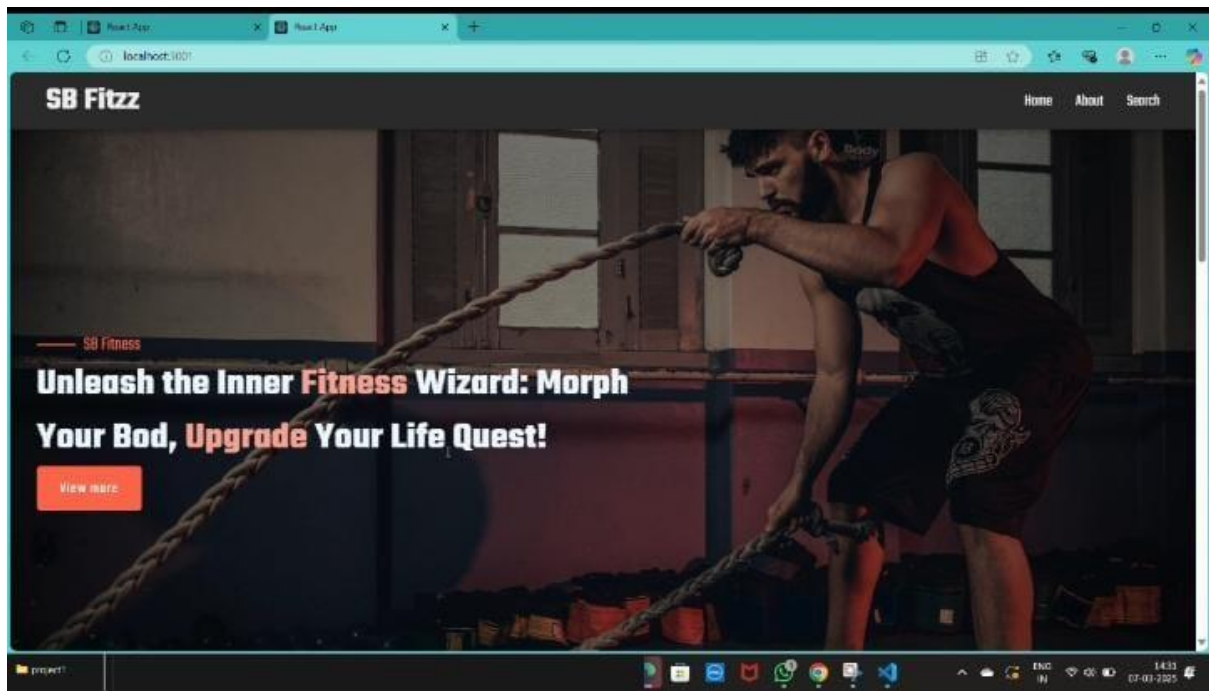
Unit Testing: Jest & React Testing Library

Integration Testing: Cypress for E2E tests

Screenshots or Demo

Project Demo: https://drive.google.com/file/d/1kkYFiO-_jAXwBainCbwYKuqbdhLeY9dV/view?usp=drive_link

Screenshot:



Known Issues

API rate limits may affect real-time updates.

Dark mode support is in progress.

Future Enhancements

AI-driven workout recommendations

Push notifications for reminders

Integration with wearables (Fitbit, Apple Watch, etc.)

Social challenges and leaderboards

This documentation provides a clear and structured overview of your fitness app. Let me know if you need modifications!