Fitness app - Project Documentation

Introduction

Project Title: Fitness app

Team Members:

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- M.Anbu

- B.Suvaitha

Project Overview

Purpose:
 Fitness is a React.js-based fitness application designed to provide users with personalized workout routines, exercise tracking, and fitness guidance.

Features:

- Personalized workout plans

- Exercise tracking and progress monitoring

- Fitness guidance and recommendations

- Integration with **RapidAPI** for extensive exercise data

- User authentication

Architecture

Component Structure:

- **Header:** Navigation bar

- **Dashboard:** Personalized user dashboard

- **Workout Planner:** Exercise routines based on fitness goals

- **Exercise Tracker:** Logs user progress

- **Guidance Section:** Fitness tips and recommendations

State Management:
Using **Redux Toolkit**

Routing:
React Router with paths:

- **Home** (/)

- **Workout Planner** (/workout-planner)

- **Exercise Tracker** (/exercise-tracker)

- **Guidance** (/guidance)

Setup Instructions

Prerequisites:

- **Node.js**

- **npm**

- **React.js**

- **Redux Toolkit**

Installation:

1. Clone the repository:

2. git clone https://github.com/your-repo/fitness.git

3. Install dependencies:

4. npm install

5. Configure environment variables

Folder Structure

/fitflex

```
├── /src

│   ├── /components

│   ├── /pages

│   ├── /redux

│   ├── /utils

│   ├── /assets

├── package.json
```

├── README.md

Running the Application

To start the development server:GitHub - Suvaitha17/fitness-app

npm start

Component Documentation

Key Components:

- **WorkoutCard:** Displays workout details

- **ExerciseTracker:** Logs and tracks workouts

- **GuidanceFeed:** Provides fitness tips

Reusable Components:

- **Button:** Customizable button component

- **Loader:** Loading animations

State Management

- **Global State:** Managed using **Redux Toolkit**

- **Local State:** Managed with React's useState

Styling

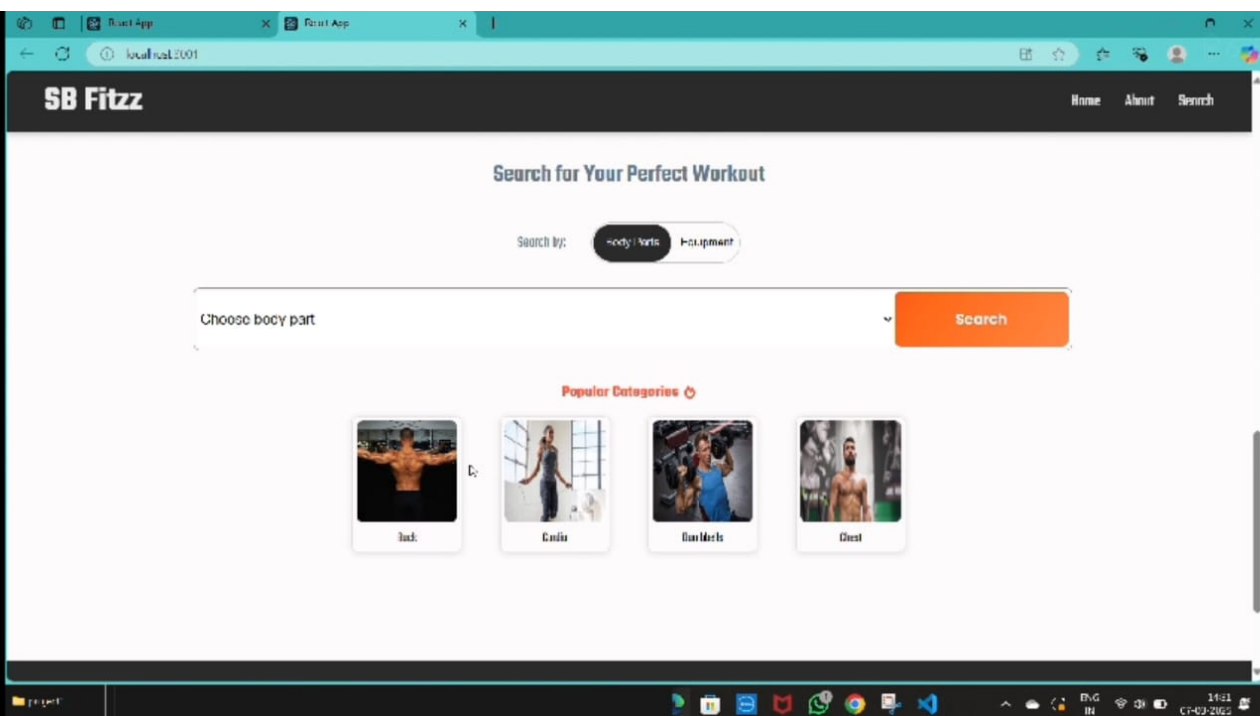Using **Tailwind CSS** for a modern UI

Testing

Testing Strategy:

- **Unit Testing:** Jest & React Testing Library

- **Integration Testing:** Cypress for end-to-end tests

Screenshot& Demo:

project demo link:Naan Mudhalvan.mp4

screeneshot :

Known Issues

- API rate limits may affect exercise data retrieval.

- Dark mode support in progress.

Future Enhancements

- AI-based workout recommendations

- Integration with wearable fitness trackers

- Social features (leaderboards, challenges)