Fitness app - Project Documentation

Intro	duction	

Project Title: Fitness app

Team Members:

- P.Dharani(Team Leader)
- V.Lokesh
- 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

•	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		
H	—/src	
	/components	
	/pages	
	/redux	
	/utils	
	/assets	
	— package.json	

React.js

Running the Application

To start the development

server:https://github.com/Suvaitha17/FitnessApp.git

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

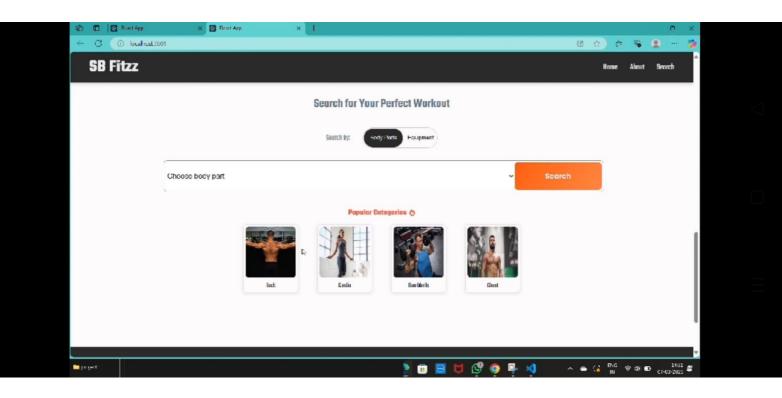
Testing Strategy:

- 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

- Al-based workout recommendations
- Integration with wearable fitness trackers
- Social features (leaderboards, challenges)