Project Documentation

# Introduction

Project Title: Your Personal Fitness Companion

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# Project Overview

Purpose: The project aims to provide users with a digital personal fitness companion that helps them track workouts, monitor nutrition, set fitness goals, and stay motivated through progress visualization.

Features:

* User authentication (login/signup)
* Personalized workout plans
* Nutrition and calorie tracking
* Dashboard with progress charts
* Daily reminders & motivational notifications
* Responsive UI for mobile and desktop

# Architecture

Component Structure:

* Navbar – Navigation across app pages
* Dashboard – Displays user progress and stats
* WorkoutPlanner – Manages workout schedules
* NutritionTracker – Tracks meals and calories
* Profile – User details, preferences, goals
* Reusable Components: Buttons, Forms, Cards

State Management: Context API (for user authentication & global state).

Routing: React Router for page navigation.

# Setup Instructions

Prerequisites: Node.js, npm, React.js

Installation:

git clone <repo-link>  
cd client  
npm install  
npm start

# Folder Structure

* /components – Navbar, Cards, Buttons
* /pages – Dashboard, Login, Profile, Tracker
* /assets – Images, icons
* /utils – Custom hooks, helper functions

# Running the Application

npm start

# Component Documentation

Dashboard: Displays fitness stats (props: userData).

WorkoutPlanner: Adds/edits workout routines.

NutritionTracker: Logs daily meals & calories.

# User Interface

UI screenshots/demos to be added.

# Styling

TailwindCSS for styling.

Custom theme with light/dark mode.

# Testing

Jest & React Testing Library for unit tests.

End-to-end testing with Cypress (future enhancement).

# Known Issues

Limited offline functionality.

Needs API integration for nutrition database.

# Future Enhancements

* AI-based workout suggestions
* Integration with wearable devices (Fitbit, Apple Watch)
* Social features (friend challenges, leaderboards)