Fitness Tracker Web App

1. **Project Description**

**Project Title:** FitTrack – A Simple Fitness Tracking Web App

**Overview:**

FitTrack is a lightweight fitness recording web application that helps users log, review, and manage their workout history. The system allows users to register and store personal fitness records including sport type, duration, date, and description. The backend is implemented using Node.js + Express + MongoDB, while the frontend uses HTML5, CSS, and Vanilla JavaScript for client-side rendering.

**Main Features:**

User registration and authentication

CRUD operations on workout records (Create, Read, Update, Delete)

Organized data storage using two MongoDB databases:

fitness\_register\_db — stores user registration information

fitness\_recording\_db — stores workout logs

RESTful API endpoints for communication between frontend and backend

Clean UI with interactive forms and table rendering of user records

**Technical Stack:**

Frontend: HTML5, CSS3, JavaScript (client-side rendering)

Backend: Node.js, Express.js

Database: MongoDB (two databases with separate collections)

Tools: ESLint, Prettier, Postman (for API testing)

Deployment: Render / Railway / or local server

1. **User Personas**

**Persona 1: Alex (The Beginner)**

Age: 23

Occupation: College Student

Motivation: Wants to keep track of daily running progress

Goals: Log daily runs, duration, and notes easily from mobile or laptop

Pain Points: Doesn’t want complicated apps or paid subscriptions

How FitTrack Helps: Provides a simple, no-login barrier to start recording activities quickly

**Persona 2: Jamie (The Fitness Enthusiast)**

Age: 30

Occupation: Software Engineer

Motivation: Consistent gym-goer who likes tracking various exercises (running, swimming, yoga)

Goals: Maintain detailed fitness history with dates and durations

Pain Points: Finds Excel tracking too manual and tedious

How FitTrack Helps: Offers easy CRUD operations to manage all workout records and view them in one place

**Persona 3: Riley (The Reformer)**

Age: 40

Occupation: Office Worker

Motivation: Recently started exercising after a health scare

Goals: Keep a digital log of workouts for motivation and consistency

Pain Points: Not tech-savvy, needs a simple interface

How FitTrack Helps: Simple UI with step-by-step flow for adding new records and viewing past activities

1. **User Stories (Use Cases with a Story)**

As a new user,

I want to register and log in to an account,

so I can securely access my personalized fitness dashboard and stored workout records.

As a fitness enthusiast,

I want to view my past workout history and visual charts of my progress,

so I can analyze how my exercise habits are improving week by week.

As a goal-oriented user,

I want to set a target weight and preferred exercise intensity,

so I can receive a customized 4-week training plan generated by the AI assistant.

As a busy professional,

I want to quickly log new workout sessions using a simple form on my phone or laptop,

so I can keep consistent fitness tracking without wasting time.

As a returning user,

I want to edit or delete my workout records,

so I can keep my fitness data accurate and up to date.

1. **Design Mockups**

(A) Home / Register Page

+--------------------------------------+

| FitTrack App |

+--------------------------------------+

| [ Register New User ] |

| Name: [\_\_\_\_\_\_\_\_\_\_] |

| Email: [\_\_\_\_\_\_\_\_\_\_] |

| Password: [\_\_\_\_\_\_\_\_\_\_] |

| [ Register ] |

+--------------------------------------+

| Already registered? [Go to Records] |

+--------------------------------------+

(B) Fitness Record Dashboard

+-----------------------------------------------------------+

| My Fitness Records |

+-----------------------------------------------------------+

| Sport Type | Duration (min) | Date | Description |

|------------------------------------------------------------|

| Running | 30 | 2025-10-06 | Morning jog |

| Yoga | 45 | 2025-10-07 | Evening stretch |

|------------------------------------------------------------|

| [ Add Record ] [ Edit ] [ Delete ] |

+-----------------------------------------------------------+

(C) Add New Record Form

+-----------------------------------+

| Add Fitness Record |

+-----------------------------------+

| Sport Type: [\_\_\_\_\_\_\_\_\_\_] |

| Duration: [\_\_\_\_\_] min |

| Date: [\_\_\_\_\_\_/\_\_\_\_\_\_/\_\_\_\_] |

| Description: [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_] |

| [ Save Record ] |

+-----------------------------------+

(D) Using AI generate exercise plan

+-----------------------------------+

| AI Plan Form |

+-----------------------------------+

| Height (cm): [\_\_\_\_\_\_\_\_\_\_] |

| Weight (kg): [\_\_\_\_\_\_\_\_\_\_] |

| Target Weight (kg): [\_\_\_\_\_\_\_\_\_\_] |

| Activity Level: [\_\_\_\_\_\_\_\_\_\_] |

| [ Generate Plan ] |

+-----------------------------------+