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)**

**Story 1 – Register and Start Tracking**

“As a new user, I want to register my name, email, and password so that I can create my own profile and start recording my workouts.”

Acceptance Criteria:

Registration form collects name, email, password.

Data is stored in fitness\_register\_db.users.

Prevents duplicate emails.

**Story 2 – Log a Workout**

“As a registered user, I want to log details of my exercise sessions, such as the sport type, duration, and date, so that I can track my progress over time.”

Acceptance Criteria:

User can submit a form with workout details.

Record saved in fitness\_recording\_db.fitness\_records.

Each record includes a reference to user ID (Uid).

**Story 3 – View All My Workouts**

“As a user, I want to view all my past workout entries, so that I can review my exercise history.”

Acceptance Criteria:

Frontend fetches /api/fitness/:uid and displays a table of all workouts.

User can see date, duration, and description.

**Story 4 – Edit a Workout**

“As a user, I want to update the details of a workout entry if I made a mistake, so that my fitness history stays accurate.”

Acceptance Criteria:

Frontend provides an Edit button for each record.

PUT request to /api/fitness/:id updates the data.

**Story 5 – Delete a Workout**

“As a user, I want to delete an outdated or incorrect workout entry, so that my list stays organized.”

Acceptance Criteria:

DELETE request to /api/fitness/:id.

UI updates to remove the deleted record.

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 ] |

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