

INFR3120 Assignment 3: Project Plan

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Application Overview

Application Name: FitTrack

Idea: FitTrack is a web-based application that is a “Workout Progress Tracker.” It is designed to replace any type of physical logbook, allowing users to track their progress digitally. The main goal is to help users track “progressive overload.” This, in turn, makes the progression and monitoring process much more efficient. By storing the data for each user in a cloud database (MongoDB), users can access their workout history remotely from any device.

CRUD Requirements

Create (Log Workout): A form to allow the user to input exercise details (Name, Reps, Weight). Once submitted the data is read and saved to MongoDB database.

Read (View Workouts): Fetches all workout documents and info from the database and displays them in a structured form that is easy on the eyes.

Update (Edit Workout): Allows the user to edit a previous workout log they have submitted. This loads a prefilled form so they can make changes and save them afterwards.

Delete (Remove a Workout): A delete button allows the user to remove a specific workout and a pop-up shows to confirm the choice before it is sent.

Technology Used

Backend: Node.js with ExpressJS framework.

Database: MongoDB (via Mongoose ODM) for storing workout logs.

Frontend: EJS Templating Engine with Bootstrap 5 for responsive design.

Hosting: Render

File Structure

config/ - Database connection configuration (globals.js).

controllers/ - Logic for handling CRUD operations (workoutController.js).

models/ - Mongoose schema definition (Workout.js).

routes/ - URL route definitions (index.js, workout.js).

views/ - EJS templates for the frontend.

partials/ - Reusable components (header, footer, nav).

workouts/ - Specific pages for adding/editing/viewing workouts.

public/ - Static assets (CSS, images, client-side JS).