

Project Report: Fitness Tracker Web Application

Chanil Park

Overview

This project is a web-based health tracking application that allows users to log their workout sessions and view statistics such as weekly averages and calorie consumption. Users can input workout type, date, and duration (in hours and minutes). The application displays progress and history through a visual bar chart.

Tools & Technologies Used

IDE	JetBrains WebStorm
Assistant	Copilot
Frontend Technologies	HTML5, CSS3, JavaScript
Chart Library	Chart.js (via CDN)
Fonts	Google Fonts: Inter, Playfair Display
Data Storage	localStorage (in-browser data persistence)

External APIs / Resources

- Chart.js: Used to render weekly workout data in bar chart form.
- localStorage: Used to persist workout data in the browser without requiring a backend.

Features Attempted & Outcomes

Workout Chart Visualization	Successfully implemented using Chart.js.
Workout Logging & Deletion	Users can input and manage daily logs with date, type, and duration.
Weekly Averages & Calorie Count	Automatically computed and displayed based on stored data (5 kcal/min).
Google Login Integration	Attempted using OAuth2 / Firebase but failed due to CORS and redirect URI issues.

Future Improvements

- - Implement Google login using OAuth2 or Firebase Authentication

- - Connect to a backend service (e.g., Firebase or Supabase) for cloud-based data storage
- - Enhance responsive design for better mobile experience