Project Documentation

Name: Active Pulse

By:

- Rawan Tarek Abd-Elrazik

- Aisha Muhammed Elsayed

- Loai Mohamed Elmesiry

- Abdallah Khaled Abdelhamed

- Magdy Elsayed Mohamed Elbassiouny

Objectives: Active Pulse is a fitness tracking dashboard to display real-time statistics and goals.

Overview: a fitness dashboard where users can log daily workout activities, set fitness goals, and track progress over time. The application will use React for the frontend, integrated with a Node.js backend to manage user data. Incorporate charts and graphs (e.g., using Chart.js or D3.js) to visualize users' progress, and implement user authentication to allow individuals to manage their own fitness records.

Technologies: React, NodeJS, HTML, CSS, JavaScript, Chart.js, API Integration, and Frontend Development.

Functional Requirements:

Functionality	Description
Register	The user can register by adding their email, username, passwords and information about their body (weight, height, routine)
Log in	The user can log in using their email, or username and password
Dashboard	- Body Overview: displays a summary of the user's fitness activities, including current goals and workout stats. - Goals: - users can set, view, edit, and delete fitness goals (e.g., weight loss, muscle gain). - the system displays goal progress (e.g., percentage of target achieved). - Progress: users can track their progress toward goals, showing data like weight, reps, or other performance metrics over time.
Workout Plan	Daily workout - displays the user's workout for the day, including exercises, sets, reps, and rest periods. - the system can adjust daily workouts based on user goals and preferences.
Statistics	- Users can see detailed stats of their workouts and goals, such as performance over time (e.g., total weight lifted, calories burned). - Statistics can be filtered by date range or specific exercises.
Settings	Users can customize preferences, such as notifications, workout reminders, and units (e.g., kg vs lbs).
Profile	- Users can view and update their personal information (e.g., name, email, password) - The system allows users to upload a profile picture and manage privacy settings.

Non-Functional Requirements:

Performance:

Requirement ID	Requirement Description
PR	● Portability: the system should be compatible with all modern browsers.
PR	● Low/minimum Latency: this means that the system should respond quickly to your requests (ex. Within 3 sec) and updates(ex. Within 2 sec), so you don't have to wait for a long time to see your changes.

Reliability:

Requirement ID	Requirement Description
R	● Reliability: the system must perform without failure in 95% of use cases.
R	● Maintainability: MTTRS(the main time to restore a system) following a system failure must not take long.