FITTRACK: PERSONAL FITNESS DASHBOARD

MINI PROJECT SUBMISSION

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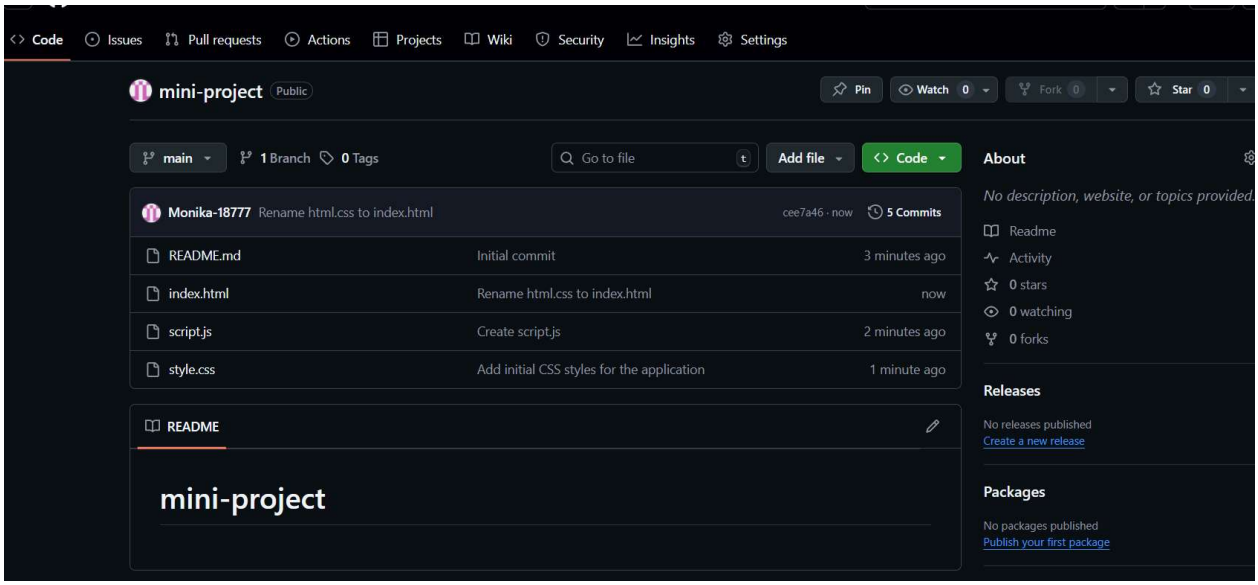

Abstract

FitTrack is a responsive and interactive web-based application that allows users to track their daily fitness activities, such as steps taken, calories burned, and water intake. It helps users visualize their health progress through attractive charts and provides insights to maintain a healthy lifestyle. The platform is built entirely using **HTML, CSS, JavaScript, and Chart.js**, ensuring fast performance and smooth interactivity. FitTrack promotes health awareness by enabling users to log and monitor their daily habits without needing backend integration. It is a lightweight, user-friendly dashboard for fitness tracking and motivation.

Introduction

FitTrack is a personal fitness dashboard designed to empower users to monitor their health and daily activity levels. The web platform allows users to input data such as steps walked, calories consumed, sleep hours, and water intake. These inputs are then visualized using interactive charts to give users a clear view of their fitness journey.

The system is designed with a clean and intuitive user interface, making it easy for anyone to use. It requires no installation and works entirely in the browser. By utilizing

localStorage, the app can temporarily save user data, allowing them to review their recent activity without a database connection.

FitTrack is ideal for individuals who want a simple, privacy-focused, and visually appealing way to monitor their fitness progress.

Objective

The main objectives of the FitTrack project are:

1. To design a simple and user-friendly web interface for daily fitness tracking.
2. To visualize user progress through interactive charts and graphs.
3. To store and manage daily input data using localStorage.
4. To encourage consistent healthy habits through visual motivation.
5. To ensure responsiveness across devices (desktop, tablet, mobile).

Scope of the Project

FitTrack focuses on providing a **frontend-only, browser-based solution** for health monitoring. It eliminates the need for complex backend systems, allowing users to access it instantly through any web browser. The project scope includes designing input forms, integrating Chart.js for visual feedback, and enabling basic data storage.

Future enhancements can include integration with fitness APIs or smartwatch sensors for real-time data synchronization. The project emphasizes simplicity, performance, and user engagement through a well-designed dashboard.

Technologies Used

Frontend Technologies

- **HTML5:** For structuring the webpage and input forms.
- **CSS3:** For creating a clean, responsive, and visually appealing layout.
- **JavaScript:** For interactivity, local data handling, and chart logic.
- **Chart.js:** For generating dynamic fitness progress charts.

Project Description

FitTrack consists of three main sections:

1. **Data Input Section:**
   Users enter details such as steps, calories, water intake, and sleep hours.

2. **Dashboard Visualization:**
   A chart displays progress trends for each fitness parameter using Chart.js.

3. **History Section:**
   Recent entries are stored in **localStorage** and displayed for quick review.

The system offers smooth transitions, responsive design, and easy customization for future expansion.

Source Code

HTML (index.html)

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>FitTrack - Personal Fitness Dashboard</title>
 <link rel="stylesheet" href="style.css">
 <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
</head>
```

```
<body>
 <header>
  <h1>🏃‍♂️ FitTrack</h1>
  <nav>
   <ul>
    <li><a href="#home">Home</a></li>
    <li><a href="#stats">Dashboard</a></li>
    <li><a href="#about">About</a></li>
   </ul>
  </nav>
 </header>

 <main id="home">
  <section class="input-section">
   <h2>Enter Your Daily Fitness Data</h2>
   <form id="fitnessForm">
    <label>Steps Walked:</label>
    <input type="number" id="steps" required>
    <label>Calories Burned:</label>
    <input type="number" id="calories" required>
    <label>Water Intake (Liters):</label>
    <input type="number" id="water" required>
    <label>Sleep Hours:</label>
    <input type="number" id="sleep" required>
    <button type="submit">Add Entry</button>
   </form>
  </section>

  <section id="stats" class="chart-section">
   <h2>Your Fitness Progress</h2>
   <canvas id="fitnessChart"></canvas>
  </section>

  <section class="history">
   <h2>Recent Entries</h2>
   <ul id="historyList"></ul>
  </section>
 </main>

 <footer>
```

```
  <p>© 2025 FitTrack | Stay Healthy 💪</p>
 </footer>

 <script src="script.js"></script>
</body>
</html>
```

CSS (style.css)

```
body {
 font-family: 'Poppins', sans-serif;
 margin: 0;
 background-color: #f2f8f9;
 color: #333;
}

header {
 background-color: #0a3d62;
 color: #fff;
 padding: 15px;
 text-align: center;
}

nav ul {
 list-style: none;
 padding: 0;
}

nav ul li {
 display: inline;
 margin: 0 15px;
}

nav ul li a {
 color: white;
 text-decoration: none;
 font-weight: bold;
}

.input-section, .chart-section, .history {
```

```
  text-align: center;
  margin: 30px;
  background: #fff;
  border-radius: 12px;
  padding: 20px;
  box-shadow: 0 0 10px rgba(0,0,0,0.1);
}

input {
  display: block;
  margin: 10px auto;
  padding: 8px;
  width: 50%;
  border: 1px solid #ccc;
  border-radius: 6px;
}

button {
  background-color: #0a3d62;
  color: white;
  padding: 10px 20px;
  border: none;
  border-radius: 6px;
  cursor: pointer;
}

button:hover {
  background-color: #1e90ff;
}

footer {
  background-color: #0a3d62;
  color: white;
  text-align: center;
  padding: 10px;
  position: fixed;
  bottom: 0;
  width: 100%;
}
```

JavaScript (script.js)

```
const form = document.getElementById('fitnessForm');
const historyList = document.getElementById('historyList');
const ctx = document.getElementById('fitnessChart').getContext('2d');

let fitnessData = JSON.parse(localStorage.getItem('fitnessData')) || [];

form.addEventListener('submit', (e) => {
  e.preventDefault();

  const steps = document.getElementById('steps').value;
  const calories = document.getElementById('calories').value;
  const water = document.getElementById('water').value;
  const sleep = document.getElementById('sleep').value;

  const entry = { steps, calories, water, sleep, date: new Date().toLocaleDateString() };
  fitnessData.push(entry);
  localStorage.setItem('fitnessData', JSON.stringify(fitnessData));

  updateHistory();
  updateChart();
  form.reset();
});

function updateHistory() {
  historyList.innerHTML = '';
  fitnessData.slice(-5).forEach(entry => {
    const li = document.createElement('li');
    li.textContent = `${entry.date}: Steps ${entry.steps}, Calories ${entry.calories}, Water
${entry.water}L, Sleep ${entry.sleep}h`;
    historyList.appendChild(li);
  });
}

function updateChart() {
  const labels = fitnessData.map(e => e.date);
  const steps = fitnessData.map(e => e.steps);
  const calories = fitnessData.map(e => e.calories);
```

```
  new Chart(ctx, {
    type: 'line',
    data: {
      labels,
      datasets: [
        { label: 'Steps', data: steps, borderColor: 'blue', fill: false },
        { label: 'Calories', data: calories, borderColor: 'red', fill: false }
      ]
    },
    options: { responsive: true }
  });
}

updateHistory();
updateChart();
```

Explanation of Code

- **HTML:**
  Creates the main structure — a form for user input, a section for the chart, and a history log.

- **CSS:**
  Provides modern, clean styling with responsiveness and rounded panels for visual appeal.

- **JavaScript:**

    - Captures user inputs and stores them in **localStorage**.

    - Displays recent data entries in the history list.

    - Uses **Chart.js** to plot trends for steps and calories burned.

Conclusion

FitTrack is a simple yet effective web-based fitness tracking system. It allows users to enter daily health parameters and visualize their progress instantly through interactive charts. The project demonstrates the power of front-end web technologies in creating functional and engaging applications without requiring a backend.

In the future, FitTrack can integrate APIs from wearables or fitness trackers to provide real-time updates and personalized recommendations. Overall, the project successfully combines design, interactivity, and functionality for everyday health tracking.

PROTOTYPE