POC
Calorie Tracker Documentation:

Using NextJS, TypeScript, and MongoDB

Version 1.1.1

BMV SYSTEM INTEGRATION PRIVATE LIMITED

Idea... Implementation... Innovation...

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Calories Tracker Documentation

1. Introduction

1.1 Overview

The Calories Tracker is a full-stack application designed to help users track their daily calorie intake. It allows users to record their meals, view nutritional information, and analyze their eating habits. The application utilizes Next.js, TypeScript, and MongoDB to provide a seamless user experience.

1.2 Purpose

The purpose of the Calories Tracker is to assist users in maintaining a balanced diet by monitoring their calorie consumption. It aims to provide an intuitive interface for users to input their meals, visualize nutritional data, and make informed decisions about their eating habits.

2. Functionality & Use-cases

2.1 Core Functions

- **User Authentication**: Allow users to sign up, log in, and manage their accounts securely.
- **Meal Tracking**: Enable users to record their meals, including food items and portion sizes.
- **Nutrition Lookup**: Integrate with the Open Ninja API to fetch nutritional information based on food names and quantities.
- **Dashboard**: Display a summary of daily calorie intake and nutritional breakdown.
- **Meal History**: Provide a chronological view of recorded meals categorized by meal type (breakfast, lunch, dinner, snacks).

- **About Us Page**: Showcase information about the application and its creators.

2.2 Advanced Features

- **Multiuser Support**: Allow multiple users to access the application and track their meals independently.
- **Data Visualization**: Generate charts and graphs to visualize nutritional data trends over time.
- **Customization**: Provide users with options to customize their meal entries and nutritional goals.
- **Offline Access**: Enable users to use the application even without an internet connection (if applicable).
- **Real-time Updates**: Ensure that changes made by one user are instantly reflected for others in collaborative environments.

2.3 Use-cases

The Calories Tracker can be utilized in various scenarios, including:

- **Personal Health Management**: Individuals can use the application to monitor their calorie intake and make informed dietary choices.
- **Dietary Planning**: Users can plan meals and track their nutritional goals to achieve specific health objectives.
- **Nutrition Education**: Educators can utilize the application to teach students the importance of balanced diets and calorie awareness.
- **Community Support**: Groups or communities focused on health and wellness can use the application to support each other in maintaining healthy eating habits.

3. Advantages and Disadvantages

3.1 Advantages

- **User-Friendly Interface**: The application offers an intuitive user experience, making it accessible to users with varying technical abilities.
- **Real-time Data Updates**: Users can view updated nutritional information and meal records instantly, enhancing usability.

- **Customizable Goals**: Users have the flexibility to set personalized nutritional goals and track their progress.
- **Collaborative Environment**: Multiple users can collaborate on meal tracking, fostering accountability and support.
- **Educational Resources**: The application provides educational resources and insights to help users make informed dietary choices.

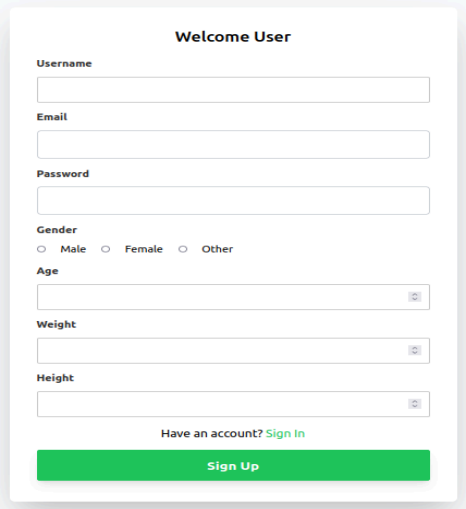
3.2 Limitations

- **Dependency on External API**: Reliance on the Open Ninja API for nutritional data may introduce potential downtime or data inconsistencies.
- **Internet Connectivity Requirement**: Users need an internet connection to access certain features, limiting usability in offline environments.
- **Data Privacy Concerns**: Users may have concerns about the privacy and security of their personal dietary information stored in the application.

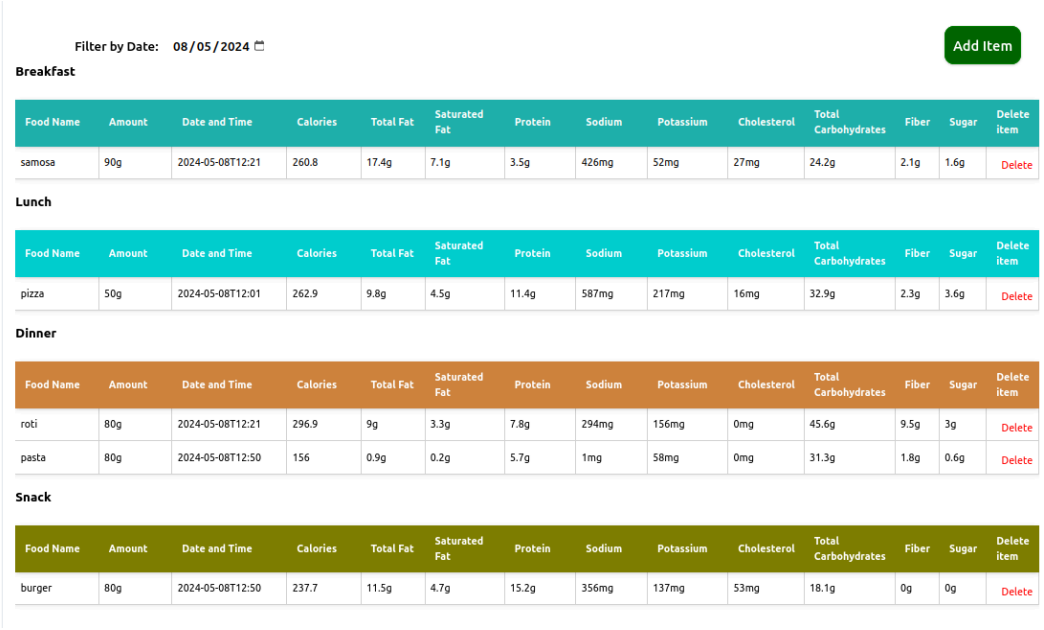
4. How it Works

The Calories Tracker operates as follows:

1. **User Registration**: Users sign up for an account or log in using their credentials.



2. **Meal Recording**: Users input their meals, including food items, amount, meal types, and quantities, into the application.



Filter by Date: 08/05/2024

Add Item

Breakfast

Food Name	Amount	Date and Time	Calories	Total Fat	Saturated Fat	Protein	Sodium	Potassium	Cholesterol	Total Carbohydrates	Fiber	Sugar	Delete item
samosa	90g	2024-05-08T12:21	260.8	17.4g	7.1g	3.5g	426mg	52mg	27mg	24.2g	2.1g	1.6g	Delete

Lunch

Food Name	Amount	Date and Time	Calories	Total Fat	Saturated Fat	Protein	Sodium	Potassium	Cholesterol	Total Carbohydrates	Fiber	Sugar	Delete item
pizza	50g	2024-05-08T12:01	262.9	9.8g	4.5g	11.4g	587mg	217mg	16mg	32.9g	2.3g	3.6g	Delete

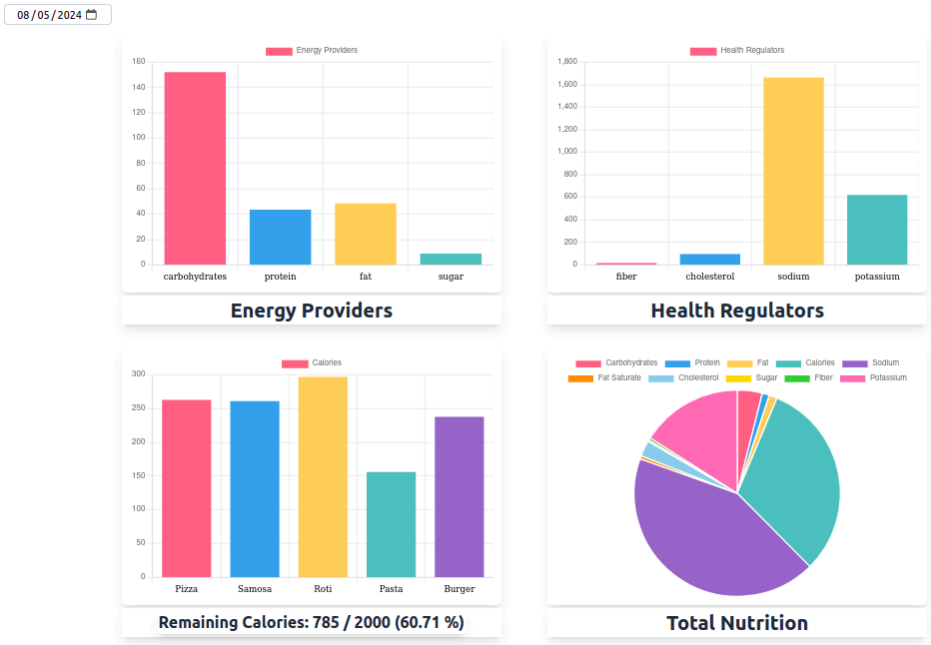
Dinner

Food Name	Amount	Date and Time	Calories	Total Fat	Saturated Fat	Protein	Sodium	Potassium	Cholesterol	Total Carbohydrates	Fiber	Sugar	Delete item
roti	80g	2024-05-08T12:21	296.9	9g	3.3g	7.8g	294mg	156mg	0mg	45.6g	9.5g	3g	Delete
pasta	80g	2024-05-08T12:50	156	0.9g	0.2g	5.7g	1mg	58mg	0mg	31.3g	1.8g	0.6g	Delete

Snack

Food Name	Amount	Date and Time	Calories	Total Fat	Saturated Fat	Protein	Sodium	Potassium	Cholesterol	Total Carbohydrates	Fiber	Sugar	Delete item
burger	80g	2024-05-08T12:50	237.7	11.5g	4.7g	15.2g	356mg	137mg	53mg	18.1g	0g	0g	Delete

3. **Nutritional Lookup**: The application fetches nutritional information from the Open Ninja API based on the user's entrees.
4. **Data Visualization**: Users can view summarized nutritional data and trends through interactive charts and graphs.



5. **Collaboration**: Multiple users can collaborate on meal tracking and share insights within the application.

5. Multi-user Functionality

The Calories Tracker supports multiple users with personalized data access:

- **User-specific Data**: Each user has an account, allowing them to track their meals independently.
- **Data Segregation**: User data is segregated to ensure privacy and security, with users only able to access their meal records.
- **Role-based Access Control**: Administrators can define user roles and permissions, controlling access to specific features or functionalities.
- **Customizable Profiles**: Users can customize their profiles and preferences, enhancing the personalized experience.

6. References

- Open Ninja API: calorieninjas.com
- MongoDB Documentation: https://docs.mongodb.com
- Next.js Documentation: https://nextjs.org/docs
- TypeScript Documentation: https://www.typescriptlang.org/docs