

Calorie Tracker

Fitness and Diet support

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ABSTRACT

Introduction

In today's health-conscious world, tracking calorie intake and maintaining a balanced diet has become essential for individuals aiming to manage their weight and overall well-being. To address this need, I propose the development of a comprehensive Calorie Tracker Web Application. This application aims to provide users with a user-friendly platform to monitor their daily caloric intake, set dietary goals, and access nutritional information. The application will be modular in design, with distinct modules catering to various functionalities.

Major Features

- User & Dietitian Login and Registration
- Weekly diet Check-up
- Premium Users
- Notes from Dietitian
- Suggest exercises and tips based on patient health reports
- Calculate calorie based on the food intake
- Add Recipes (recipe catalogue)
- Progress Tracker (Comments and feedback)
- Meal Distribution Report
- Statistics (Dietary Goals and Recommendation)
- Chatbot to communicate between Dietitian and Customer
- BMR estimation based on gender
- Payment Gateway
- Testimonials

Modules

- 1.Admin
- 2.Dietitian
- 3.Customer

4. Doctor or Medical Trainer

Admin

This will take care of all access privileges so that the customer and the admin cannot access each other's data. Also, it will make sure that the logged-in user can't go to the login/register page, unauthorized users can't access any page except login and registration page. Admin can also view the details of the food added by the customers and monitor the suggested diet plans from the dietitian.

Dietitian

The Dietitian Module in the Calorie Tracker Web App plays a crucial role in providing expert guidance and personalized recommendations to users. This module involves the interaction between certified dietitians or nutritionists and app users seeking professional advice.

- **Dietitian Registration and Profile Creation:**

Dietitian can create accounts, providing relevant information such as the certificates and licenses, awards and citations and the area on which they focus. This data forms the basis for personalized recommendations.

- **Expert Consultation:**

Dietitians can register and create profiles on the app. Users seeking professional assistance can connect with dietitians for one-on-one consultations. This interaction can be through messaging, video calls, or scheduled appointments.

- **Personalized Meal Plans:**

Dietitians can create customized meal plans for users based on their dietary preferences, health goals, allergies, and restrictions. These plans take into account the user's calorie requirements, nutrient needs, and other relevant factors.

- **Nutritional Analysis:**

Dietitians can review users' logged food intake and provide comprehensive nutritional analysis. They can offer insights into nutrient imbalances, recommend adjustments, and suggest alternative food choices.

- **Goal Adjustment and Monitoring:**

If users' goals change over time, dietitians can help adjust their meal plans accordingly. Regular check-ins and progress tracking allow dietitians to modify plans and provide ongoing support.

- **Education and Guidance:**

Dietitians can offer educational content, such as articles, videos, and tips, to help users make informed decisions about their nutrition. They can address common misconceptions and promote healthy eating habits.

Customer

The Customer (User) Module focuses on the interactions and functionalities available to users of the Calorie Tracker Web App. Users play an active role in tracking their calorie intake, setting goals, and engaging with the app's features.

- **User Registration and Profile Creation:**

Users can create accounts, providing relevant information such as age, gender, weight, height, and dietary preferences. This data forms the basis for personalized recommendations.

- **Calorie Intake Logging:**

Users can log their daily food and beverage consumption by searching for items, selecting portion sizes, and adding them to their intake record. The web app calculates and displays the total calories consumed.

- **Setting Dietary Goals:**

Users can set dietary goals such as weight loss, maintenance, or muscle gain. Based on these goals and user profile data, the dietitian can suggest recommended daily calorie intake.

- **Premium Users:**

Premium users can access the privileges like real time video conferencing with the dietitian and raise their queries through the use of chatbots and get suggested diet plans based on their premium membership.

- **Progress Tracking:**

Users can monitor their progress over time using visualizations such as charts and graphs. They can observe trends in their calorie consumption, weight changes, and nutrient distribution.

- **Interacting with Dietitians:**

Users interested in expert guidance can connect with dietitians through the app. They can schedule appointments, communicate via messaging or video conferencing and receive personalized advice.

- **Meal Planning and Recipe Suggestions:**

Users can access meal plans and recipe suggestions aligned with their goals and preferences.

- **Testimonials:**

Users can feel motivated and carry on their fitness journey from support from the success stories of other customers to take a leap in their health journey.

- **Notifications and Reminders:**

Users receive notifications and reminders to log meals, stay hydrated, and meet their goals. Customizable settings ensure these reminders align with their routines.

Both the Dietitian and Customer Modules work in tandem to provide a holistic and personalized experience for users, ensuring that they receive expert guidance while taking control of their nutritional habits.

Doctor / Medical Trainer

- Doctor Login & Registration
- Book Appointment
- Payment Gateway
- Validate & Verify or analyze patient health records.
- Chat Bot
- Suggest effective Remedials
- Prescribe tests based on health reports.

Existing System

The study suggests that young, currently healthy adults, have some interest in apps that attempt to support health-related behaviour change. They also valued the ability to record and track behaviour and goals and the ability to acquire advice and information “on the go”. While the study demonstrated that apps promoting physical activity applied an average of 5 out of 23 possible behaviour change techniques. It is observed that paid apps tended to be user-friendlier in terms of the user’s literacy in comparison to free apps hence the need to explore the development of more user-friendly and accessible Web apps is the need of the hour. This led to the study which showed evidence that apps are a feasible and acceptable means of administering health interventions. As a result, the study opined that the use of particular design features and application of evidence-based behaviour change techniques could optimise continued use and the effectiveness of internet/smart phone interventions. Furthermore, the study revealed that abandonment does not necessarily reflect individuals’ dissatisfaction with technology. The proposed system allows us to communicate in real time with the dietitian and the customer through video and audio conferencing.

- <https://www.mynetdiary.com/>
- <https://www.myfitnesspal.com/>

Functionalities covered in Mini project:

- Weekly diet Check-up
- Implementing search Filters
- Notes and Tips from Dietitian
- Suggest exercises and tips based on patient health reports
- Calculate calorie based on the food intake
- Add Recipes (recipe catalogue)
- Progress Tracker (Dietary Goals and Recommendation)
- Statistics (Comments and feedback)
- Meal Distribution Report using charts and graphs
- BMR estimation based on gender
- Testimonials
- Suggests Diet Plans

Functionalities covered in Main Project:

- Real time video and audio Communication between the modules using WebRTC API technology

- Chatbot to communicate between Dietitian and Customer
- Book Appointments (for premium users)
- Payment Gateway

Project Requirements:

Front-End: HTML, CSS, BOOTSTRAP

Back-End: Python-Django Framework

Server: XAMPP

Database: MySQL