

# **FOODFIT**

## **CALORIE TRACKER**

**A PROJECT REPORT SUBMITTED IN PARTIAL  
FULFILMENT OF REQUIREMENT  
FOR THE AWARD OF THE DEGREE**

**MASTER OF COMPUTER APPLICATION (MCA)**

**OF**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

**BY**

**Athul Abraham**

**Reg No : 22PMC119**



**MARIAN COLLEGE  
KUTTIKKANAM**

**(AUTONOMOUS)**

**MAKING COMPLETE**

**Marian College Kuttikkanam Autonomous**

**Peermade, Kerala – 685 531**

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A Project Report on

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**By**

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**Reg No : 22PMC119**

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**Marian College Kuttikkanam Autonomous**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

**KUTTIKKANAM – 685 531, KERALA.**

## **CERTIFICATE**

This is to certify that the project work entitled

**FOODFIT**

is a bonafide record of work done by

**Athul Abraham**

**Reg No : 22PMC119**

In partial fulfillment of the requirements for the award of Degree of

**MASTER OF COMPUTER APPLICATIONS [MCA]**

During the academic year 2022-2024

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Finally, I express my deep appreciation to all my friends and family members for the moral support and encouragement they have given to complete this project work successfully.

**ATHUL ABRAHAM**

## **ABSTRACT**

The Calorie Tracker is a software application that helps individuals monitor and manage their daily calorie intake. It aims to promote healthier eating habits and provide users with a tool to achieve their nutrition goals. The project involves developing a user-friendly web-based application with a comprehensive food database and features such as goal setting and progress tracking. The project has the potential to benefit individuals interested in maintaining a balance and nutritious diet.

## **OBJECTIVE AND SCOPE**

### Objective:

The objective of the Calorie Tracker is to develop a user-friendly software application that enables individuals to track and manage their daily calorie intake, promoting healthier eating habits and helping users achieve their nutrition goals.

### Scope:

The project involves developing a web-based application with a comprehensive food database, allowing users to record and track their daily food consumption. The application will calculate and display total calorie intake and may include features such as goal setting, progress tracking, and personalized recommendations. Privacy and data security measures will be implemented.

## **PROBLEM STATEMENT**

Many individuals struggle with managing their daily calorie intake and maintaining a healthy diet. Without a convenient and user-friendly tool to track and monitor their calorie consumption, they find it challenging to make informed food choices and achieve their nutrition goals. Existing methods for calorie tracking often lack accuracy, ease of use, and comprehensive features, making it difficult for individuals to effectively manage their dietary habits. Therefore, there is a need for a reliable and intuitive software application that can simplify calorie tracking, provide accurate nutritional information, and support individuals in adopting healthier eating habits. The Calorie Tracker aims to address this problem by developing a user-friendly application that enables individuals to track and manage their daily calorie intake effectively.

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# **1.INTRODUCTION**

## **1.1 PROBLEM STATEMENTS**

Many individuals struggle with managing their daily calorie intake and maintaining a healthy diet. Without a convenient and user-friendly tool to track and monitor their calorie consumption, they find it challenging to make informed food choices and achieve their nutrition goals. Existing methods for calorie tracking often lack accuracy, ease of use, and comprehensive features, making it difficult for individuals to effectively manage their dietary habits. Therefore, there is a need for a reliable and intuitive software application that can simplify calorie tracking, provide accurate nutritional information, and support individuals in adopting healthier eating habits. The Calorie Tracker aims to address this problem by developing a user-friendly application that enables individuals to track and manage their daily calorie intake effectively.

## **1.2 PROPOSED SYSTEM**

The proposed system for the Calorie Tracker is a user-friendly software application designed to simplify and enhance the process of tracking and managing daily calorie intake. The system will offer a range of features and functionalities to address the limitations of existing methods and provide an effective solution for individuals striving to maintain a healthy diet:

## **1.3 FEATURES OF THE PROPOSED SYSTEM**

The features of this website are:

- Food Database.
- Calorie Tracking.
- Goal Setting.
- User Friendly Interface.
- Privacy and Security.

# **FEATURES AND HIGHLIGHTS**

## FEATURES AND HIGHLIGHTS

1. User-Friendly Interface:
- 2 Food Database.
3. Custom Food Entry.
4. Calorie Calculation .
5. Goal Setting.
6. Privacy and Security.
- 7 .The Admin can view
  - 1.Customers
  - 2.Foods
  - 3.Update and Delete Foods.
8. Admin can add food.

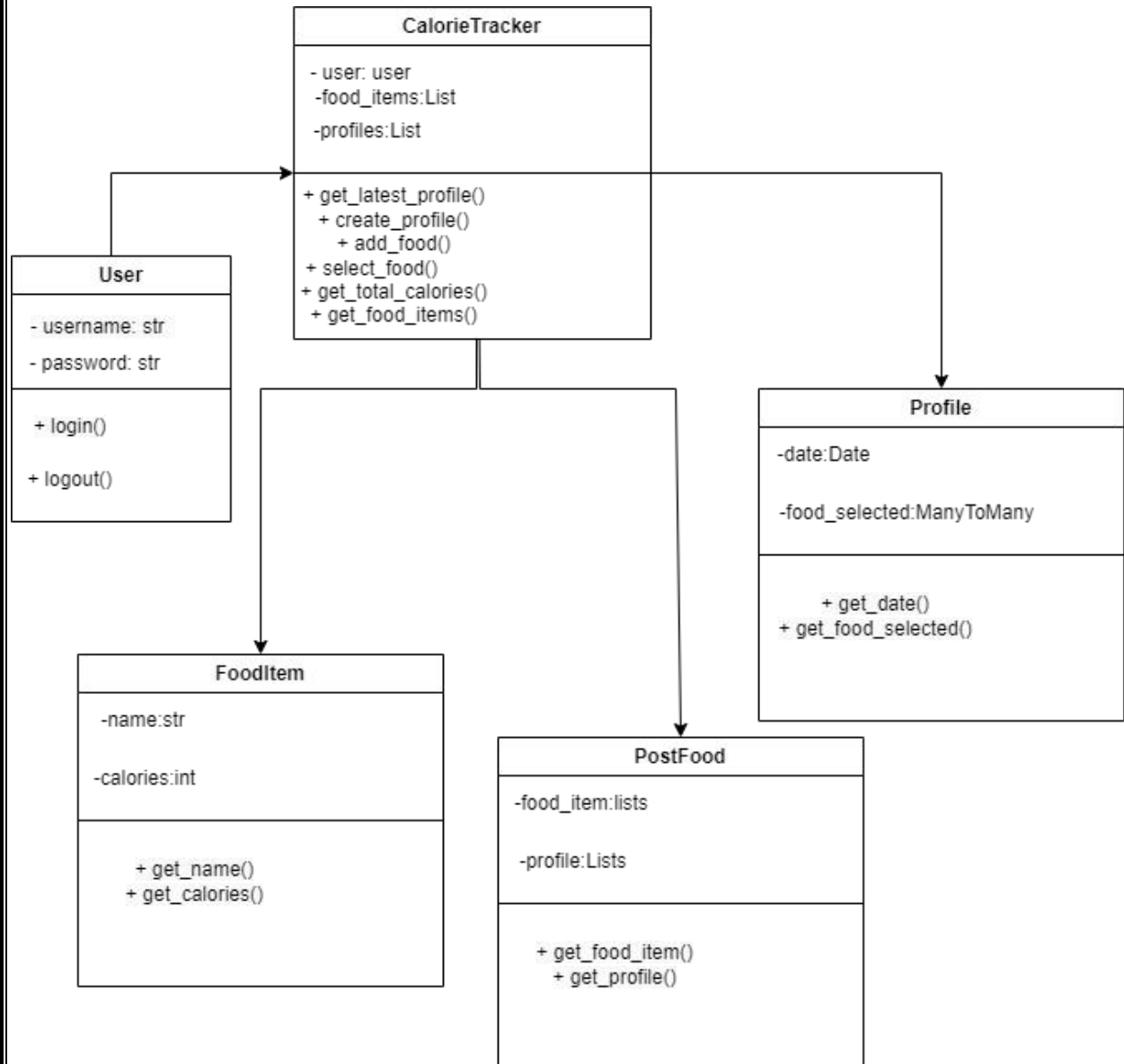
## TECHNICAL ASPECTS

- **Presentation Layer:**
  - **User Interface (UI):** This layer includes the components that interact with users, such as web pages or mobile app screens.
  - **Django Templates:** Django's built-in template engine allows you to define HTML templates that render dynamic content and interact with the back-end.
- **Application Layer:**
  - **Django:** Django serves as the back-end framework, handling HTTP requests, routing, and managing the application's business logic.
  - **Django Views:** Views receive requests from the user interface, process data, and generate appropriate responses. They interact with models, services, and external APIs as needed.
  - **Django Forms:** Forms handle user input validation and data submission, allowing users to input and update travel-related information.

## **2.DATABASE**

## **CLASS DIAGRAM**

## 2.CLASS DIAGRAM



# **3. CHALLENGES FACED DURING THE DEVELOPMENT**

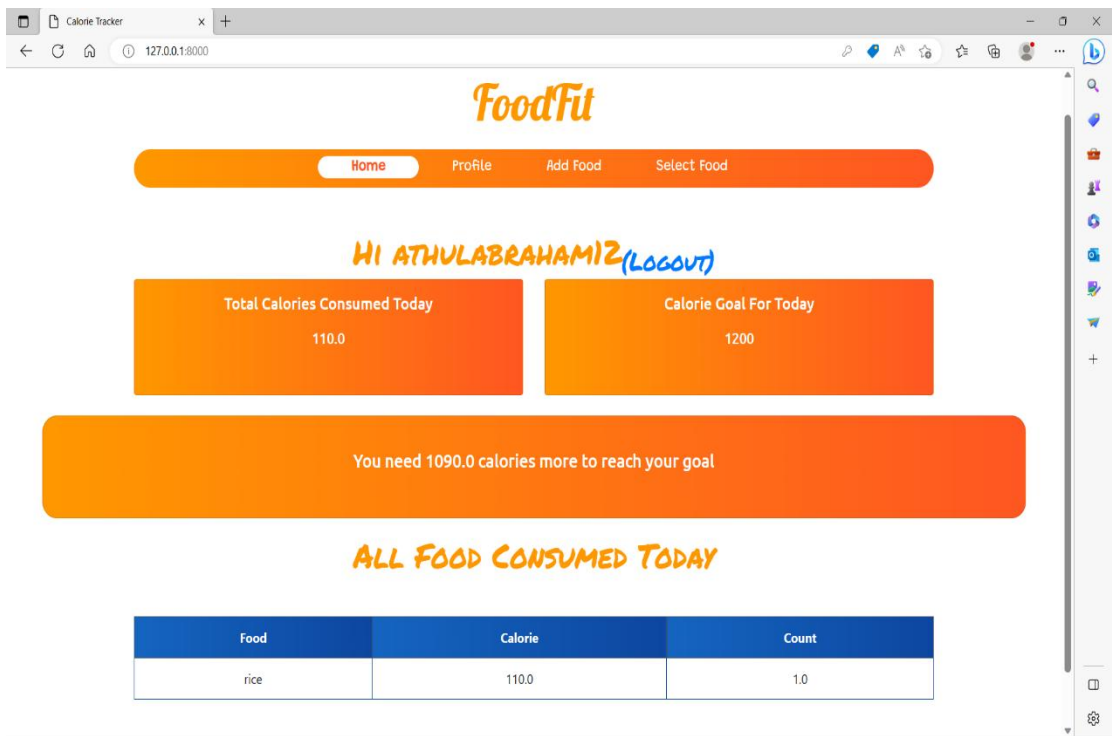


- **Food Database Accuracy:** Building and maintaining a comprehensive and accurate food database can be a challenge. Ensuring the correctness of nutritional information for a wide range of food items requires careful data collection and validation.
- **Data Entry and Updating:** Incorporating new food items and keeping the database up to date can be time-consuming. It may involve manual data entry, sourcing information from trusted sources, and verifying the accuracy of nutritional data regularly.
- **User Experience Design:** Creating an intuitive and user-friendly interface is crucial for the success of the application. Designing an interface that is easy to navigate, visually appealing, and accommodates different device screens and resolutions can be a complex task.
- **Calorie Calculation Accuracy:** Accurately calculating calories from various food items, considering portion sizes, cooking methods, and nutritional variations, can pose a challenge. Ensuring accurate and reliable calorie calculations is essential for providing users with trustworthy information.
- **Privacy and Security:** Safeguarding user data and ensuring privacy and security can present challenges. Implementing robust security measures, complying with data protection regulations, and preventing unauthorized access to personal information are critical aspects of the development process..

## **4.SCREENSHOTS**

SCREENSHOTS

HOME PAGE



PROFILE

Calorie Tracker

127.0.0.1:8000/profile/

FoodFit

Home

Profile

Add Food

Select Food

YOUR PROFILE :

Name: athulabraham12

Calorie Goal For Today

1200

select

RECORDS FROM PAST WEEK

Date	Calorie Consumed	Calorie Goal
May 25, 2023	0.0	1200

ALL FOOD ITEMS

Food Name	Calories	Quantity	Update	Delete
rice	111.0	1	Update	Delete

ADD FOOD

Calorie Tracker

127.0.0.1:8000/add\_food/

FoodFit

HomeProfileAdd FoodSelect Food

SELECT FOOD

Name

Quantity

Calorie

select

SEARCH FOOD ITEMS:

Search

ALL FOOD ITEMS

Food Name	Calories	Quantity
rice	111.0	1

## SELECT FOOD

FoodFit

Home Profile Add Food **Select Food**

**SELECT FOOD**

Food selected:

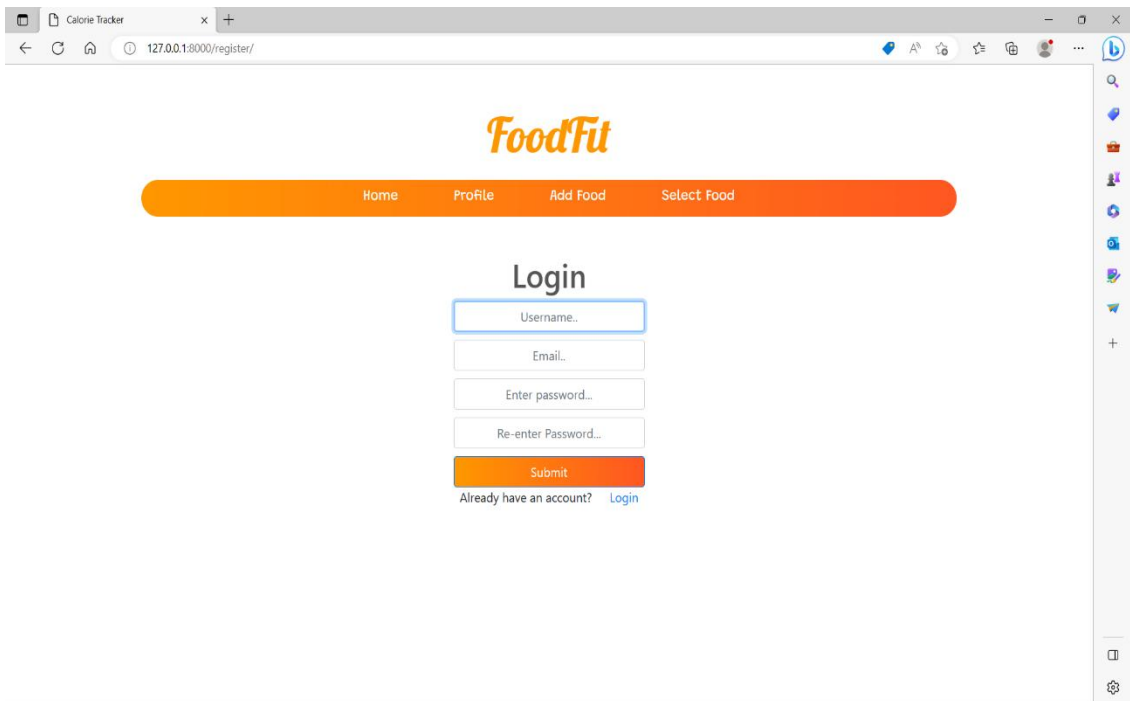
Quantity:

**select**

**ALL FOOD ITEMS**

Food Name	Calories	Quantity
rice	111.0	1

## REGISTRATION



The screenshot shows a web browser window with the title 'Calorie Tracker' and the address bar displaying '127.0.0.1:8000/register/'. The page features the 'FoodFit' logo in orange script. Below the logo is an orange navigation bar with links: Home, Profile, Add Food, and Select Food. The main content area is titled 'Login' and contains a registration form with the following fields: 'Username..', 'Email..', 'Enter password..', and 'Re-enter Password..'. A blue 'Submit' button is positioned below these fields. At the bottom of the form, there is a link that reads 'Already have an account? Login'. The browser's sidebar on the right shows various application icons.

## LOGIN

The screenshot shows a web browser window with the title 'Calorie Tracker' and the address bar displaying '127.0.0.1:8000/login/'. The page features the 'FoodFit' logo in a stylized orange font. Below the logo is a horizontal orange navigation bar with four links: 'Home', 'Profile', 'Add Food', and 'Select Food'. The main content area is titled 'Login' and contains two input fields labeled 'Username...' and 'Password...'. Below these fields is an orange 'Login' button. At the bottom of the login section, there is a link that says 'Don't have an account? Sign Up'. The browser's taskbar at the bottom shows the system clock as 20:01 on 26/05/2023, along with various system icons and a weather widget indicating 23°C and 'Partly cloudy'.



## **5. FUTURE ENHANCEMENTS**

## **FUTURE ENHANCEMENTS**

- **Integration with Wearable Devices:** The application could be integrated with wearable devices, such as fitness trackers or smartwatches, to automatically track and sync users' calorie intake and activity data. This integration would provide a seamless and convenient experience for users.
- **Integration with Fitness Apps:** Integrating the calorie tracker with popular fitness apps or platforms would allow users to have a holistic view of their health and wellness journey. This integration could provide insights into the correlation between calorie intake and exercise, offering a more comprehensive understanding of overall health and fitness.
- **Enhanced Data Analytics:** Implementing advanced data analytics capabilities, such as predictive analysis and trend identification, would enable users to gain deeper insights into their eating patterns, identify potential areas for improvement, and receive proactive recommendations for maintaining a healthy diet.
- **Multi-Language Support:** Expanding the application's language support to cater to a broader user base would enhance accessibility and usability, allowing individuals from different regions and cultural backgrounds to benefit from the calorie tracking system.

## **6 .CONCLUSION**

## CONCLUSION

In conclusion, the Calorie Tracker Project aims to develop a user-friendly software application that empowers individuals to track and manage their daily calorie intake. The project addresses the challenge of maintaining a healthy diet by providing a comprehensive tool that promotes healthier eating habits and assists users in achieving their nutrition goals.

With features such as a comprehensive food database, calorie tracking, goal setting, progress tracking, and personalized recommendations, the Calorie Tracker Project offers a valuable solution for individuals seeking to adopt a balanced and nutritious diet. The proposed system focuses on user experience, accuracy, and privacy to ensure a seamless and secure tracking process.

Moreover, the project has potential for future enhancements, including integration with wearable devices, meal planning features, social interactions, and advanced data analytics, to further enhance the user experience and provide comprehensive support in achieving health and wellness goals.

Overall, the Calorie Tracker Project strives to empower individuals to make informed food choices, monitor their calorie intake, and ultimately lead healthier lifestyles. By providing a user-friendly and effective tool, the project aims to contribute to improved overall health and well-being

## **7.REFERENCES**

## REFERENCES

- Mayo Clinic - <https://www.mayoclinic.org/>
- <https://www.cdc.gov/>