Bite Bright

Project Overview

Modern diet management systems often focus heavily on calorie counting, which can lead to food-related anxiety and unsustainable eating habits. This project aims to create a system that tracks food intake, promotes emotional well-being, and encourages healthy eating patterns through personalized, sustainable recommendations.

Use Cases

Track Food Intake

Use Case ID	UC-001
Actors	User
Preconditions	The user must be logged into the system.
Basic Flow	1. The user selects the 'Track Food Intake' option. 2. The system displays a form to input meal details (e.g., food type, portions). 3. The user fills in the form and submits it. 4. The system logs the data and categorizes the meal (healthy/unhealthy). 5. The system saves the data for further analysis.
Alternative Flow	If input data is incomplete or in the wrong format, the system shows an error message and prompts the user to correct it.
Postconditions	Meal data is added and categorized for the user's analysis.

Monitor Health Data

Use Case ID	UC-002
Actors	Wearable Device, User
Preconditions	The wearable device must be synced with the system.
Basic Flow	1. The wearable device collects health data (e.g., heart rate, steps). 2. The system receives this data and updates the health dashboard. 3. The system analyzes and saves the data for further use.
Alternative Flow	If the device fails to sync, the system alerts the user and retries synchronization.
Postconditions	Health data is updated and available for the user.

Add Health Condition Manually

Use Case ID	UC-003
Actors	User, System
Preconditions	The user must be logged in and have access to the health section.
Basic Flow	1. The user navigates to the health conditions section. 2. The user selects the option to add a health condition manually. 3. The user enters the details of their health condition. 4. The system validates the input and saves the condition.
Alternative Flow	If the user enters invalid data, the system prompts them to correct the information.
Postconditions	The health condition is added to the user's profile.

Recommend Personalized Diets

Use Case ID	UC-004
Actors	User
Preconditions	The user must have logged sufficient health and food data.
Basic Flow	1. The system analyzes the user’s health data and food logs. 2. Based on the 80/20 principle, the system generates a diet plan. 3. The system presents the plan to the user for review.
Alternative Flow	If there isn’t enough data, the system prompts the user to provide missing details.
Postconditions	A personalized diet plan is created for the user.

Send Real-Time Feedback

Use Case ID	UC-005
Actors	System, User
Preconditions	The system must track user data in real-time.
Basic Flow	1. The system monitors the user's dietary patterns. 2. If deviations from the 80/20 rule are detected, the system sends a notification. 3. The system suggests corrective actions.
Alternative Flow	If notifications cannot be delivered (e.g., no internet), they are stored and sent later.
Postconditions	Notifications and corrective actions are delivered to the user.

Emotional Health Monitoring

Use Case ID	UC-006
Actors	User
Preconditions	The user must have logged emotional data.
Basic Flow	1. The user enters emotional health data (e.g., mood, stress level). 2. The system analyzes the data and correlates it with dietary patterns. 3. The system provides insights and suggestions for improvement.
Alternative Flow	If no emotional data is entered, the system will not provide insights .
Postconditions	Insights and suggestions are provided to the user.

User Stories

Feature	User Story
Food Monitoring	As a user, I want to log my daily food intake, so that I can track my eating habits and categorize meals as healthy or unhealthy.
Health Monitoring	As a user, I want the system to sync with my wearable device, so that my health metrics are automatically updated in the dashboard.
Personalized Diets	As a user, I want personalized diet recommendations based on the 80/20 principle, so that I can maintain a balanced and sustainable diet.
Meal Planning	As a user, I want the system to create weekly meal plans for me, so that I can follow a structured dietary schedule.
Real-Time Feedback	As a user, I want the system to notify me when I deviate from my healthy eating patterns, so that I can correct my actions promptly.
Progress Visualization	As a user, I want to view trends and summaries of my diet and health improvements, so that I can track my progress over time.
Emotional Health Monitoring	As a user, I want to log my emotional health information, so that I can receive insights about how my emotions affect my eating habits.
Behavioral Analysis	As a system, I want to analyze users' eating and emotional patterns, so that I can suggest sustainable and incremental improvements.
Social Engagement	As a user, I want to connect with others in the community to share tips, recipes, and encouragement, so that I feel motivated to continue.
Integration with HIS	As a system, I want to integrate with Health Information Systems, so that users can seamlessly track their food intake and health metrics.