Smart Diet Tracker - Patent Document

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# Abstract

The Smart Diet Tracker is an advanced digital system designed to assist users in tracking their diet, logging meals, and analyzing calorie intake through an intuitive web-based interface. Utilizing AI-powered analytics, the system provides insights into dietary habits and recommends optimized meal plans based on user preferences.

# Background

Maintaining a balanced diet is a common challenge, especially for individuals with busy lifestyles. Existing diet-tracking solutions lack real-time insights, personalized recommendations, and interactive UI features that make meal logging effortless. This invention aims to solve these issues with a user-friendly, intelligent, and mobile-accessible solution.

# Summary of Invention

The Smart Diet Tracker introduces an intuitive UI for logging meals, tracking calories, and analyzing diet progress through AI-driven insights. The system offers an interactive dashboard, a meal recommendation engine, and seamless cross-device accessibility.

# Technical Details

## Website UI and Features

The Smart Diet Tracker features a modern, interactive web-based UI. Users can log their meals, track calories, and view analytics through an aesthetically designed dashboard optimized for both desktop and mobile devices.

## Technology Stack

- \*\*Frontend\*\*: HTML, CSS, JavaScript for a dynamic and responsive UI.  
- \*\*Backend\*\*: PHP for user authentication, data handling, and API interactions.  
- \*\*Database\*\*: MySQL for storing user data and meal logs efficiently.  
- \*\*AI Integration\*\*: Machine learning models analyze dietary patterns and provide meal recommendations.

# Patent Claims

1. A web-based diet tracking system with real-time meal logging and calorie tracking.  
2. AI-driven meal recommendation engine based on user dietary patterns.  
3. Interactive dashboard with charts and progress indicators for better health insights.  
4. Multi-device accessibility with responsive UI and cloud-based data storage.

# Conclusion

The Smart Diet Tracker revolutionizes diet tracking by combining an interactive UI with AI-powered analytics. This solution helps users achieve their dietary goals with greater efficiency and convenience.