AI-Powered Personalized Nutrition Plan for Diabetes

Project Overview:

The goal of this project is to develop an AI-powered system that creates personalized nutrition plans for individuals with diabetes. The system will take into account various health-related factors such as medical analyses, weight, dietary habits, calorie consumption, and more. Additionally, it will consider socioeconomic factors such as income, location, education, and literacy levels to ensure that the plan is accessible and effective for a wide range of users, particularly those in rural or underserved communities. For individuals with limited literacy, the nutrition plan will include visual representations to improve comprehension and adherence.

Level:

Easy to Medium

Type of Project:

AI Development, Healthcare, Personalization

Skills Required:

- Python
- Healthcare Data Processing
- OpenAI API
- Image Processing (for visual plans)
- UI development

Key Features

Milestone 1: Personalized Nutrition Plan Engine

- AI-Based Nutrition Plan Generation:
    - Generate personalized nutrition plans based on individual health metrics, including medical analyses and dietary intake data.
    - Incorporate socioeconomic factors such as income, location, and local food availability to create feasible nutrition plans for individuals.

Milestone 2: Contextual Customization:

- Consider literacy and education levels, adapting the plan to be accessible (e.g., using visuals for users with low literacy)

Client Information:

The client is an internationally recognized WHO Consultant and licensed Medical Doctor based in North America. He works extensively with rural communities across the globe, particularly in Africa. His focus is on improving healthcare accessibility and outcomes, especially for underserved populations, through tailored health solutions that consider local contexts, socioeconomic factors, and cultural differences.