Project Initialization and Planning Phase

Date	11-07-2024
Team ID	SWTID1720188483
Project Title	Nutrition App Using Gemini Pro : Your Comprehensive Guide to Healthy Eating and Well-being
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) report:
Nutritionist AI is a revolutionary mobile application designed to empower individuals to achieve their health and wellness goals through personalized nutrition. By leveraging the advanced capabilities of the Gemini Pro large language model, Nutritionist AI offers a unique and data-driven approach to healthy eating. This proposal outlines the project's objectives, scope, solution approach,

Project Overview	
Objective	The primary objective of this project is to develop and launch Nutritionist AI, a mobile application that utilizes machine learning to: • Analyze user data, health goals, and dietary preferences. • Generate personalized meal plans, nutritional insights, and wellness tips. • Promote healthy eating habits and empower users to take control of their well-being.
Scope	This project encompasses the design, development, and deployment of a user-friendly mobile application. Nutritionist AI will leverage the capabilities of the Gemini Pro large language model to analyze user data, dietary preferences, and health goals. Based on this analysis, the app will provide personalized meal plans, nutritional insights, and wellness tips.
Problem Statement	
Description	Many individuals struggle with maintaining healthy eating habits due to factors like lack of knowledge, conflicting information, and difficulty in creating personalized meal plans.
Impact	This can lead to unhealthy dietary choices, nutritional deficiencies, and difficulty reaching weight management or fitness goals.
Proposed Solution	

Approach	Nutritionist AI will address these challenges by employing machine learning to personalize the user experience. The app will collect user data such as dietary restrictions, allergies, activity levels, and health goals. This data will be analyzed by the Gemini Pro model to generate: • **Personalized Meal Plans:** Tailored meal plans that meet individual needs and preferences. • **Nutritional Insights:** Detailed breakdowns of nutrient content in meals, highlighting potential deficiencies or areas for improvement. • **Wellness Tips:** Guidance on healthy eating habits, food preparation techniques, and strategies for achieving lifestyle goals.
Key Features	• **Machine Learning-Powered Analysis:** Leverage the capabilities of the Gemini Pro large language model to personalize nutrition recommendations. • **Customizable Dietary Profiles:** Allow users to input dietary restrictions (e.g., vegetarian, vegan, gluten-free) and allergies. • **Goal Setting and Tracking:** Set personalized health goals (e.g., weight loss, muscle gain) and track progress through the app. • **Recipe Integration:** Provide access to a library of healthy and delicious recipes aligned with user preferences and goals. • **Progress Reports and Feedback:** Offer regular progress reports and personalized feedback to motivate users and ensure they stay on track.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	T4 GPU
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
Software		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	scikit-learn, pandas, numpy
Development Environment	IDE	Github,VScode
Data		
Data	Source, size, format	Kaggle dataset, 614, csv UCI dataset, 690, csv