

**Project Design Phase**  
**Proposed Solution**

Date	15 February 2025
Team ID	LTVIP2026TMIDS66228
Project Name	Advancing nutrition science through geminai
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Many individuals struggle to understand nutritional values and create personalized meal plans suited to their health conditions, dietary restrictions, and lifestyle due to lack of accessible, intelligent, and affordable guidance.
2.	Idea / Solution description	Develop a web-based AI-powered nutrition assistant using Streamlit, Google Gemini API, and LangChain to provide real-time nutritional analysis, personalized meal planning, and virtual nutrition coaching.
3.	Novelty / Uniqueness	The solution integrates Generative AI (Gemini) with nutrition science to deliver conversational, personalized, and dynamic dietary recommendations rather than static diet charts.
4.	Social Impact / Customer Satisfaction	Improves public health awareness by empowering users to make informed dietary decisions, increasing customer satisfaction through personalized and accessible nutrition guidance.
5.	Business Model (Revenue Model)	Freemium model: Basic nutrition insights are free, while advanced meal planning, detailed reports, and premium AI coaching features are offered through subscription plans.
6.	Scalability of the Solution	The system can scale using cloud deployment to support multiple users simultaneously, handle increasing AI requests, and integrate with wearable devices or mobile applications in the future.