

Project Initialization and Planning Phase

Date	8 February 2026
Team ID	LTVIP2026TMIDS34355
Project Title	Flavour Fusion: AI-driven Recipe Blogging
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	To develop a web application that leverages Google's Generative AI to create unique and customized recipe blogs. The app provides users with the ability to input a topic and specify the desired word count for their recipe blog. Using the specified parameters, the AI generates detailed and engaging recipe content. Additionally, the app includes a fun feature where it tells a programmer joke to entertain users while the AI is generating the content.
Scope	The project encompasses a web-based interface using Streamlit where users can input a dish name and desired length. The system utilizes the Google Gemini API to generate content and includes a feature to display entertainment (jokes) during the generation process.

Problem Statement	
Description	Current methods of generating culinary content are manual and labor-intensive. Food bloggers and home cooks struggle to consistently produce creative, well-structured, and engaging recipe posts due to writer's block and time constraints. Additionally, readers often find it difficult to locate concise, personalized recipe instructions amidst the clutter of generic search results.

Impact	This inefficiency leads to inconsistent content quality and a frustrating experience for users seeking quick, reliable cooking guidance. Solving this problem will streamline content creation, ensuring high-quality, customized recipes are available instantly, thereby enhancing productivity and user satisfaction.
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Proposed Solution	
Approach	Approach: The solution integrates the Gemini 1.5 Flash Large Language Model (LLM) with a Python-based Streamlit application. The app sends user prompts to the AI and formats the response into a readable blog post.
Key Features	<ul style="list-style-type: none"> ✓ Customizable word count for recipe generation. ✓ "Programmer Joke" feature to entertain users during wait times. ✓ Instant generation of structured content (Ingredients, Instructions, Tips).

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	Standard Laptop CPU	Intel i5/Ryzen 5 or equivalent
Memory	RAM specifications	8 GB RAM recommended (Minimum 4 GB is sufficient).
Storage	Disk space for data, models, and logs	100 MB disk space (Project files are lightweight).

Software		
Frameworks	Python frameworks	Streamlit (Python Web Framework).
Libraries	Additional libraries	google-generativeai (Gemini)

		SDK), random.
Development Environment	IDE, version control	Visual Studio Code (VS Code) / Python 3.10+.

Data		
Data	Source, size, format	<p>Source: Pre-trained Knowledge Base of Google Gemini 1.5 Flash Model.</p> <p>Format: API Responses (Text).</p> <p>Size: N/A (Cloud-based).</p>