

PROJECT INITIALIZATION AND PLANNING PHASE

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| Date | 31 Jan 2025 |
| Team ID | LTVIP2026TMIDS83843 |
| Project Name | flavour fusion: ai-driven recipe blogging |
| Maximum Marks | 3 Marks |

PROJECT PROPOSAL (PROPOSED SOLUTION)

Project Title

flavour fusion: ai-driven recipe blogging

Project Overview

Objective

The objective of this project is to develop an AI-powered web application that generates structured and high-quality recipe blogs based on user input using Google Gemini API.

Scope

- Users can enter a recipe topic.
- Users can specify desired word count.
- The system generates structured content including Ingredients, Instructions, and Tips.
- The application is deployed using Streamlit for easy access.

Problem Statement

Description

Many food bloggers, students, and home cooks struggle to create well-structured and engaging recipe blogs quickly. Writing recipes requires creativity, time, and proper formatting.

Impact

Solving this problem will:

- Save time for content creators.
- Provide instant structured recipes.
- Improve user experience in content generation.
- Help beginners cook easily with clear instructions.

Proposed Solution

Approach

The project uses:

- Streamlit for frontend interface.
- Google Gemini 2.5 Flash model for content generation.
- Prompt engineering to structure recipes properly.
- API-based integration without training a custom model.

Key Features

- AI-based recipe generation
- Word count customization
- Structured output (Ingredients, Instructions, Tips)
- Joke display feature during processing
- Error handling for invalid input

Resource Requirements

◆ Hardware

- Laptop with minimum 8GB RAM
- Stable internet connection

◆ **Software**

| Resource Type | Description |
|-------------------------|-----------------------------|
| Programming Language | Python |
| Framework | Streamlit |
| AI Model | Gemini 2.5 Flash |
| Libraries | google-genai, python-dotenv |
| Development Environment | VS Code |

Data

This project does not require a traditional dataset.
It uses a pre-trained generative AI model via API.