

## Project Design Phase-II

### Data Flow Diagram & User Stories

Date	31 January 2025
Team ID	LTVIP2026TMIDS78841
Project Name	Flavour Fusion: AI-Driven Recipe Blogging
Maximum Marks	4 Marks

#### Data Flow Diagrams:

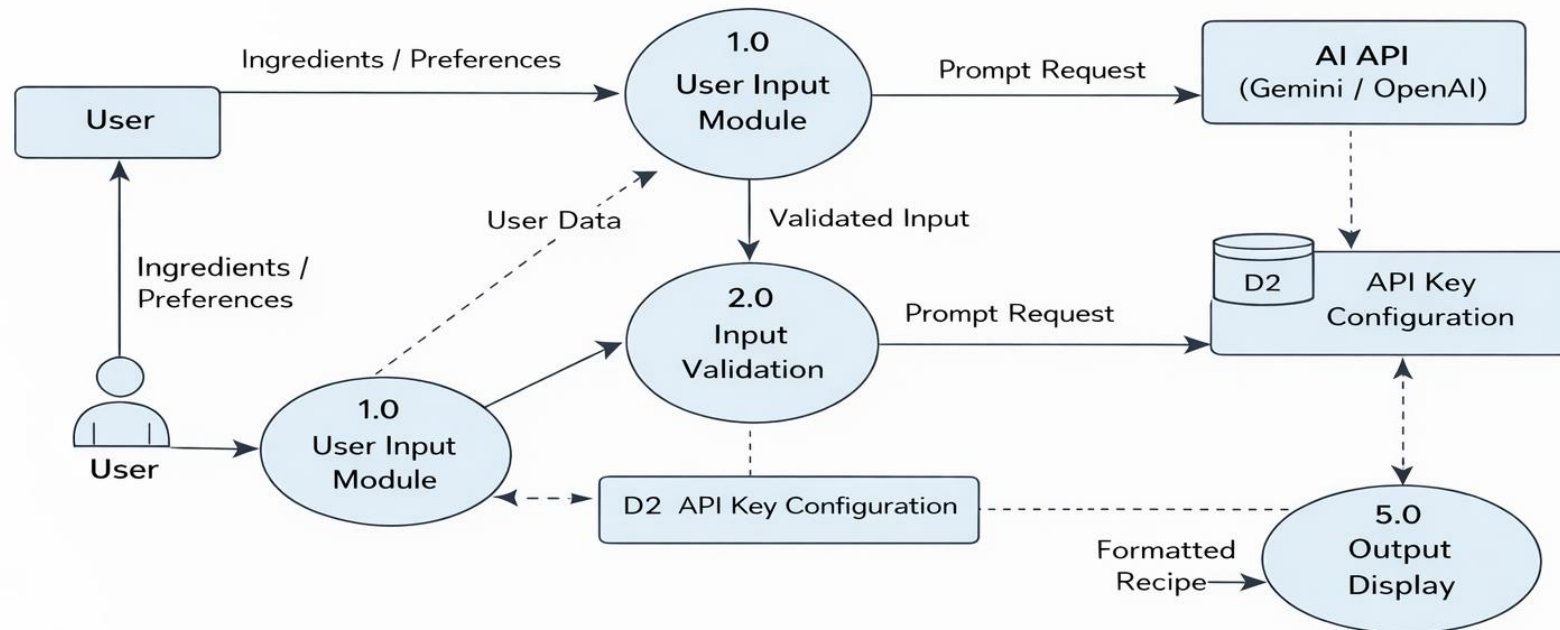
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

#### Flow:

- User opens the application and enters ingredients or food preferences.
- The system receives the input through the User Input Module.
- The system checks whether the input is valid (not empty, correct format).
  - If input is wrong → shows error message.
  - If input is correct → moves to next step.
- The system sends the validated input as a request to the AI API (Gemini/OpenAI).
- The AI processes the request and generates:
  - Recipe name
  - Ingredients list
  - Step-by-step cooking instructions
- The system formats the recipe properly.
- The final recipe is displayed to the user on the screen.

## Flavour Fusion: AI-Driven Recipe Blogging

### DFD Level 1 – Data Flow Diagram



The Data Flow Diagram illustrates how user input is processed through validation and AI integration to generate personalized recipes, which are then displayed to the user through a Streamlit interface.

## User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
User (Web)	Recipe Generation	USN-1	As a user, I can enter ingredients to generate a recipe.	System generates recipe based on input ingredients.	High	Sprint-1
User (Web)	AI Processing	USN-2	As a user, I receive a complete recipe with steps.	Recipe includes title, ingredients, and instructions.	High	Sprint-1
User (Web)	Input Validation	USN-3	As a user, I get an error if input is empty.	System shows validation message.	Medium	Sprint-1
User (Web)	User Interface	USN-4	As a user, I can use a simple and clean interface.	Application loads properly and displays results clearly.	Medium	Sprint-1
User (Web)	Performance	USN-5	As a user, I receive recipe results quickly.	Recipe generates within a few seconds.	High	Sprint-1