

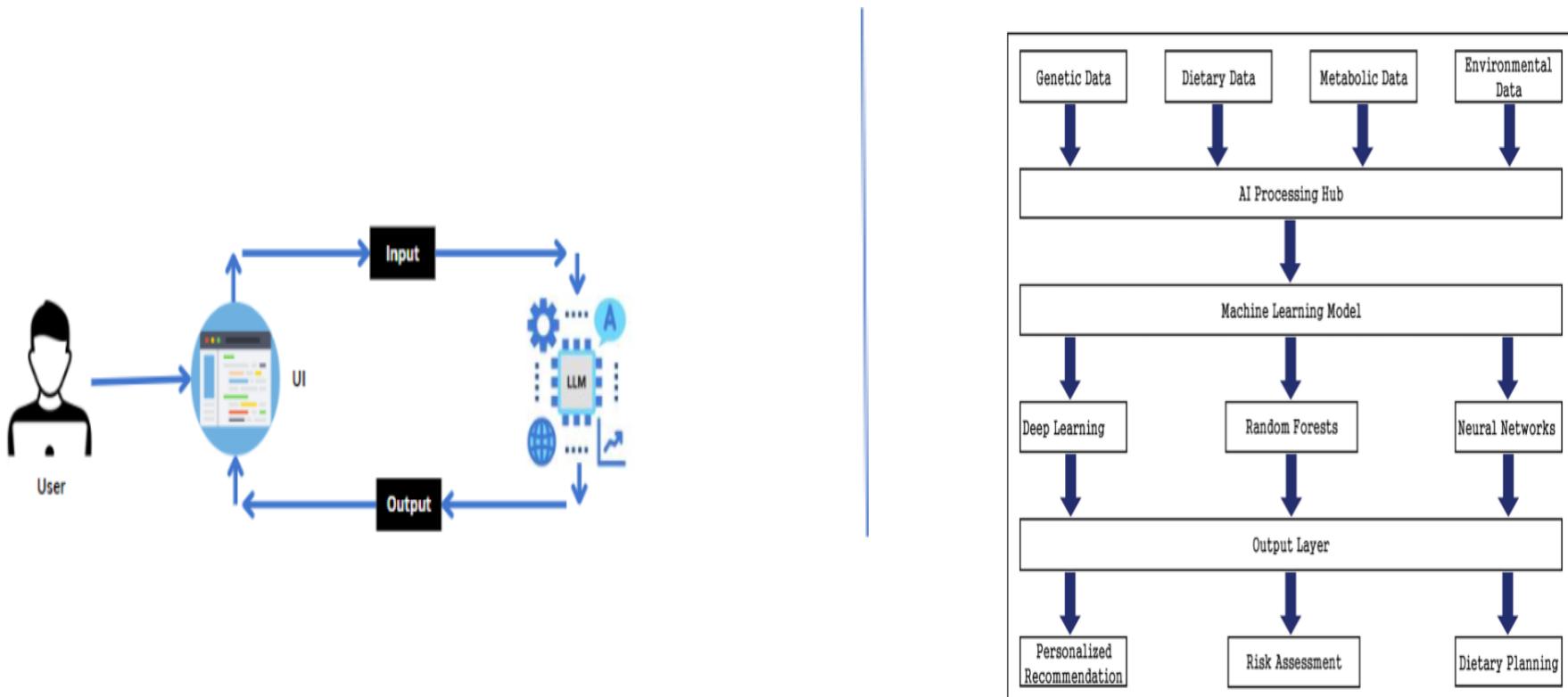
## Project Design Phase-II

### Data Flow Diagram & User Stories

|               |   |
|---------------|---|
| Date          | 10 January 2026                             |
| Team ID       | LTVIP2026TMIDS66228                         |
| Project Name  | Advancing nutrition science through geminai |
| Maximum Marks | 4 Marks                                     |

#### Data Flow Diagrams:

In Advancing Nutrition Science through Gemini AI, a Data Flow Diagram (DFD) shows how user inputs like food details and dietary preferences enter the system, how the data is processed using Gemini AI, and how personalized meal plans and nutritional insights are generated. It also illustrates how user information is stored and managed within the application.



**Example:**

## User Stories

Use the below template to list all the user stories for the product.

| User Type              | Functional Requirement (Epic) | User Story Number | User Story / Task   | Acceptance criteria  | Priority | Release  |
|------------------------|-------------------------------|-------------------|---|--|----------|----------|
| Customer (Mobile user) | Registration                  | USN-1             | As a user, I can register by entering my name, email, password, age, weight, and dietary preferences. | I can access my account / dashboard  | High     | Sprint-1 |
|                        |                               | USN-2             | As a user, I receive a confirmation email after Registration.   | I can receive confirmation email & click confirm                               | High     | Sprint-1 |
|                        |                               | USN-3             | As a user, I can register/login using Google account.   | I can register & access the dashboard with Facebook Login                      | Low      | Sprint-2 |
|                        |                               | USN-4             | As a user, I can log in using email and password.   | I can access my personalized nutrition dashboard securely.                     | Medium   | Sprint-1 |
|                        | Login                         | USN-5             | As a user, I can view my personalized meal plan on the dashboard.                                     | Weekly meal plan is displayed based on my profile.                             | High     | Sprint-1 |
|                        | Dashboard                     | USN-6             | As a user, I can input a food item and receive macronutrient and micronutrient details.               | The system displays calories, protein, carbs, fats, vitamins, and minerals.    | High     | Sprint-2 |
| Customer (Web user)    | Meal Planning                 | USN-7             | As a user, I can generate a personalized weekly meal plan   | The AI generates balanced meals based on my health conditions and preferences. | High     | Sprint-2 |
|                        | Virtual Coaching              | USN-8             | As a user, I can chat with the AI nutrition coach for guidance  | Gemini AI provides accurate and relevant dietary advice.                       | Medium   | Sprint-3 |
|                        | Progress Tracking             | USN-9             | As a user, I can track my calorie intake and nutrition progress                                       | Daily and weekly nutrition reports are generated.                              | Medium   | Sprint-2 |
| Administrator          | User Management               | USN-10            | As an admin, I can manage user accounts and monitor system usage.                                     | System updates reflect accurately without affecting users.                     | Medium   | Sprint-2 |

|               |                    |        |   |  |        |          |
|---------------|--------------------|--------|---|--|--------|----------|
| Administrator | System Maintenance | USN-11 | As an admin, I can update nutrition data and manage AI prompts. | System updates reflect accurately without affecting users. | Medium | Sprint-3 |
|---------------|--------------------|--------|---|--|--------|----------|