Project Design Phase-II
Data Flow Diagram & User Stories

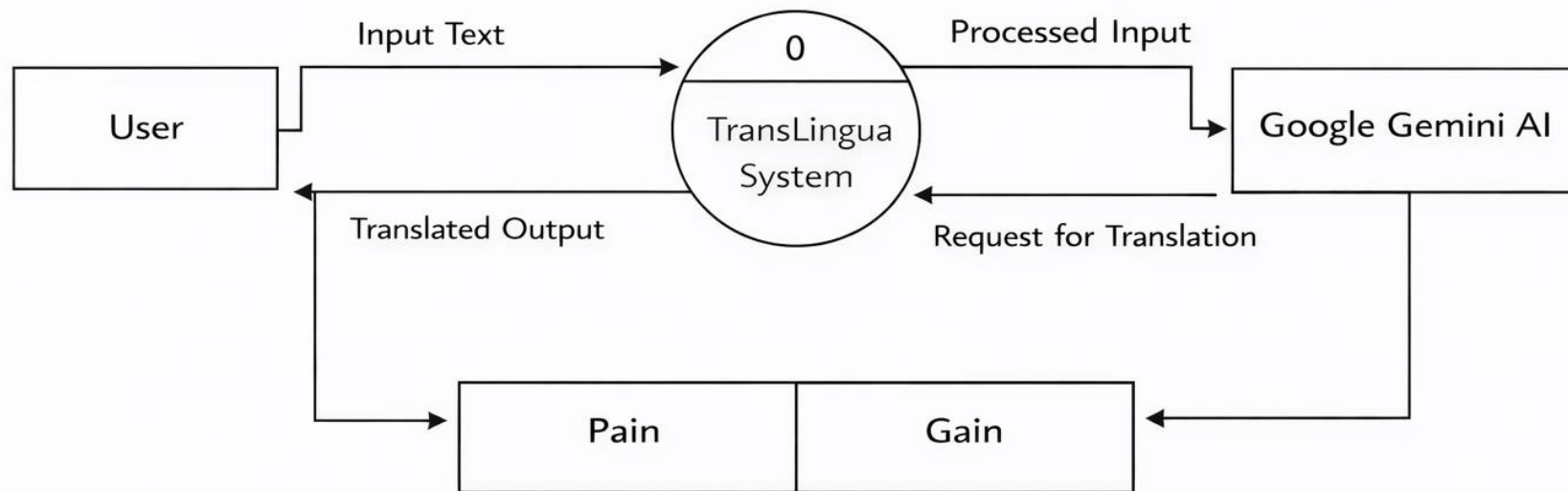| Date	12 February 2026
Team ID	LTVIP2026TMIDS66080
Project Name	TransLingua – AI-Powered Multi-Language Translator
Maximum Marks	4 Marks

1. Data Flow Diagram (DFD)

A Data Flow Diagram (DFD) visually represents how data flows within the TransLingua system. It shows how data enters the system, how it is processed, and how it is returned to the user.

In the TransLingua application:

- The user provides input text and selects languages.
- The system processes the input.
- The request is sent to Google Gemini AI.
- The translated output is returned and displayed.

Level 0 Data Flow Diagram for AI-Powered Language Translation Web Application

2. User Stories

User stories describe system functionality from the user's perspective. They help define requirements clearly and guide development.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer (Web User)	Text Translation	USN-1	As a user, I can enter text to be translated.	The system accepts text input without errors.	High	Sprint-1
Customer (Web User)	Language Selection	USN-2	As a user, I can select source and target languages.	Language dropdowns are displayed and selectable.	High	Sprint-1
Customer (Web User)	AI Translation	USN-3	As a user, I can generate translated text using AI.	The system returns accurate translated output.	High	Sprint-1
Customer (Web User)	Output Display	USN-4	As a user, I can view translated text instantly.	The translated text appears without delay.	High	Sprint-1
Administrator	API Key Security	USN-5	As an administrator, I can securely manage API keys.	API key is stored in .env and not exposed.	High	Sprint-1
Administrator	Version Control	USN-6	As a developer, I can maintain project code in GitHub.	Code is stored with proper repository structure.	Medium	Sprint-1
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Customer (Web User)	Language Selection	USN-2	As a user, I can select source and target languages.	Language dropdowns are displayed and selectable.	High	Sprint-1
Customer (Web User)	AI Translation	USN-3	As a user, I can generate translated text using AI.	The system returns accurate translated	High	Sprint-1

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