

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	18 February 2026
Team ID	LTVIP2026TMIDS65753
Project Name	TransLingua – AI-Powered Multi-Language Translator
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Text Input	User can enter text to be translated
		System validates non-empty input
FR-2	Language Selection	User can select source language
		User can select target language
FR-3	AI Translation	System generates translation using Google Gemini AI

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application should have a simple and user-friendly web interface.
NFR-2	Security	API keys must be securely stored using environment variables and not hardcoded.
NFR-3	Reliability	The system should consistently provide accurate translations without errors.
NFR-4	Performance	The system should generate translations with minimal delay.
NFR-5	Availability	The application should be accessible whenever the Streamlit server is running.
NFR-6	Scalability	The system should support future expansion to more languages and features.