

## Project Design Phase

### Proposed Solution

Date	11 February 2026
Team ID	LTVIP2026TMIDS66199
Project Name	TransLingua: AI-Powered Multi-Language Translator
Maximum Marks	2 Marks

#### Proposed Solution:

Project team shall fill the following information in the proposed solution template.

S.No	Parameter	Description
1	Problem Statement (Problem to be solved)	Users face language barriers while traveling, studying, or conducting business across different countries. Existing translation methods can be slow, inaccurate, expensive, or lack contextual understanding, making communication difficult and inefficient.
2	Idea / Solution Description	Develop an AI-powered web application that translates text between multiple languages in real time. The system uses a pre-trained Gemini Generative AI model to generate context-aware, accurate translations instantly based on user-selected source and target languages.
3	Novelty / Uniqueness	The solution leverages generative AI for context-aware translation rather than simple word-by-word conversion. Unlike traditional translators, the system focuses on meaningful, structured, and intelligent translation using advanced AI models.
4	Social Impact / Customer Satisfaction	The solution reduces communication gaps and enables seamless global interaction. It supports travelers, students, professionals, and content creators by providing fast and reliable translation, improving confidence and productivity.
5	Business Model (Revenue Model)	The platform can adopt a freemium model, offering basic text translation for free and premium features such as advanced AI models, document translation, speech-to-text translation, and ad-free access through subscription plans.
6	Scalability of the Solution	The system can be scaled by deploying on cloud infrastructure, supporting more languages, integrating speech translation features, handling higher user traffic, and upgrading to advanced AI models for improved accuracy and performance.