

Project Design Phase
Proposed Solution Template

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| Date | 7 February 2026 |
| Team ID | LTVIP2026TMIDS65765 |
| Project Name | TransLingua – AI-Powered Multi-Language Translator |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

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

| S.No. | Parameter | Description |
|-------|--|--|
| 1 | Problem Statement (Problem to be solved) | Many individuals face communication difficulties due to language barriers. Existing translation tools may be slow, inaccurate, or complex to use. |
| 2 | Idea / Solution Description | Develop a web-based AI-powered language translation application using Streamlit and Google Gemini Generative AI to provide fast and accurate translations. |
| 3 | Novelty / Uniqueness | Integration of Generative AI for real-time translation with a lightweight and user-friendly web interface. Secure API key management is implemented. |
| 4 | Social Impact / Customer Satisfaction | Helps students, professionals, and travelers communicate effectively, improving accessibility and reducing language-based barriers. |
| 5 | Business Model (Revenue Model) | Freemium model – Free basic translation with potential premium features such as advanced language support or API access. |
| 6 | Scalability of the Solution | The system can be expanded to support more languages, voice translation, cloud deployment, and mobile applications. |