**Project Design Phase**

**Solution Architecture**

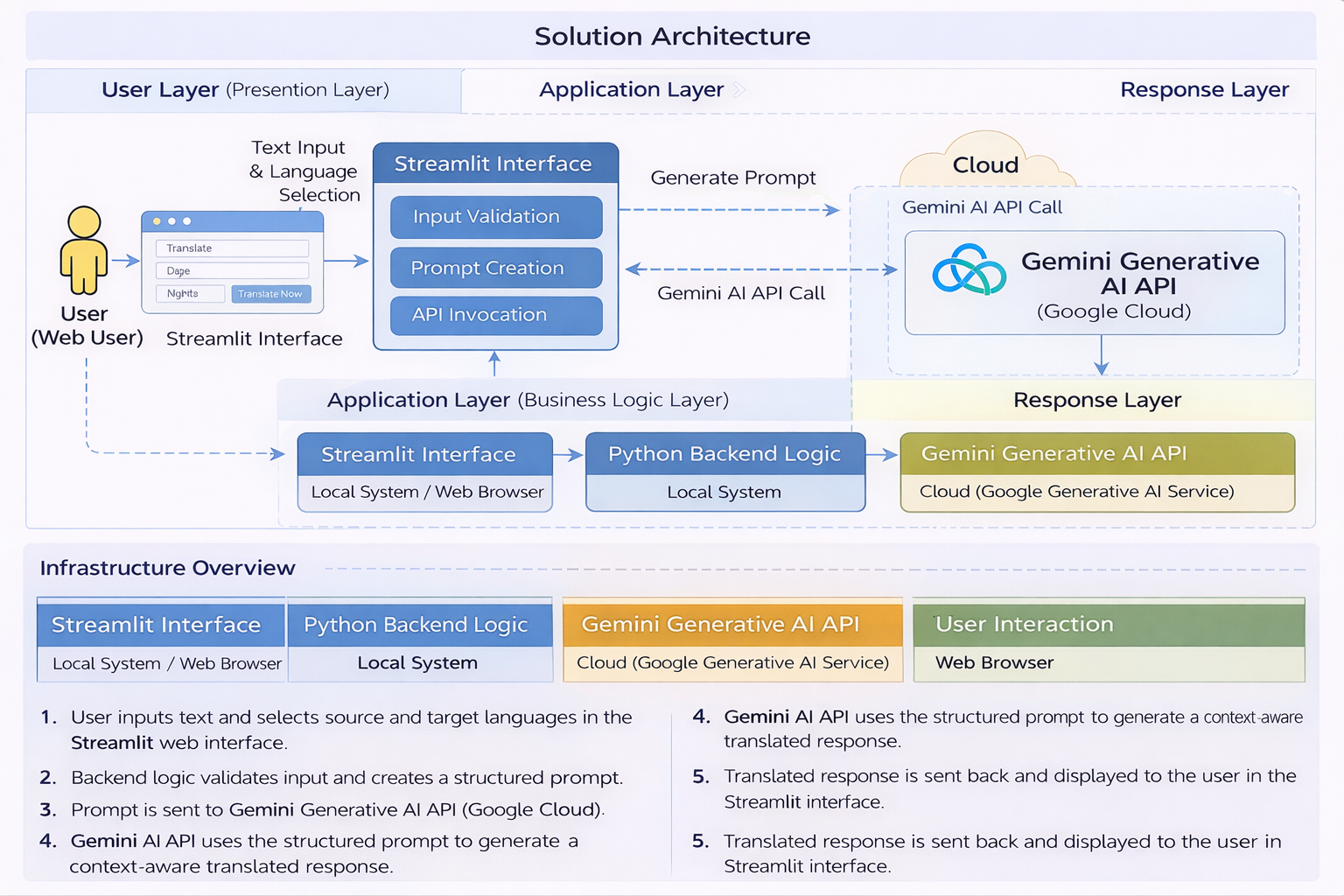
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| Date | 13 February 2026 |
| Team ID | LTVIP2026TMIDS66199 |
| Project Name | TransLingua: AI-Powered Multi-Language Translator |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

The solution architecture of *Explore with AI* bridges the gap between the problem of manual travel planning and the implementation of an AI-powered automated system.

The architecture is designed to be lightweight, modular, and scalable. It integrates a web-based user interface with backend application logic and a cloud-based generative AI service.

**Solution Architecture Diagram:**

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*Figure 1: Architecture and data flow of travel itinerary application*

**Reference:** [**https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/**](https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/)