

## Model Development Phase

Date	12 February 2026
Team ID	LTVIP2026TMIDS73289
Project Title	Explore With Ai: Custom Itineraries For Your Next Journey
Maximum Marks	5 Marks

### Model Selection Report

In this project, the focus is on selecting a suitable **pre-trained generative AI model** rather than training multiple machine learning models. The model selection was based on factors such as text generation quality, ease of integration, response speed, and suitability for natural language tasks like travel itinerary generation.

#### Model Selection Report:

Model	Description
Gemini Flash Lite (models/gemini-flash-lite-latest)	A lightweight and efficient generative AI model capable of producing coherent and context-aware text responses. It is well-suited for real-time applications such as travel itinerary generation and integrates easily using an API.
Other LLMs (Considered)	Other large language models were reviewed conceptually, but Gemini Flash was selected due to its fast response time, scalability, and strong support for natural language generation tasks.

### Justification for Model Selection

The Gemini Flash model was chosen because it provides high-quality text generation with low latency, making it suitable for interactive web applications. Its ability to understand contextual prompts and generate structured travel itineraries aligns well with the project requirements. Additionally, the availability of a simple API interface allows seamless integration with the Streamlit application.