Initializing the Model Phase

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Team ID	LTVIP2026TMIDS26163
Project Name	Explore with AI: Custom Itineraries for Your Next Journey
Maximum Marks	3 Marks

Define the model to be used:

In this step, the generative AI model is defined and configured to produce travel itinerary content. Various generation parameters such as temperature, top_p, and top_k are set to control the creativity and diversity of the AI's responses, while max_output_tokens limits the length of the generated text. The response format is specified as plain text to ensure compatibility with the application. After configuring these settings, an instance of the GenerativeModel is created using the selected model name, such as gemini-1.5-flash, which is designed for fast and efficient text generation. This model is then used to generate personalized travel itineraries based on the user's input.

```python
# Function to generate a travel itinerary based on user input
def generate_itinerary(destination, days, nights):
    # Create the model configuration
    generation_config = {
        "temperature": 0.4,
        "top_p": 0.95,
        "top_k": 64,
        "max_output_tokens": 8192,
        "response_mime_type": "text/plain",
    }
```

```python
# Initialize the Generative Model
model = genai.GenerativeModel(
    model_name="gemini-1.5-flash",
    generation_config=generation_config,
)
```

Created an instance of Generative Model with the model_name set to "gemini-1.5-flash".