**Integrating AI with Open-Meteo API for**

Enhanced Weather Forecasting

Workflow Execution Steps

1. **User Interaction:**
   * The workflow starts when a user sends a chat message (e.g., "Weather Forecast for the Next 7 Days in São Paulo") through the hosted chat interface.
2. **Query Processing:**
   * The **Generic AI Tool Agent** analyzes the input message, leveraging context from the **Chat Memory Buffer** if available.
   * The agent identifies that it needs to fetch geolocation data for the requested city.
3. **Geolocation Lookup:**
   * The workflow invokes the geolocation tool which makes an HTTP request to the Open-Meteo geocoding API.
   * The API returns the latitude and longitude for "São Paulo".
4. **Weather Forecast Retrieval:**
   * With the obtained geolocation, the workflow calls the weather forecast tool.
   * The Open-Meteo API provides weather forecast data for the next 7 days.
5. **Response Generation:**
   * The **OpenAI Chat Model** refines and formats the weather data into a user-friendly response.
   * The final weather forecast is delivered back to the user through the chat interface.

Benefits & Use Cases

* **Real-Time Forecasting:**  
  Provides users with timely and accurate weather information based on their specific query.
* **AI-Powered Interaction:**  
  Leverages AI to determine and execute the appropriate API calls dynamically during a conversation.
* **Educational Value:**  
  Serves as an excellent example for workshops on integrating multiple APIs (e.g., geocoding and weather) with AI to build interactive applications.
* **Customizable Workflow:**  
  The workflow can be extended or modified to suit various use cases such as travel planning, event organization, or personal weather monitoring.