Tool Descriptors

```json
[
    {
        "tool_id": "get_forecast",
        "description": "Get 7-day weather forecast for a city",
        "inputs": {
            "city": "string",
            "units": "metric | imperial"
        },
        "when_to_use": "User asks about future weather conditions",
        "examples": [
            "What will the weather be in Accra next week?",
            "Is it going to rain tomorrow in NYC?"
        ]
    },
    {
        "tool_id": "email_send",
        "description": "Send an email to a recipient",
        "inputs": {
            "to": "email address",
            "subject": "string",
            "body": "string"
        },
        "when_to_use": "User wants to send an email",
        "examples": ["Send an email to john@example.com"]
    },
    ⋮
]
```
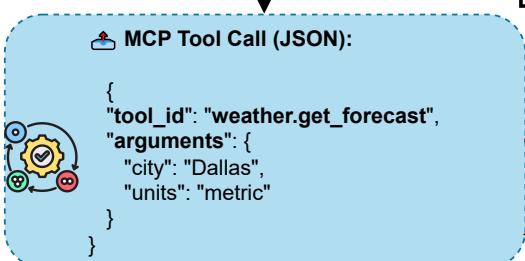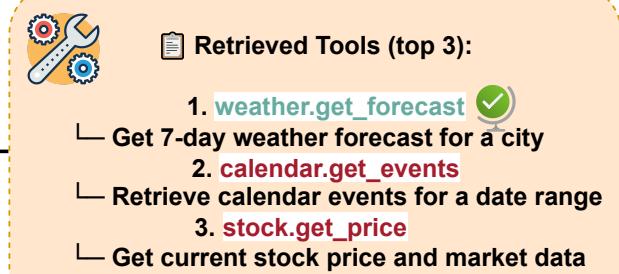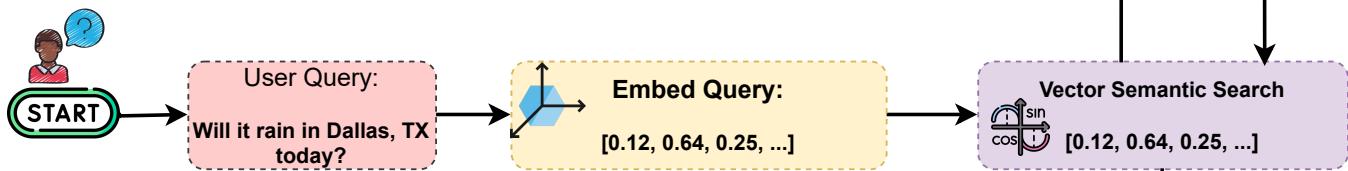
JSON

VectorDB

Embedding 1: [0.12, 0.45, 0.90, 0.15 ...]

Embedding 2: [0.42, 0.55, 0.10, 0.25 ...]

⋮

Embedding n: [0.72, 0.95, 0.60, 0.75 ...]

START

User Query:

Will it rain in Dallas, TX today?

Embed Query:

[0.12, 0.64, 0.25, ...]

Vector Semantic Search

[0.12, 0.64, 0.25, ...]

💬 **Agent's Reasoning (GPT-4o):**

- "This looks like a weather forecast request"
- "Tool: **weather.get_forecast** matches intent"

✅ Selected Tool: weather.get_forecast

📋 **Retrieved Tools (top 3):**

1. **weather.get_forecast** ✅
   └ **Get 7-day weather forecast for a city**
2. **calendar.get_events**
   └ **Retrieve calendar events for a date range**
3. **stock.get_price**
   └ **Get current stock price and market data**

retry_tool   retry_query

🎛 **MCP Tool Call (JSON):**

```json
{
    "tool_id": "weather.get_forecast",
    "arguments": {
        "city": "Dallas",
        "units": "metric"
    }
}
```

Validation

feedback

User Feedback

🛠 🎛 **Tool Response:**

{"city": "Dallas", "units": "metric", "forecast": [...]}

💬 **Final Response to User:**

Here's the weekend forecast for Dallas:
- Saturday: Partly Cloudy, 28°F (20% chance of rain)
- Sunday: Light Rain, 26°F (60% chance of rain)

Yes, there's a chance of rain this weekend!