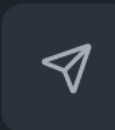




CleonGPT – How to build a ChatGPT Clone (~ReAct Agent)

Michael Schwarz (er/ihm) / [@schwamic](#)

Message CleonGPT...



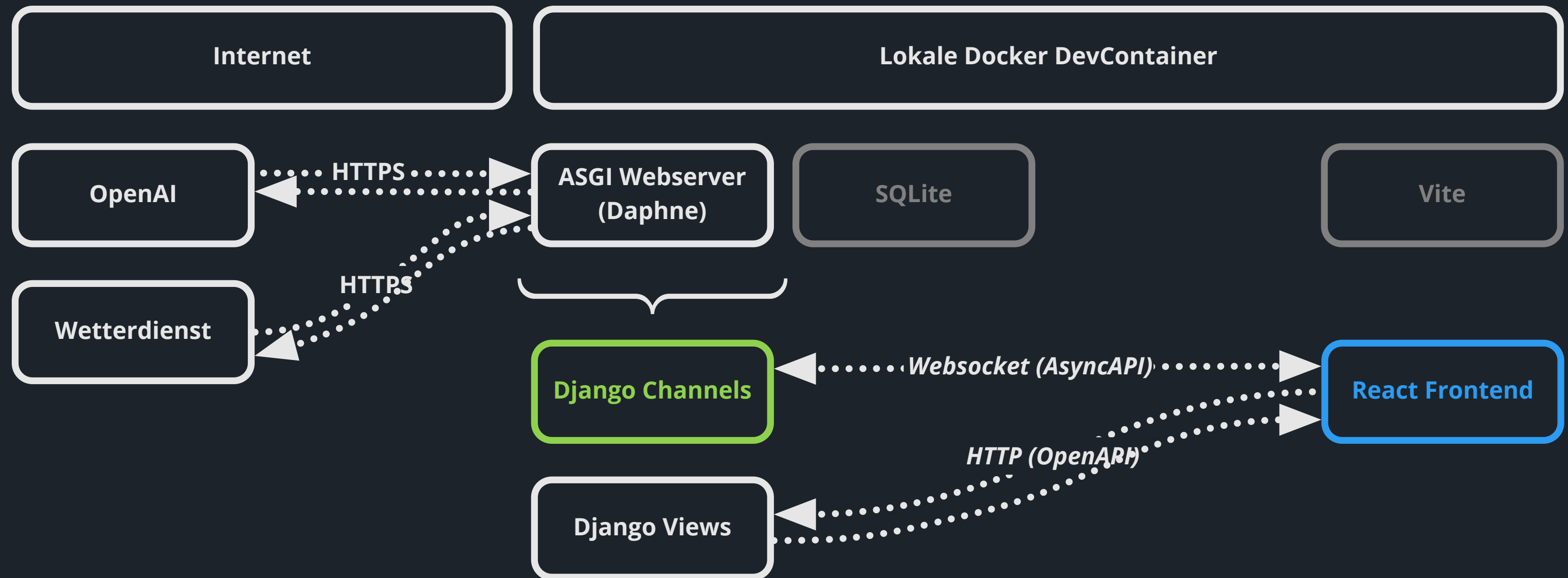
CleonGPT can make mistakes.

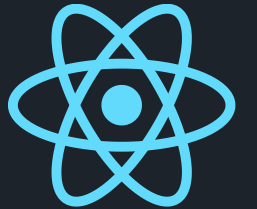
(press 'Enter')

Agenda

- 1. Technischer Überblick*
- 2. ReAct Agent via LangGraph*
- 3. Fazit*

Technischer Überblick – CleonGPT





**react-use-
websocket**

*Utility Library für
WebSocket-Handling*

react-query

*Fetch- und Async-State-
Management*

react-markdown

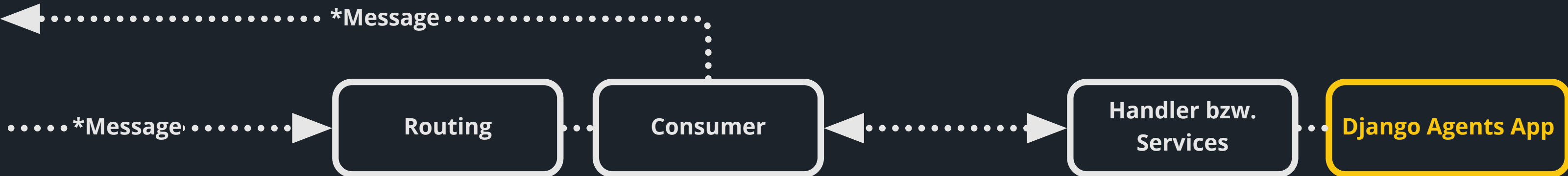
*Transformiert Markdown
zu HTML Elemente*

**lodash (throttle,
debounce)**

*Nötig um Rerenderings und
State-Updates zu managen.*

**daisyui &
tailwindcss**


User Inferface



Server-Settings
Routing = URLs


~REST Schnittstelle für
Websocket-Messages
(z.B. Validierung)

Domänenlogik

 AsyncAPI

Building the future of
Event-Driven Architectures.

```
1 asyncapi: '2.5.0'
2 info:
3   title: Streetlights API
4   version: '1.0.0'
5   description: >
6     The Streetlights API allows you to remotely manage the
7     city lights.
8   ## Check out its awesome features!
```


 www.asyncapi.com

AsyncAPI Initiative for
event-driven APIs

Open source tools to easily build and
maintain your event-driven architecture.
All powered by the AsyncAPI
specification, the industry standard for
defining asynchronous APIs.

Balance agent
control with agency

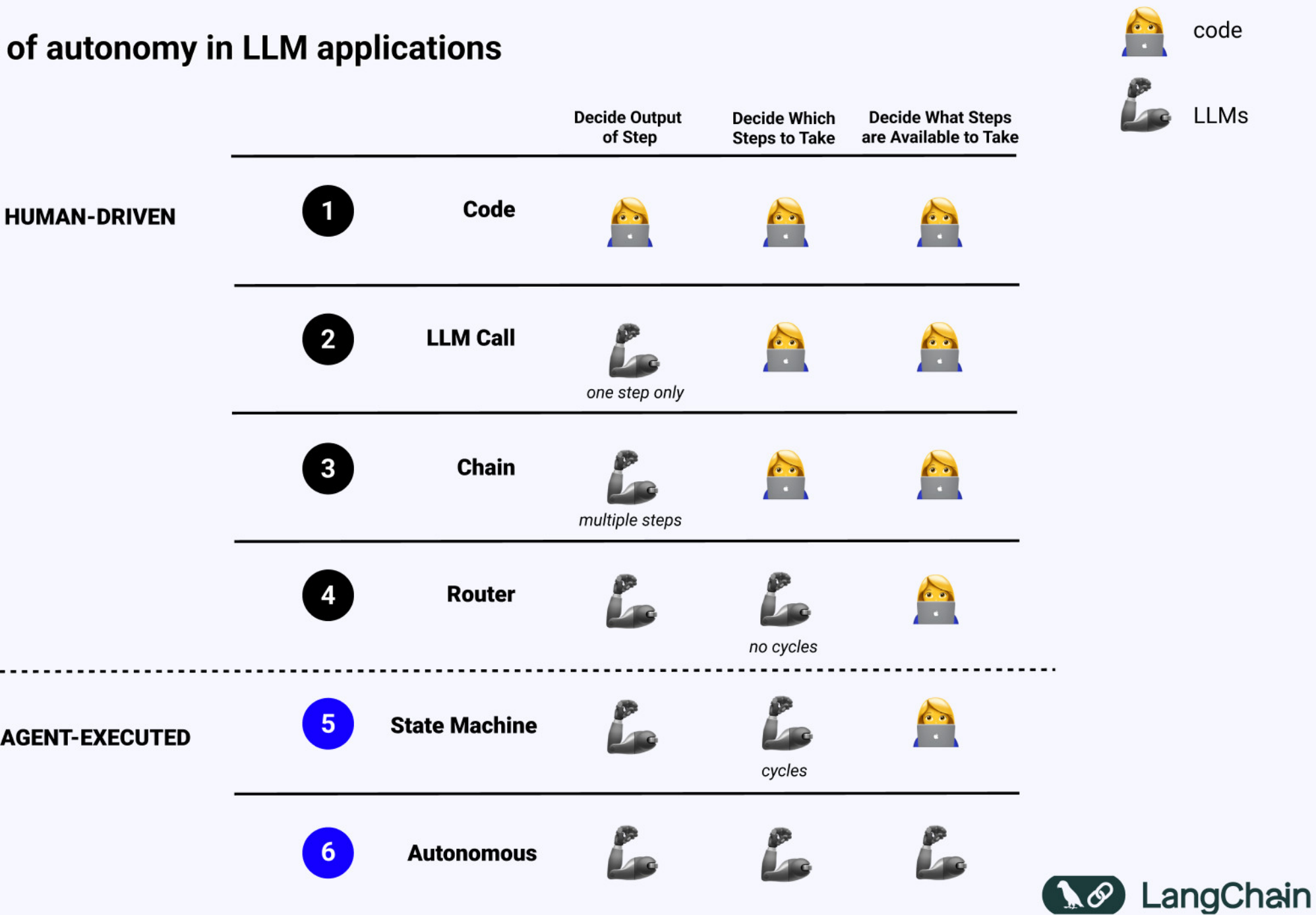
Gain precision and control with LangGraph to build agents that
reliably handle complex tasks. Build and scale agentic applications
with LangGraph Platform.

 www.langchain.com

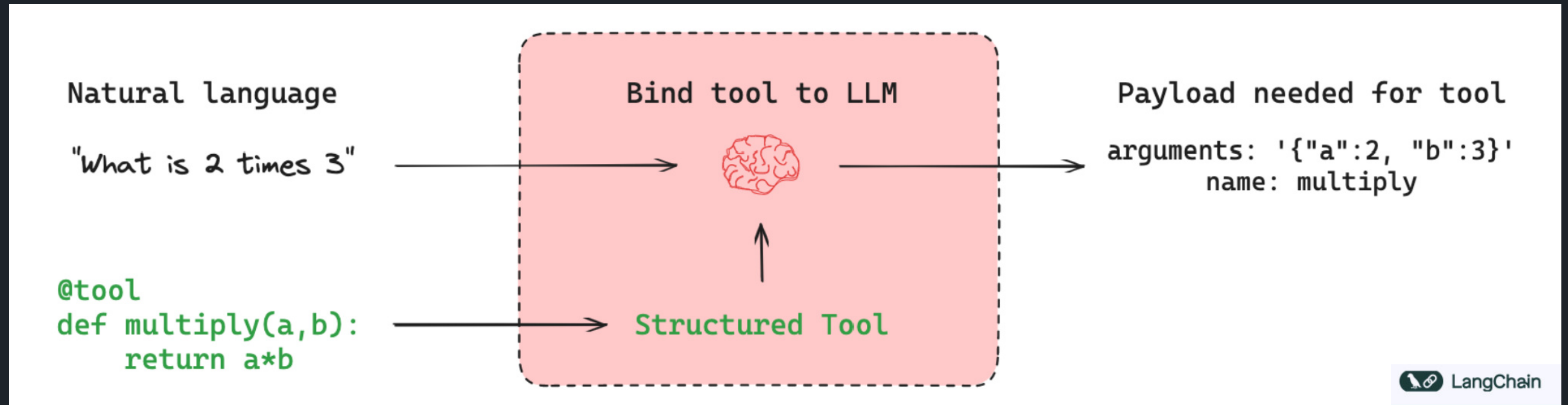
LangGraph

Deploy your LLM app instantly with
LangServe.

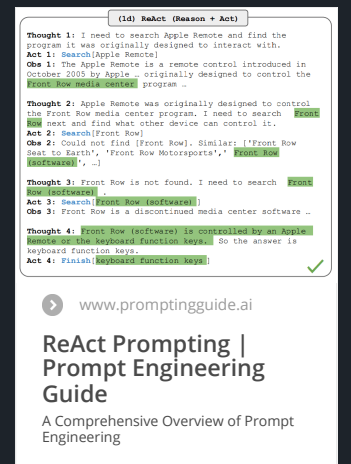
Levels of autonomy in LLM applications



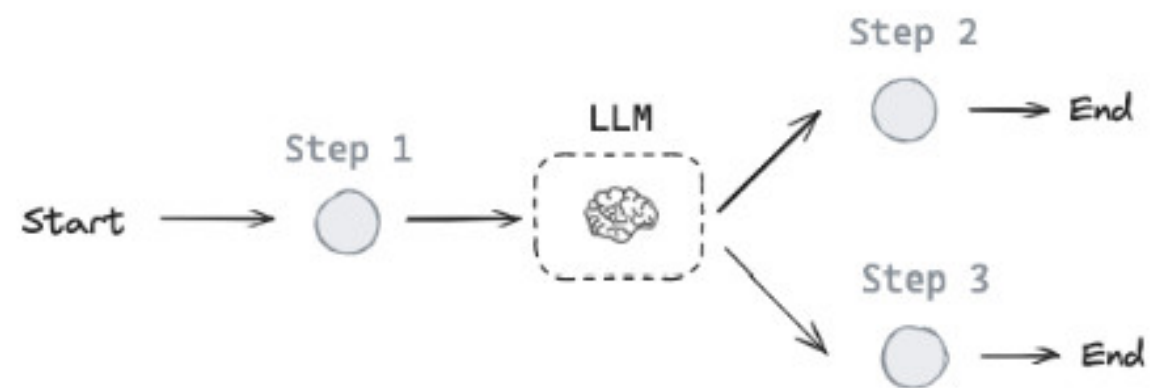
LangGraph – Router für Function-Calling



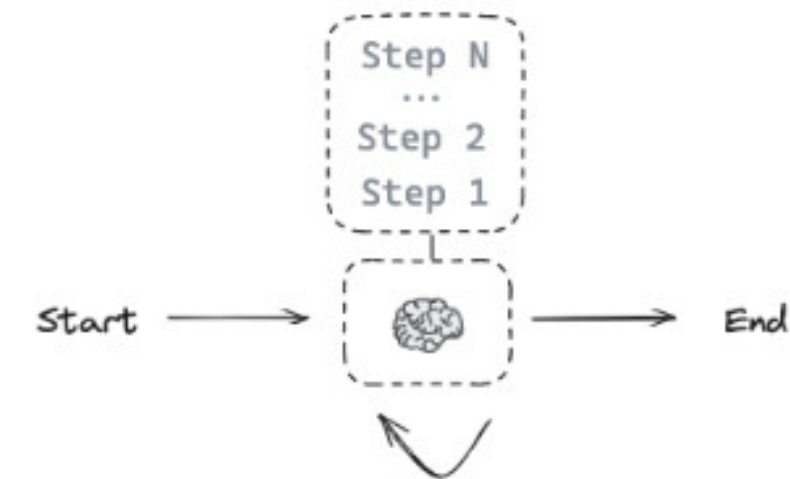
ReAct = Reason + Act (Prompt Engineering Technik, 2022)
Ermöglicht mit externen Tools zu interagieren, um
zusätzliche Informationen abzurufen => bessere Antworten



Router



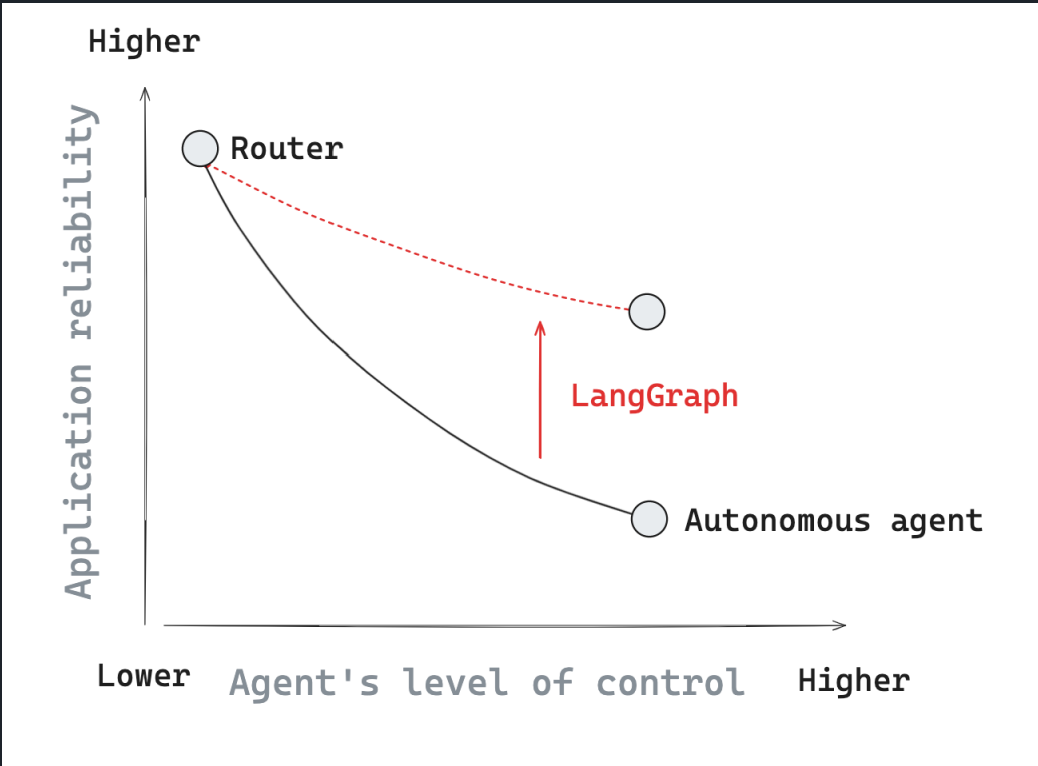
Fully Autonomous



Less

Control

More



 LangGraph

academy.langchain.com

Introduction to LangGraph

Learn the basics of LangGraph - our framework for building agentic and multi-agent applications. Separate from the LangChain package, LangGraph helps developers add better precision and control into agentic workflows.

agents - LangGraph Studio

tools_markdown_chatbot Assistants Memory Interrupts

Thread 698902f6-fc4b-451c-ad2c-ef6361a772ab 48 seconds ago

__start__

How is the weather in Augsburg?

assistant

get_current_weather ID

city Augsburg

tools

get_current_weather

{'location': {'name': 'Augsburg', 'region': 'Bayern', 'country': 'Germany', 'lat': 48.3667, 'lon': 10.8833, 'tz_id': 'Europe/Berlin', 'localtime_epoch': 1733842216, 'localtime': '2024-12-10 15:50'}, 'current': {'last_updated_epoch': 1733841900, 'last_updated': '2024-12-10 15:45', 'temp_c': 2.0, 'temp_f': 35.6, 'is_day': 1, 'condition': {'text': 'Overcast', 'icon': 'https://cdn.weatherapi.com/weather/64x64/day/122.png', 'code': 1009}, 'wind_mph': 6.9, 'wind_kph': 11.2, 'wind_degree': 49, 'wind_dir': 'NE', 'pressure_mb': 1022.0, 'pressure_in': 30.18, 'precip_mm': 0.03, 'precip_in': 0.0, 'humidity': 93, 'cloud': 100, 'feelslike_c': -1.2, 'feelslike_f': 29.8, 'windchill_c': -1.7, 'windchill_f': 28.9, 'heatindex_c': 1.6, 'heatindex_f': 34.8, 'dewpoint_c': 0.6, 'dewpoint_f': 33.2, 'vis_km': 10.0, 'vis_miles': 6.0, 'uv': 0.1, 'gust_mph': 9.4, 'gust_kph': 15.2}}

assistant

Current Weather in Augsburg, Germany

- **Temperature**: 2°C (35.6°F)

- **Condition**: Overcast

- **Feels Like**: -1.2°C (29.8°F)

- **Humidity**: 93%

- **Wind**: 11.2 kph (6.9 mph) from the NE

- **Wind Gusts**: Up to 15.2 kph (9.4 mph)

- **Pressure**: 1022 mb (30.18 in)

- **Precipitation**: 0.03 mm

- **Visibility**: 10 km (6 miles)

- **UV Index**: 0.1

OUTPUT

Input

Messages

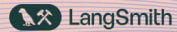
+ Message

Submit


Online http://localhost:51185 Project Settings Logs New version 0.0.31 available! Click here to restart. Deploy

Fazit

LangGraph ist super zum Entwickeln – für mehr aber auch nicht. Für produktive Software gibt es zusätzlich die Erweiterung LangSmith.



Get your LLM app from
prototype to production



www.langchain.com

LangSmith

Get your LLM app from prototype to
production.

