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Sign up

Hermes AI Agent Training

2 days (14 hours)

Overview

Hermes AI Agent is a short training course designed to help you build an AI agent capable of orchestrating tasks, invoking tools, and generating reliable responses. You will learn how to apply it to real-world scenarios: internal support, document research, workflow automation, and business assistants.

The goal is to move from a simple chatbot to a goal-driven agent: defining roles, managing context, choosing tools, and implementing safeguards (validation, traceability, limits). You'll see how to structure prompts, manage memory, and integrate knowledge sources.

The approach is hands-on: guided workshops, step-by-step demos, and scenario-based exercises. Deliverables include a functional agent, a test suite (scenarios + criteria), a security checklist, and an operations guide for iterating and deploying.

Like all our training courses, this one will introduce you to **the latest stable version** of the technology and its new features.

Objectives

- Identify use cases and define a goal-oriented agent.
- Design robust prompts and a context/memory strategy.
- Integrate tools (APIs, functions) and orchestrate actions.
- Set up tests, metrics, and validation mechanisms.
- Hardening security: permissions, red teaming, data management.

Target Audience

- Developers and software engineers
- Data/ML engineers and data scientists
- Product owners and technical project managers
- Support/ops managers looking to automate processes

Prerequisites

- Basic knowledge of Python or JavaScript
- Understanding of REST APIs and the JSON format
- Basic experience with Git and the command line
- Basic knowledge of application security (authentication, secrets) is a plus

Technical prerequisites

- Computer with 16 GB of RAM recommended (8 GB minimum)
- macOS, Linux, or Windows (WSL2 recommended)
- A code editor and a terminal (Bash/Zsh/PowerShell)
- Access to a runtime environment: Python 3.11+ or Node.js 18+
- Dependency manager: pip/venv or npm/pnpm

Hermes AI Agent Training Program

[Day 1 - Morning]

Fundamentals of AI Agents and the Hermes Framework

- Defining an AI Agent: objectives, autonomy, perception-decision-action loop
- Identifying use cases: internal support, research, back-office automation, business co-pilot
- Understanding the components: LLM, memory, tools, planning, safeguards
- Establishing requirements: inputs/outputs, constraints, success criteria, KPIs
- Hands-on workshop: Formalizing a use case and its acceptance criteria.

[Day 1 - Afternoon]

Designing a Hermes agent: prompts, tools, and orchestration

- Structuring system instructions: role, rules, style, limits, and rejections
- Designing tools (functions): input schemas, validations, errors, timeouts
- Choosing a strategy: ReAct, plan-and-execute, multi-skill routing
- Tracing and monitoring: logs, decisions, tool calls, costs, and latency
- Hands-on workshop: Building a minimal Hermes agent with 2 tools (internal search + ticket creation).

[Day 2 - Morning]

Memory, knowledge, and RAG for Hermes

- Distinguish between short-term memory, long-term memory, and conversational context
- Implementing RAG: ingestion, chunking, embeddings, top-k, reranking
- Managing quality: deduplication, freshness, sources, citations, and traceability
- Reducing hallucinations: confidence thresholds, “I don’t know” responses, human fallback
- Hands-on workshop: Connect Hermes to a document database and return a sourced response.

[Day 2 - Afternoon]

Security, evaluation, and deployment of a Hermes agent

- Securing: secret management, tool-based permissions, access control, and auditing
- Safeguards: filtering, policies, prompt injection prevention, action sandboxing
- Evaluation: test suites, scenarios, metrics (accuracy, escalation rate, cost, latency)
- Scaling: prompt versioning, deployment, monitoring, alerting, continuous improvement
- Hands-on workshop: Setting up an evaluation grid and a deployment plan (staging & production).

Target Audience

This training is intended for both individuals and companies, large or small, wishing to train their teams in a new advanced IT technology or to acquire specific business knowledge or modern methods.

Assessment upon enrollment

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency in various types of technologies, as well as their expectations and personal goals regarding the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could pose challenges for monitoring and ensuring the smooth running of the training session.

Teaching Methods

Practical Course: 60% Practical, 40% Theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the trainer, supported by examples and reflection sessions, and group work.

Certification

At the end of the session, a multiple-choice quiz is used to verify that the skills have been properly acquired.

Certification

A certificate will be issued to each trainee who has completed the entire training program.