



AgentGarage Training Exercise: LLM Workflow with N8N

Objective

In this exercise, you'll set up and explore **AgentGarage** – a lightweight GenAI development environment based on Docker, featuring:

- A local LLM (connected via OpenWebUI or direct API)
- **N8N** for workflow orchestration
- A simple workspace for experimenting with SDLC-related automations

The goal: build a **simple use case** from the **Software Development Lifecycle (SDLC)** domain, where N8N interacts with the local LLM.

Tech Stack

- Local LLM (e.g., Ollama, LM Studio, Mistral, etc.)
 - OpenWebUI (or direct LLM API access)
 - N8N (workflow automation)
 - Docker Compose (for local setup)
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Exercise Task

1. Clone and start the [AgentGarage](#) environment using docker-compose.
 2. Access N8N and the local LLM via browser and verify the setup.
 3. Build a **simple N8N workflow** that communicates with the LLM API.
 4. Choose your own small use case within the SDLC context.
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Requirements

- The N8N workflow must include at least **one API request** to the local LLM.
 - The input/output flow must be traceable (e.g., via Webhook, File Input, Email, etc.).
 - You are responsible for prompt design (i.e., how N8N "talks" to the LLM).
 - Keep it simple, focused, and creative.
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💡 Example Use Cases (for inspiration only)

1. Pull Request Description Generator

A workflow takes a commit message or changelog fragment, sends it to the LLM, and receives a clean, human-friendly pull request description.

2. Code Review Suggestions

A workflow receives a code snippet or diff from a pull request and uses the LLM to generate review comments or a code quality summary.

Example output:

“Looks good overall. Consider simplifying the nested loop in line 14. No test coverage found for the new function.”

3. User Story to Acceptance Criteria (Gherkin Format)

The workflow accepts a user story (in plain text), passes it to the LLM, and receives a structured list of acceptance criteria.

Input:

"As a user, I want to change my password so I can secure my account."

Output:

gherkin

Given the user is logged in

When the user navigates to the account settings and submits a new password

Then the password should be updated and a confirmation message displayed

🧠 Learning Goals

- Get hands-on experience with Docker-based LLM environments
- Understand API integration between N8N and a local language model
- Apply prompt engineering to real SDLC workflows
- Explore automation ideas within your daily development lifecycle