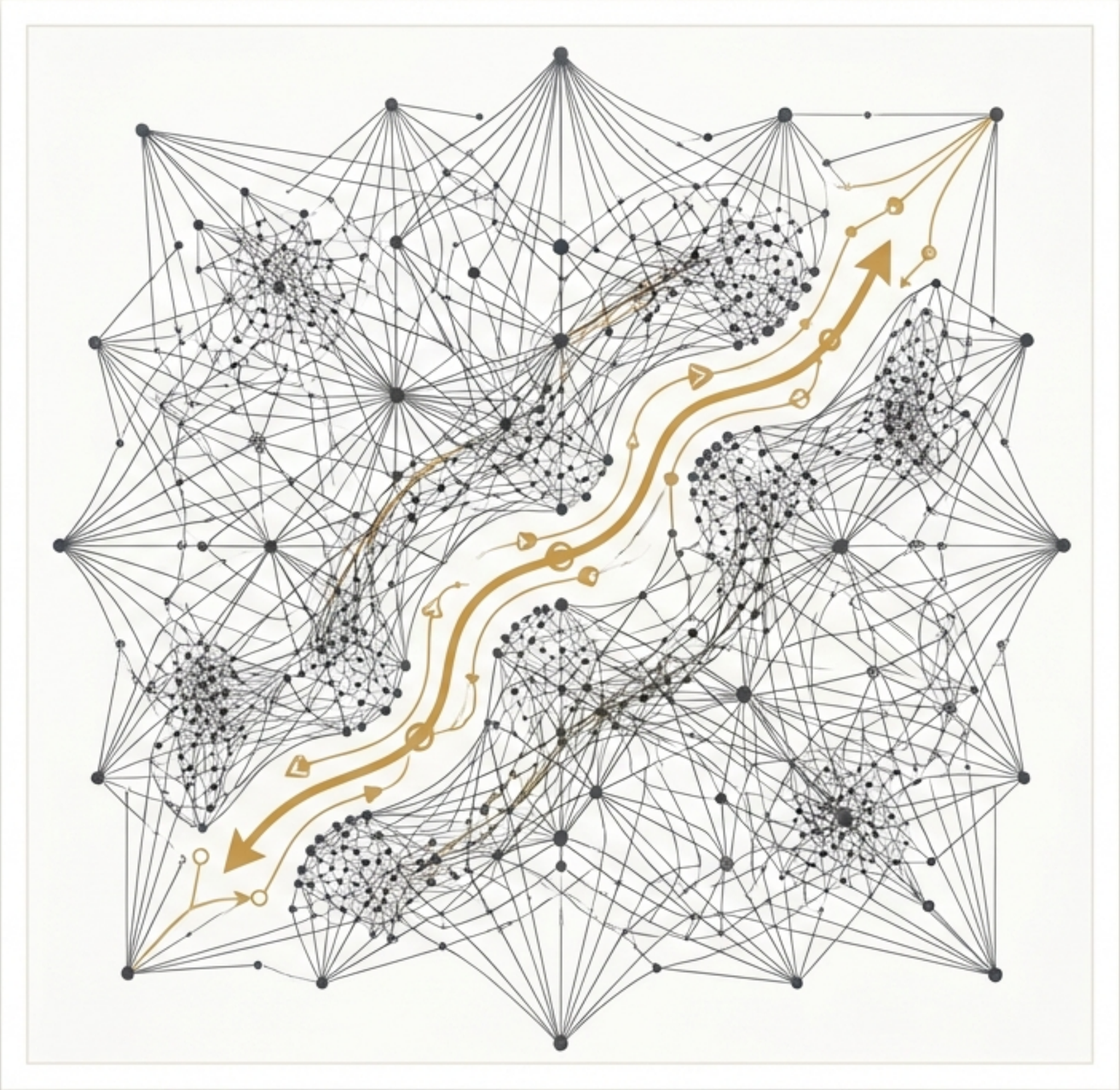
You're Not Learning to Build AI. You're Learning to **Steer It.**

This lab is designed for **knowledge workers**, not software engineers. It's for professionals in HR, Finance, Marketing, and Legal who need to use AI with precision and confidence.

The goal is to see **inside the model's 'mind'** to make **better design decisions** about your prompts and workflows. This is about moving from being a **passenger** to being the **navigator**.



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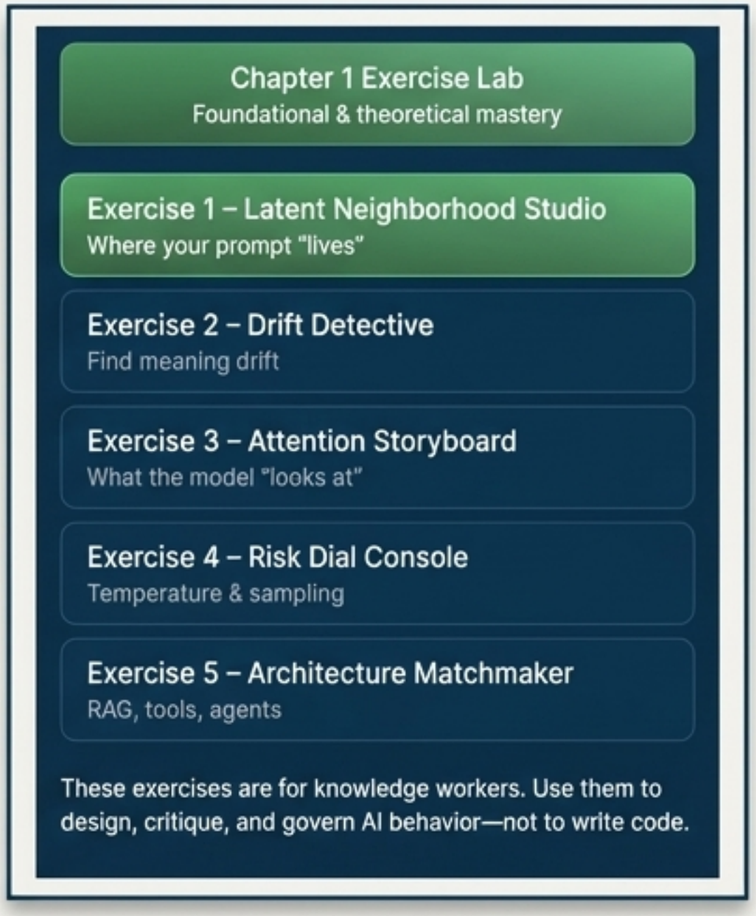
The Five Core Skills of an Expert AI Navigator

The Chapter 1 Exercise Lab is a self-contained tool (a single HTML file) that develops five foundational skills. You can work through them in sequence or jump to the one most relevant to your work.



Skill 1: The Geographer – Mapping where your prompt 'lives.'

Skill 2: The Detective – Finding hidden meaning drift.

Skill 3: The Storyboarder – Seeing what the model "looks at."

Skill 4: The Sound Engineer – Tuning the creativity vs. risk dials.

Skill 5: The Architect – Choosing the right components for the job.

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Skill 1: The Geographer – Mapping Where Your Prompt “Lives”

Where does your prompt “live” in the model’s map of meaning? Does it think you’re asking for a marketing blurb, a legal analysis, or a fictional story?

From

“Latent space is an abstract map of meaning.”

To

“I understand where my real prompts land, and I can nudge them into a safer or more useful region.”

Why It Matters

Misinterpreting your intent is a primary source of AI error. Anchoring your prompt in the correct **“semantic neighborhood”** (e.g., Policy & Compliance vs. Speculation & Opinion) is the first step to **reliable outputs.**

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Lab in Action: The Latent Neighborhood Studio

Exercise 1 – Latent Neighborhood Studio

Objective: See where your prompts sit in the model's map of meaning

Place realistic work prompts into conceptual neighborhoods (policy, marketing, risk, fiction, etc.) and see how small wording changes move them into safer, more useful regions of meaning.

Instructions

1. Start from a scenario. 2. Type or adapt a prompt you might actually use at work. 3. Add domain cues and constraints. 4. Place it in latent space and review its "neighbors."

Start from a scenario

Summarize a policy for managers

Your prompt

Summarize this HR policy into a one-page overview for frontline managers, highlighting what changes for them. Focus on HR / people implications. Highlight financial and risk implications. Explicitly state what is expected from the target audience.

Refine the prompt

Domain cues

HR / People | Finance / Risk | Marketing / Brand | Legal / Compliance

Add constraints

No fiction or invented examples | Specify audience & outcome | Stay grounded in provided docs

Place in latent space | Reset

Reflection prompt

After you place and refine your prompt, note how its "neighborhood" changes. What wording changes moved it into a safer or more useful region?

Latent neighborhood view

This is a conceptual map showing which kinds of content your prompt is closest to.

Policy & Compliance Policies, rules, handbooks, HR and legal guidance.	**Marketing & Brand Voice** Social posts, campaigns, taglines, brand stories.	**Technical Explanation** How-it-works explanations, specs, tutorials.
Fiction & Storytelling Stories, characters, fictional scenarios.	**Speculation & Opinion** Hot takes, guesses, opinions, ungrounded claims.	**Risk & Controls** Risk notes, incident summaries, controls, mitigations.

Neighbor prompts & notes

Interpretation:

The prompt currently sits mostly in the 'Policy & Compliance' neighborhood. Small wording changes can move it closer to or away from this region.

- Neighbor cluster: Policy & Compliance.

Neighbor prompts (examples)

- "Explain the remote work policy in 5 bullet points for people managers."

What You'll Practice

- Start with a **real-world scenario** (e.g., "Summarize a policy for managers").
- **Refine** your prompt with specific **Domain Cues** (HR, Finance) and **Constraints** ("No fiction," "Specify audience").
- Click 'Place in latent space' to see which conceptual neighborhood your prompt lands in.
- Experiment by changing a few words to see how the neighborhood shifts.

Key Takeaway: Test prompts you already use at work. If a compliance prompt lands in 'Fiction & Storytelling," you've found a critical risk. Use your insights to build reliable prompt templates for your team.

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Skill 2: The Detective – Spotting Semantic Drift

How does a clear, firm instruction slowly become a vague suggestion across multiple AI rewrites?

From

“Drift is a theoretical risk.”

To

“I can recognize where wording shifts turn hard rules into vague suggestions.”

Why It Matters

In areas like policy, compliance, and safety, words matter. A change from ‘must’ to ‘should’ or ‘ideally’ can have serious consequences. This exercise trains your risk radar to catch this subtle language softening.

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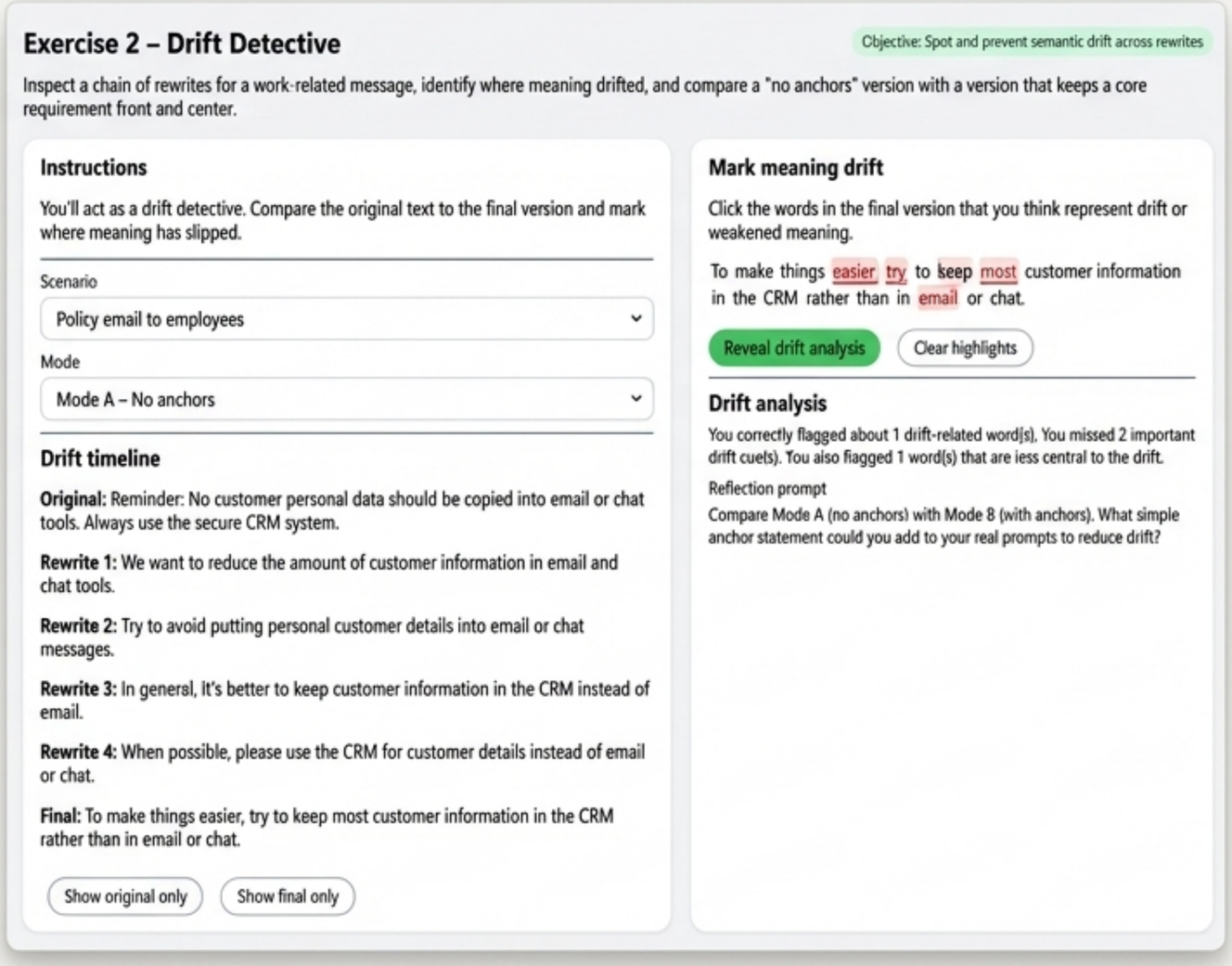
Lab in Action: The Drift Detective



What You'll Practice

1. **Review a rewrite chain** and spot how a message like 'No personal data should be copied' slowly weakens.
2. **Mark the drift:** Click on words in the final version that weaken the original intent (e.g., 'easier,' 'try to keep,' 'rather than').
3. **Reveal the analysis** to check your work and get coaching.
4. **Compare 'Mode A (No anchors)' with 'Mode B (With anchors)'** to see how a simple repeated phrase like `[Core rule: ...]` stabilizes meaning.

Your Key Takeaway: Find a core anchor phrase for your high-stakes tasks and embed it into your prompts and policies to prevent meaning drift.

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Skill 3: The Storyboarder – Seeing What the Model ‘Looks At’

What is the model *actually* paying attention to in your text? Vague pronouns and unclear references can lead it astray.

From

“Attention is a diagram in a book.”

To

“I can predict which words the model needs to focus on—and rewrite my text to make that easier.”

Why It Matters

You’ll learn to think like different “attention heads” that track distinct patterns: grammar, entities (people, systems), pronouns, and cause-and-effect. This helps you write inputs that are impossible for the AI—and your colleagues—to misinterpret.

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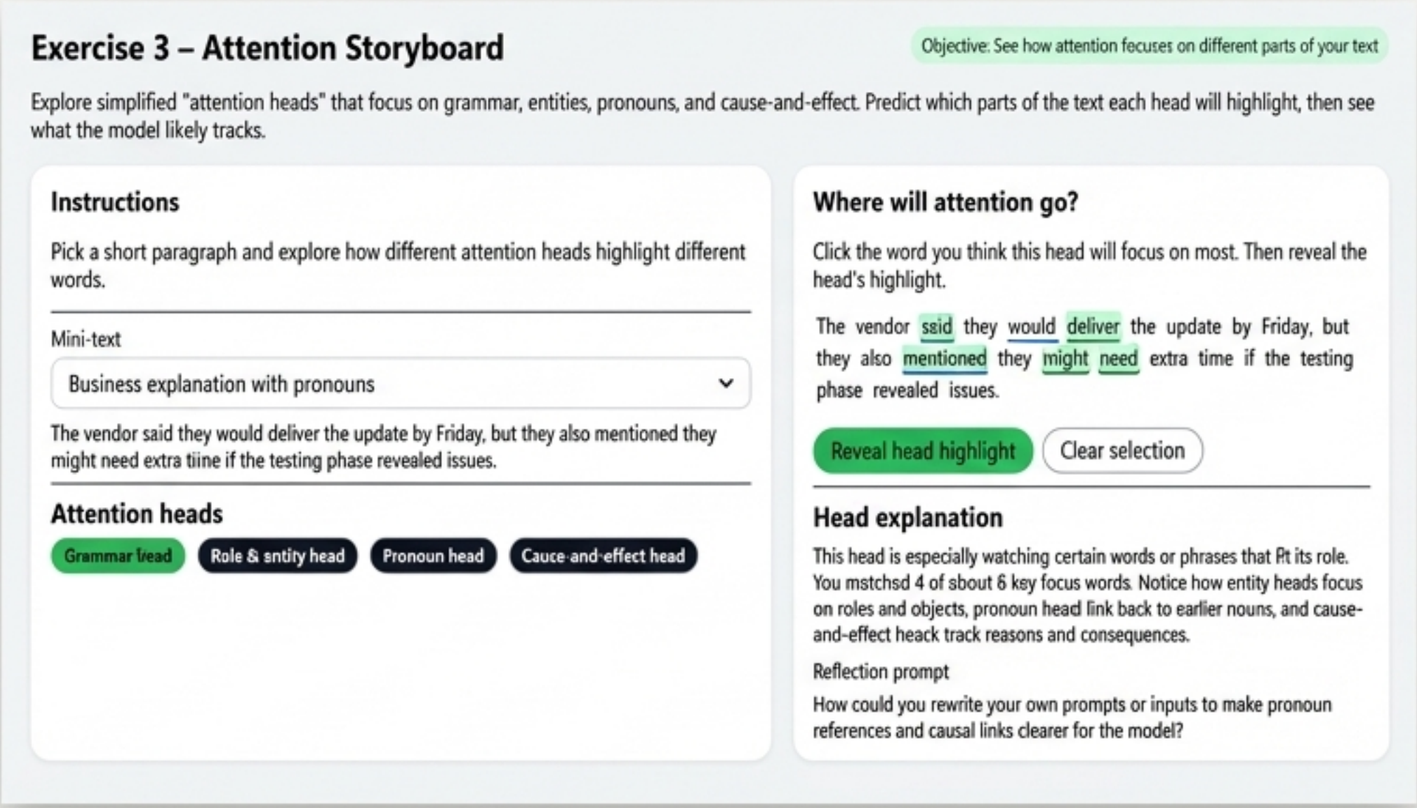
Lab in Action: The Attention Storyboard



What You'll Practice

1. Choose a mini-text (e.g., "Business explanation with pronouns").
2. Pick an attention head, like the "Pronoun head" or "Cause-and-effect head."
3. Predict the focus: Click the words you think that specific head will pay attention to.
4. Reveal the highlight to see the 'true' focus words and compare them with your prediction.

Your Key Takeaway: Vague words like 'they' or 'it' are attention traps. Learn to rewrite critical instructions by naming entities clearly ('the security team') and spelling out cause-and-effect relationships.

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Skill 4: The Sound Engineer – Tuning the Risk Dials

Can you set the right creativity vs. reliability level for the task at hand? The settings for brainstorming are dangerously wrong for explaining policy.

From
"Temperature is the model's randomness."

To
"I know which settings I'd choose for my real tasks—and why."

Why It Matters

This skill gives you direct control over the model's behavior. Knowing when to turn the dials down for consistency (low risk) and when to turn them up for variety (higher risk) is essential for effective and safe AI use.

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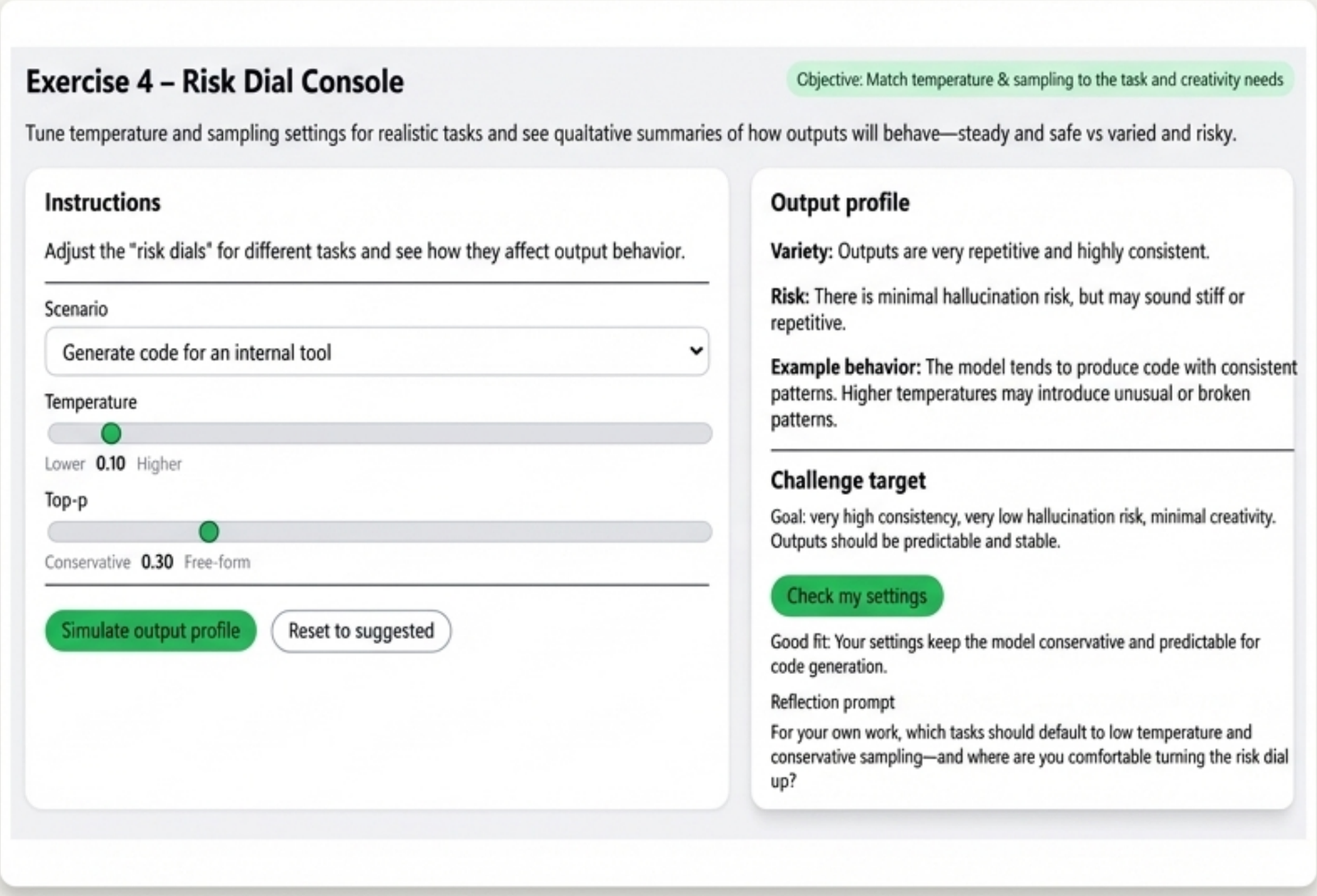
Lab in Action: The Risk Dial Console



What You'll Practice

- **Select a scenario** (e.g., Generate code, Brainstorm campaign ideas, Draft a policy explanation).
- **Adjust the 'Temperature' and 'Top-p' sliders** from conservative to adventurous.
- **Simulate the output profile** to see the impact on Variety and Risk.
- **Check your settings** against the recommended target for that scenario.

Your Key Takeaway: For high-risk tasks (policy, compliance), low temperature and conservative sampling are safer defaults. Use this lab to create a simple internal guide: "For Task X, we recommend T ≈ 0.2–0.4, Top-p ≈ 0.3–0.6."

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Skill 5: The Architect – Matching the Architecture to the Job

Which system design would you trust for this task? Is a plain LLM enough, or do you need grounding (RAG), tools, or multiple agents?

From
"RAG, tools, and agents are labels."

To
"I can choose and justify a simple, safe design for a realistic use case."

Why It Matters

This is about thinking like a solution designer. Understanding when RAG is non-negotiable for accuracy or when tools are needed for calculations empowers you to have more informed conversations with IT and vendors about how AI should be deployed.

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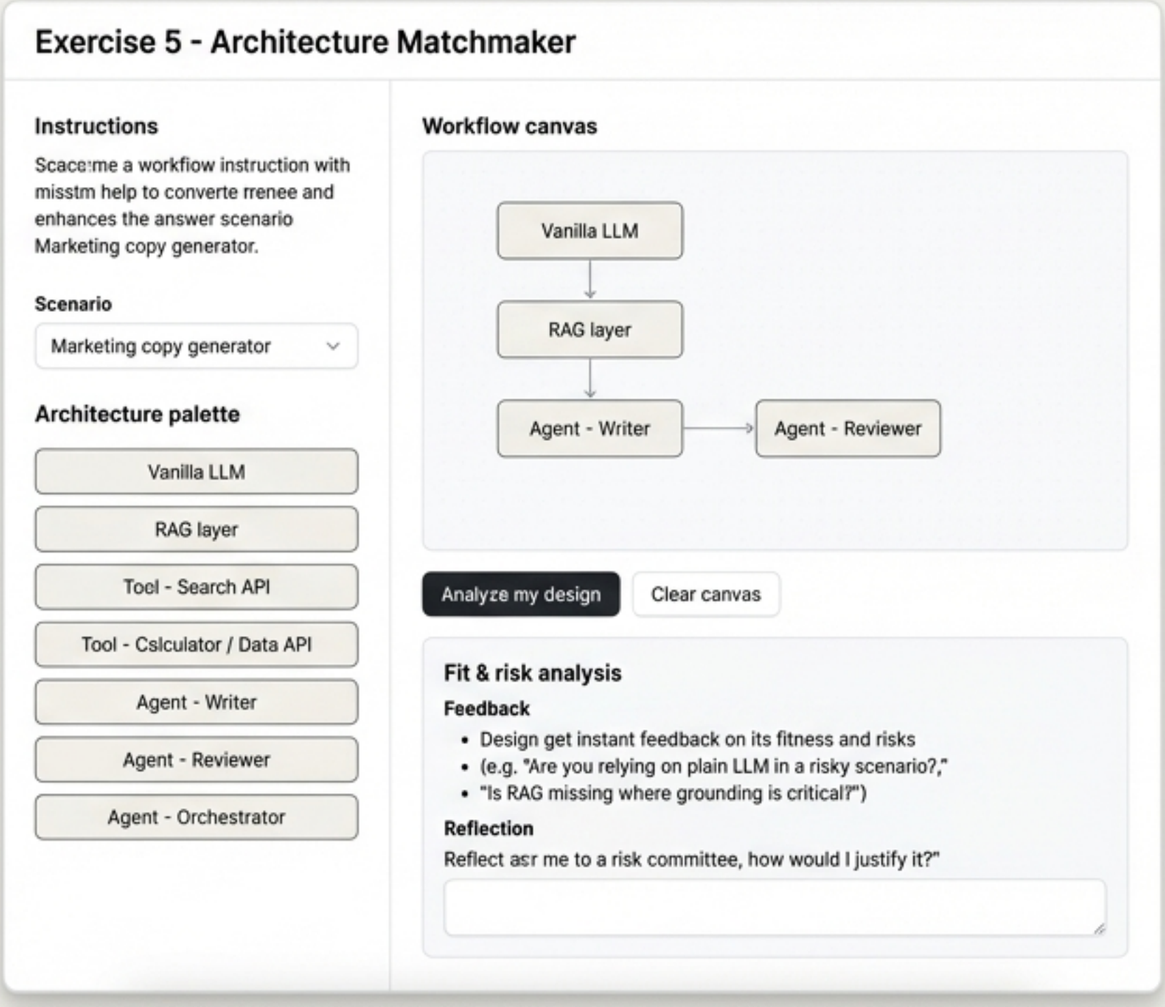
Lab in Action: The Architecture Matchmaker



What You'll Practice

1. Choose a scenario like "Internal policy chatbot" or "Vendor risk review workflow."
2. Add building blocks from the palette: Vanilla LLM, RAG layer, Tools (Search, Calculator), and Agents (Writer, Reviewer).
3. Analyze your design to get instant feedback on its fitness and risks (e.g., "Are you relying on plain LLM in a risky scenario?," "Is RAG missing where grounding is critical?").

Your Key Takeaway: Learn to articulate and defend your choices. Ask yourself, "If I had to defend this architecture to a risk committee, how would I justify it?"

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Putting It All Together: From Five Skills to a Unified View

The true value of this lab comes from connecting the dots between the exercises. As you save your reflections, look for patterns that cut across the five skills.

How does the **latent neighborhood** (Skill 1) of a prompt affect its **drift risk** (Skill 2) or the need for a **RAG architecture** (Skill 5)?

How do confusing **attention patterns** (Skill 3) force you to lower the **risk dials** (Skill 4) to stay safe?

Where are you personally most comfortable turning the **creativity dial up**—and where is it non-negotiable to keep it down?

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Turn Your Insights Into Professional Practice

The goal of the lab isn’t just to learn theory, but to build durable habits. Use your notes to write 3-5 simple rules for your own use of AI.

Examples of Personal Rules

- I will always specify domain, audience, and outcome in prompts for high-stakes tasks.
- For policy and compliance questions, I will prefer grounded designs (RAG + reviewer) over a plain LLM.
- If wording turns ‘must’ into ‘usually’ or ‘ideally’ in a safety context, that’s a red flag I will investigate.
- For code and calculations, I keep the risk dial low; for idea generation, I’m okay with higher creativity.

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From Theory You've Read to Habits You Can Use

"Done well, these exercises turn Chapter 1 from 'theory I've read' into **habits I can use in my daily work**—how I write prompts, read AI answers, and evaluate AI systems."

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