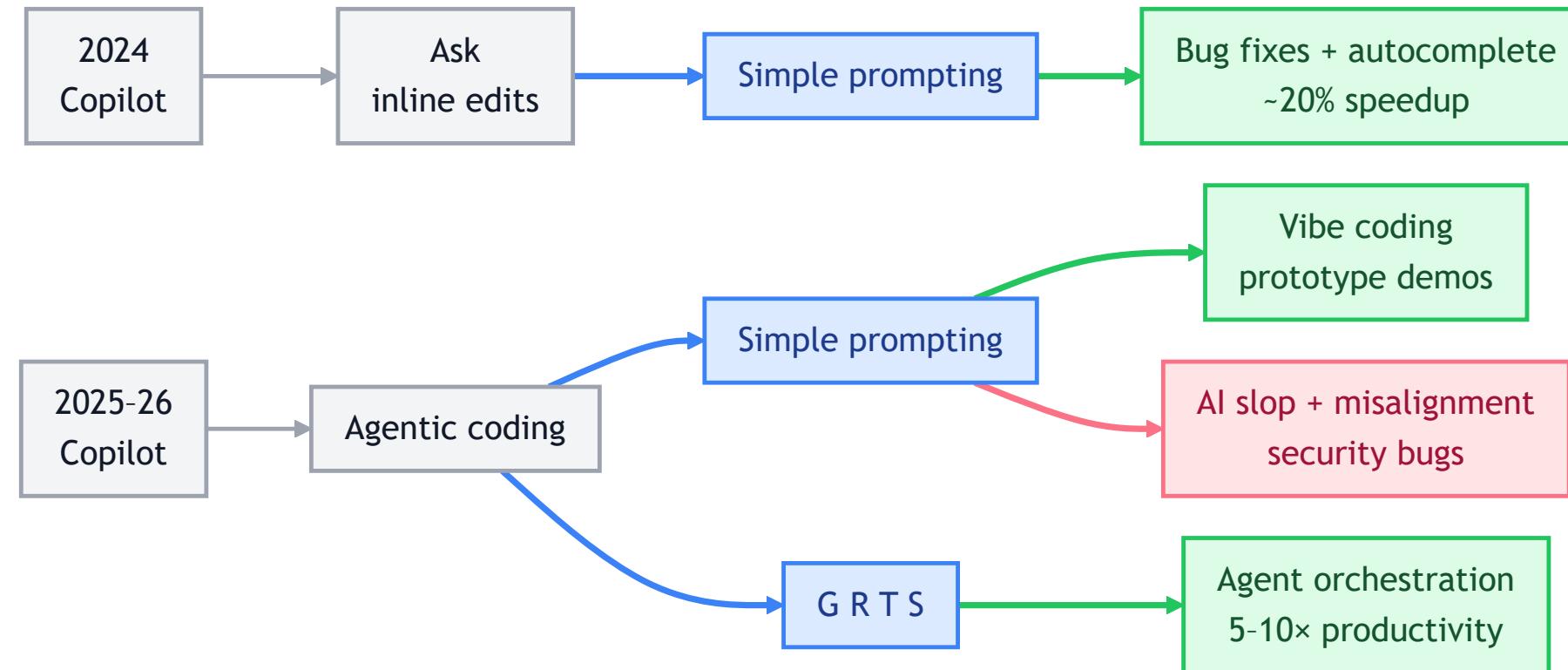




GR_TS

Don't build features. **Build the system that builds features.**

Coding Agent: The very eager stupid genius



You will not be replaced by an agent...
but you may be replaced by someone who can direct one well.



- Get familiar with the eccentricities of the stupid genius
 - **First steps (concrete, low context, low risk tasks):** Ask it to (1) review your code, (2) debug your software, (3) refactor a class and (4) research the next idea.
- If the agent falls down a Rabbit hole 🐰 ➔ ask:
 - Research the best 3 approaches to this issue with pros/cons — cite evidence.
 - Check out this site <stack overflow link>. Does it help?
- If the agent tries to cheat or take a shortcut ➔ ask:
 - What is the proper way to fix this?
 - Right place for the code? Clean architecture? Utilities library?
- The agent keeps giving me the "average" solution - not the one for my domain!
 - Make the domain explicit: "I am working in this domain and follow such and such guidelines."
 - If possible, use an oracle / golden sample / explicit success criteria.

Takeaway: Spend 1-2 weeks getting a feel for working with the latest LLM's.



- **.github/copilot-instructions.md** -> Repository orientation
 - Agents will always read this file. It should contain the fundamentals of the repo, the reality of what it is for, what base technologies are used, how to build and test and how it is structured.
 - Point to any coding standards or guidelines - make them or move them into the repo if needed.
 - Use [this blog post](#) and [this documentation](#) for instructions
- **Skills and custom agents** -> wearing different hats
 - Have a repeatable way to focus the agent in on a task or technology.
 - Find the best ones and iterate. Is the agent getting better at understanding your context?
 - Use [this repo](#) for a curated list of skills and custom agents
- **Keep it concise | Structure matters | Be direct | Show examples**

Takeaway: After bootstrapping the initial set of files, refine them heavily in the first week, putting the best guidance in the relevant places.



Tools

Capabilities | Abilities | Touch the external world



To get this	use this
Issue read and write	GitHub MCP , Atlassian MCP
Up-to-date API	Context7 + research online
Agent intellisense	Serena
Deterministic actions	Generate a script for repetitive/complex work (e.g., convert NUnit3 tasks to NUnit4 across many files)
Truth sources	diffs, test output, CI checks, benchmarks/sim logs
Easy local action	Make VS Code tasks for Build, test, lint, format, etc.
Stop the approvals!	<code>chat.tools.terminal.autoApprove</code> for git status, list files, get file content

Takeaway: 1 week - Craft a thoughtful set of MCP tools, VSCode tasks, restrictions and auto-approvals (and update custom agent instructions) to make your "guided, rule-constrained stupid genius" powerful.



Specifications

Objectives | Checklists | Planning | Requirements



For larger, more ambiguous work, spend time planning to reduce churn and wrong turns.

How large? How ambiguous?	Example	Recommended workflow
Level 1 (Low)	bugs and small edits	we can just make a single prompt
Level 2 (Medium)	Don't know best way to implement	1–3 planning prompts (research/explain/3 options) → then implement
Level 3 (High)	Want the model to follow a specific checklist	Create a checklist in Markdown → review → implement
Level 4 (New feature)	Significant planning and research needed. Many steps.	Use OpenSpec or Spec Kit : specify → clarify → plan → analyze → implement

Takeaway: 1-2 weeks - develop sense of when a model fails and "go to the next level". Choose OpenSpec, Spec-kit or other platform for large features.

Final thoughts: Best Practices from the trenches for not having AI ruin your codebase

Thanks for [your post](#) Deepayan-Thakur!

1. Treat AI Agents as Junior Engineers (With Super Speed)
2. Enforce a “Human-in-the-Loop” Merge Contract
3. CI Is Your Real Boss (Make It Ruthless)
4. Security: Assume the Agent Is Overconfident
5. Multi-Agent Setups: Divide Responsibilities or Suffer
6. Maintainability > Cleverness (AI Loves Cleverness)
7. Track Provenance: Know What the AI Touched
8. Teach the Agent Your Rules (Or It Will Make Its Own)



Extra slides

A1: Multi-agent workflows

- You'll often be waiting on agents. Use that time:
 - Research the next feature in parallel
 - Use [git worktrees](#) / background agents for parallel branches
 - Delegate to cloud agents (ensure CI/CD is set up)
 - Split roles: Planner → Implementer → Reviewer

A2: Risk -> Gating | Ambiguity -> Planning

The good	The bad and the ugly
<p>reason about the goal plan steps take actions (read/edit/run tools) iterate until done (or stuck)</p>	<p>confidently wrong misses hidden constraints misapplies “best practices” thrashes without a stable hypothesis misuses tools (wrong env/partial runs)</p>

	Risk: Low	Risk: High
Ambiguity: Low	Great for agents (docs, refactors, small tests)	Needs gates + review (small but critical changes)
Ambiguity: High	Clarify first (spec + oracle)	Human-first (architecture/safety-critical/unclear bugs)

A4: Extra References

- [Building effective agents \(Anthropic\)](#) — Designing agent loops: checkpoints, tool feedback, stop conditions.
- [About GitHub Copilot coding agent](#) — Capabilities, limits, and governance.
- [Security \(VS Code Copilot\)](#) — Trust boundaries, tool approvals, prompt injection risks.
- [Tutorial: Work with agents in VS Code](#) — Local/plan/background/cloud agent workflows + worktrees.
- [Use tools in chat \(VS Code\)](#) — [Tool approval](#) — Tool approvals, URL post-approval, and auto-approval tradeoffs.
- [Lessons from Anthropic](#) as of November 2025