

# Legacy AI-Coding



request slides

 **AI-Coding.pro**

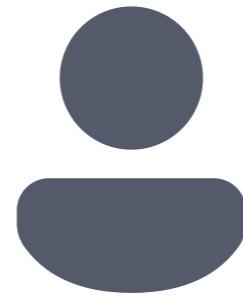
**W.W. AGILE.COACH**

Dr. Timon Fiddike

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Web: [agile.coach](http://agile.coach), [ai-coding.pro](http://ai-coding.pro)

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People



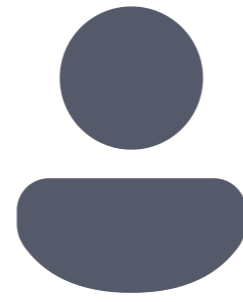
Timon Fiddike



Technology



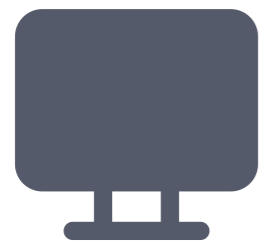
Processes



# People



Timon Fiddike



# Technology



LOVOO

<https://ai-coding.pro/>



# Processes

Cost?

# Cost-Effectiveness

1. Make it effective

2. Save tokens == € (while preserving effect)

- Choose a good model (not cheap, not “auto”)
- Think and check your prompt before sending
- At least at the beginning:
  - Parallel thinking / preparation is o.k., but:
  - Finish one thing before starting the next session
- Finish what you start in 1 h (cache hits are 1/10 price, see Claude API pricing)
- Clear context / start new session unless you have a reason to keep it (good for cost and adherence)
- Create tool wrappers to keep output short in case of success (easy way to save tokens)
- Stop if things get weird! Go back one or two steps!
- Carefully use prompting levels (behaviour from user perspective, technical plan, code, results)

Browser window showing Claude API Docs pricing page. URL: platform.claude.com/docs/en/about-claude/pricing

Navigation: Claude API Docs Messages Build Admin Models & pricing Client SDKs API Reference English Log in

# Pricing

Learn about Anthropic's pricing structure for models and features

This page provides detailed pricing information for Anthropic's models and features. All prices are in USD. For the most current pricing information, please visit [claude.com/pricing](https://claude.com/pricing).

## Model pricing

The following table shows pricing for all Claude models across different usage tiers:

Model	Base Input Tokens	5m Cache Writes	1h Cache Writes	Cache Hits & Refreshes	Output Tokens
Claude Opus 4.6	\$5 / MTok	\$6.25 / MTok	\$10 / MTok	\$0.50 / MTok	\$25 / MTok
Claude Opus 4.5	\$5 / MTok	\$6.25 / MTok	\$10 / MTok	\$0.50 / MTok	\$25 / MTok
Claude Opus 4.1	\$15 / MTok	\$18.75 / MTok	\$30 / MTok	\$1.50 / MTok	\$75 / MTok
Claude Opus 4	\$15 / MTok	\$18.75 / MTok	\$30 / MTok	\$1.50 / MTok	\$75 / MTok
Claude Sonnet 4.6	\$3 / MTok	\$3.75 / MTok	\$6 / MTok	\$0.30 / MTok	\$15 / MTok
Claude Sonnet 4.5	\$3 / MTok	\$3.75 / MTok	\$6 / MTok	\$0.30 / MTok	\$15 / MTok
Claude Sonnet 4	\$3 / MTok	\$3.75 / MTok	\$6 / MTok	\$0.30 / MTok	\$15 / MTok

Ask Docs

Capacity



Coding

Code Review

Test (tech)

Test (user)

Deploy to staging

Capacity



Coding

Code Review

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Deploy to staging

Capacity



Coding

Code Review

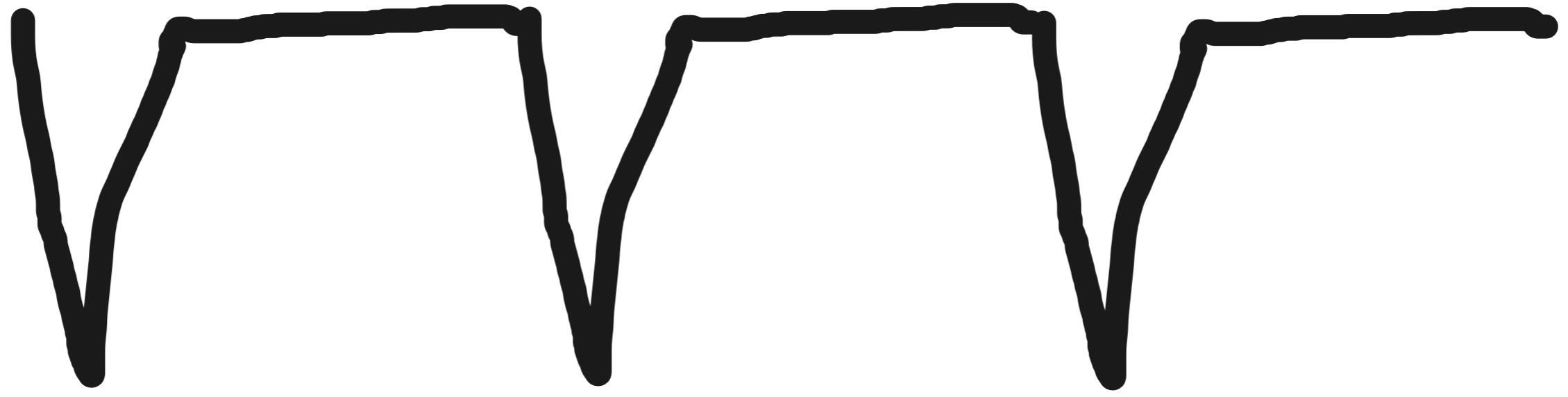
Test (tech)

Test (user)

Deploy to staging

Human

Agent

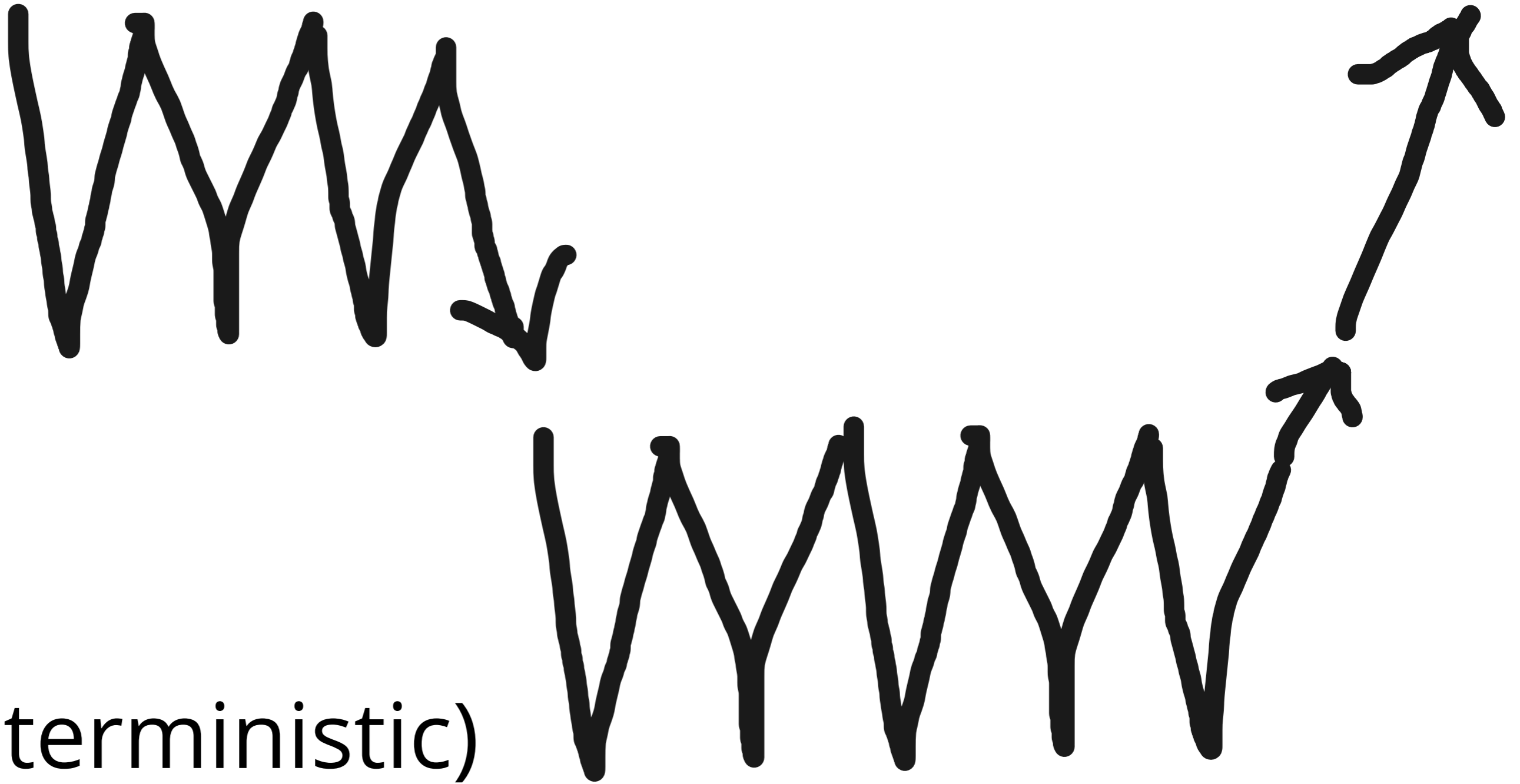


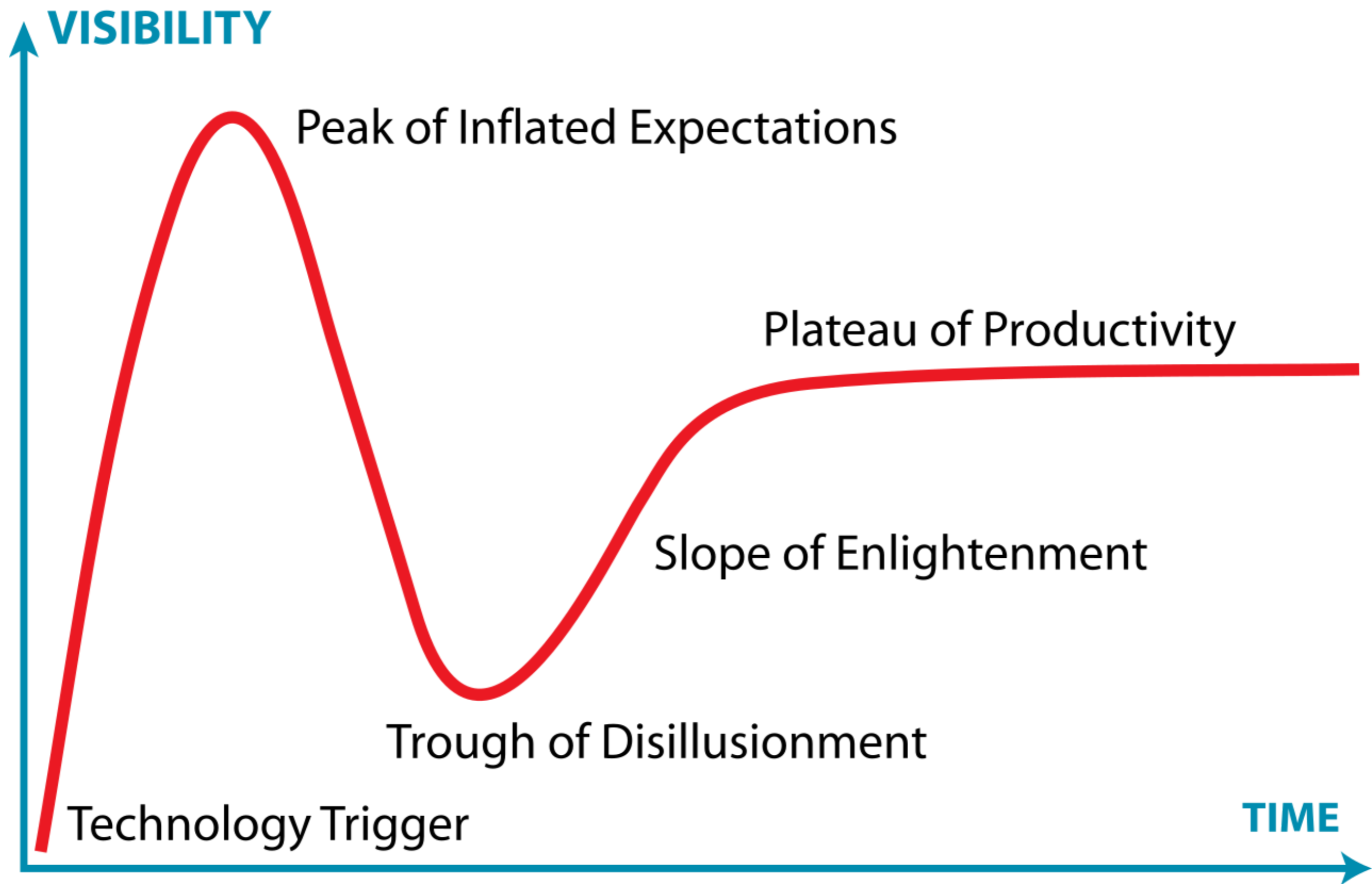
Human

Agent

Tools (deterministic)

Plan (what) Plan (how) Coding Code Review Test (tech) Test (user)





# Q&A and Discussion

Questions?

Your Experience?

We can also go deeper into my process with many more sides :-)

# Who has done AI Coding via ...



- 1: Copy & Paste with ChatGPT
- 2: AI Code Completion
- 3: IDE with AI Chat und Agent  
(plugin or native)
- 4: AI Agent with Auto-Run

# Did anyone read the articles?



AI-Coding Lernen: Ein Weg in 10 Schritten: Ein Erfahrungsbericht

<https://ai-coding.pro/de/blog/ai-coding-lernen-ein-weg-in-10-schritten-ein-erfahrungsbericht/>

Haltung zu KI-Coding: Von Vermeidung zu Realismus: Ein Erfahrungsbericht

<https://ai-coding.pro/de/blog/haltung-ai-coding-vermeidung-realismus-erfahrungsbericht/>

...

# Very Many Options

Show: Cursor: Models

Good: No dependency on one service. But:

**F O M M O**

# Today: Cursor + Claude Sonnet 4.6

Suchtrends ansehen

Löschen

Suchbegriffe vorschlagen

Github Copilot  
Software



Cursor-Editor  
Software



Claude Code  
Suchbegriff



+

Weltweit

01.02.2025 - 15.01.2026

Websuche

Interesse im zeitlichen Verlauf

Weltweit · 01.02.2025 - 15.01.2026

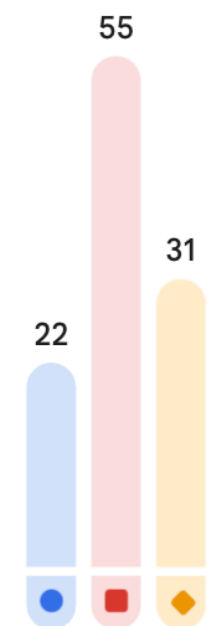
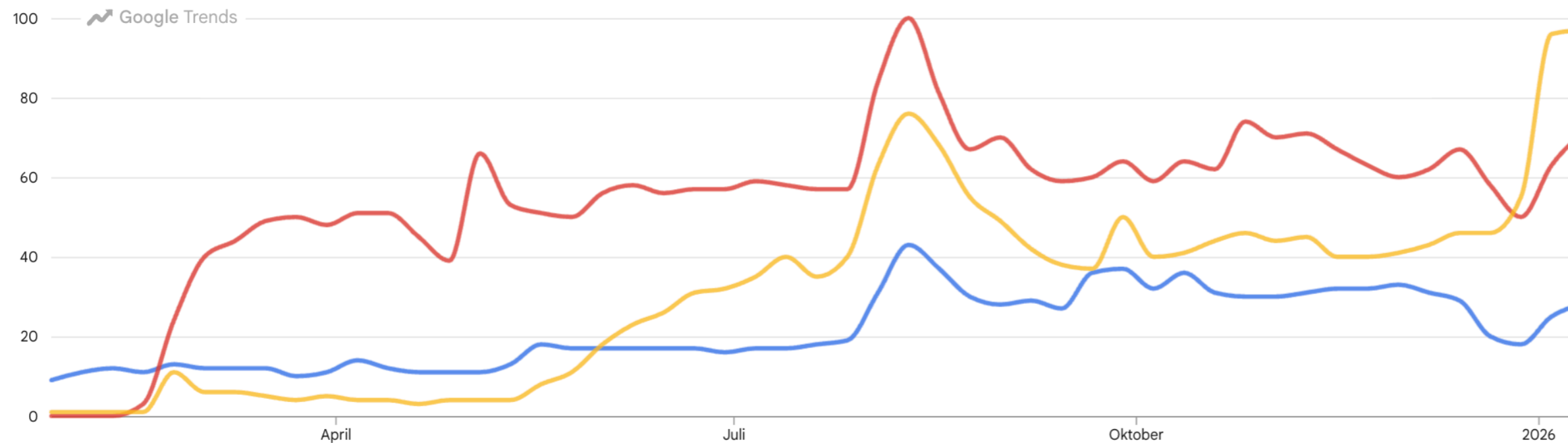


Durchschnittliches Interesse



Weltweit · 01.02.2025 - 15.01.2026

Sowohl Suchbegriffe als auch Suchthemen sind enthalten, werden aber unterschiedlich gemessen. [Weitere Informationen](#)



Very Many  
Options

FOMO

The most important part  
is something else:

Capacity



Coding

Code Review

Test (tech)

Test (user)

Deploy to staging

Capacity



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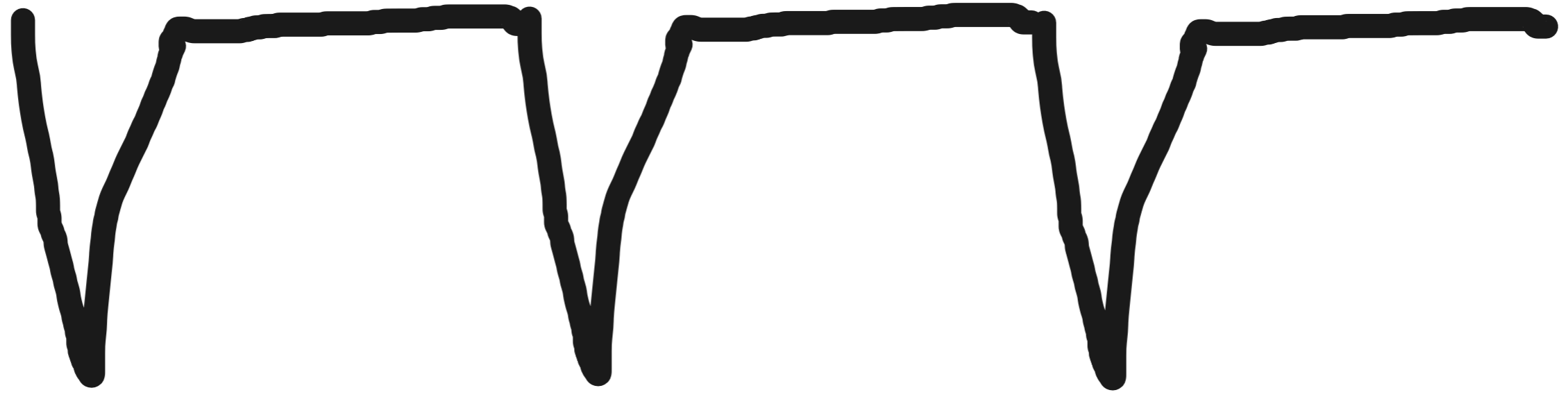
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Human

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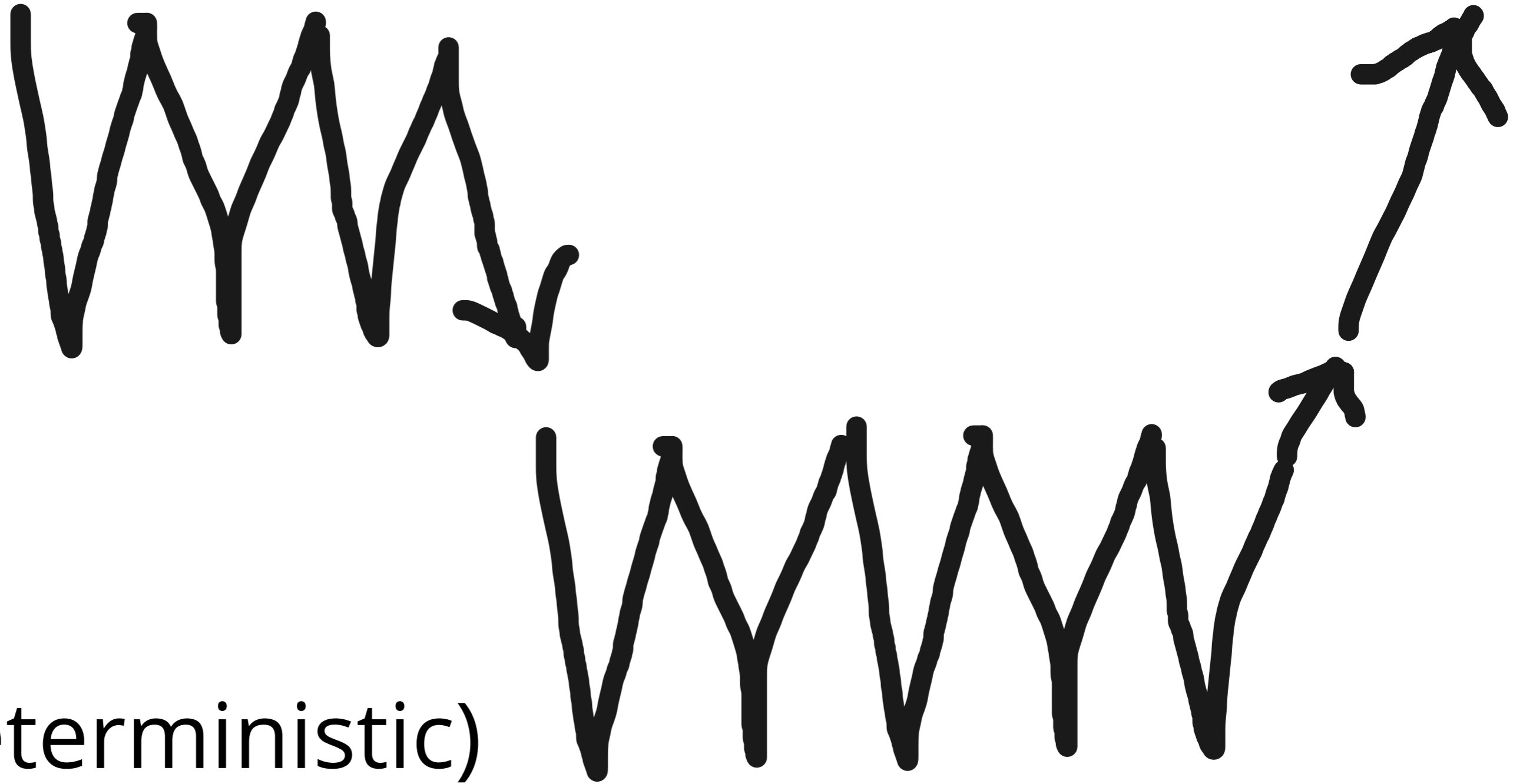


Human

Agent

Tools (deterministic)

Plan (what) Plan (how) Coding Code Review Test (tech) Test (user)



# Adding a field

Imagine you need to add a field to an entity in your app:  
What do you need to take care of?

Please write  
sticky notes!

Adding a field

# Demo

(Focus on feedback)

# 10 Steps to Enable Fundamental How

AI-Coding Lernen: Ein Weg in 10 Schritten: Ein Erfahrungsbericht

<https://ai-coding.pro/de/blog/ai-coding-lernen-ein-weg-in-10-schritten-ein-erfahrungsbericht/>

Copy & Paste with ChatGPT

Tab Code Completion

IDE with AI Chat and Agent

➤ Agent with Auto-Run Mode in VM

More Technical Context

Rules for the Agent

Planning in Multiple Levels

Faster Feedback Loops

Learning from Mistakes

Relying More on Agents

# Autorun: Freedom and Limits

Docker Container

Webserver

DB Tests ...

# Autorun: Freedom and Limits

Dev Machine

PHPStorm Cursor ...

Docker Container

Webserver

DB Tests ...

# Autorun: Freedom and Limits

Regular Machine

E-Mail      Customer data      Live Access

Dev Machine

PHPStorm Cursor ...

Docker Container

Webserver  
DB Tests ...

...

# Autorun on Dev Machine?!



Regular Machine

E-Mail      Customer data      Live Access

Dev Machine

PHPStorm Cursor ...

Docker Container

Webserver  
DB Tests ...

...

# Rebuild Docker Container

Imagine you need to rebuild your docker container:  
What do you need to take care of?



Please write  
sticky notes!

Docker Container

Webserver

DB Tests ...

# Rebuild Docker Container

# Demo

- `dash/bin/dev/docker-dev-setup.sh`
- `dash/bin/dev/docker-dev-start.sh`

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# More Technical Context

1. Standard Framework
2. Documentation inside Repo
3. Automated Tests
4. MDC Rules
5. ...

## Without Standard Framework?

- Need more of everything else.

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Human



Agent



Tools (deterministic)

Plan (what) Plan (how) Coding Code Review Test (tech) Test (user)

# Planning in Multiple Levels

1. Clarify Target State, including User, Goal, Feature(s), Interaction.
2. Detailed Technical Plan, including Architecture, Migrations etc.

# Clarify Target State (Cursor "Ask")

I want to enable a <User Type>  
to achieve <Goal>,  
probably using <Feature>, <Interaction>.  
Help me clarify how the feature  
should work from a user perspective.  
Ask me questions, one at a time, consider  
each answer before asking the next q.

Things get weird?

Too many questions?

Late questions brings up valid concern  
about early decisions?

Things get weird?

Too many questions?

Late questions brings up valid concern about early decisions?

Learn!

Try to understand, make notes of what you learned, draft a better starting prompt, clear context(!) and: Start over.

# Detailed Technical Plan (Cursor "Plan")

Same session as before:

Create a detailed implementation plan.

Ask me questions, one at a time,  
consider each answer before asking the  
next q.

Optional:

Extra hint for faster feedback loop in "go".

Things get weird?

Too many questions?

Late questions brings up valid concern about early decisions?

Learn!

Try to understand, make notes of what you learned, draft a better starting prompt, clear context(!) and: Start over.

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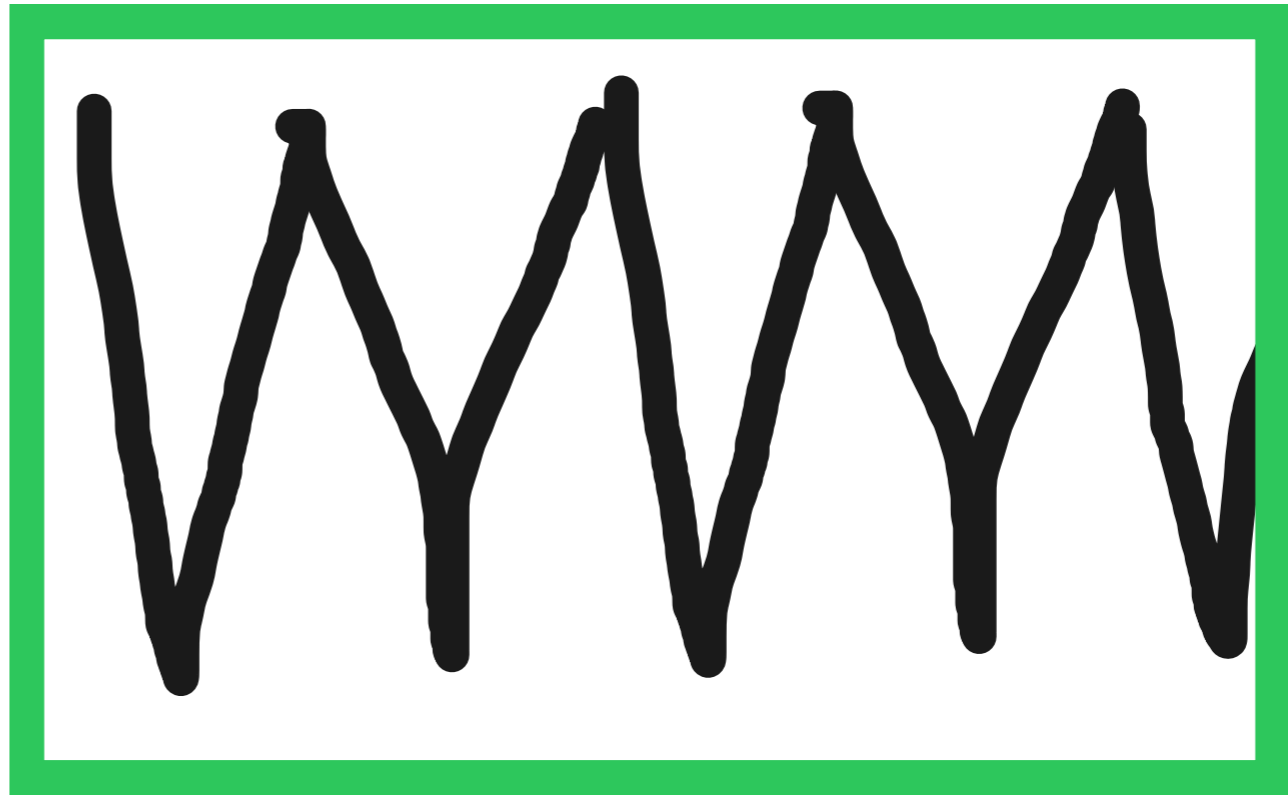
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# Faster Feedback Loops

## Quality Script (always, via MDC)

- PHPStan,
- Linter  
(PHP, YAML),
- Formatter,
- Automated Tests  
(Unit, Integration, HTTP)
- Automated E2E  
(Playwright, Chrome CLI)

## Case by Case (prompt)

- Browse Tab (Cursor)
- curl CLI
- sql CLI
- chrome CLI
- MCP

# Triggers for Feedback Loops 1

- Quality script (always, via MDC)
  - Show examples in Dash

# Triggers for Feedback Loops 2

- Quality script (always, via MDC)
  - Show examples in Dash
- Case by case (prompt)

Prompt Example:

Implement, then click through the new workflow using Chrome via `browser_navigate`.

Fix any errors and re-validate up to 5 times.

Report how many cycles of fix+re-validate were needed and why they were needed.

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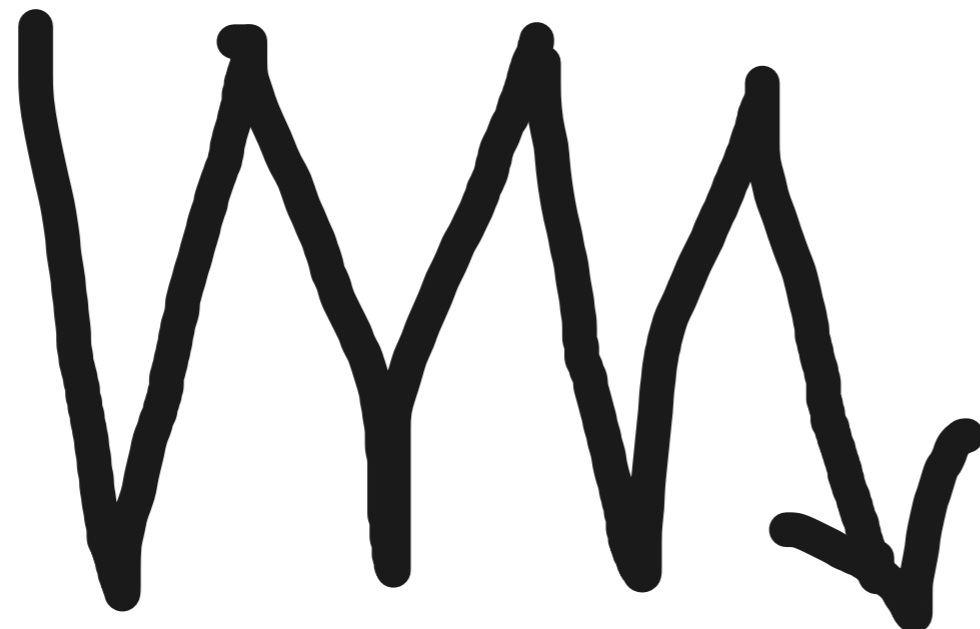
Relying More on Agents

# Learning from Mistakes: Goal

Goal: Achieve high quality results

- more quickly,
- using fewer tokens

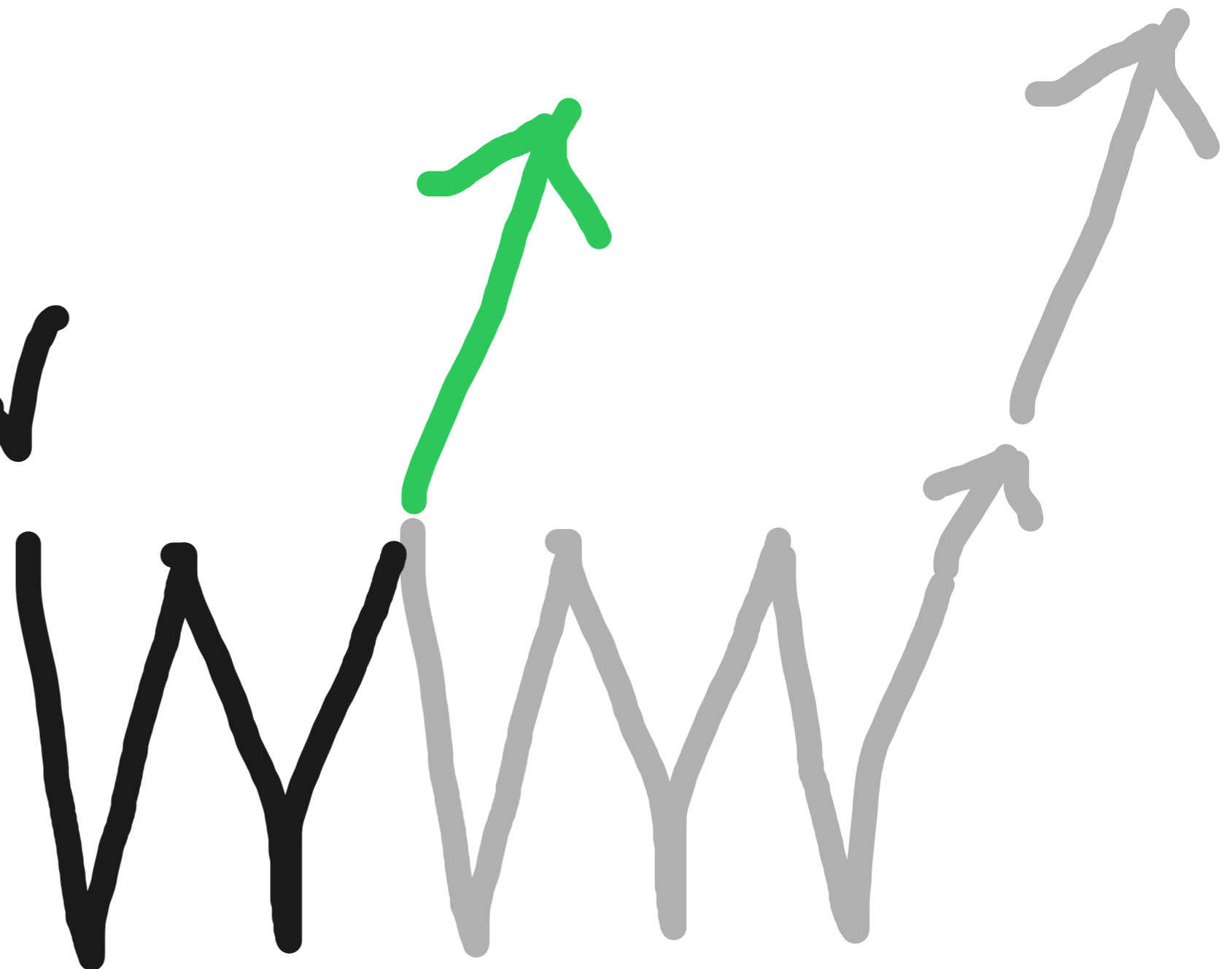
Human



Agent



Tools (deterministic)



# Learning from Mistakes: How

If the implementation prompt was:

Implement, then click through the new workflow using Chrome via browser\_navigate.

Fix any errors and re-validate up to 5 times.

Report how many cycles of fix+re-validate were needed and why they were needed.

... agent working ... reports **thing that went wrong**

Learning prompt example:

Create an **MDC rule to prevent thing that went wrong.**

Normally:

Hello World

# Hello World

Skip, and try things on your own  
codebase: small, medium, large

Keep in mind as plan b.

Prepare

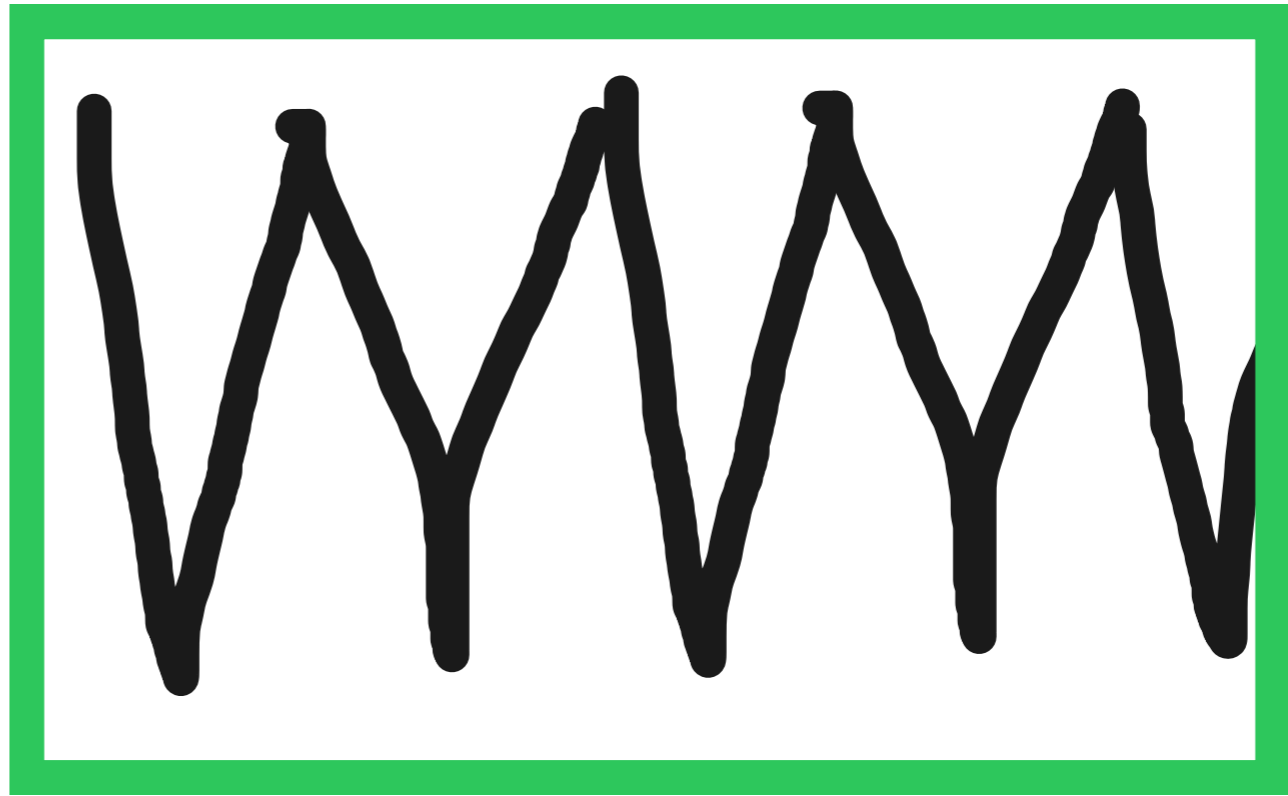
Legacy

Coding

Human

Agent

Tools (deterministic)



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# Prepare Legacy Coding

## Which steps do we need?

- Tests
  - Very high coverage
  - Increase testability (if needed)
- Quality Tools: Everything? Or pre change flow?
  - PHPStan
  - Linter
  - Formatter
- MDC (when / how to execute tools, rule management)
- Container setup from Repo
  - Synthetic / anonymised Data?
- Deployment strategy?

# Legacy Coding

Where do we start?

Architecture Change?

Directly build new things?  
(and document current system  
super well?)

# Architecture Change?

Architecture Vision?

Step by Step Executable

Transition Strategy?

Both clear enough? Then  
prompt for transition plan.

# Prompt together

## Diverge Merge Pattern:

- Quietly and quickly think and write prompt ideas in parallel (create frames as we go)
- Looks at all ideas:
  - Merge OR
  - identify variants to try separately

# Prompts: Log + Learn

- check prompts together
- log every prompt we want to try
- execute
- log success / failure
- try to understand

# Accept Excitement / Stress

- deeply not deterministic  
(even at hardware level)
- surprises are normal
- try to automate control  
as much as possible, but:
- accept experimentation