



How to maintain a codebase - when everyone can code



Matt Collier / Technical consultant

Developer Experience Platform

Deploy faster, more often,
more confidently

→ More experimentation

→ Focus on frontend innovation

→ v0 for rapid development

Managed Infrastructure

Deliver high-performance dynamic
experiences on robust infrastructure

→ High performance global network

→ Automatic scaling & provisioning

→ Headless hosting

HubSpot

BCG

SIERRA

Takeda

tapestry

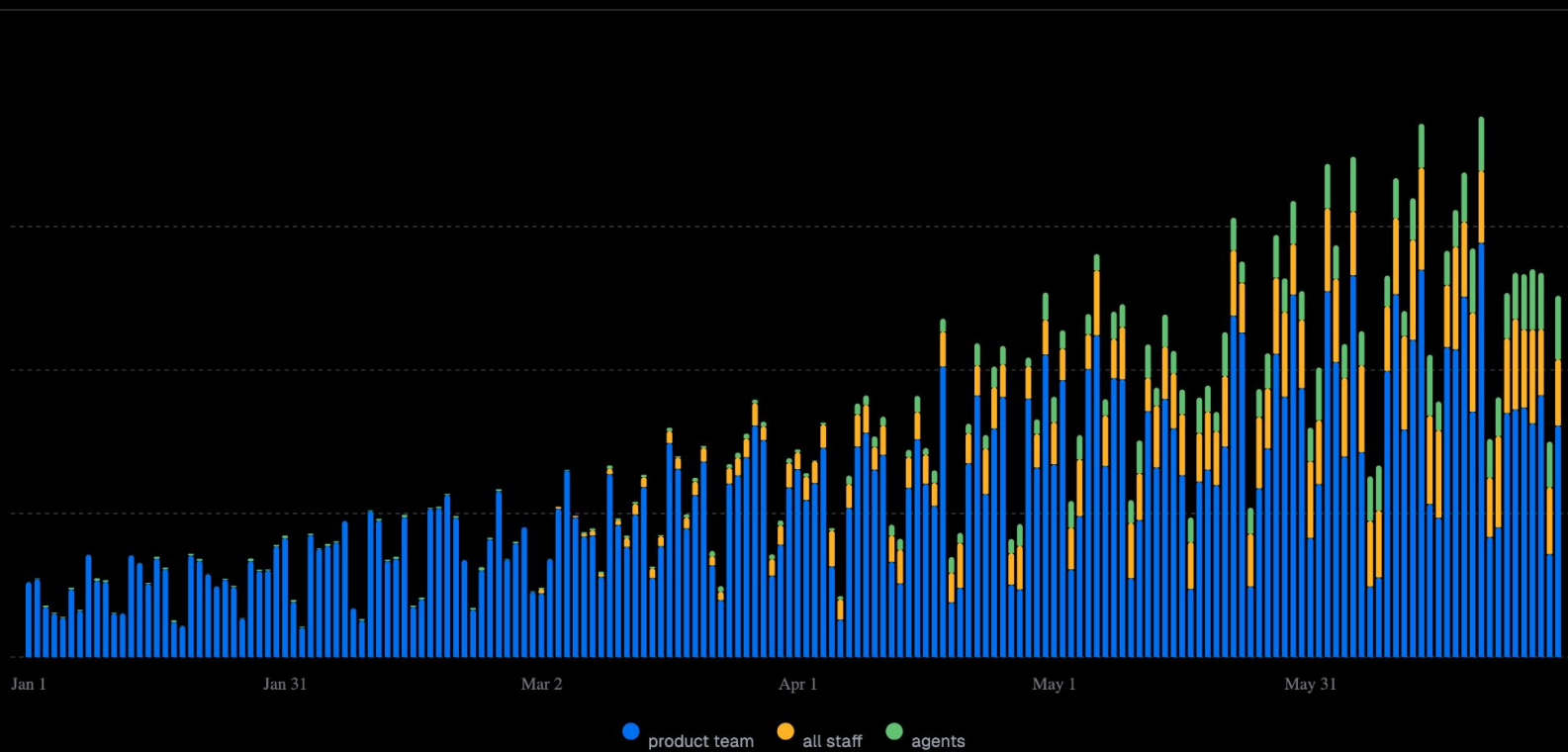
zapier

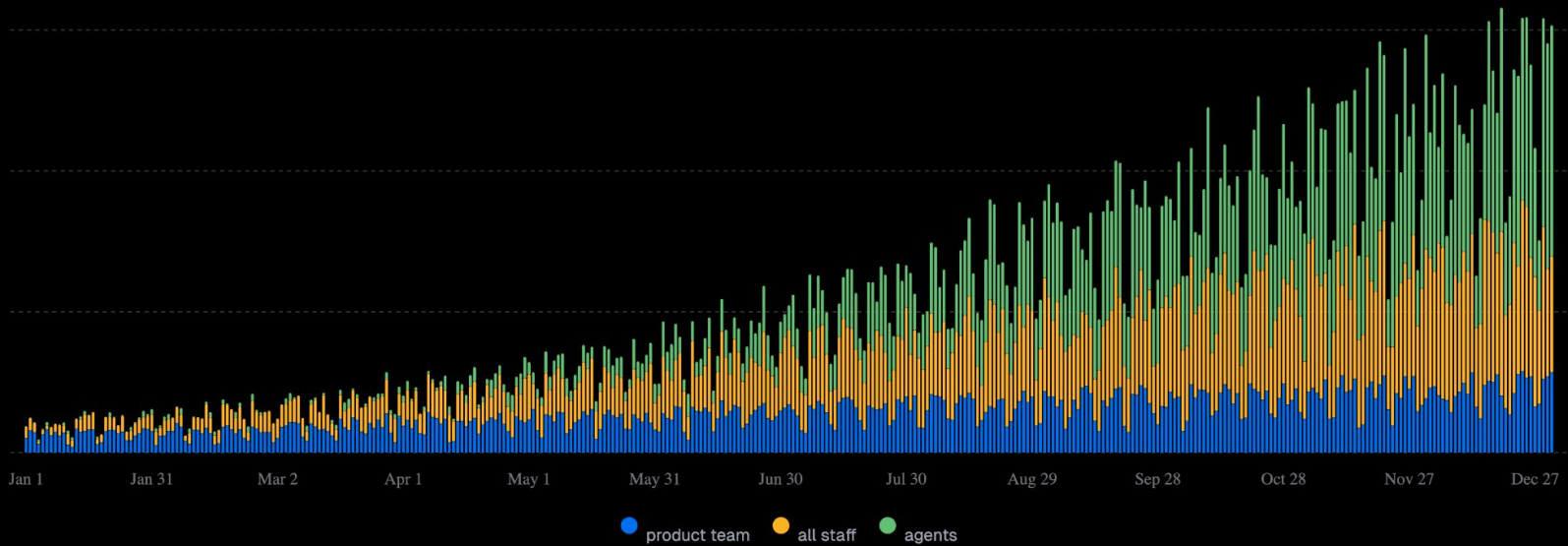
logitech

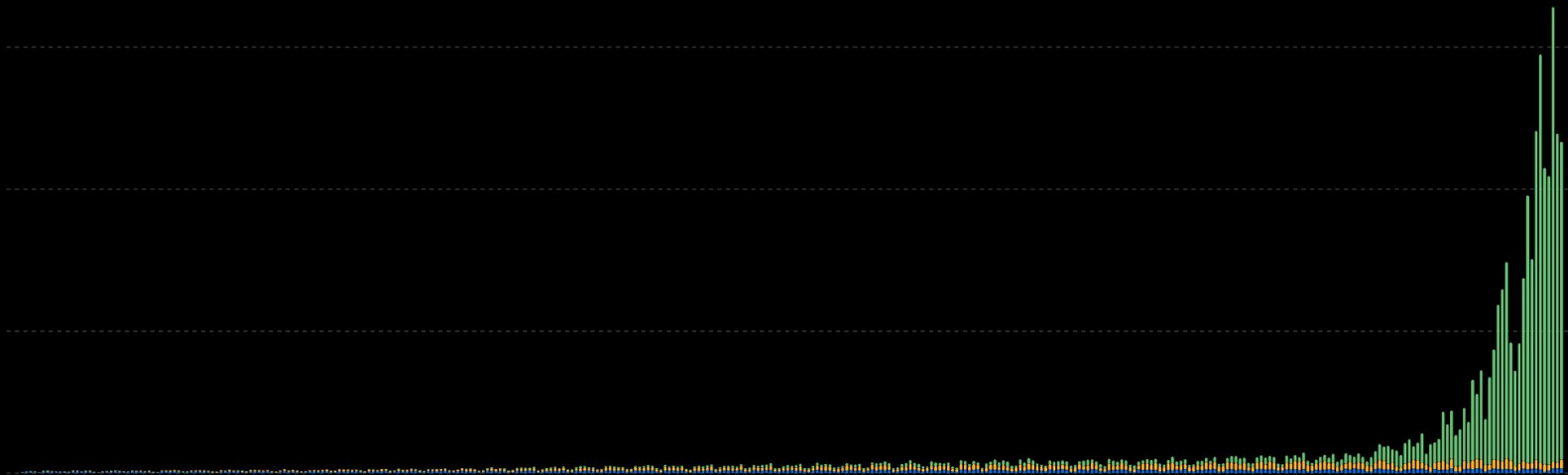
UNDER ARMOUR

DOORDASH

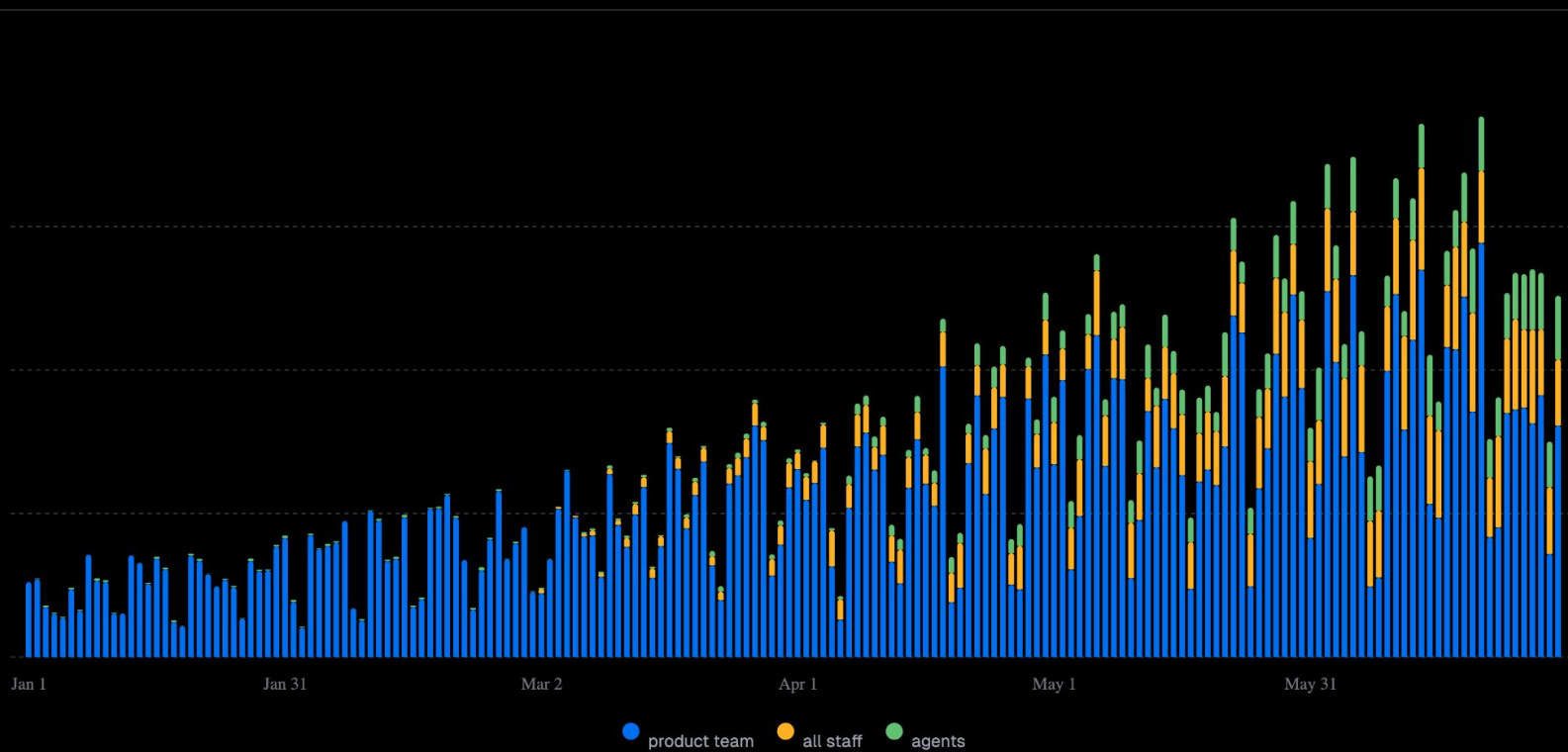








**I may have taken some liberties
there**



**70% of PRs for Claude Code are
created by Claude Code**

Investigating alert
2.7s

Checking recent
code changes
7.2s

Finding similar
incidents
4.6s

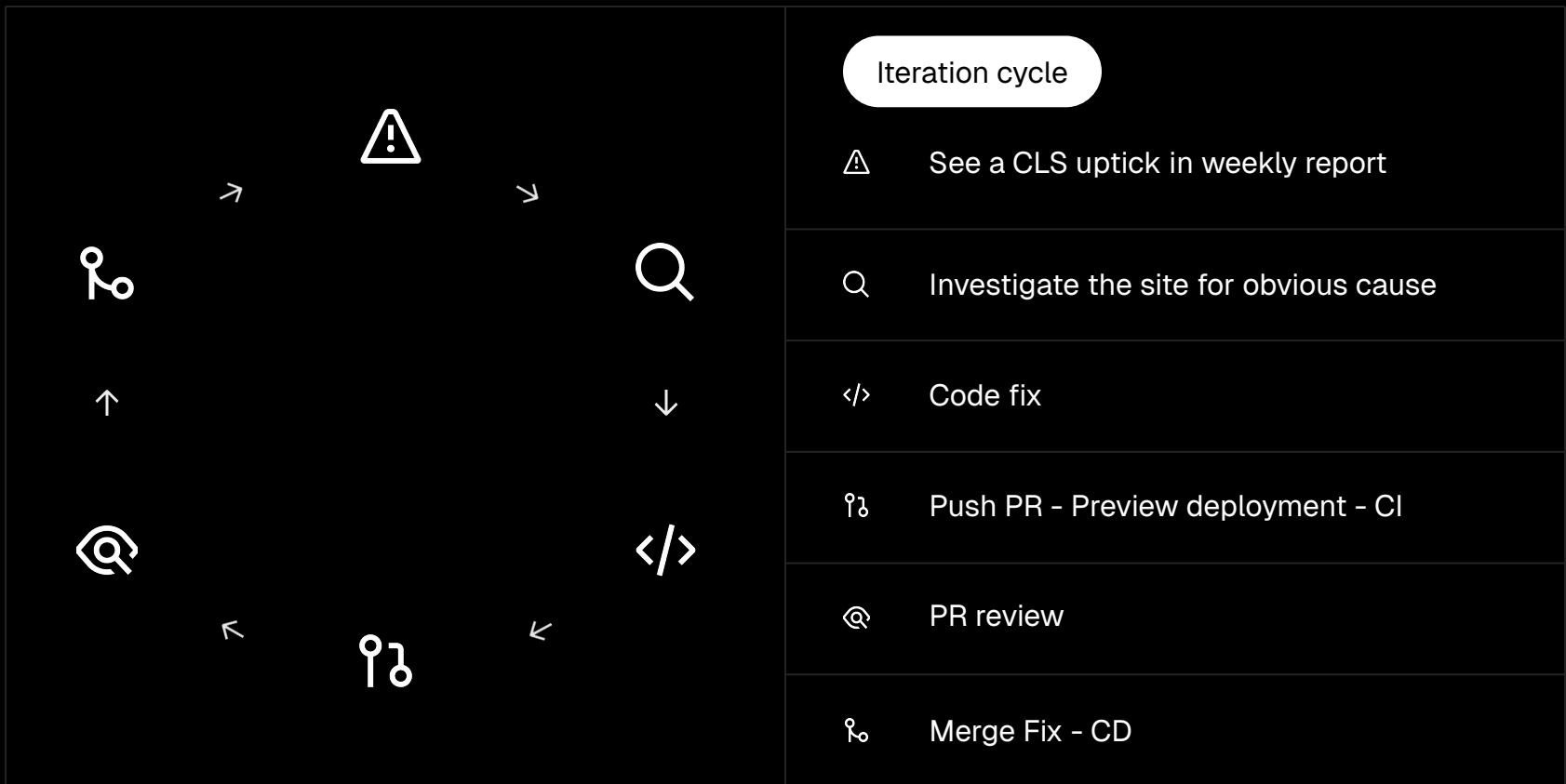
Looking for relevant
Slack messages
6.4s

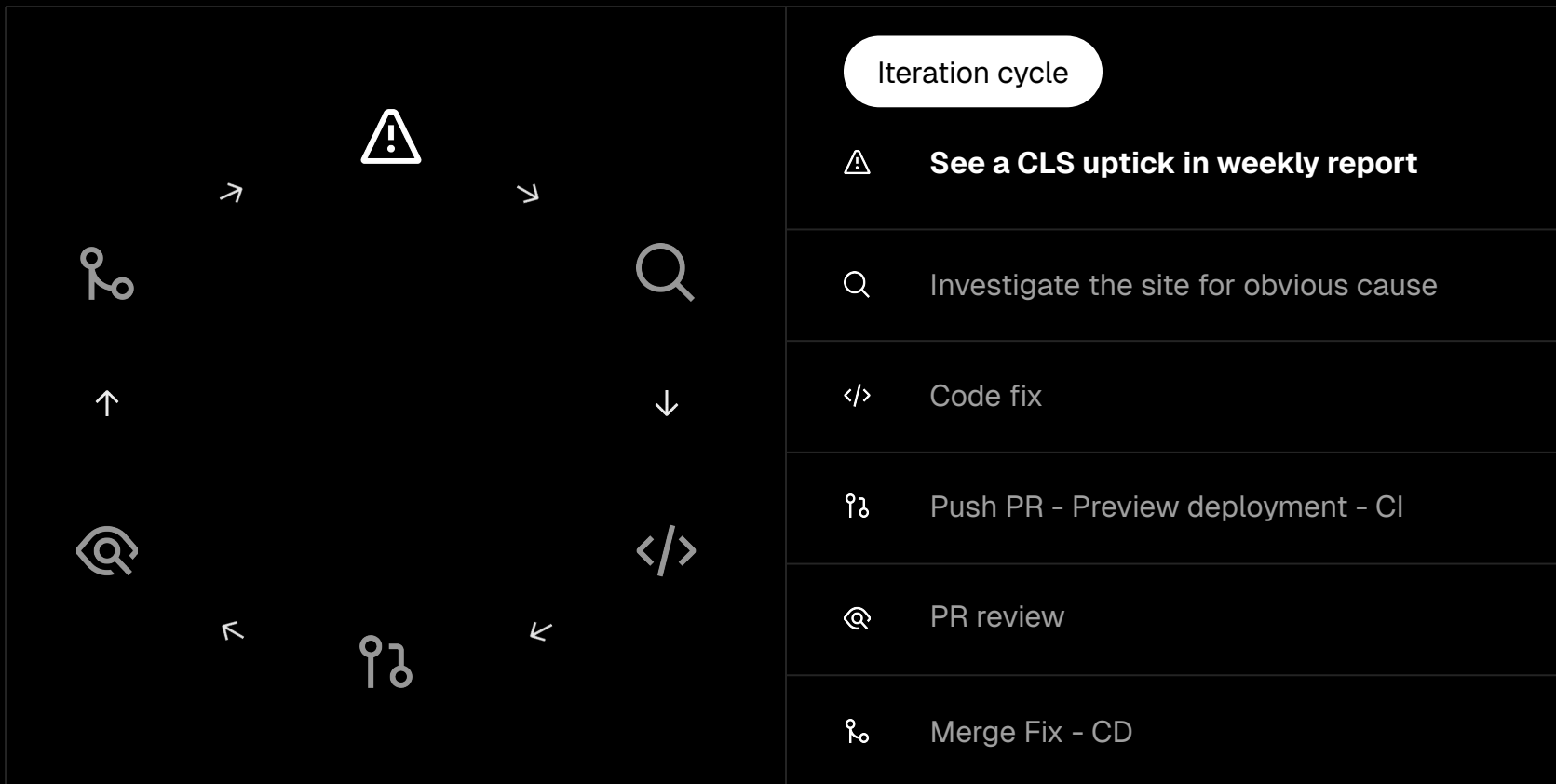
Found 3 suspicious
Investigating PR#1312
8.2s

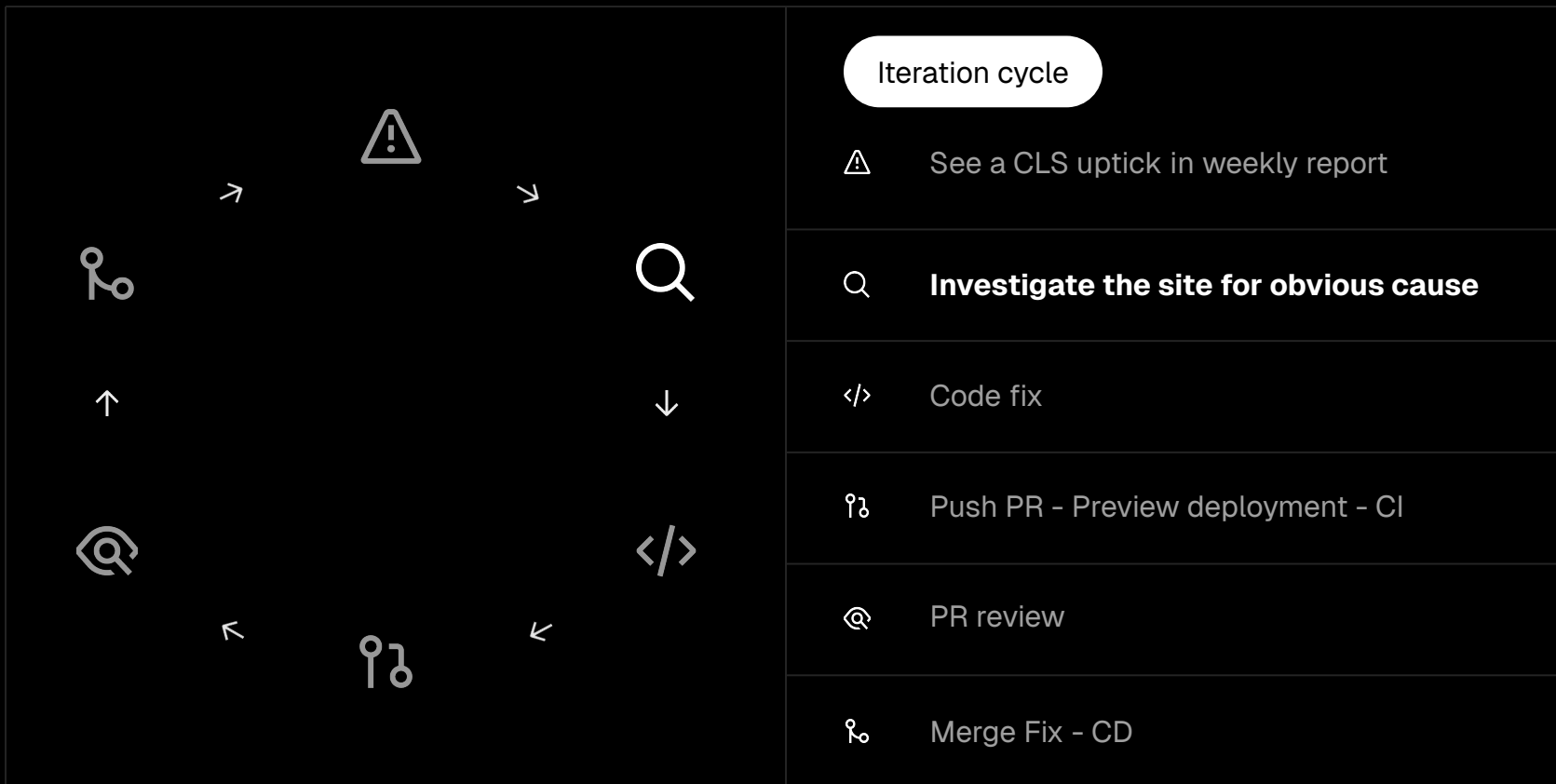
Summarizing
findings
9.7s

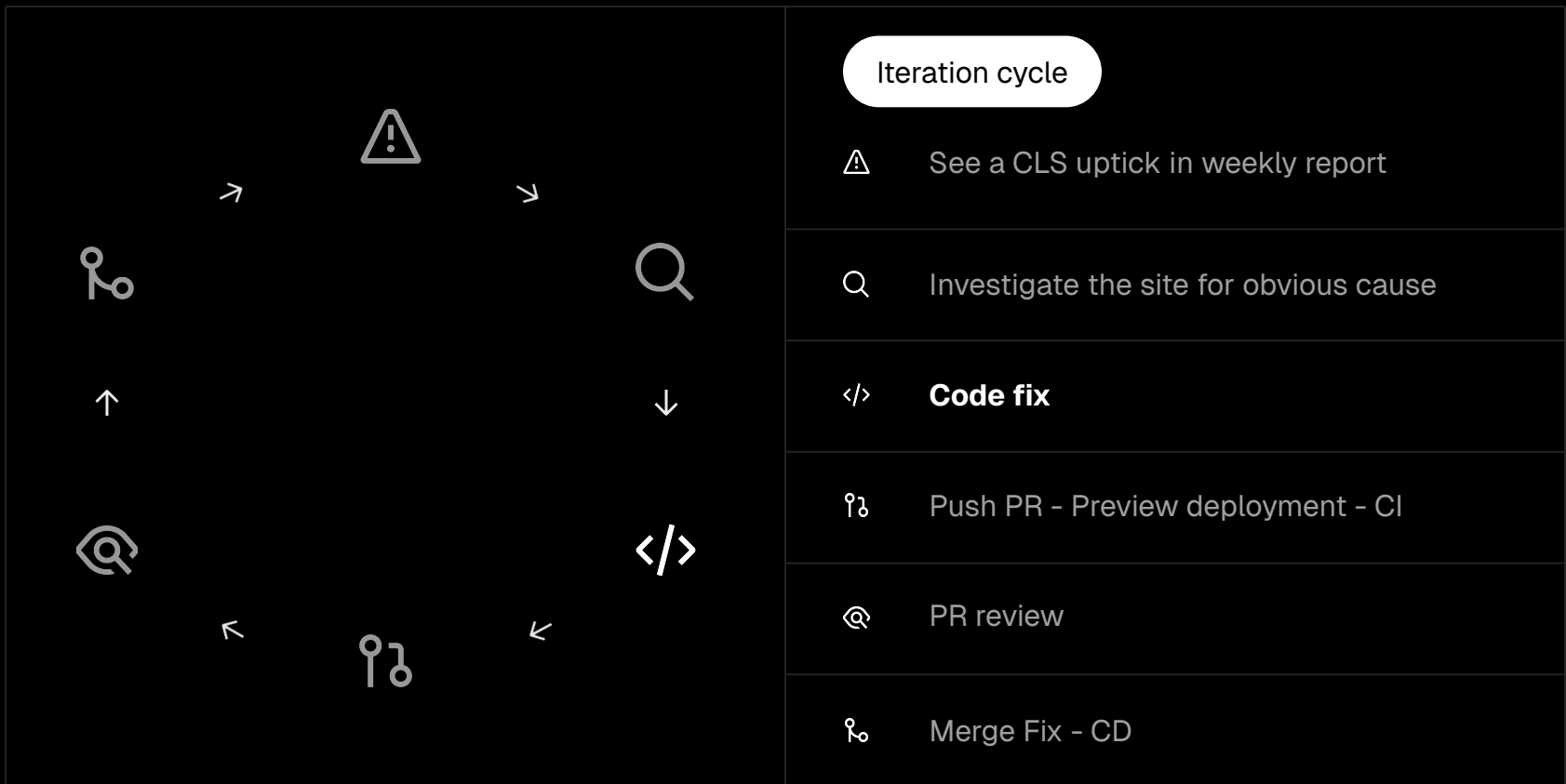
How do we get there?

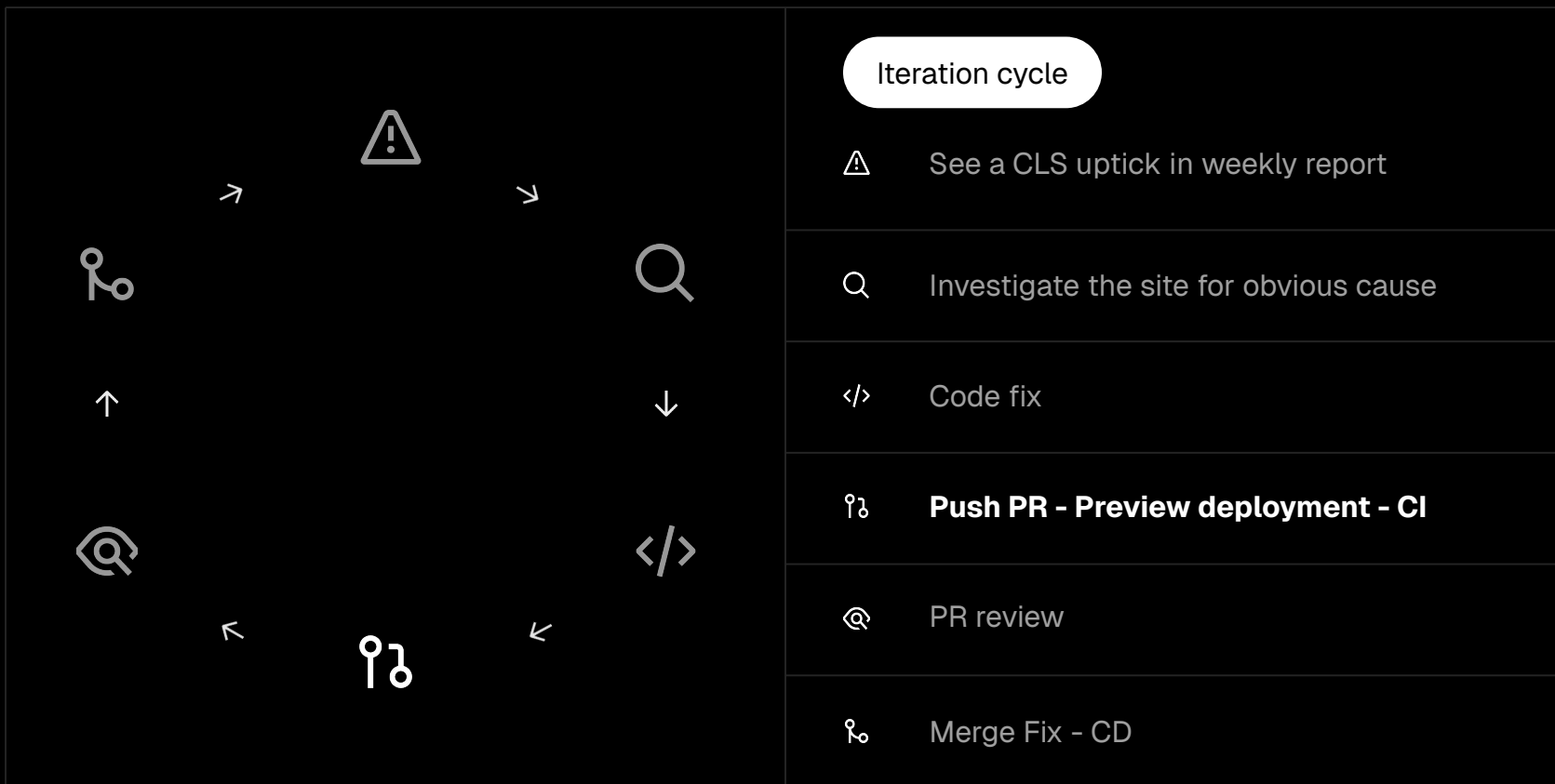
The current way

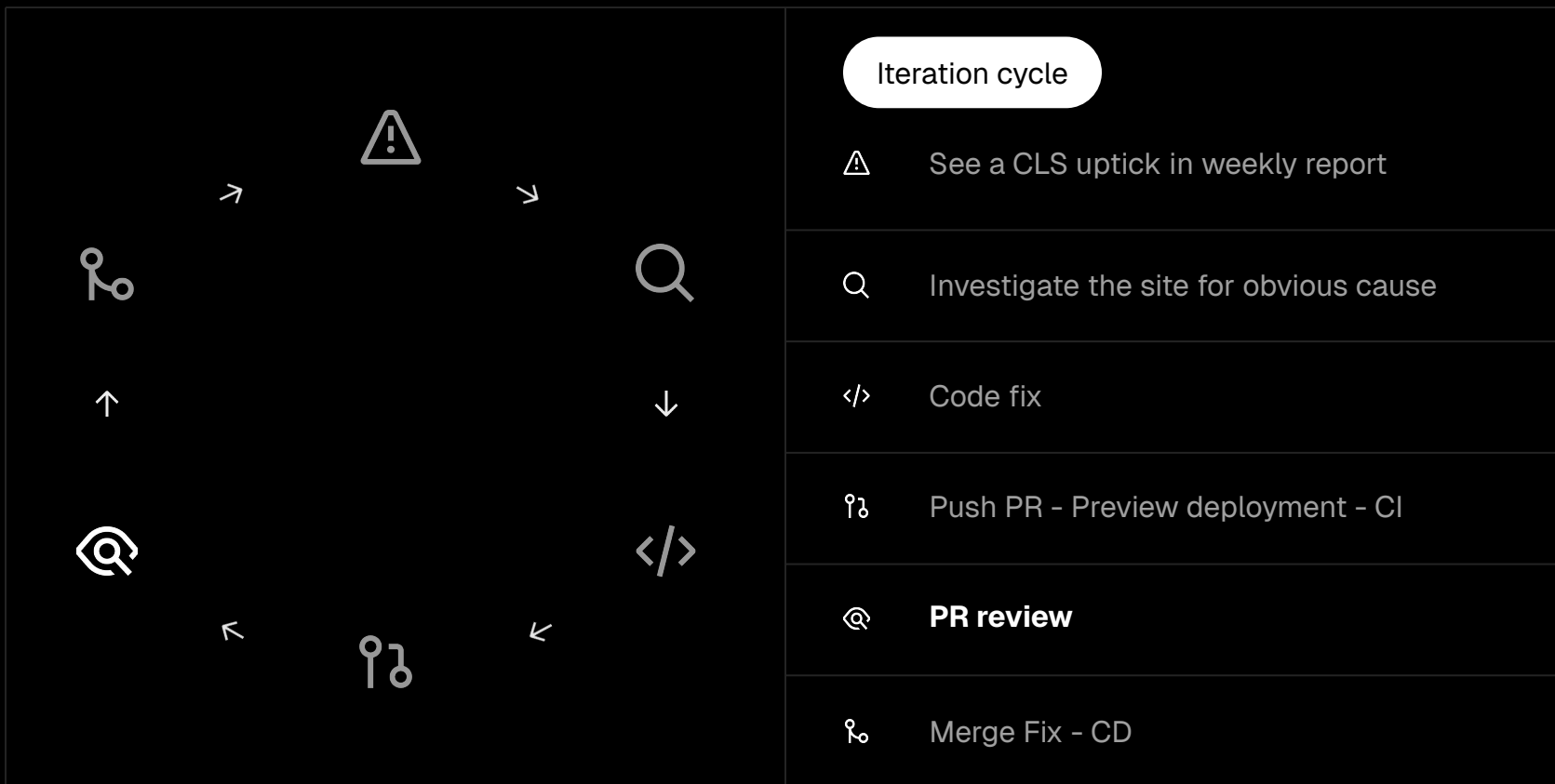


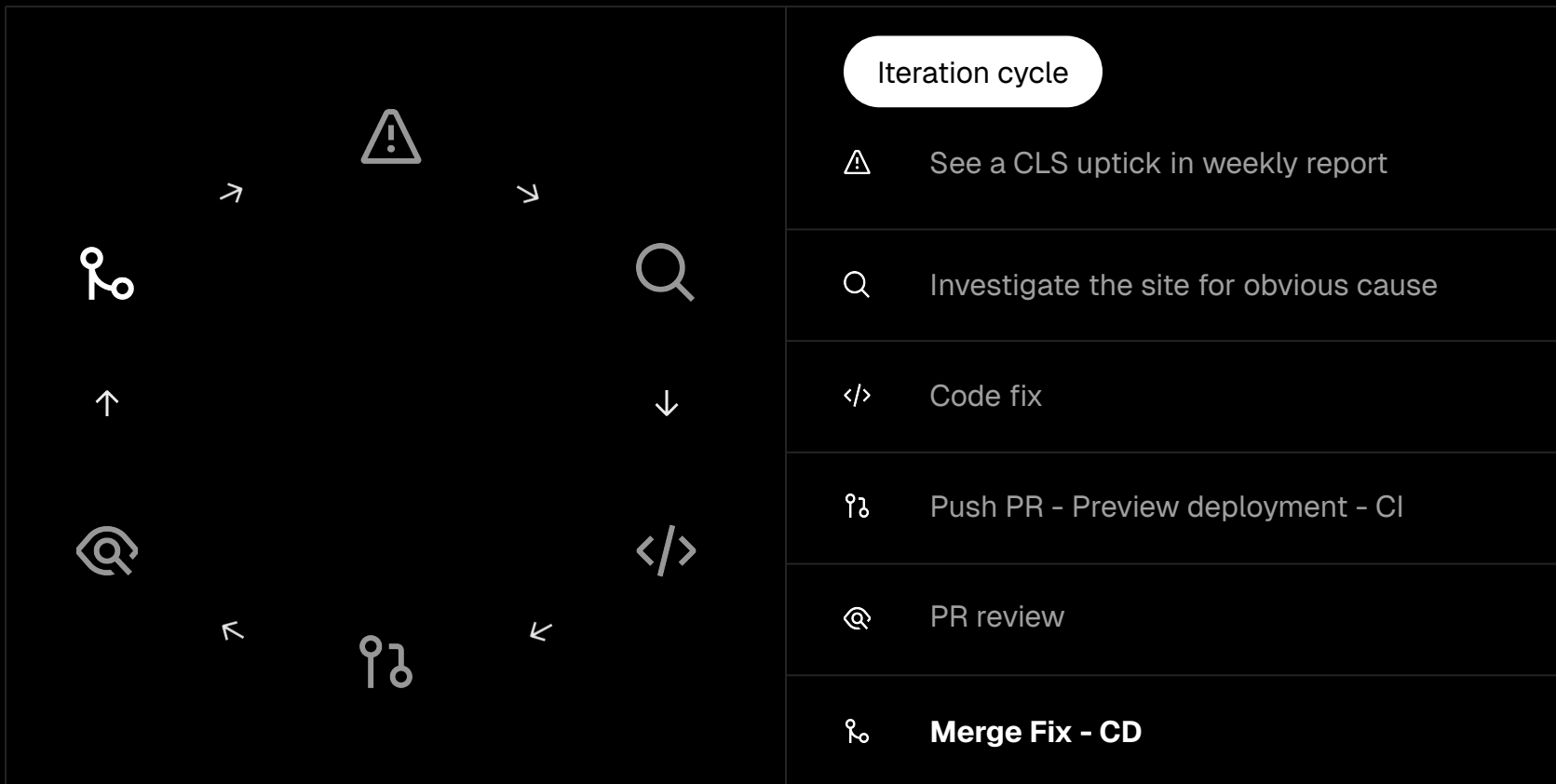


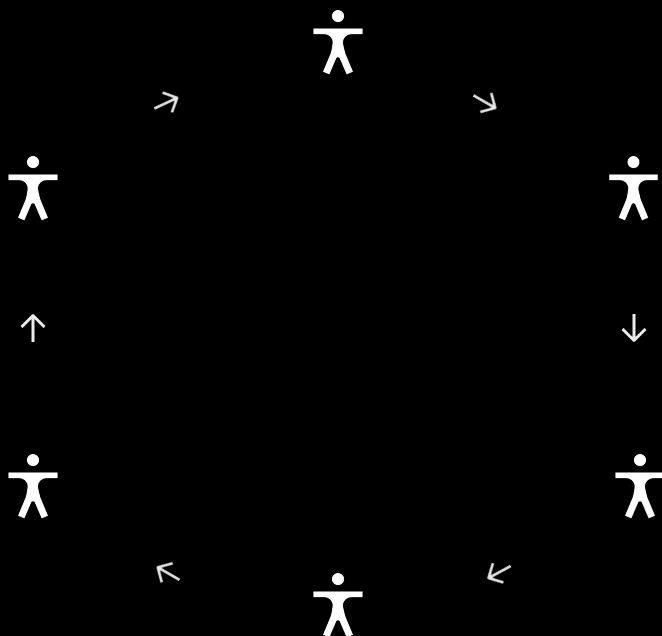






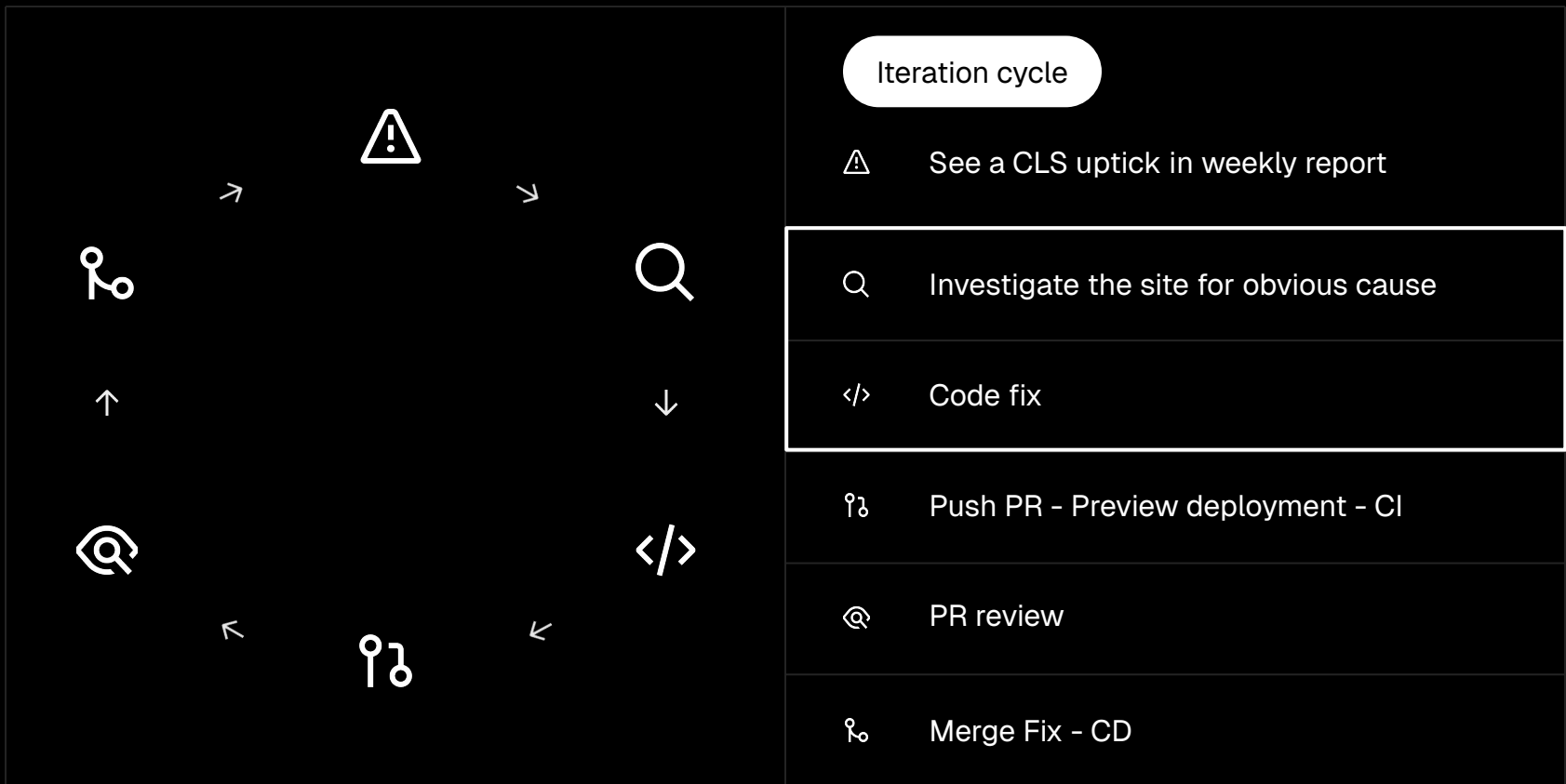


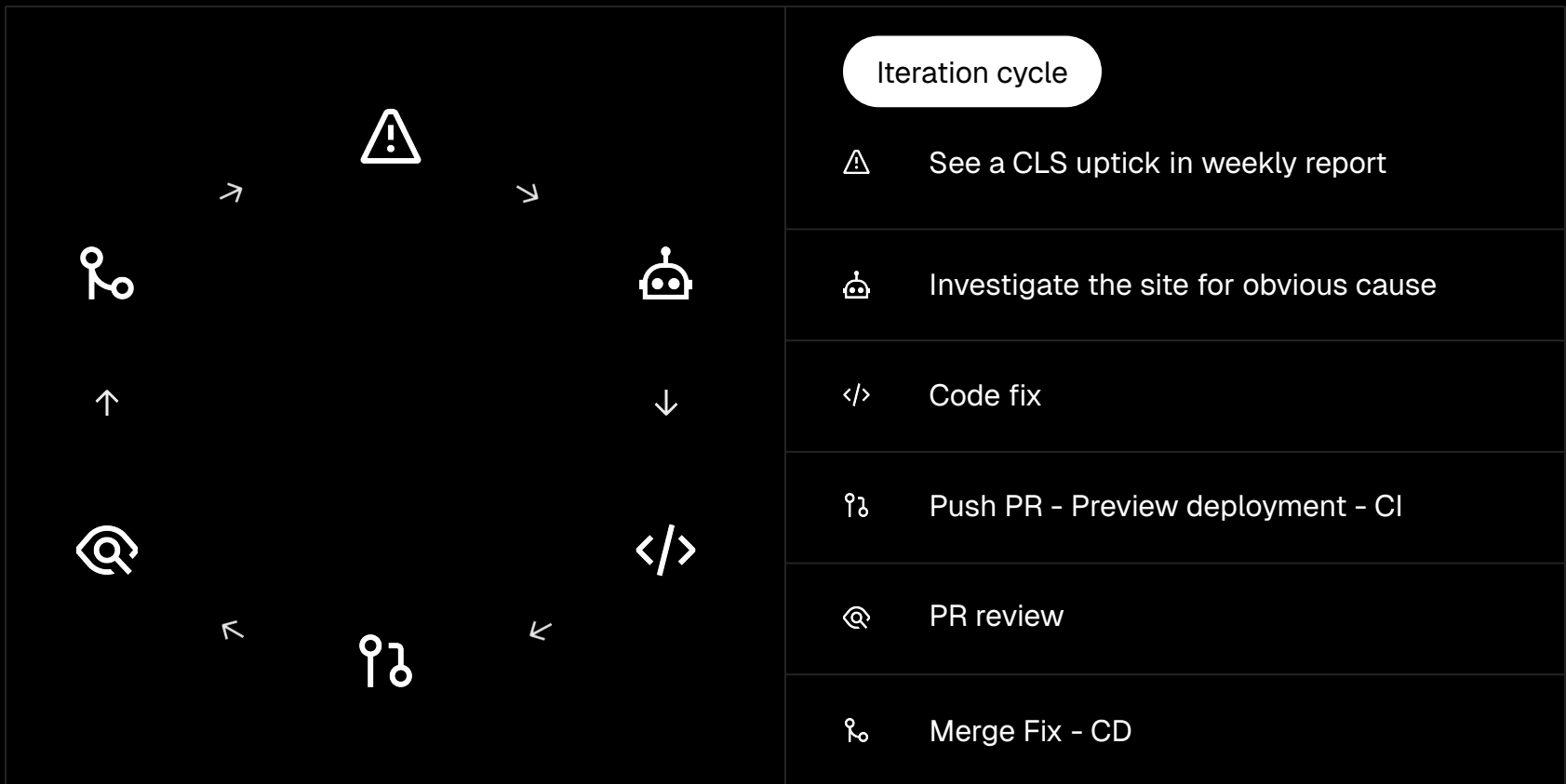


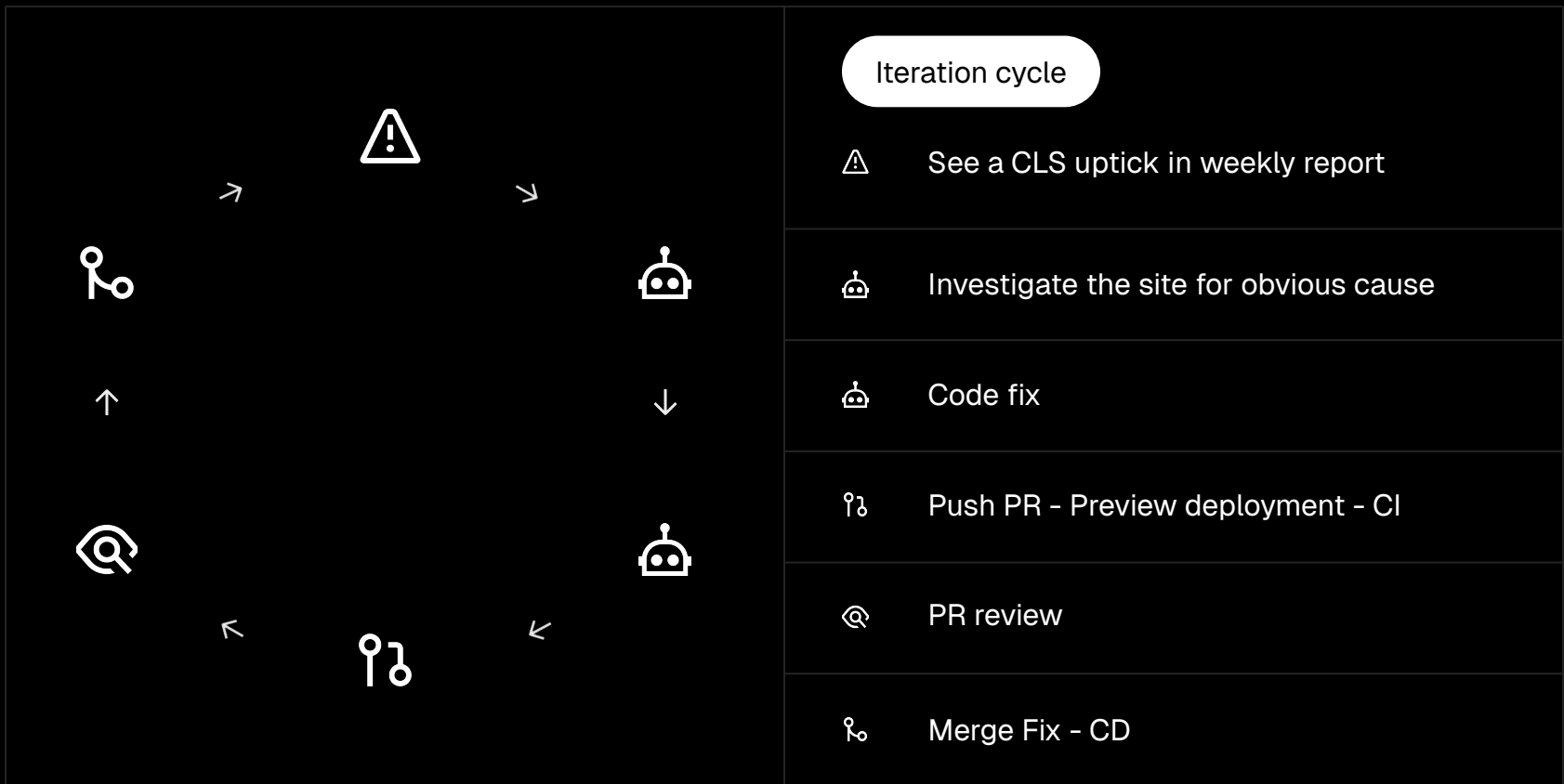


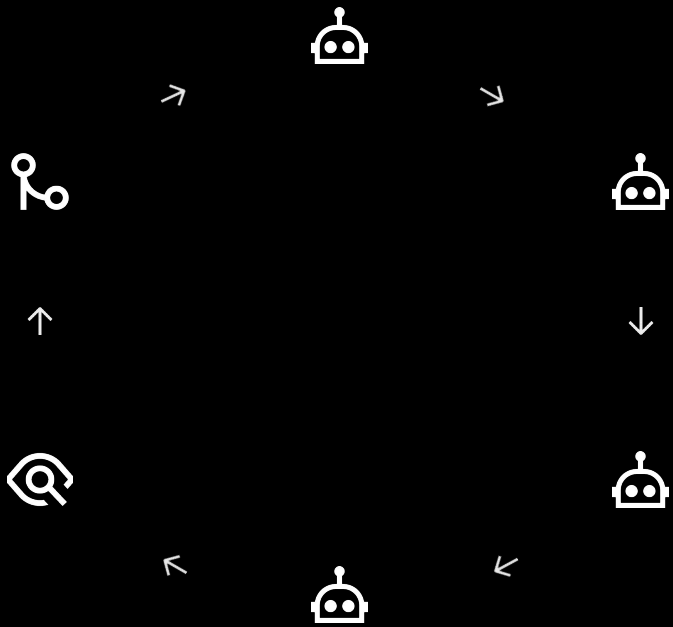
Iteration cycle

- ⚠ See a CLS uptick in weekly report
- 🔍 Investigate the site for obvious cause
- </> Code fix
- 🔗 Push PR - Preview deployment - CI
- @ PR review
- 🔗 Merge Fix - CD









Iteration cycle



See a CLS uptick in weekly report



Investigate the site for obvious cause



Code fix



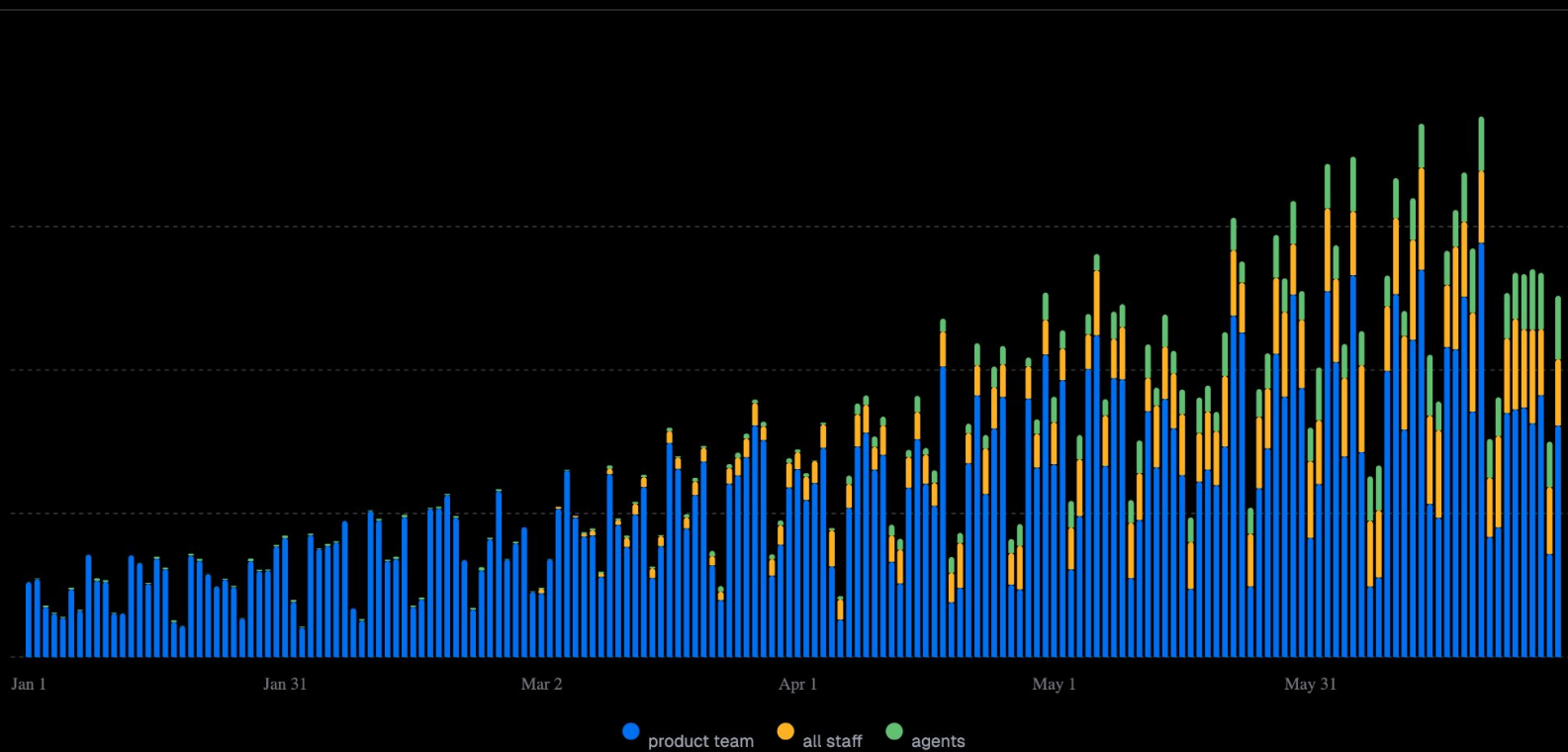
Push PR - Preview deployment - CI

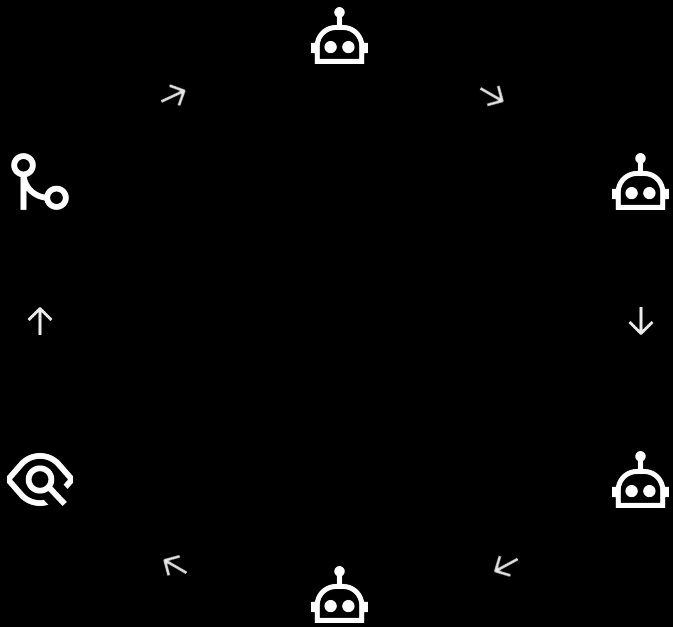


PR review



Merge Fix - CD





Iteration cycle



See a CLS uptick in weekly report



Investigate the site for obvious cause



Code fix



Push PR - Preview deployment - CI



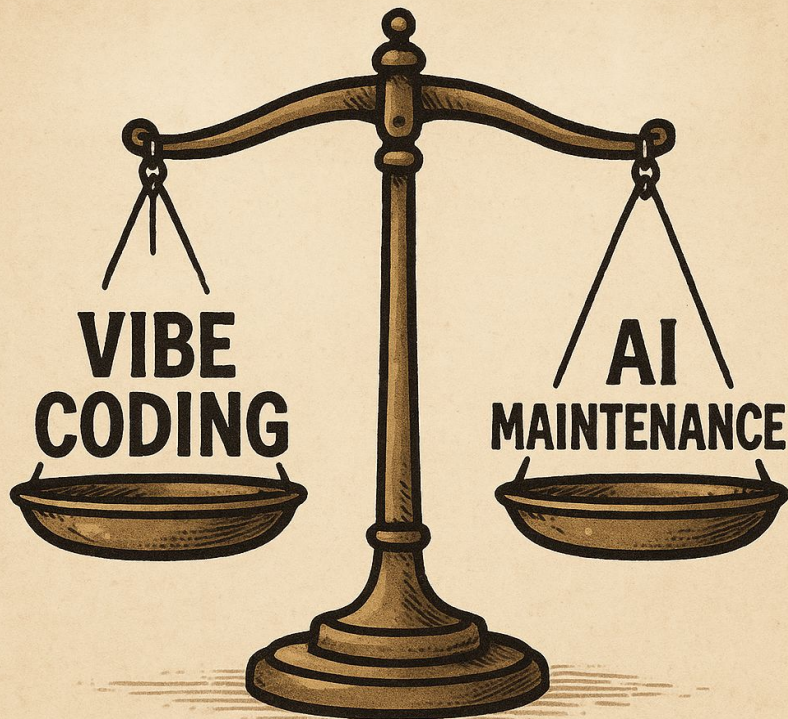
PR review



Merge Fix - CD

Code creation is no longer the bottleneck

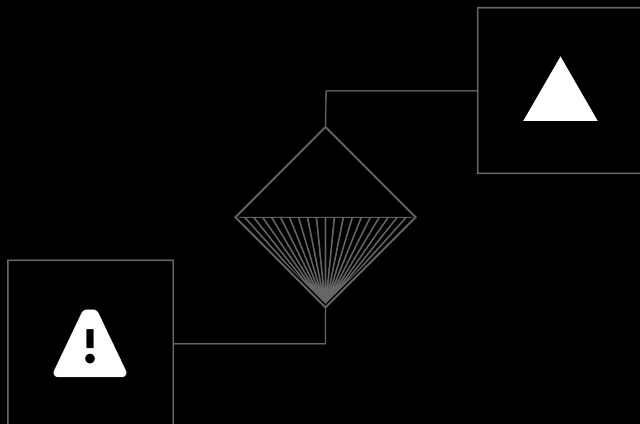
Now it's PR review and merge queue.



What is needed for AI maintenance?

The triggers

Information on what the site is doing at runtime



Frontend Observability



Real User Metrics



Tracing



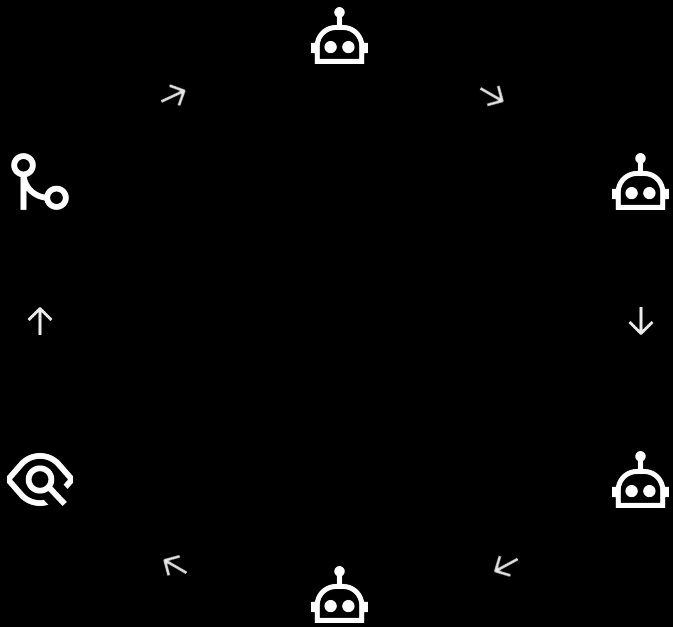
Network logs



Session replay



Error tracking



Iteration cycle



See a CLS uptick in weekly report



Investigate the site for obvious cause



Code fix



Push PR - Preview deployment - CI



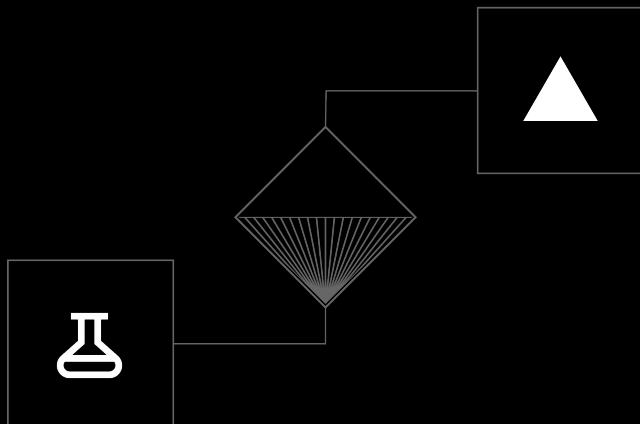
PR review



Merge Fix - CD

The guardrails

CI/CD



CI/CD



Unit Tests



Integration Tests



End-to-End Tests



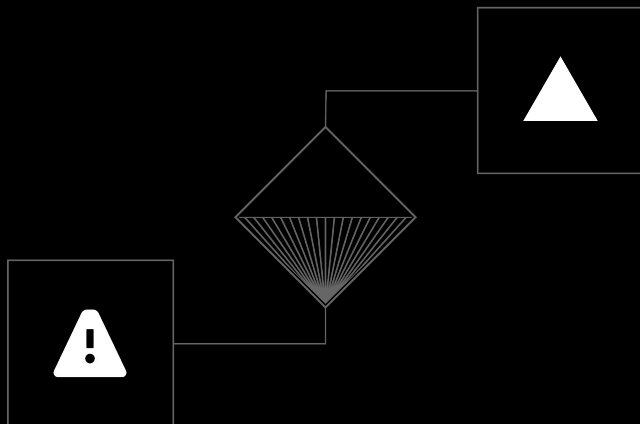
Visual Regression



Performance Tests

4 things that feel important in this future

1. Every output, is an input



Frontend Observability



Real User Metrics



Tracing



Network logs



Session replay



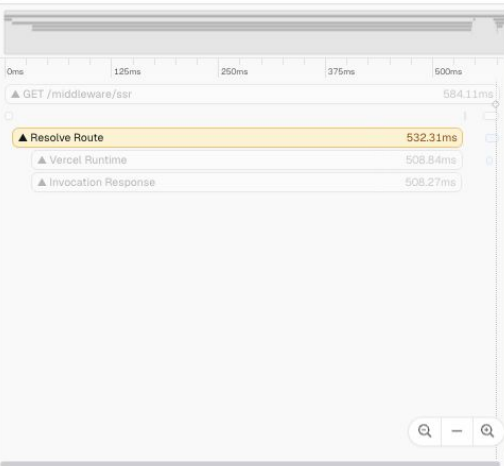
Error tracking

why is <https://nextjs-fetch-playground.vercel.app/middleware/ssr> so slow?

I can analyze why this page is slow by examining the OpenTelemetry trace data. Let me run a trace analysis for you.

Trace Analysis

<https://nextjs-fetch-playground.vercel.app/middleware/ssr>



Performance Impact

The following spans are the most performance-impacting spans in the trace.

Resolve Route

This span took 532.31ms to resolve the route, which is significant as it indicates a delay in processing the request for the specified route.

Guides

Model Context Protocol

Generate MCP servers from your documentation

Overview

The Model Context Protocol (MCP) is an open protocol for LLMs and AI applications. With Mintlify's integration, you can generate an MCP server from your existing documentation or OpenAI seamless AI-powered interactions with your product.

 Copy page



Copy page

Copy page as Markdown for LLMs



View as Markdown ↗

View this page as plain text



Open in ChatGPT ↗

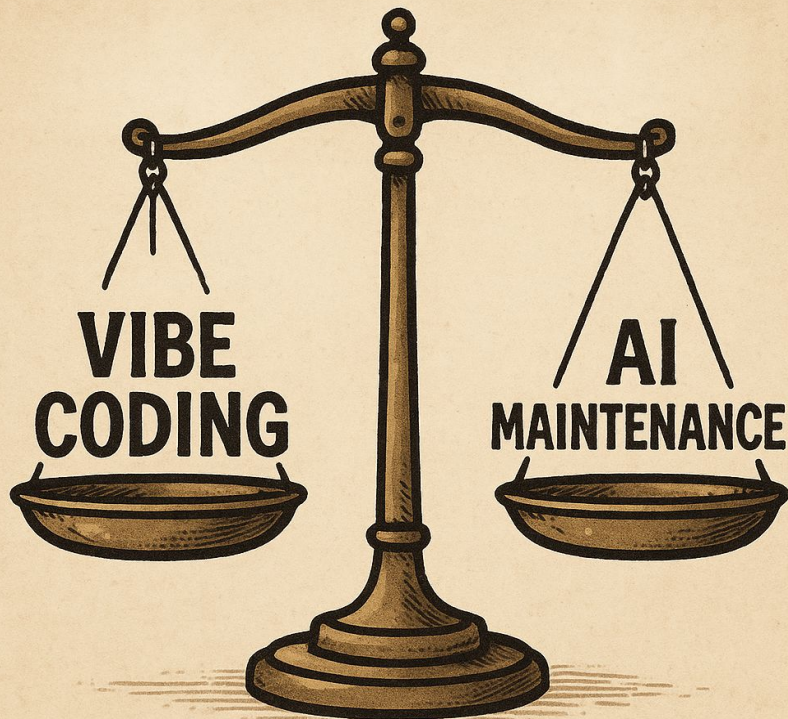
Ask questions about this page



Open in Claude ↗

Ask questions about this page

2. Diagnostic tools should mirror input skill



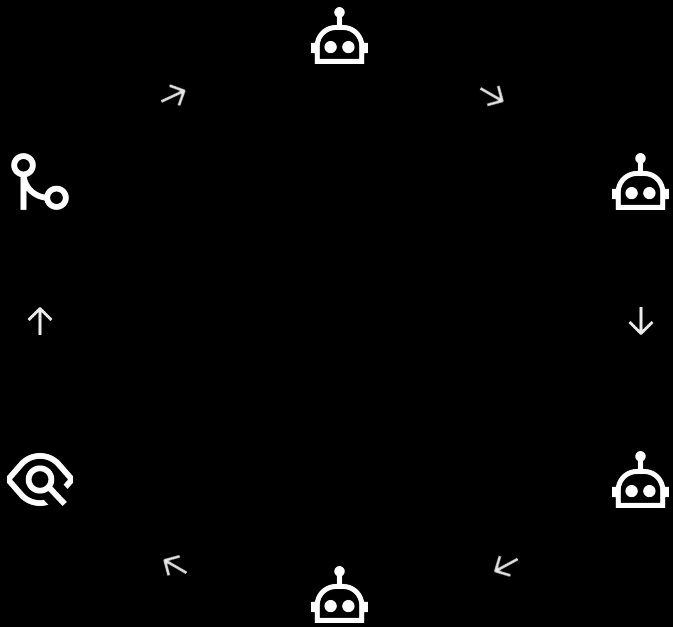
3. Capture every log

**Humans can't read every log
but machines can**

4. Decouple release from deployment

**An agent should run the generated
fix in a duplicate production
environment**

What's next?



Iteration cycle



See a CLS uptick in weekly report



Investigate the site for obvious cause



Code fix



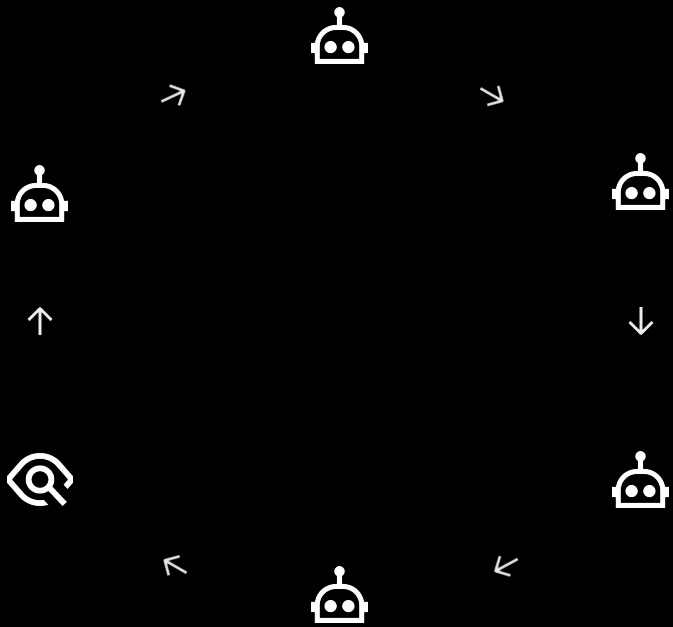
Push PR - Preview deployment - CI



PR review



Merge Fix - CD



Iteration cycle



See a CLS uptick in weekly report



Investigate the site for obvious cause



Code fix



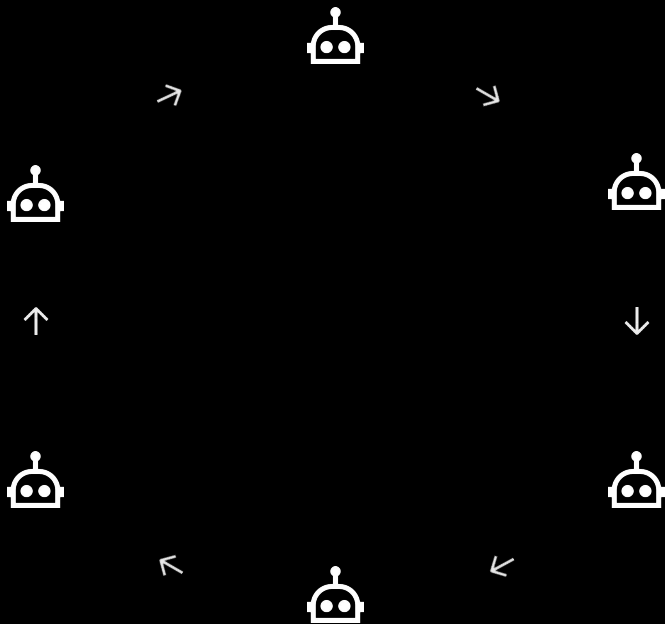
Push PR - Preview deployment - CI



PR review



Merge Fix - CD



Iteration cycle



See a CLS uptick in weekly report



Investigate the site for obvious cause



Code fix



Push PR - Preview deployment - CI



PR review



Merge Fix - CD

2026?

Gradually and then suddenly



Thank you



Matthew Collier / @mattcOllier