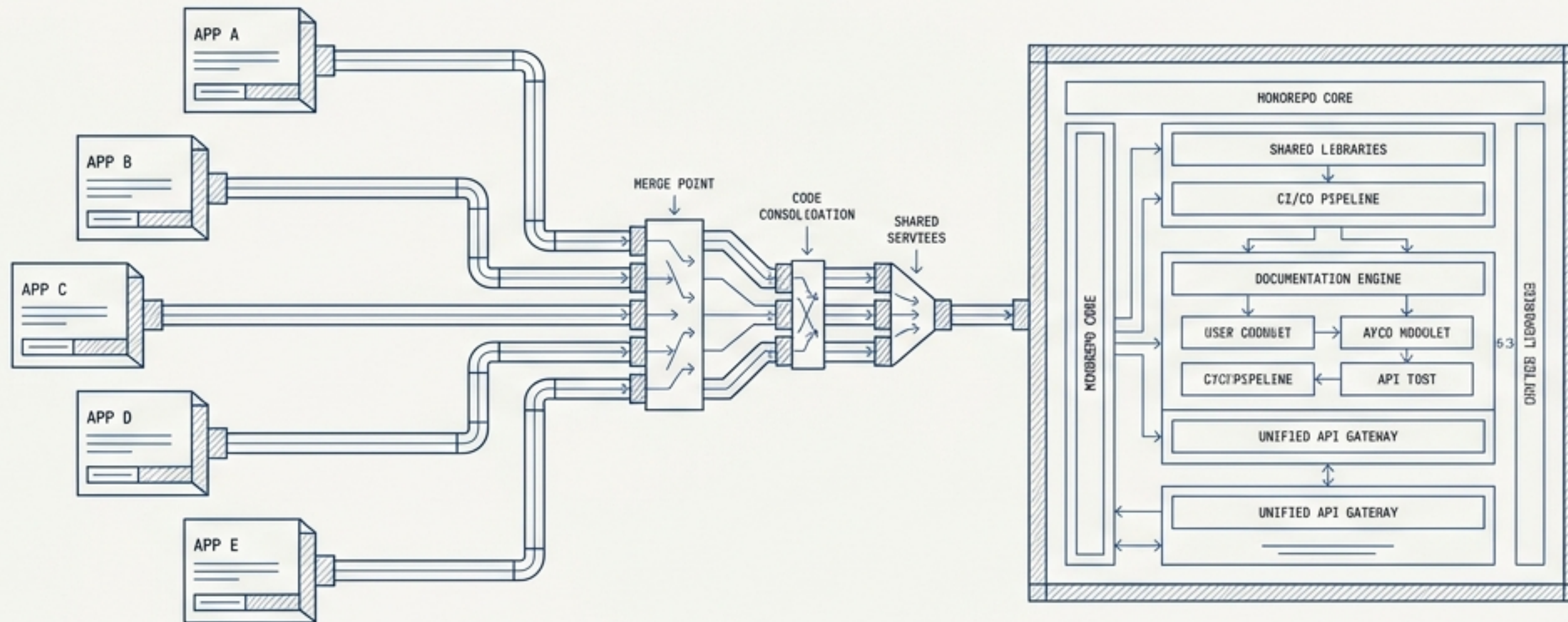


111 Commits in 3 Days: From Fragmented Apps to a Unified Monorepo Platform

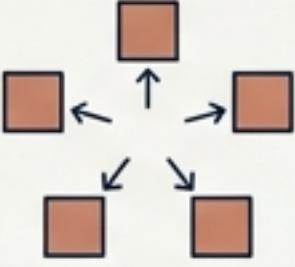
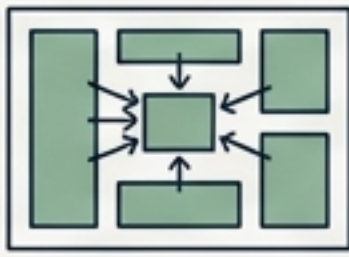
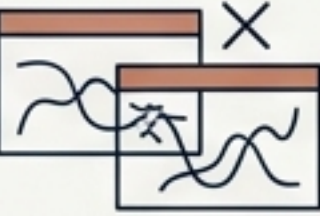
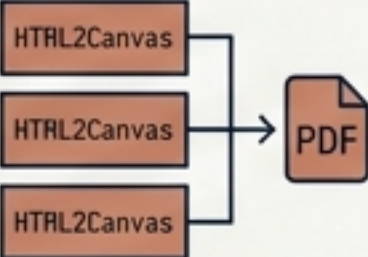
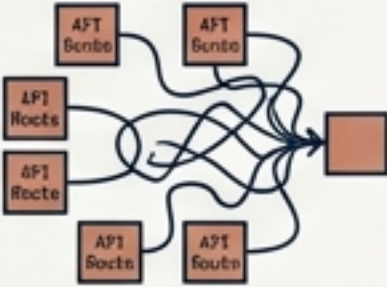
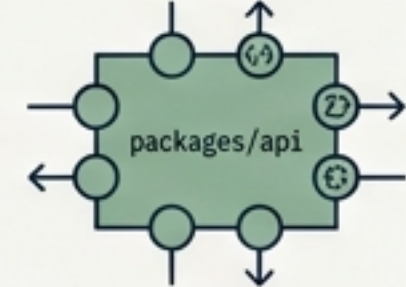
RUNTIME:
3 Days

CHANGELOG:
111 Commits

OUTPUT:
5 Siloed Apps -> 1 Monorepo Platform



The architectural debt required an immediate and total refactor

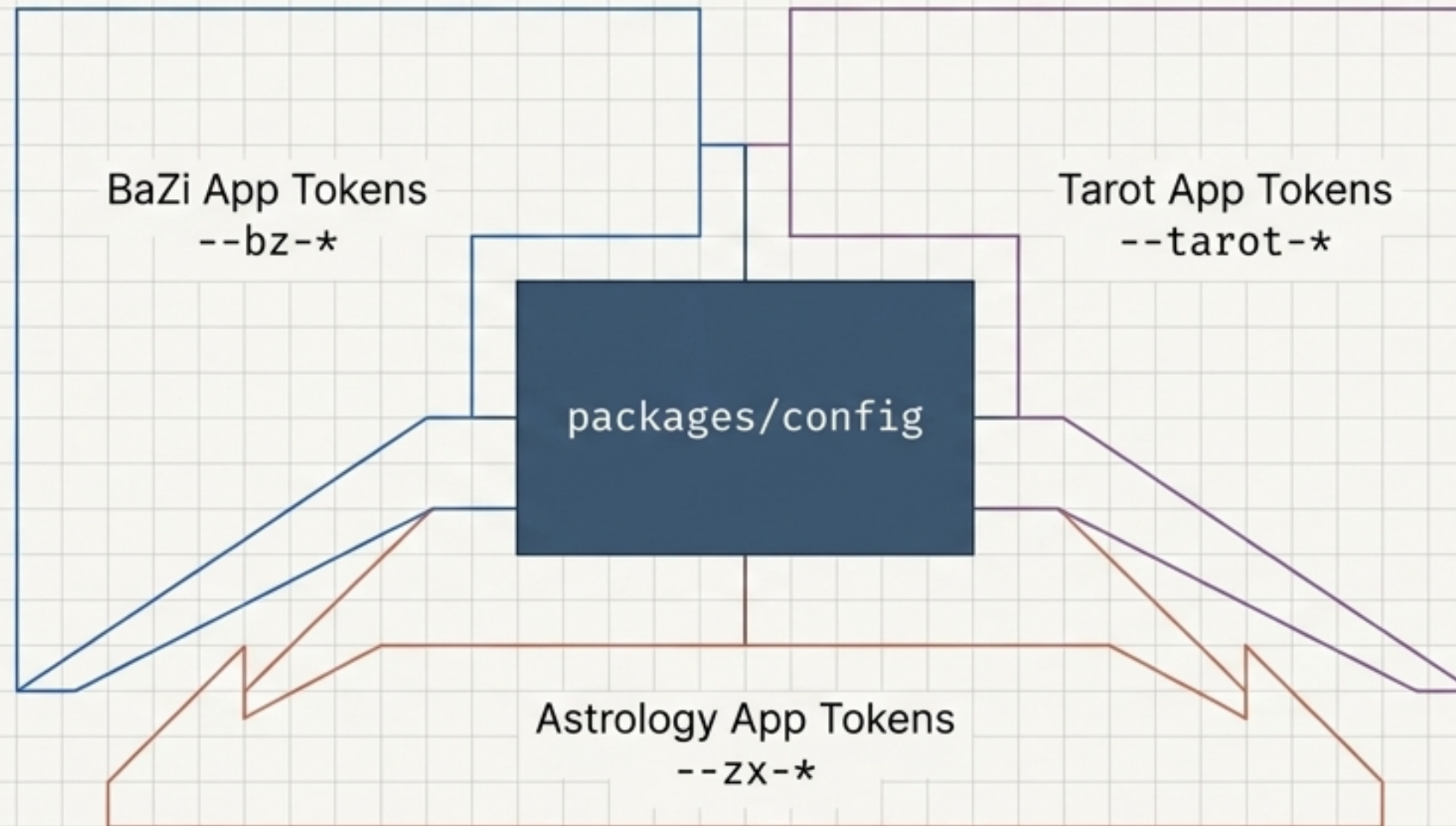
INITIAL_STATE		FINAL_STATE	
	Architecture: 5 standalone applications.		Architecture: Shared packages/monorepo.
	Design: Duplicated CSS namespaces causing collisions.		Design: Unified packages/config for Tailwind.
	Functionality: 3 redundant HTML2Canvas setups for PDF exports.		Functionality: Modular packages/pdf and packages/ui.
	Backend: 15+ separate AI streaming API routes with duplicated boilerplate.		Backend: Centralized packages/api with standardized lifecycle hooks.

Day 2 required 38 commits just to survive CSS restoration hell

UI INITIAL STATE: VISUAL DEBT	COMMIT LOG: RESTORATION ATTEMPT
	<pre>08:01:23 2a4b5c9 feat: update tailwind config, begin migration 08:15:45 3d5e6f7 fix: resolve primary button padding inconsistency 08:45:12 8g9h0j1 fix: address nav bar overlap with main content 09:22:34 1k2l3m4 fix css: correct margin on card component 09:55:56 5p6q7r8 fix css: align baselines in hero section 10:30:18 9s0t1u2 fix css: resolve flexbox alignment issue in sidebar 11:12:40 3v4w5x6 fix css: fix spacing on modal dialog 11:45:02 7y8z9a0 fix css: correct color variable usage for links 13:00:24 1b2c3d4 fix css: adjust grid gaps in dashboard view 13:35:46 5e6f7g8 fix css: resolve z-index conflict in dropdown 14:15:08 9h0j1k2 fix css: unify font sizes across components 14:50:30 3l4m5n6 fix css: address border radius inconsistencies 15:25:52 7p8q9r0 fix css: fix responsiveness on mobile breakpoint 16:05:14 1s2t3u4 fix css: resolve text overflow issue in table 16:40:36 5v6w7x8 fix css: correct icon alignment in lists 17:20:58 9y0z1a2 fix css: adjust shadow depth for consistency 17:55:20 3b4c5d6 fix css: resolve final visual regression in footer</pre>

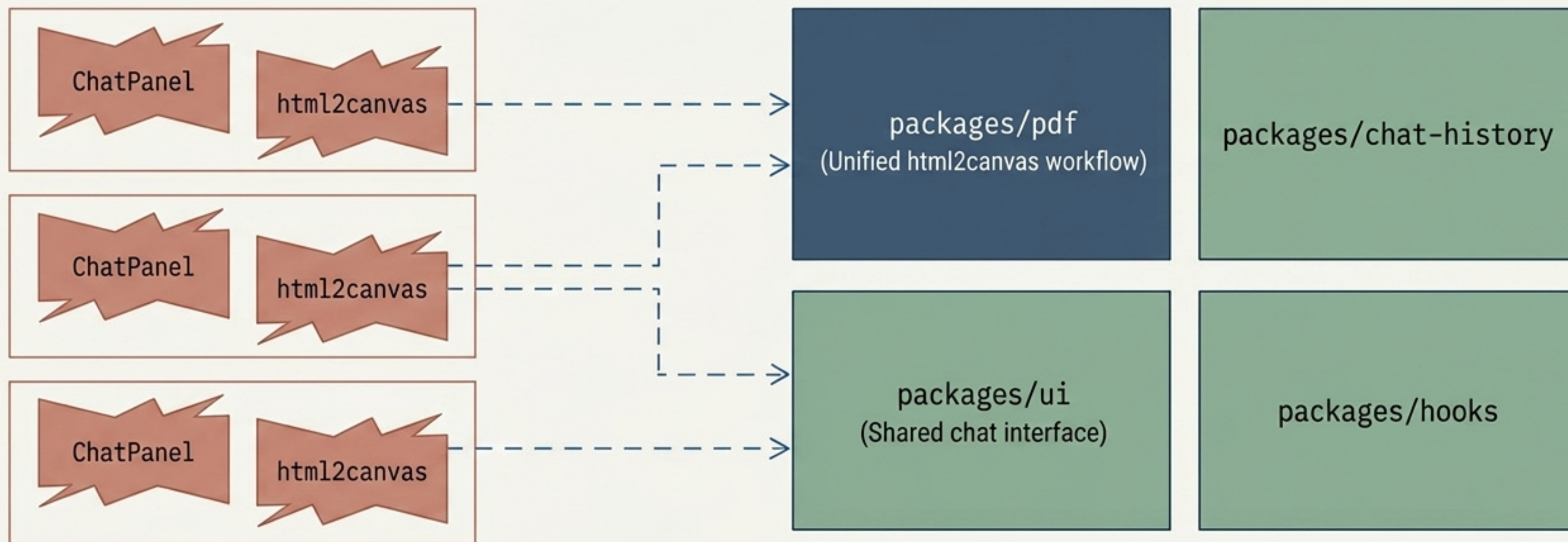
// Unifying Tailwind configs meant custom design tokens broke across all 5 apps.
Not with red errors, but with subtle, maddening visual inconsistencies.

Establishing a namespace collision model for design tokens



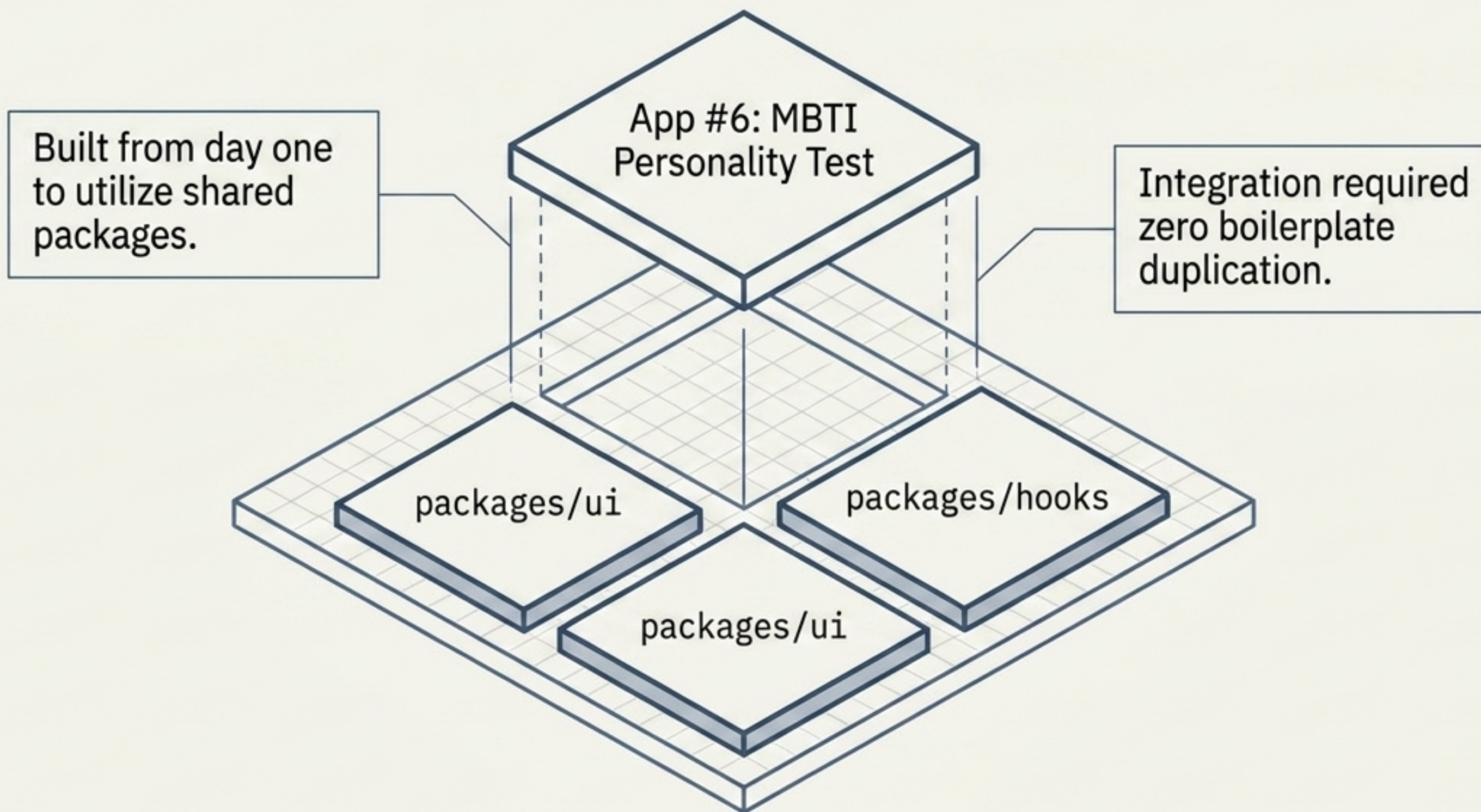
↑
The Tailwind configuration hub allows all variable namespaces to coexist without collision. Each application retains its unique visual identity while pulling from a single shared infrastructure.

Duplicated code was extracted into 4 shared monorepo packages

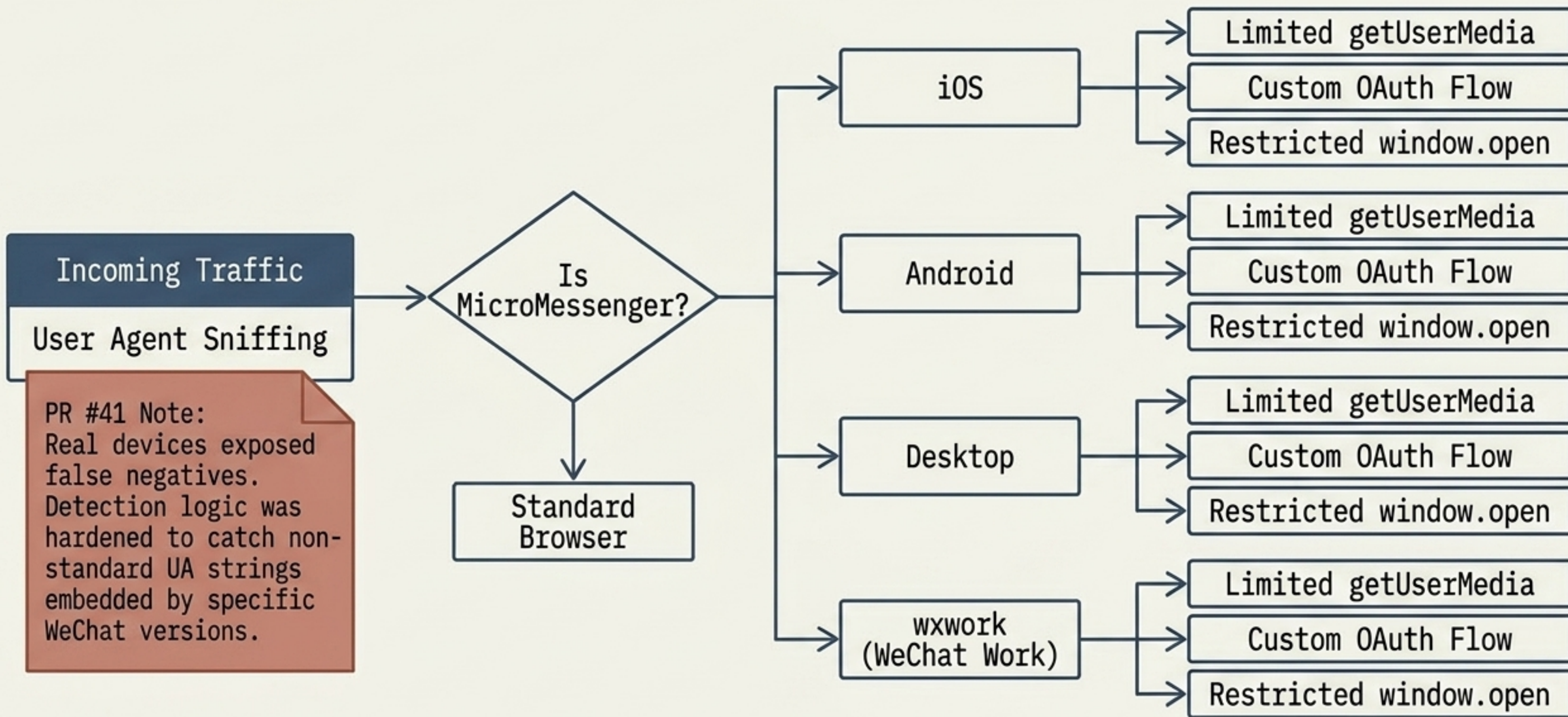


The Result: A single bug fix to PDF export or Chat UI now automatically propagates to every application on the platform.

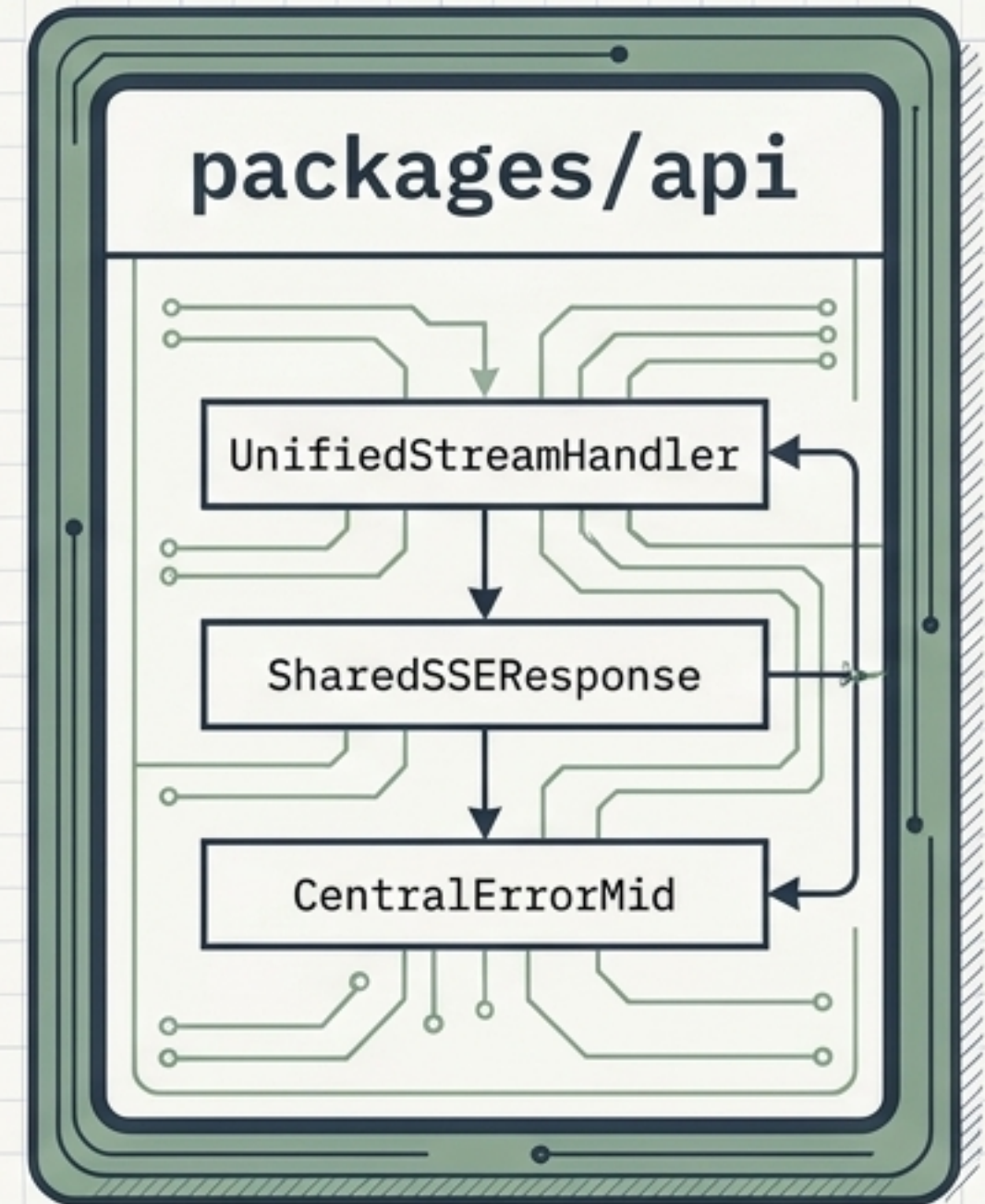
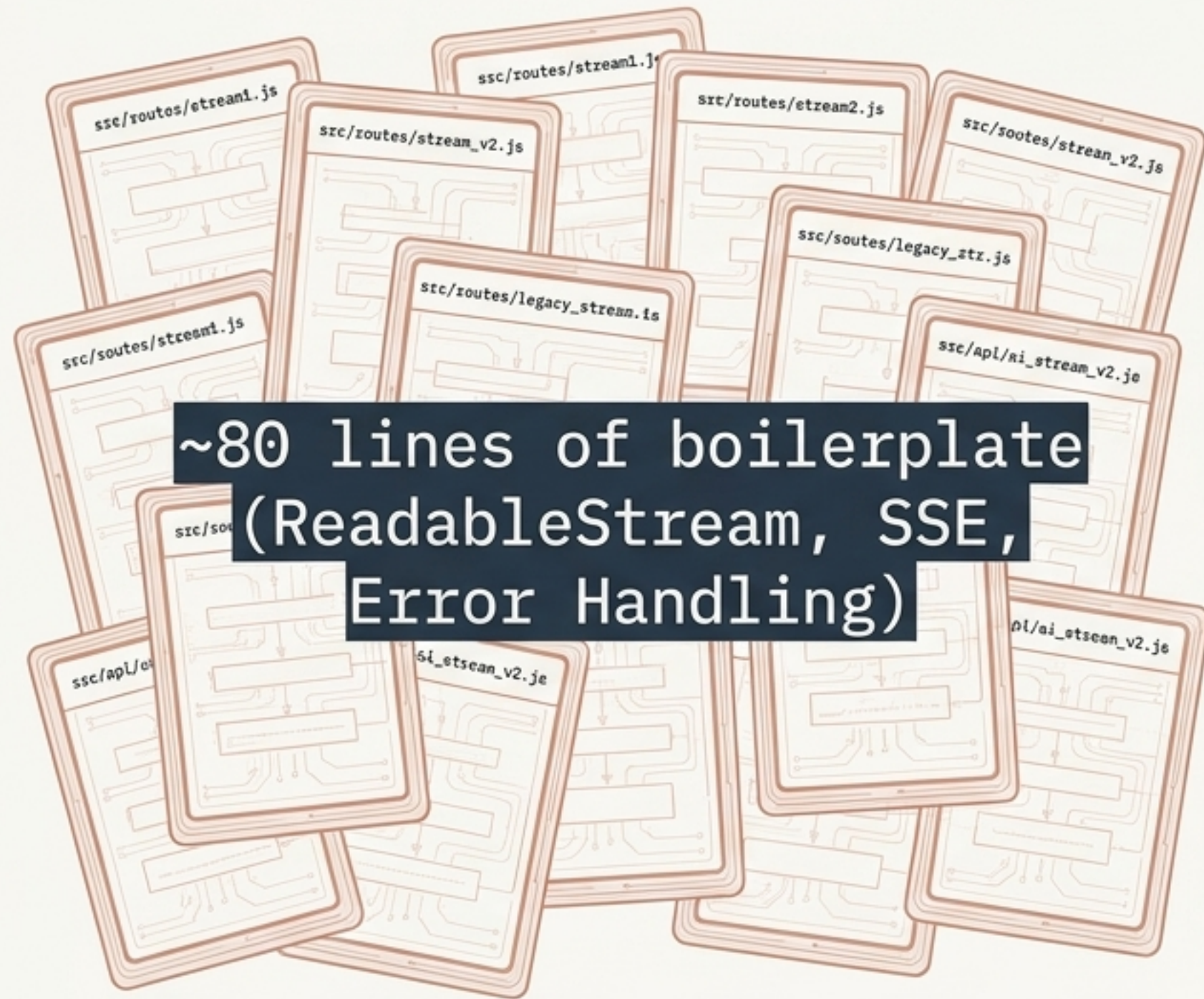
Day 3 proved the monorepo value by absorbing a sixth application



Routing WeChat traffic required a hardened browser detection tree

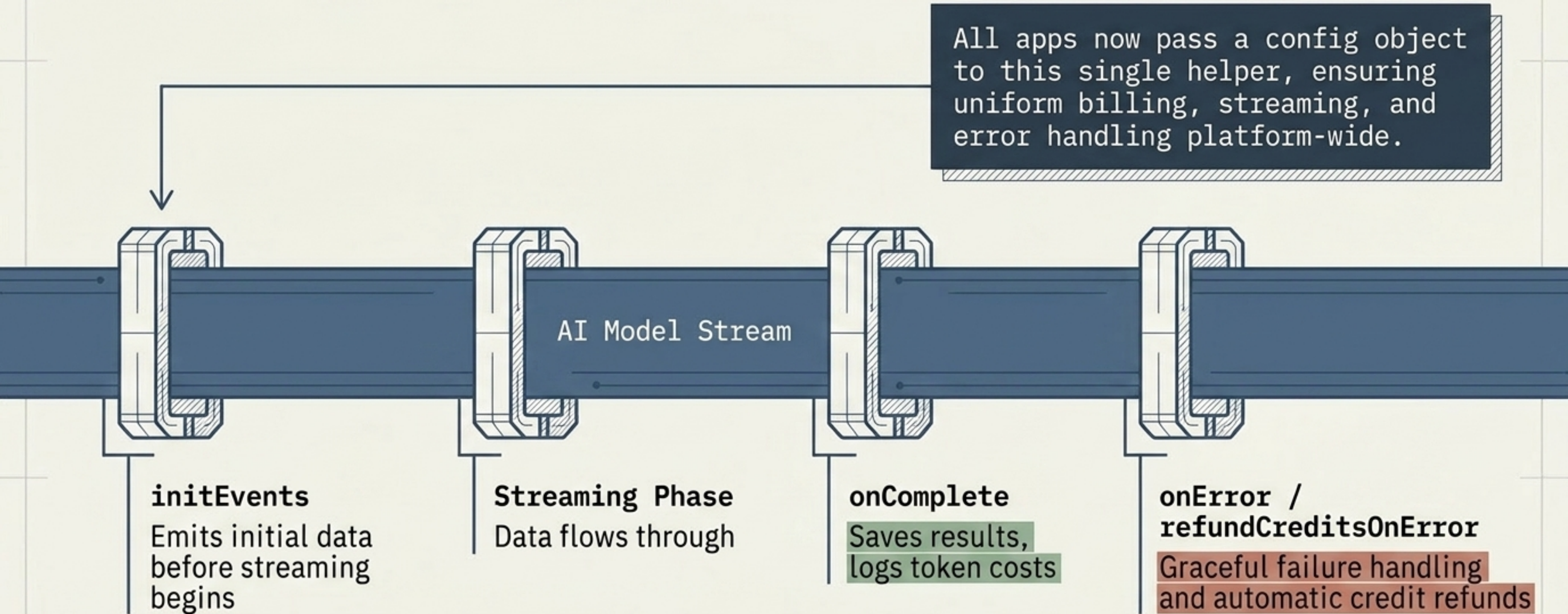


Day 4 eliminated 15 disparate AI streaming routes



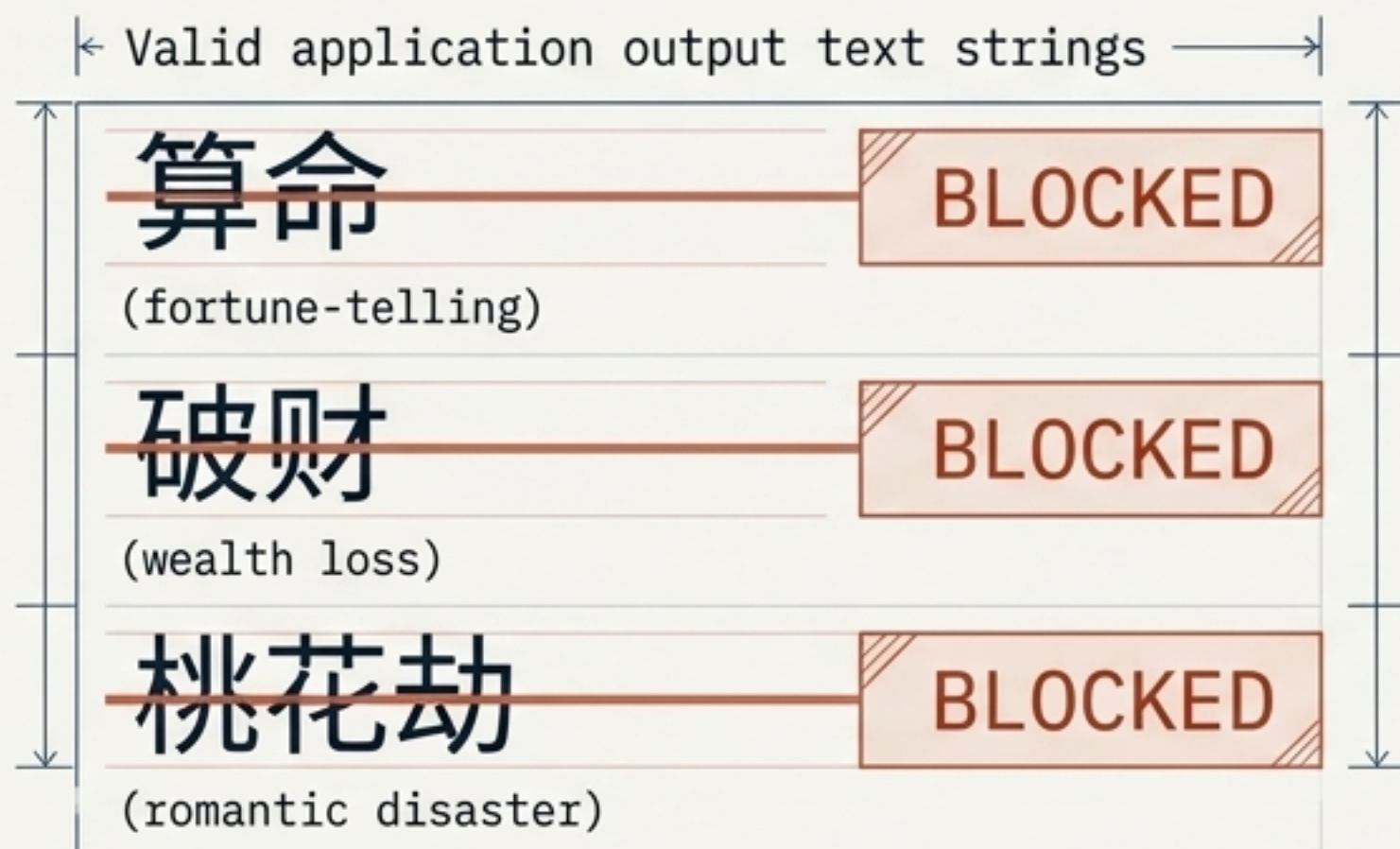
Using Claude Code, 52 API routes were migrated to a unified pattern in one hour of wall-clock time—saving an entire day of manual refactoring.

A single helper function now standardizes all AI API communication

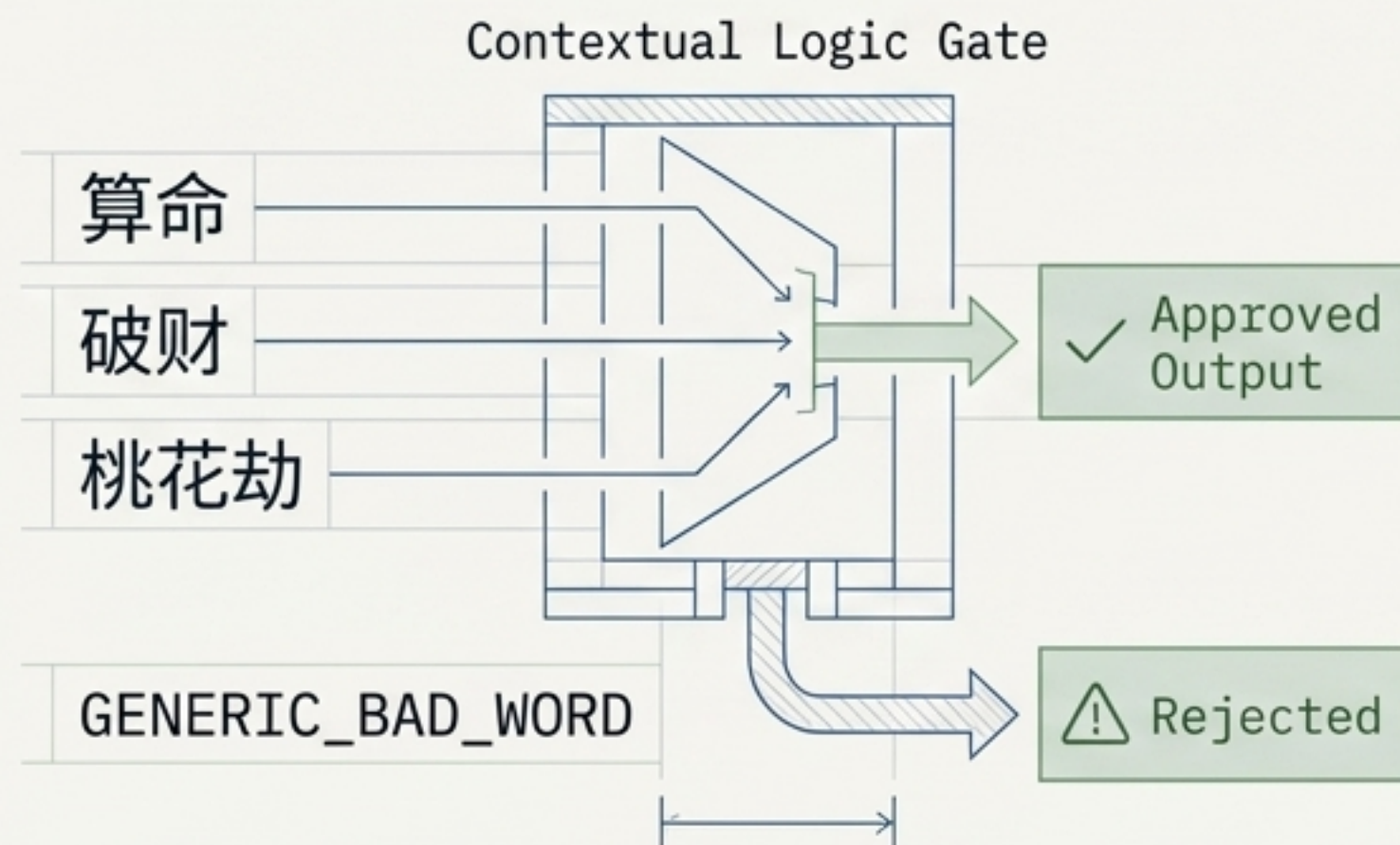


Standard keyword filters break legitimate metaphysics content

Panel A: Naive Profanity Filter

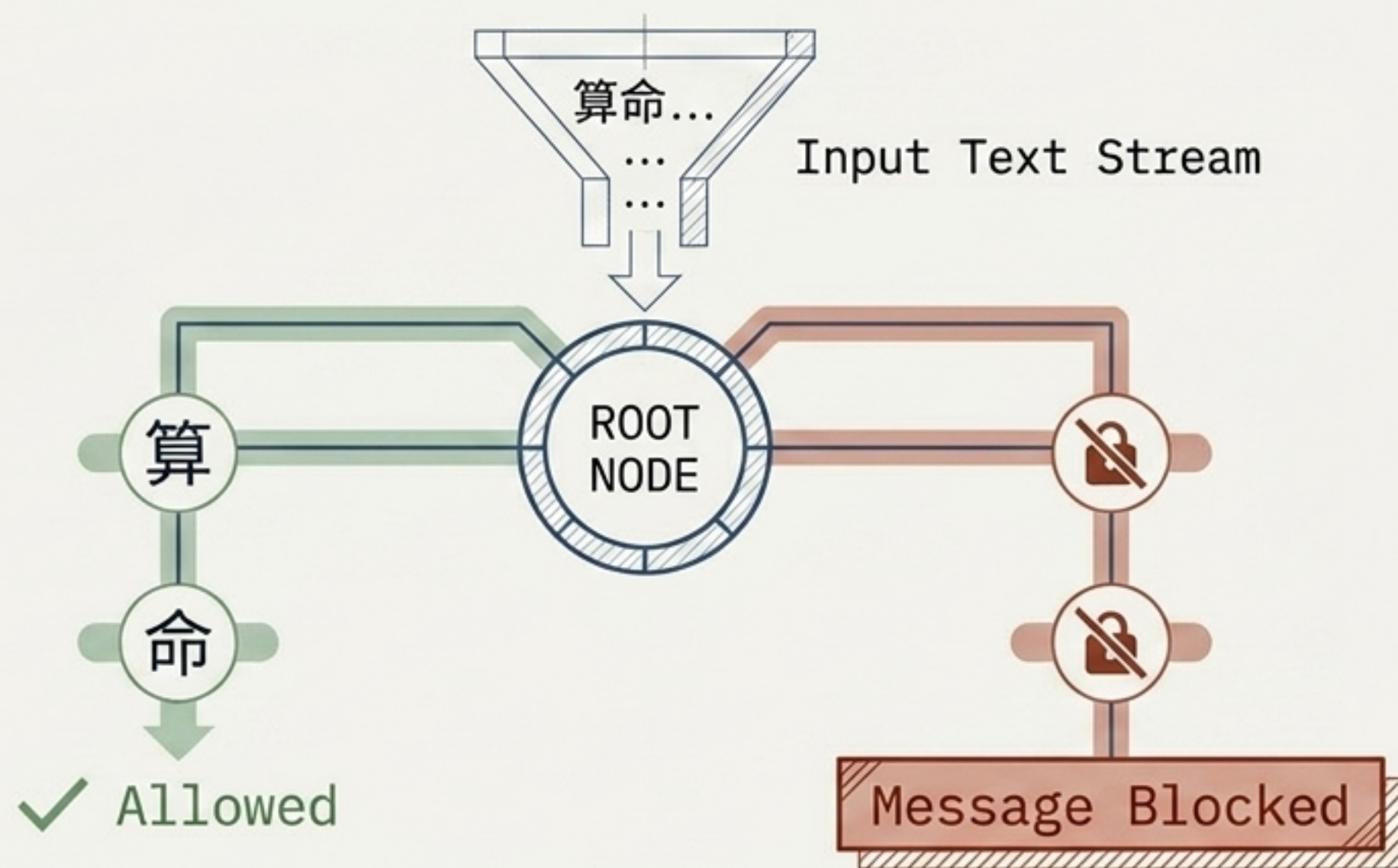


Panel B: Context-Aware Filter v1



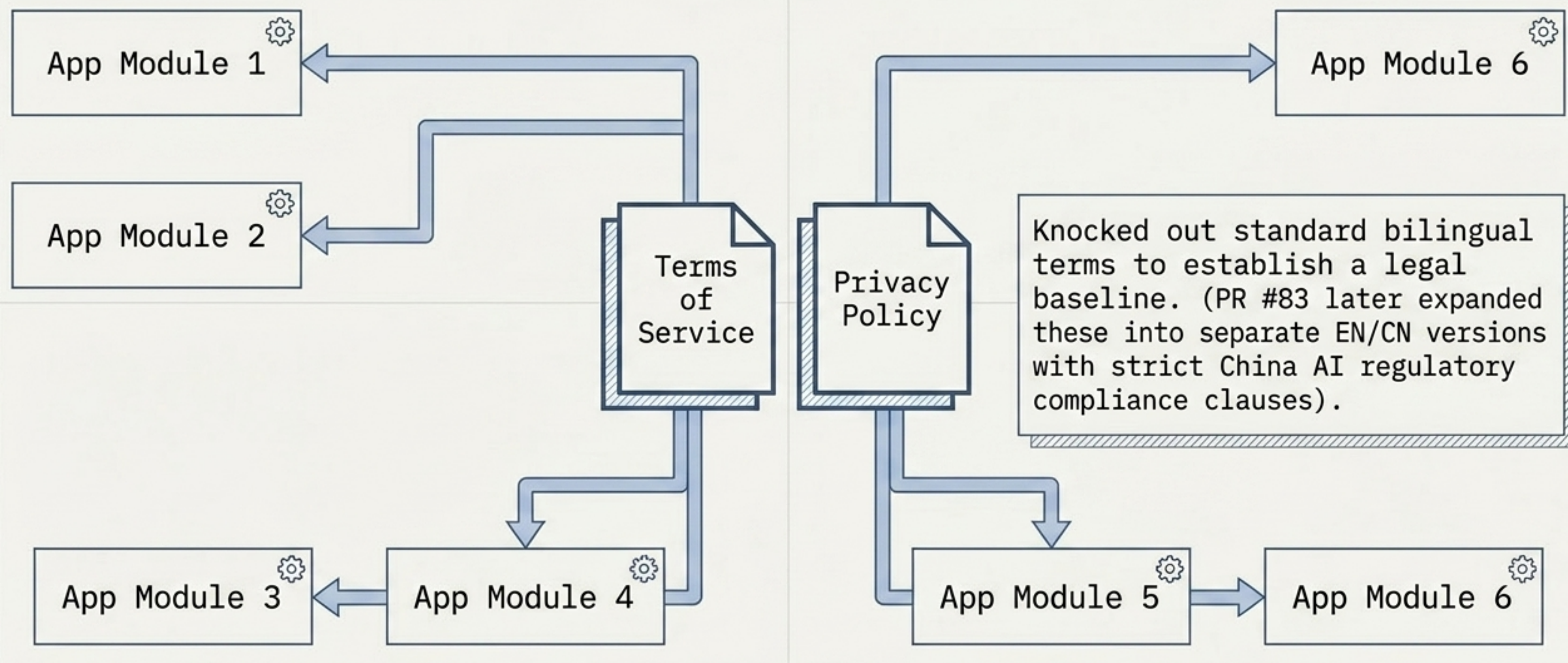
Metaphysics applications naturally generate terms that trigger naive keyword bans. A smarter, structural approach was required to block sensitive regulatory words while allowing domain-specific terminology.

Implementing a Deterministic Finite Automaton (DFA) sensitive word filter



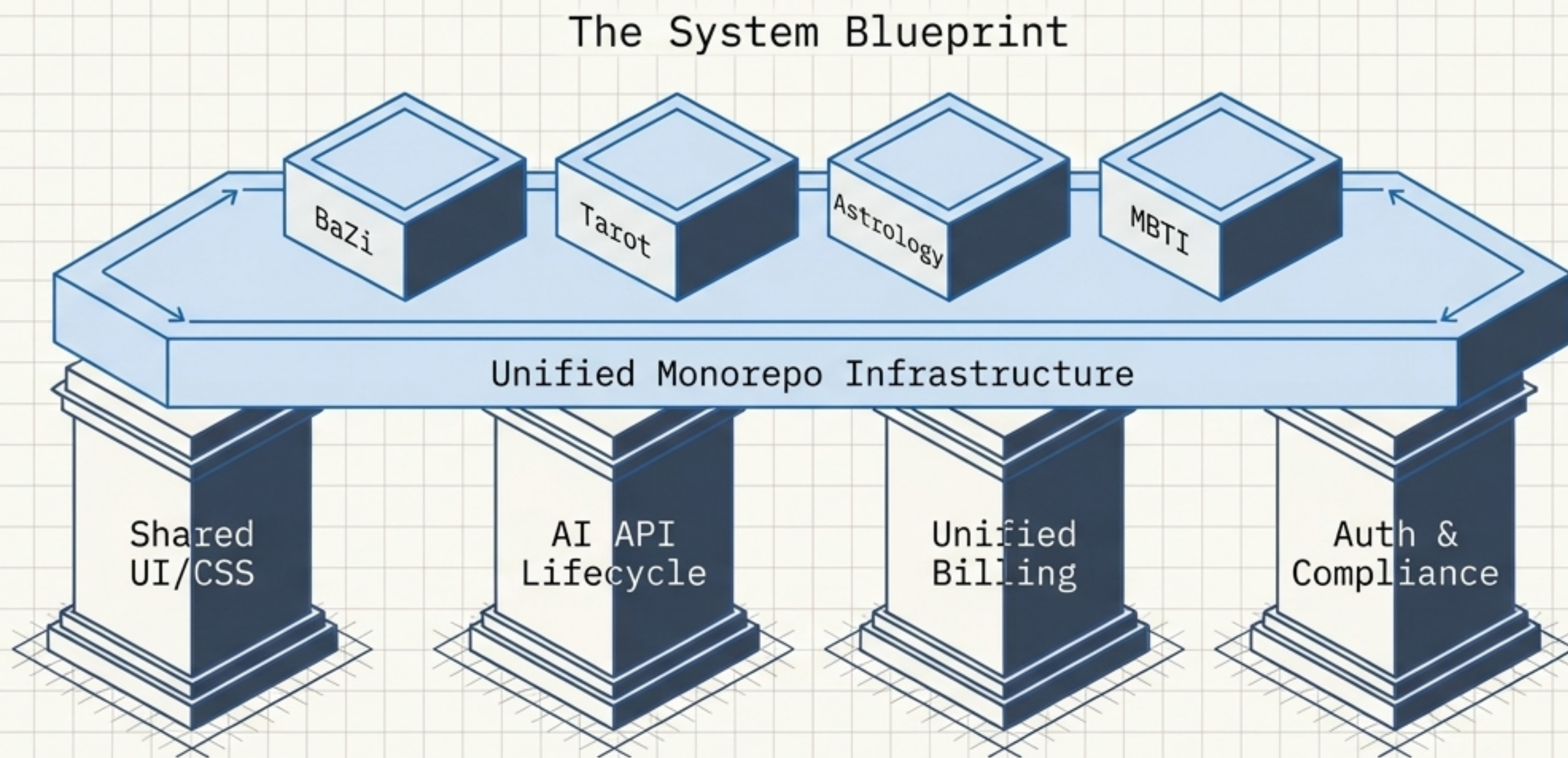
The DFA approach builds a trie from a targeted word list. It streams text character-by-character, allowing granular control over exact sensitive phrases (v1 blocked the entire message upon detection).

Scaling requires unified bilingual compliance and legal terms



The Platform Multiplier: 11 PM on Day 4

ONE LOGIN. ONE CREDIT BALANCE. SIX PRODUCTS.



The sprint ended. Five siloed apps were gone. The platform was live.