

Building 9 Products in an Unknown Domain



Quest Log

Timeframe: 29 Days

Scale: 9 Product Verticals

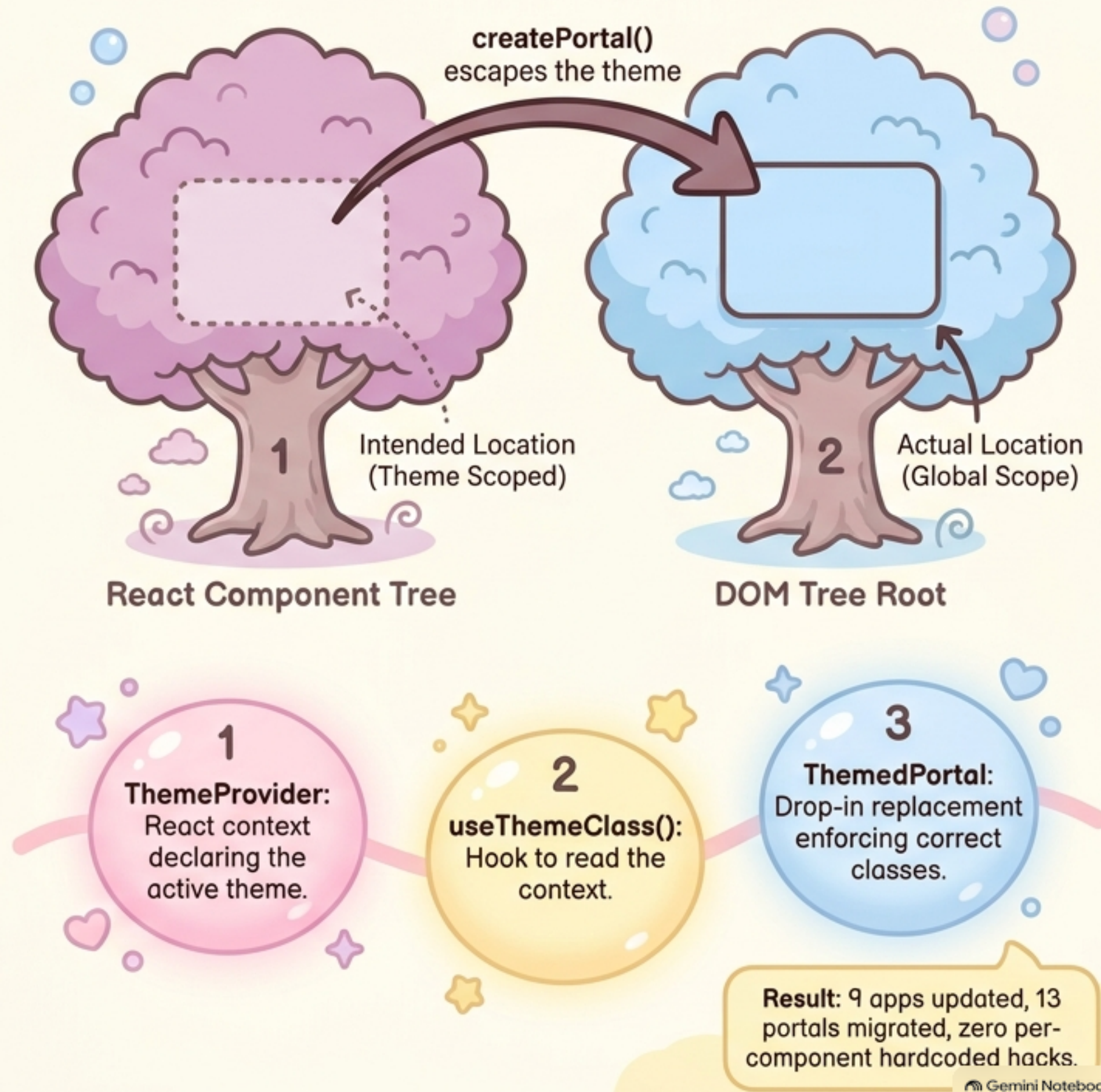
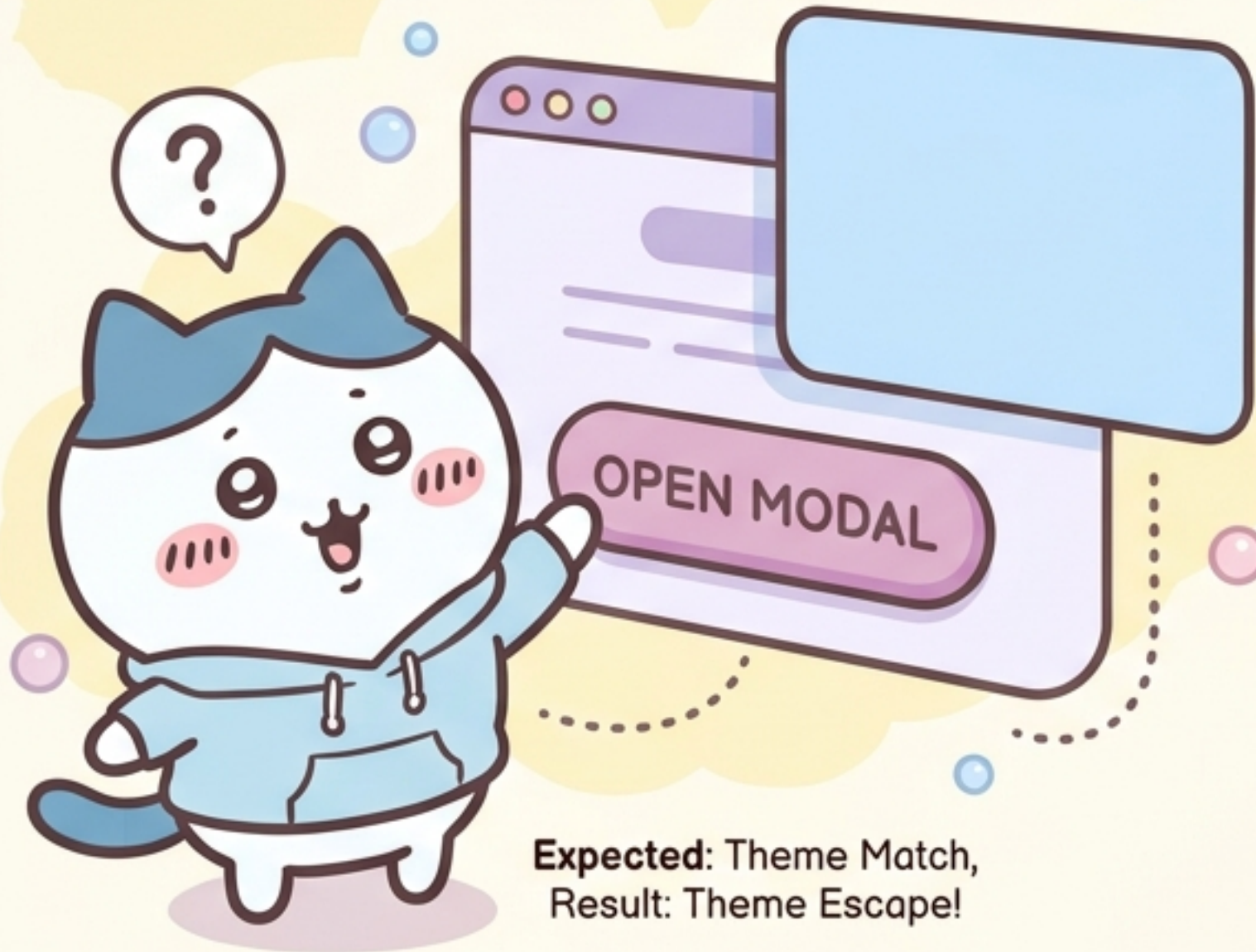
Output: 1,134 Commits |
109 Pull Requests

Domain Knowledge: 0 (Still
looking up Heavenly Stems)

Can a single engineer, augmented by AI, build a multi-product platform from scratch? The answer lies in surviving the edge cases.

The React Portal Illusion (PR #67)

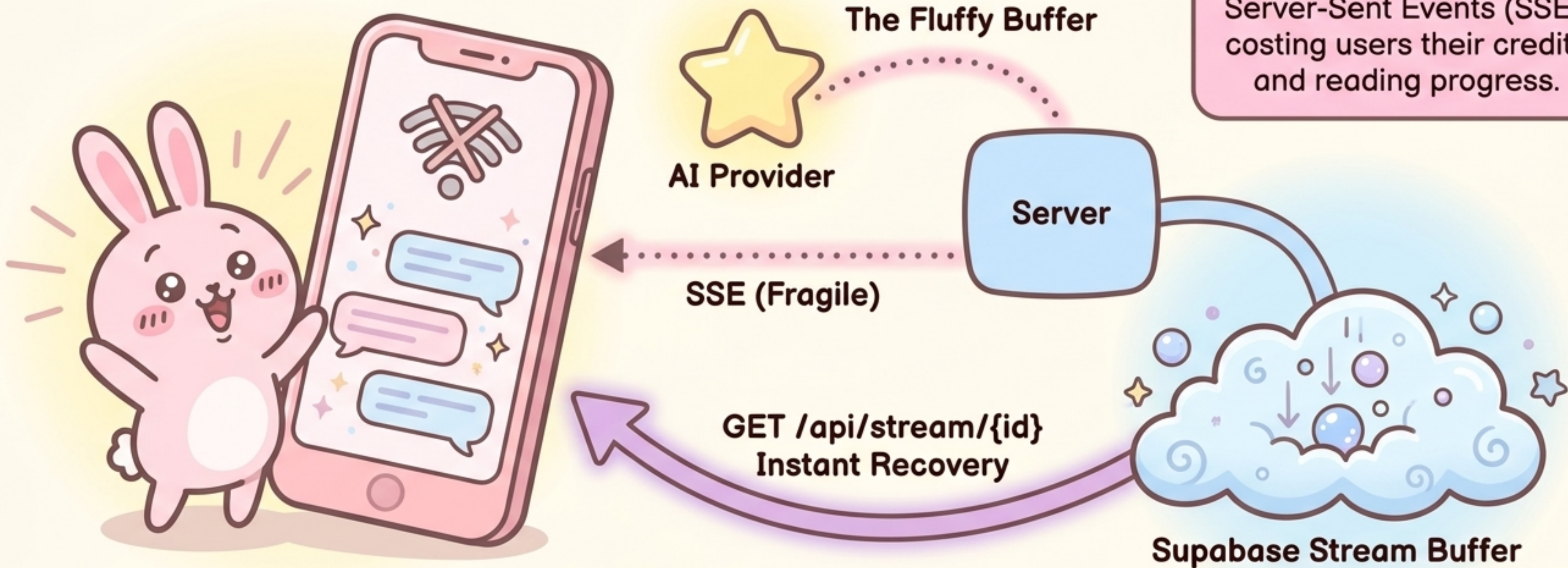
CSS variables scoped to an app's theme are invisible to modals. CSS inheritance follows the DOM tree, entirely bypassing the React component tree.



Resilient AI Streaming Infrastructure (PR #105)

The Vulnerability:

Mobile connection drops kill Server-Sent Events (SSE), costing users their credits and reading progress.



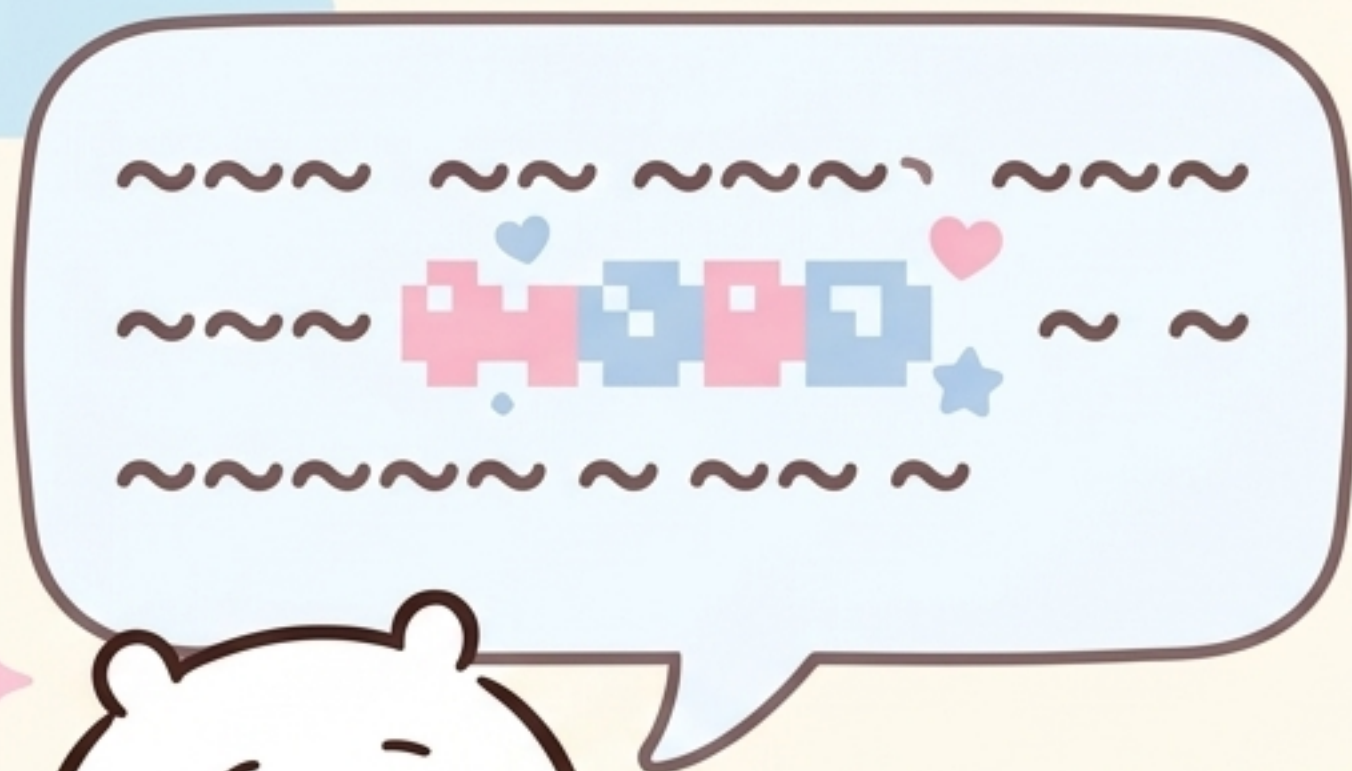
Buffer all 19 AI routes to stream_buffers table.

Provide client recovery via unified useAIStream hook.

Clear expired buffers with a 15-minute cron job.

The Paradoxical Win: Achieved a net -186 lines of code by unifying 3 inconsistent patterns.

Evolving the Boundary-Safe Filter (PR #104)



Filter Iteration History

	V1: DFA Keyword Block	Blocks entire message. Bad UX.
	V2: Stream-Aware Truncate	Cuts stream mid-sentence. Users lose credits.
	V3: Inline Masking (PR #104)	Replaces sensitive words with inline masking. Stream continues uninterrupted.

Dual-Filter Architecture



(Input) Aggressive Mode:
Blocks ads, politics, and illicit content prior to AI processing.



(Output) Relaxed Mode:
Allows fortune-telling specific terms that normally trigger blunt ad-blockers.

The Technical Hurdle: Boundary-safe masking requires evaluating the full accumulated buffer before splitting it, ensuring sensitive words spanning chunk boundaries are successfully caught.

Scaling Up by Tearing Down



The Final Polish (PR #83 & #102)



i18n Centralization

-223 lines from consumers, +607 lines centralized. 180 lines of duplicated maps eliminated.



China AI Compliance

PIPL transfer mechanisms, automated decision-making transparency, and a 5-step / 72-hour regulatory breach response procedure.

The Hypothesis Proven: The velocity of a solo engineer is real. The domain knowledge gap is bridgeable. With AI augmentation, building the whole product—not just the engineering—is entirely possible in 29 days.