

Building the Machine Gun Crab

```
struct Crab_Entity {  
    const k_ = "D";  
    int foe_ne_mill = 1000;  
    tab helle;  
    // ... p_y =  
    function fire() {  
        coche.generate(Entity?);  
        return fire();  
    }  
}
```

Shipping with
Claude Code:
A 2,000-line
AI Case Study.



Crab Unit Overview

Deployment Stats

From Inspiration to Execution in 6 Hours



1

The Catalyst

pretext

Discovered **pretext** — a library for DOM-free layout measurement running at 120fps.

2

The Question

What if the text on my portfolio became interactive physics objects?

3

Retro Terminal

xiax.xyz (Terminal)

```
> INITIALIZING...  
PHYSECS ENGINE: ACTIVE...  
RENDERING 20 COLLIDERS...  
> |
```

Modern Web Wireframe

nlog.xiax.xyz (Next.js)

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Dynamic Physics Text

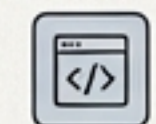
Learn more about our latest, revolutionary technology, see our newest features.



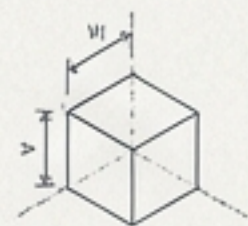
7
Distinct Effects



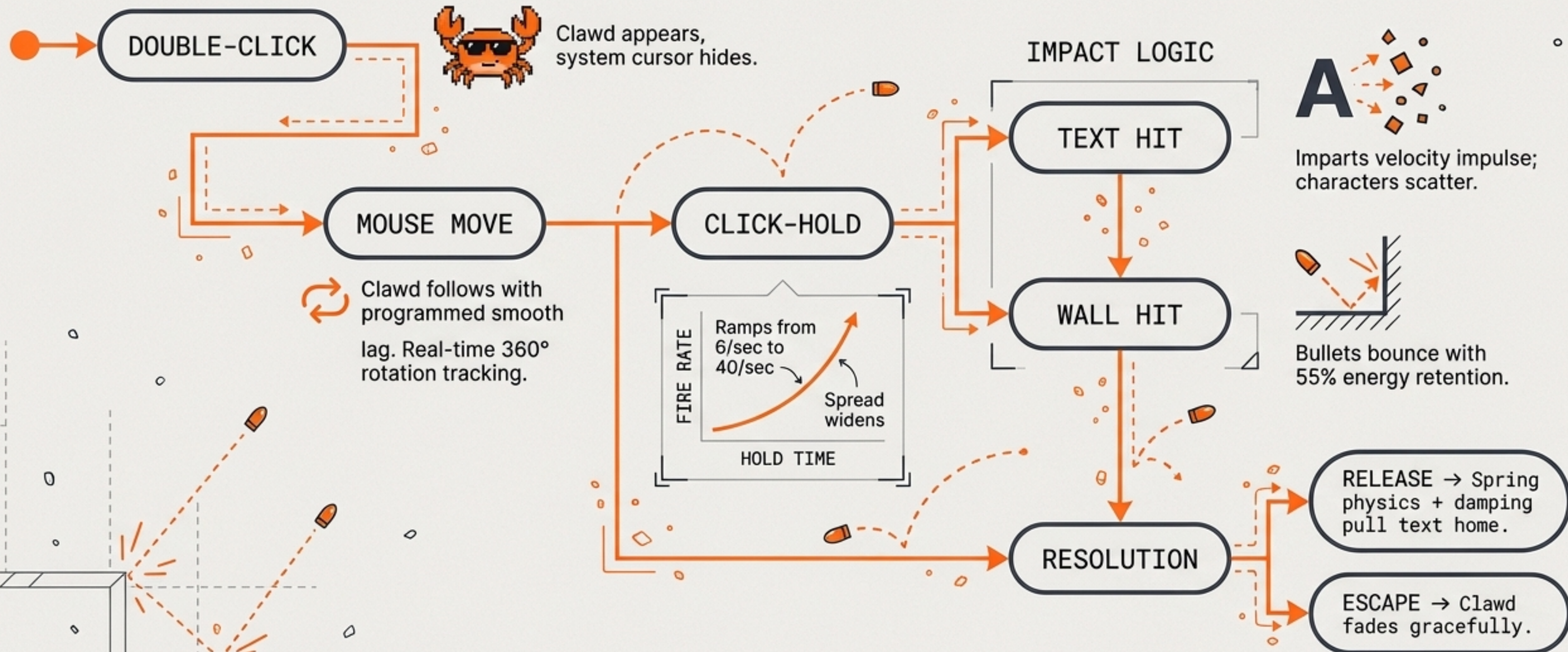
2
Radically Different Tech Stacks



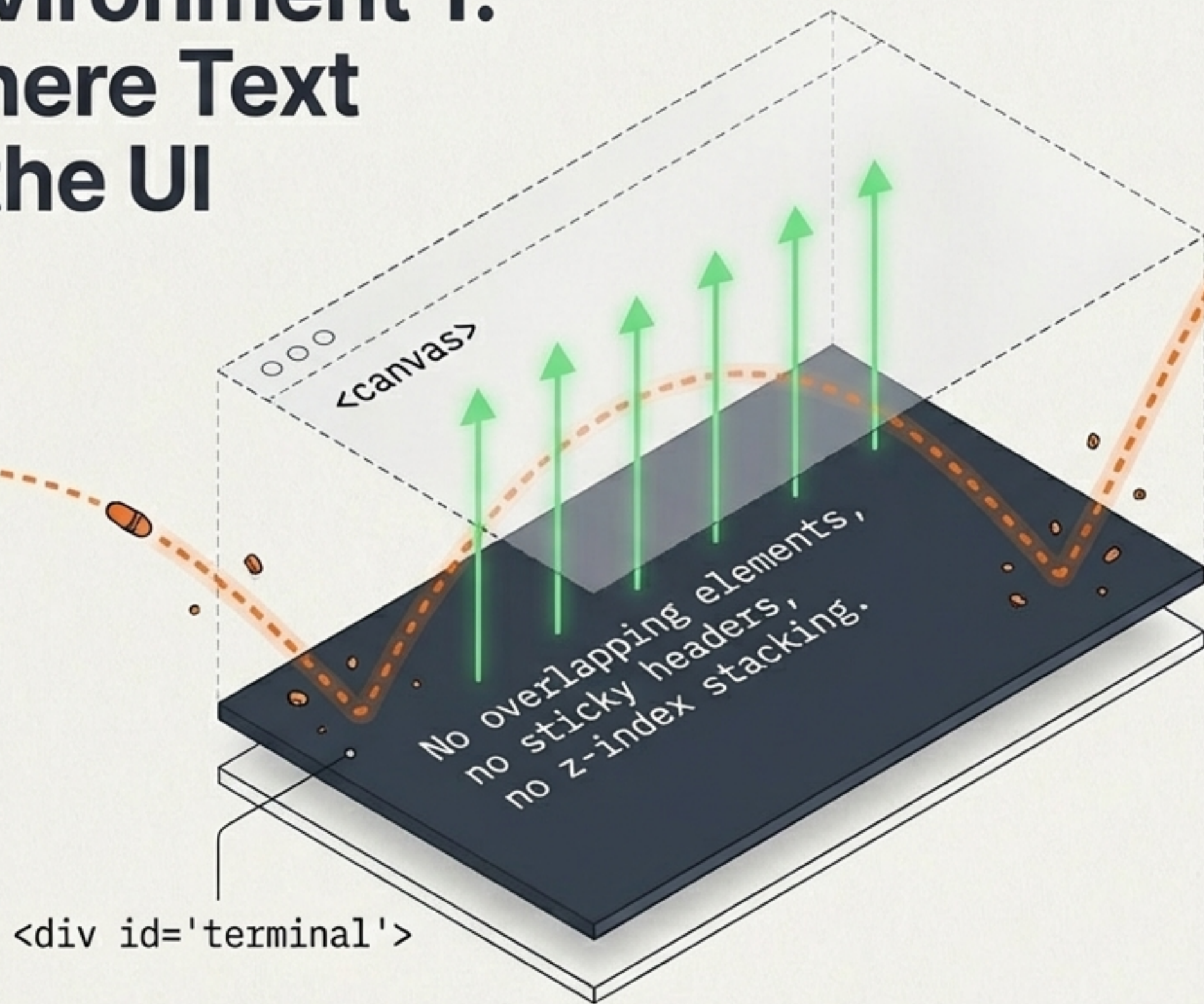
2,000+
Lines of AI-Generated Code.



The Anatomy of an Easter Egg



Environment 1: Where Text Is the UI



Architecture:
Single Div Container

Stack:
Pure Vanilla JS

Dependencies:
Zero

Advantage:
Perfect for 1:1
Text-to-Canvas Extraction

The 5,000-Node DOM Challenge



5,000+ per-character DOM reads = Browser Freeze.

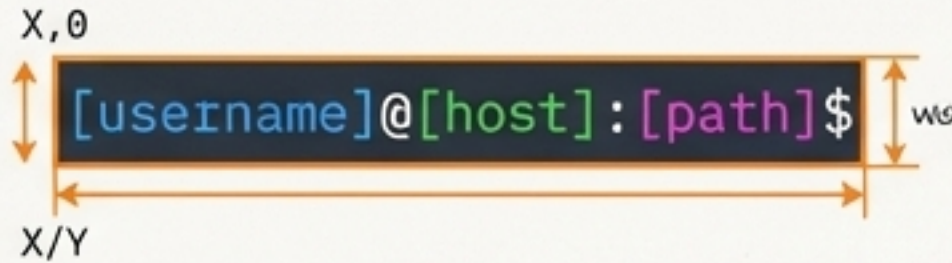
5,000,0335.100



~200 DOM reads = Imperceptible Latency.

~200 DOM

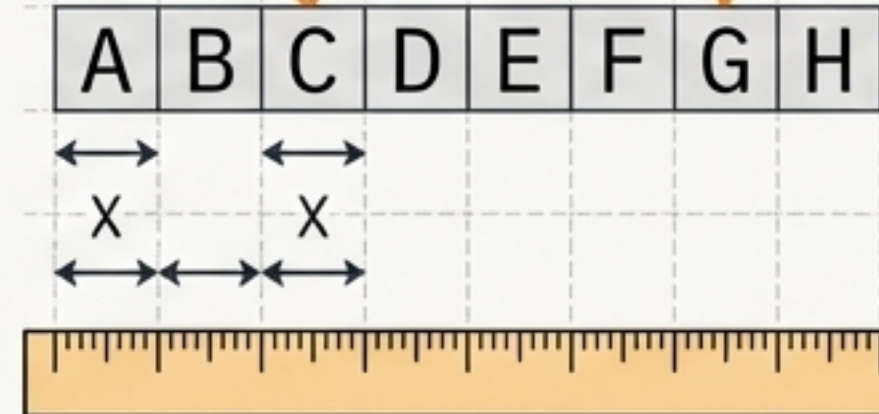
Step 1: The Bulk



Call `getBoundingClientRect()` on whole text nodes, not individual characters. Grabs exact X/Y and node colors.

Step 2: The Math

Apply **Monospace Math**. Calculate individual character positions mathematically based on fixed character width.



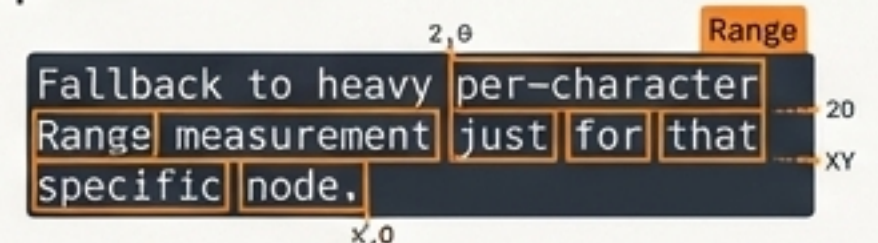
Step 3: The Edge Case

Did the text wrap?

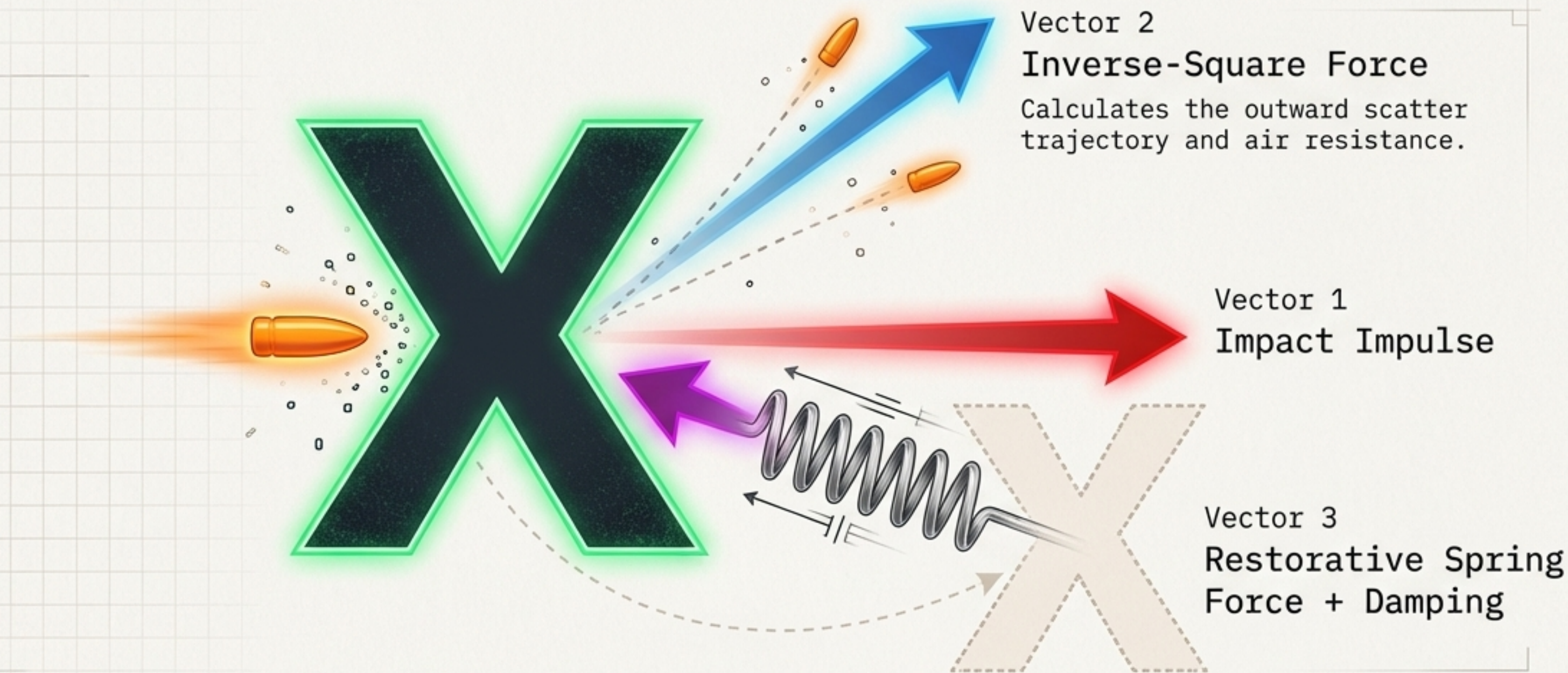
No

Yes

Fallback to heavy per-character **Range** measurement just for that specific node.



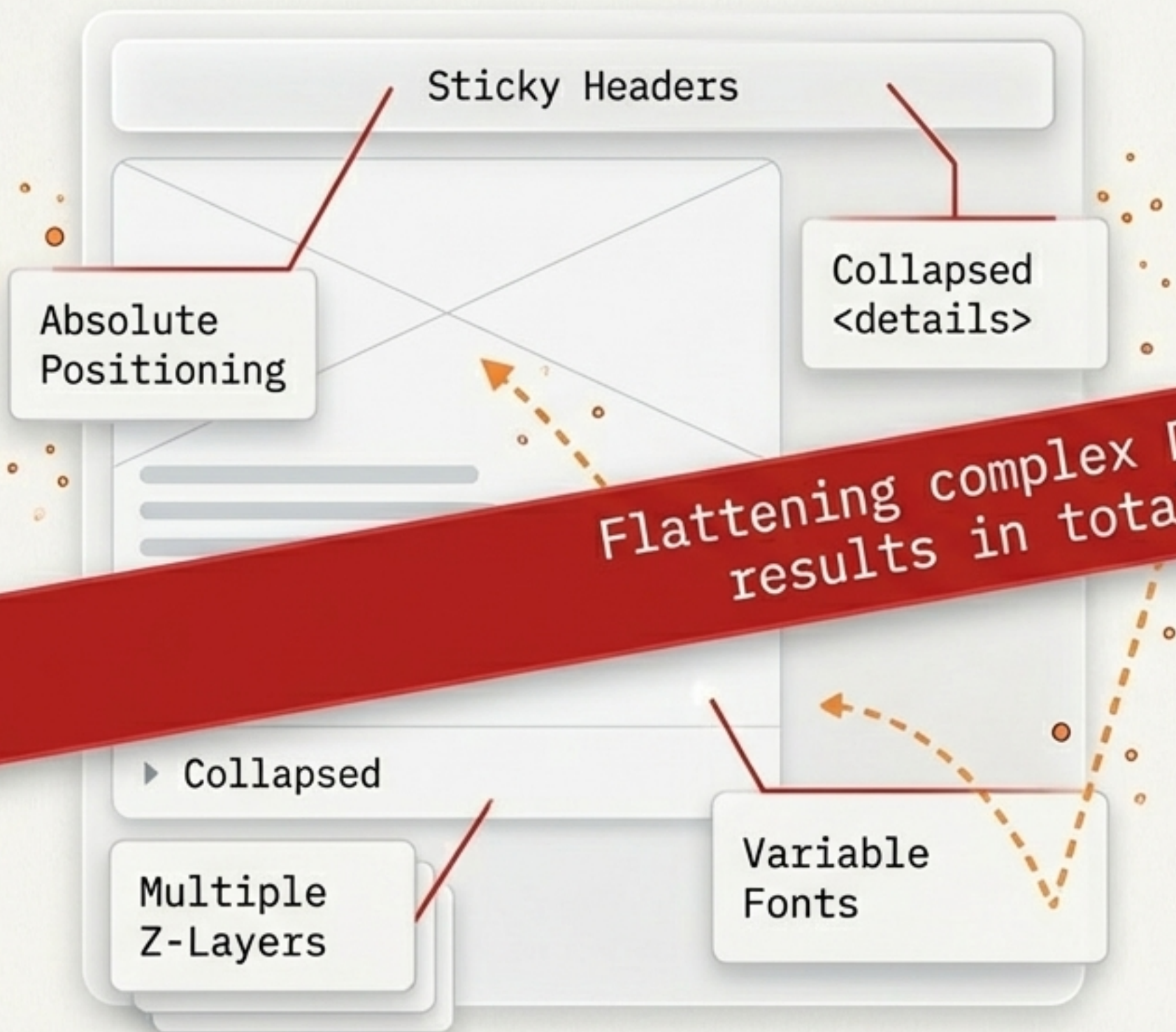
Chaos & Order: The Math of the Bounce



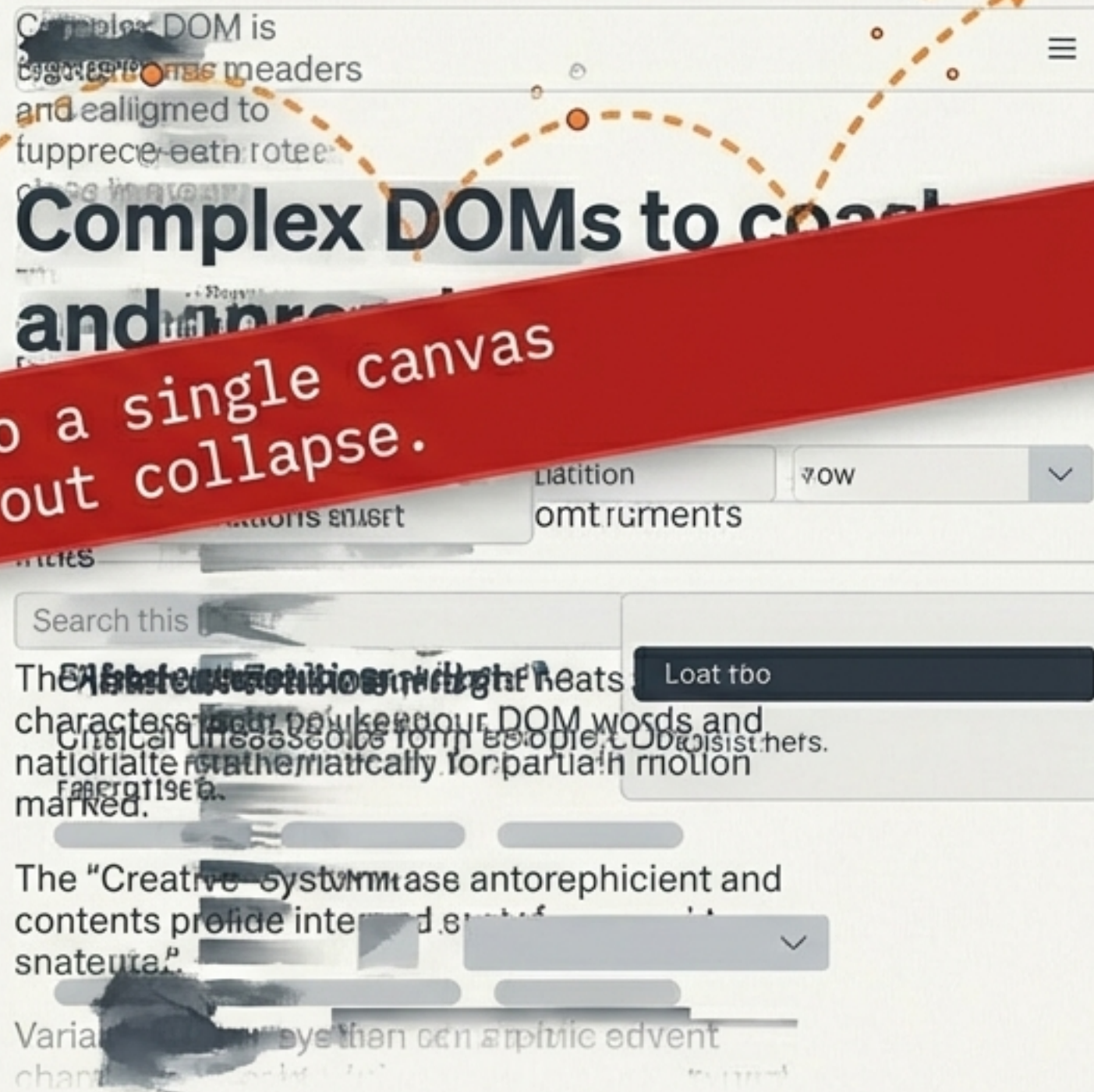
Performance Output: Silky 60fps / Zero Layout Reflows (100% Canvas-Rendered).

Complex DOMs Break Simple Canvas Tricks

The Reality - Next.js Blog (nlog.xiax.xyz)

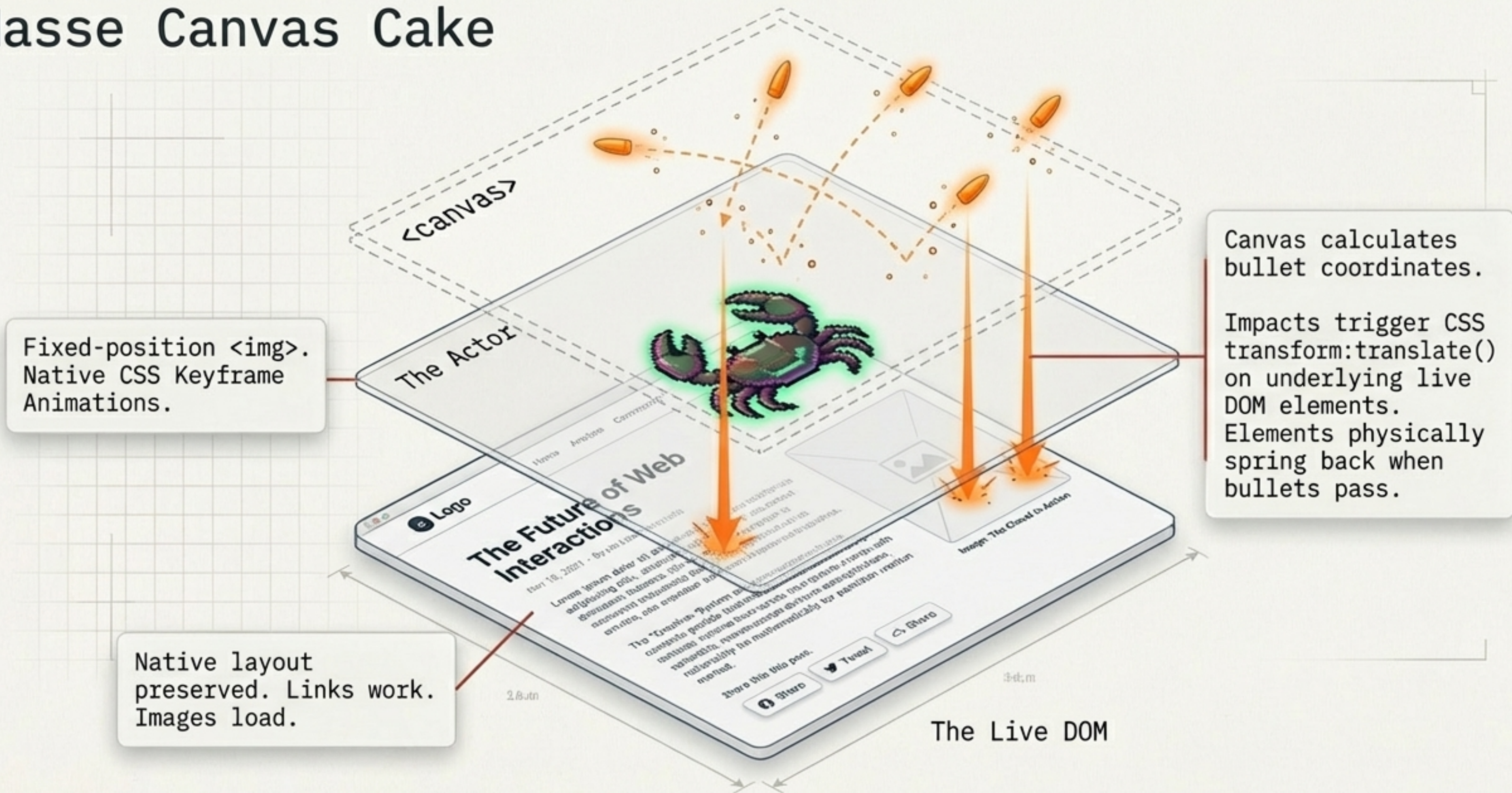


The Catastrophe



Environment 2: Don't Canvas the Text. Move the DOM.

Masse Canvas Cake



Two Environments, Two Architectures

Terminal (xiax.xyz)		Next.js Blog (nlog.xiax.xyz)	
Layout Complexity	Single Div, Monospace.	Variable Fonts, Multiple Z-Layers.	
Rendering Engine	100% Canvas override.	Live DOM + Transparent Canvas Overlay.	
Animation Method	Canvas requestAnimationFrame.	CSS Keyframes & Transforms.	
DOM Handoff	Read DOM once, render forever on Canvas.	Physics engine actively pushes live live DOM nodes.	

2,000 Lines, 10 Files, 1 AI Agent



The Hidden Arsenal

Terminal Site (xiax.xyz)



Explosion: Click any tab to scatter characters.



Typewriter: New tab content types in natively.



Clawd Core: Double-click for crab + bouncing bullets.

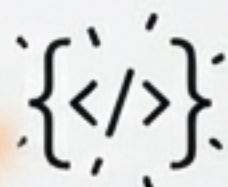
Blog Site (nlog.xiax.xyz)



Post Card Explosion: Click a post; card shatters before navigating.



Tag Cloud Physics: Click a tag; elastic bounce scatters peers.



Code Block Shatter: Double-click code; chars scatter and reassemble.



Reading Reward: Scroll to post end for a confetti burst.



Global Clawd: Double-click anywhere.

Architecture-Safe: All effects utilize `dynamic import()` to bypass SSR issues, and strictly respect OS-level `prefers-reduced-motion` settings.

Your Turn to Play

> visit xiax.xyz

Double-click anywhere. Drag to aim. Watch the bounce.

>_



> input Konami Code on nlog.xiax.xyz

Type `↑↑↓↓←→←→BA` for permanent Clawd mode that survives page loads.



> navigate to `/doesnotexist`

Trigger the 404 secret.