



adaptTo()

ADAPTTTO() 2026

Tales from the AEM Migration Trenches



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THE ASK

"Make migrating a website to AEM Edge Delivery Services fast and easy."

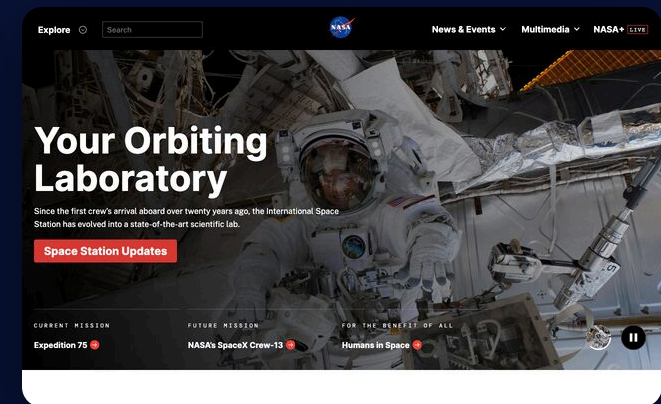
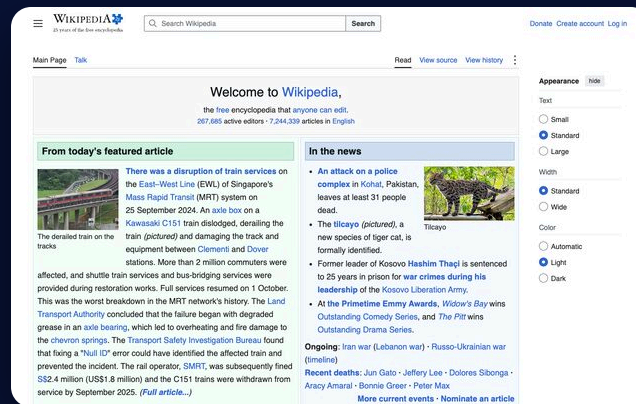
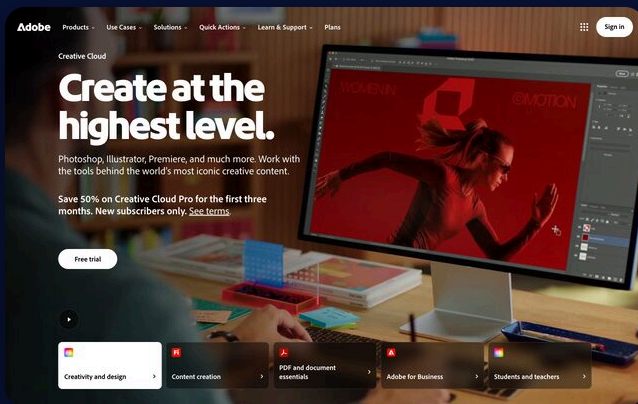
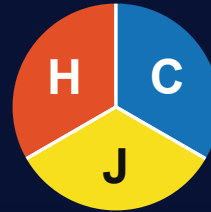
— a Product Management request, ~3 years ago

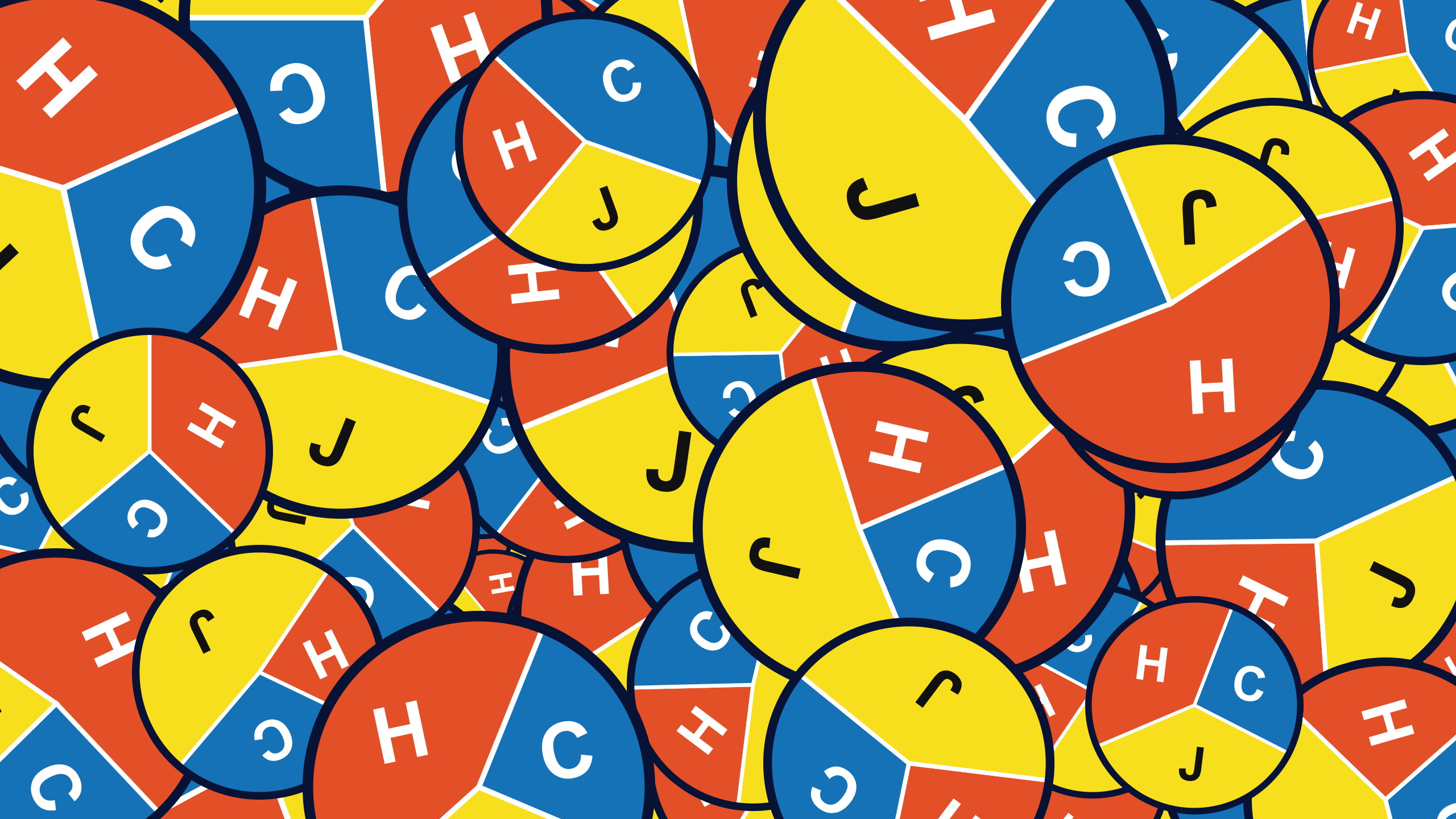
The problem is infinite.

HTML

CSS

JS







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The journey... so far.

	The machine
I	A helper script
II	VIP project automation on Github
III	A conversational studio + <i>skills</i>
IV	Everything in the browser
V	<i>The road ahead...</i>



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ACT I · 2024

Where it started.



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One Bash script to rule the migration.

demo.sh: 1,309 lines

- Orchestrates `helix-importer-ui`, Puppeteer
- Visual decomposition: boxes first, meaning second
- Blocks found by XPath, screenshotted one by one
- No AI anywhere in it

Manual page decomposition

 **AEM Importer**

Import - Express

Import - Fragment Creator

Import - Workbench

Import - Bulk

Crawl

Eyedropper

Import - Fragment Creator

Fragment creator allows quick creation of fragments based on a page.

URL *

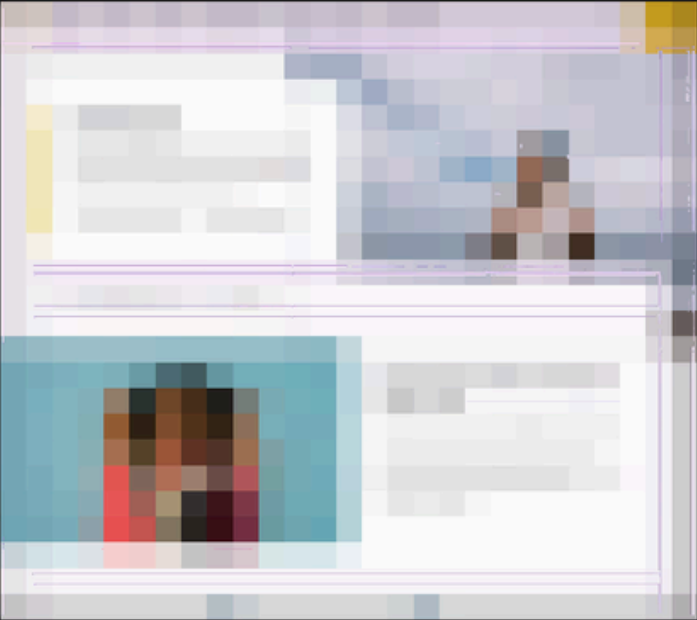
> Load Options

> Detect Options

Detect Sections

Import

Page preview



Mapping Preview Rules Markdown HTML

Add Fragment

i

/nav

/credit-cards

Settings

Fragment Path (ex. /index)

Sections

i

box-id--1723827067

0 x 0

Hero

Custom Block Name

box-id--1511540031

0 x 0

Default Content

Custom Block Name

box-id--1511540000

2 x 1

Columns

Custom Block Name

/footer

@adobe/helix-importer-ui@1.51.27

7

Manual page decomposition

AEM Importer

- Import - Express
- Import - Fragment Creator**
- Import - Workbench
- Import - Bulk
- Crawl
- Eyedropper

Import - Fragment Creator

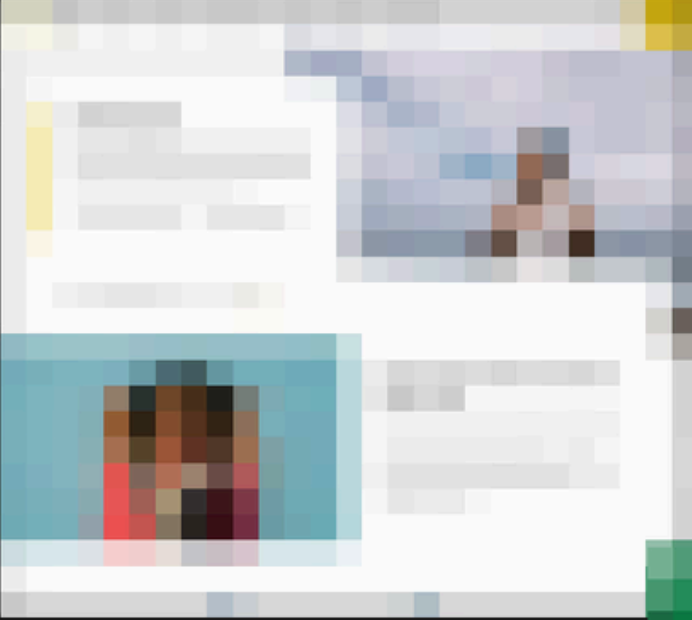
Fragment creator allows quick creation of fragments based on a page.

URL *
https://www.example.com

> Load Options
> Detect Options

Detect Sections **Import**

Page preview

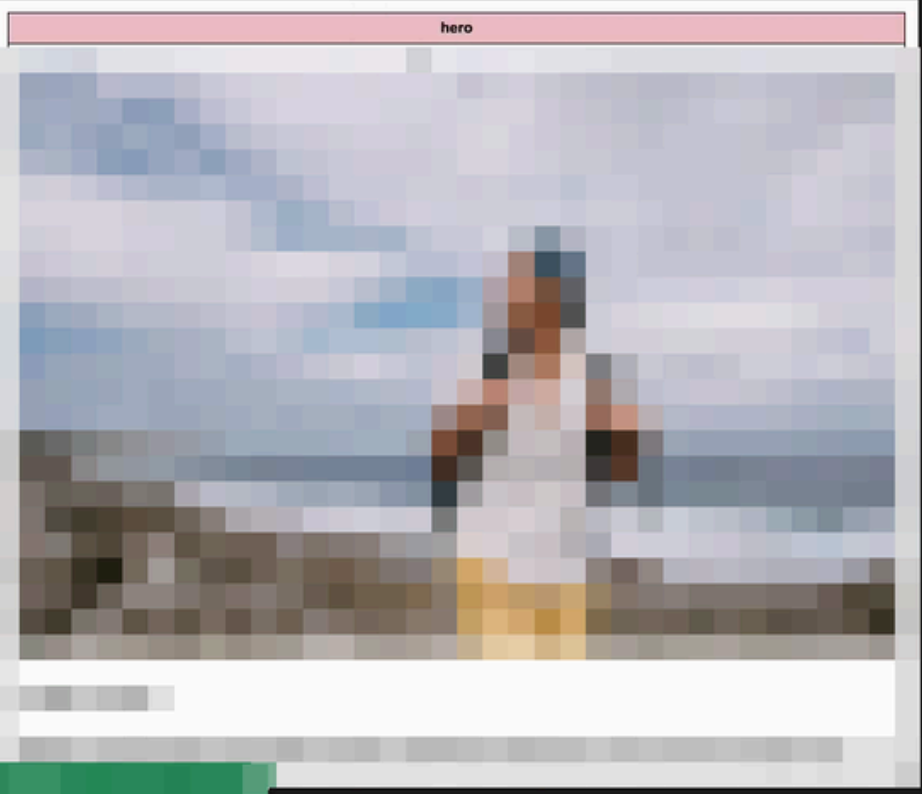


@adobe/helix-importer-ui@1.51.27

Mapping Preview Rules Markdown HTML

/credit-cards

hero



7



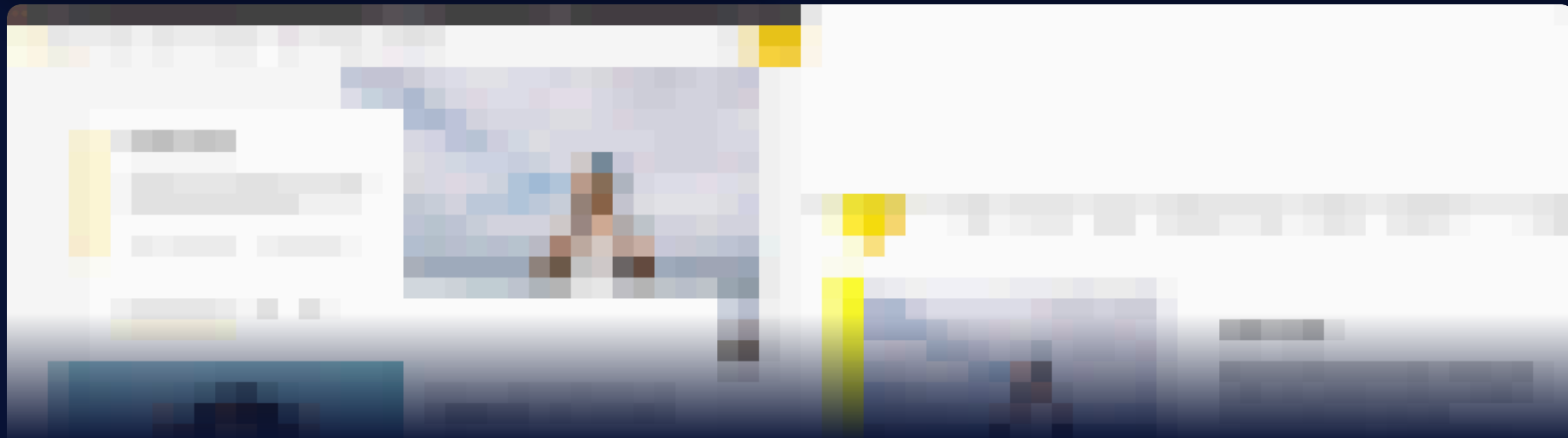
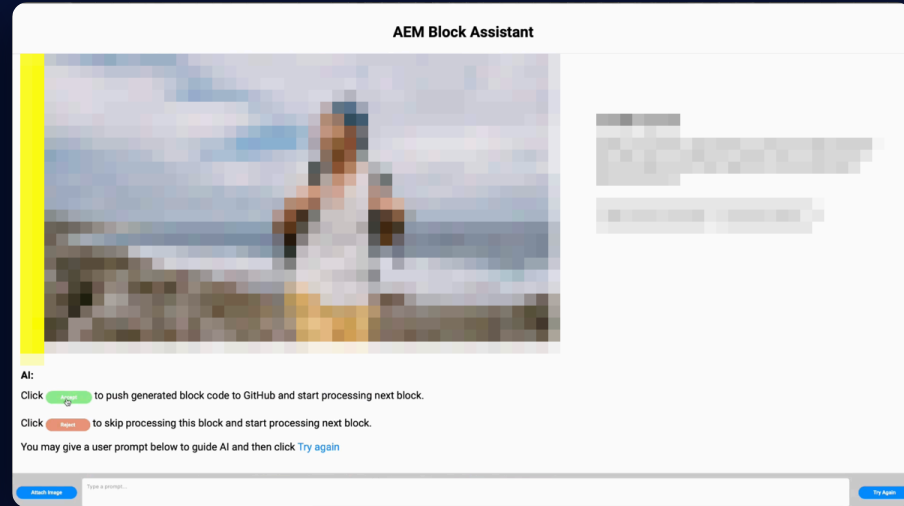
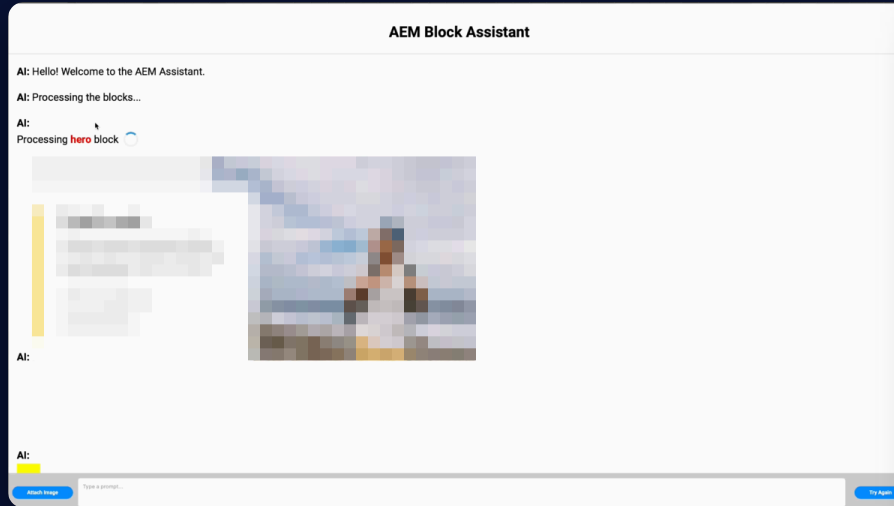
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July 18, 2024: the first LLM.

```
AEM_BLOCK_ASSISTANT=false    # opt-in  
OPENAI_API_KEY=...           # only billed if you dare
```

An **optional polish step** for block styling.
The tool worked fine without it.

| Visual boxes handled layout. They couldn't judge meaning.





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THE MIGRATION MISSION

Every migration is three jobs.

- **Project setup:** the repository, the Edge Delivery project, authoring wired up
- **Content:** every page imported, and still authorable
- **Code:** blocks, styles and scripts that render it like the original



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ACT II · NOV 2024 – OCT 2025

Agents before "agents."



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The moving parts.

18 repositories · ~2,865 commits · Azure Container Apps

```
GitHub issue (label: mig-help)
```

```
└─> coordinator — GitHub App webhooks
```

```
    │└─> blueprint-detector  layout fingerprint, no LLM  
    │└─> mapping            clusters → blocks, LLM match  
    │└─> importscript       LLM-generated JS parsers  
    │└─> styles             multi-model CSS loops  
    └─> critic              vision eval
```



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Every agent, one protocol (2024).

```
export class Agent {  
  getTools()           // declared functions  
  canHandleFunction(name) // dispatch test  
  callFunction(ctx, call) // executor  
}  
// callbacks: ok / error / progress / update
```

Declared tools, async HTTP callbacks, and a coordinator: **AEMY**, our GitHub App.

| Did I hear *harness*?



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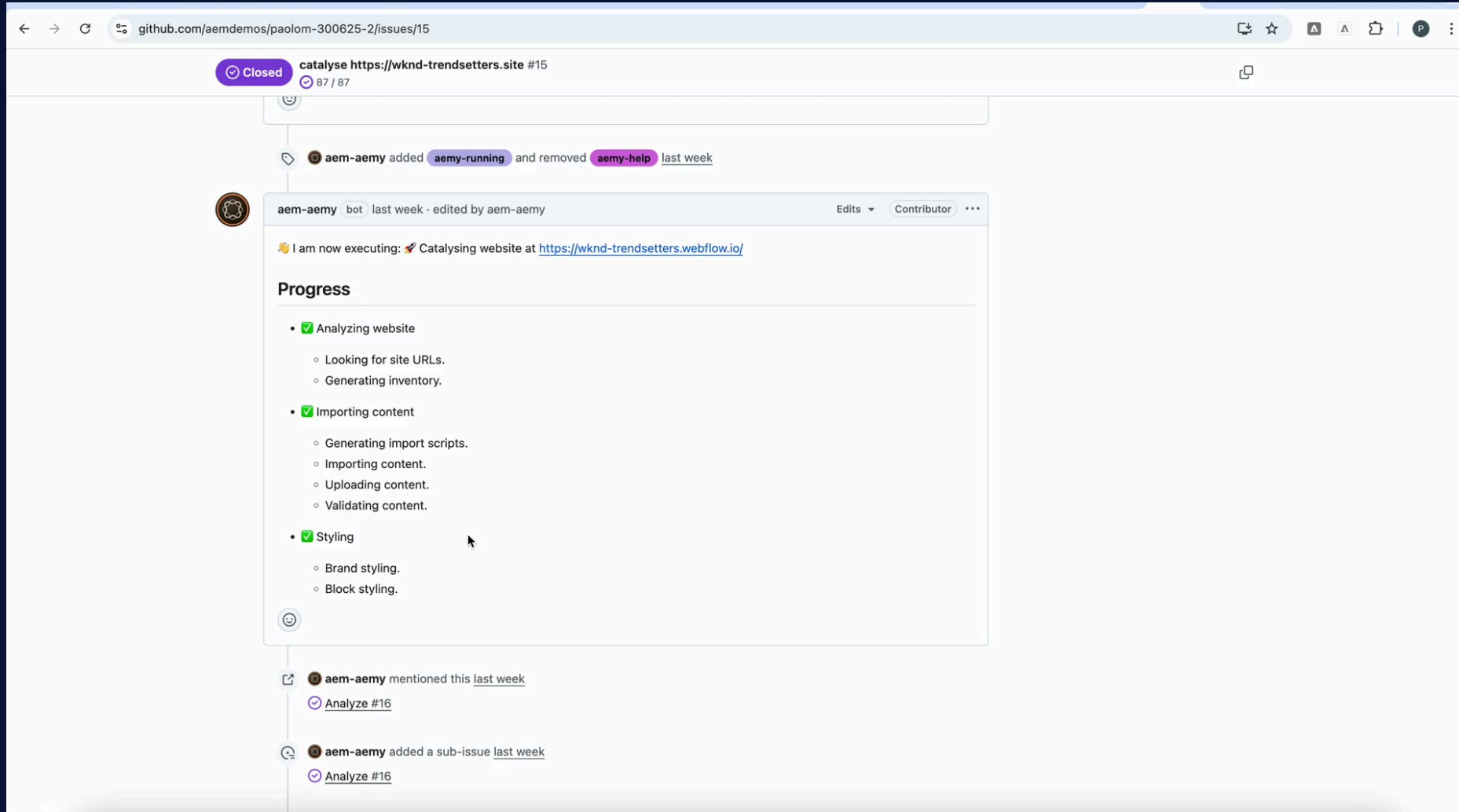
WHAT IT COST US

Ah. No. We were far from a harness!

- 1,070 commits, just in the Azure function-apps repo
- Terraform + Bicep + App Insights + Key Vault
- Promptfoo evals for every LLM agent
- Semantic-release plumbing × 18 repos

| We built our own agents. We also built our own hole to climb out of.

Video Recap

A screenshot of a GitHub issue page for the repository "aemdemos/paolom-300625-2". The issue is titled "catalyse https://wknd-trendsetters.site #15" and is marked as "Closed". The issue body shows a comment from the bot "aem-aemy" dated "last week". The comment states: "I am now executing: Catalysing website at https://wknd-trendsetters.webflow.io/". Below this, a "Progress" section lists three main tasks, each with a green checkmark and a list of sub-tasks: "Analyzing website" (Looking for site URLs, Generating inventory), "Importing content" (Generating import scripts, Importing content, Uploading content, Validating content), and "Styling" (Brand styling, Block styling). The bottom of the issue shows two more comments from "aem-aemy": "aem-aemy mentioned this last week" with a link to "Analyze #16", and "aem-aemy added a sub-issue last week" with a link to "Analyze #16".

ACT III · OCT 2025 - EMA (EXPERIENCE MODERNIZATION AGENT)

The conversational era.



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"Just have the conversation."

One studio: **chat + code + content + preview**

- User: *"migrate this page"*, and the LLM picks it up
- Claude Agent SDK, per-user isolated workspaces
- Last-mile fixes happen in the chat, on live preview
- In production with Adobe Sales and partners today



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Early October 2025.

```
excat/  
├── CLAUDE.md  
├── agents/  
│   ├── excat-eds-migration-expert.md  
│   ├── excat-design-token-expert.md  
│   ├── excat-eds-debugger.md  
│   ├── excat-eds-developer.md  
│   └── excat-navigation-expert.md  
├── commands/upload.md  
├── hooks/auto-convert-md.js  
└── tools/excatops-mcp/
```

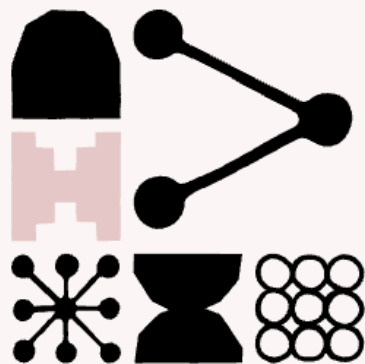
Every conversation with Claude Code left **instructions**, **scripts** and **snippets** behind.
We kept asking Claude to read them, look at them, run them.

ANTHROPIC

Research ▾ Policy Commitments ▾ Learn ▾ News

Try Claude ▾

Engineering at Anthropic



Equipping agents for the real world with Agent Skills

Published Oct 16, 2025

Claude is powerful, but real work requires procedural knowledge and organizational context. Introducing Agent Skills, a new way to build specialized agents using files and folders.

Update: We've published [Agent Skills](#) as an open standard for cross-platform portability. (December 18, 2025)



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October 17, 2025.

```
commit d2b54171
Skills (#60): feat: move subagents to claude skills

agents/ → skills/
```

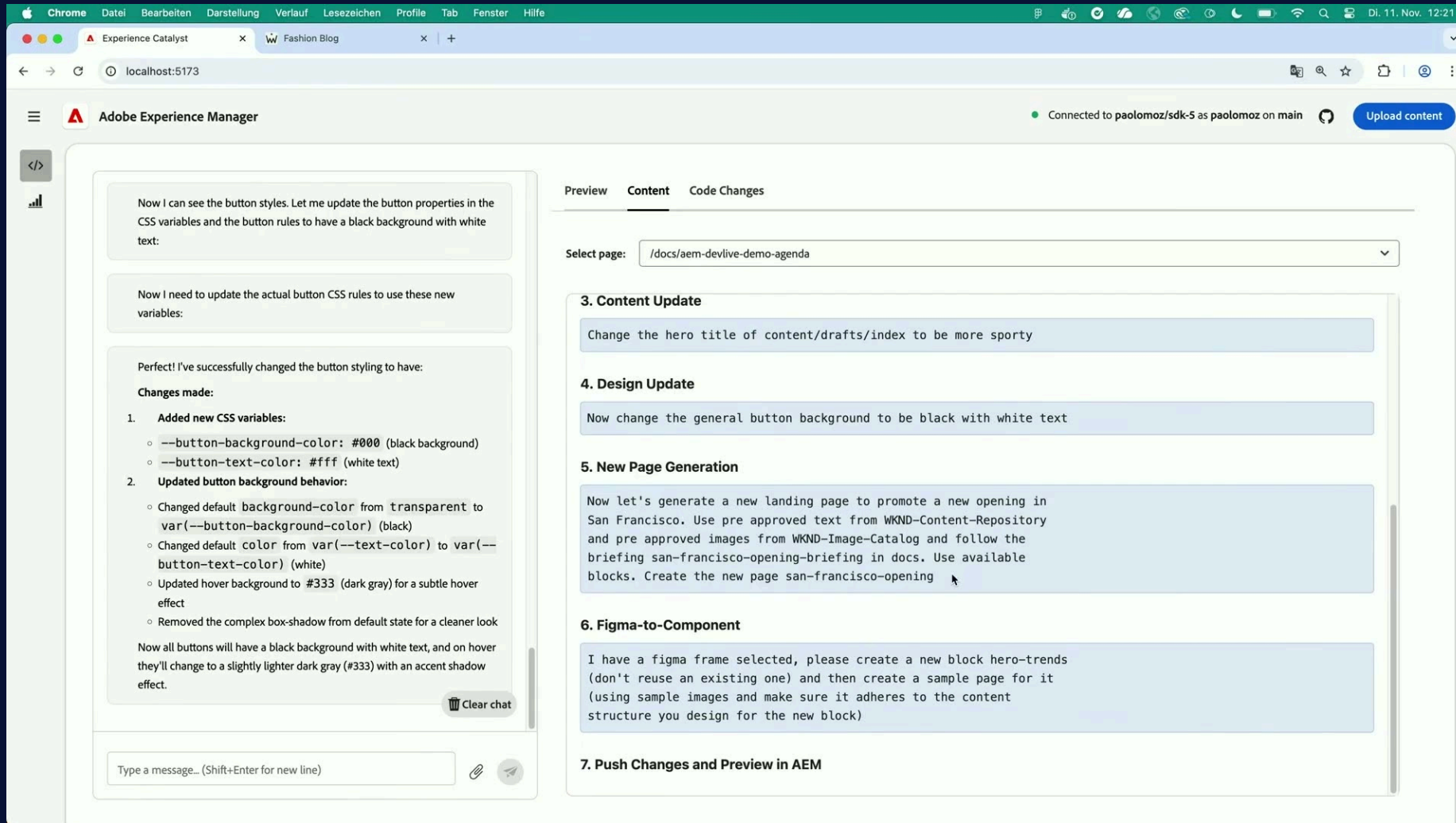
A small commit that changed how we built everything after it.

And we upstream it.

Adobe's **official open-source skills** for AEM, installable in Claude Code and Friends, today.
Our migration work ships there as public skills **for Edge Delivery Services**:

- **Page import pipeline:** `page-import` · `scrape-webpage` · `identify-page-structure` · `page-decomposition` · `authoring-analysis` · `generate-import-html` · `preview-import`
- **Block development:** `building-blocks` · `content-driven-development` · `content-modeling` · `block-collection-and-party` · `block-inventory` · `find-test-content` · `testing-blocks` · `code-review`
- **Site & content ops:** `create-site` · `da-content` · `da-auth` · `aem-cli` · `ue-component-model`
- **Planning & docs:** `analyze-and-plan` · `docs-search`
- **Plus, lower level (web plugin):** `browser-probe` · `page-prep` · `page-tree` · `page-reduce` · `page-collect` · `page-langs` · `cdp-connect` · `cdp-ext-pilot` · `domain-mask`
- **New, stardust plugin (15 skills):** audit, redesign or replicate a whole site, migrate it and roll it out to Edge Delivery Services (built on *impeccable*)

Video Recap



The screenshot shows the Adobe Experience Manager (AEM) interface. The top navigation bar includes tabs for 'Experience Catalyst' and 'Fashion Blog'. The main content area is divided into two sections: a chat window on the left and a content update panel on the right.

Chat Window (Left):

- Message 1:** "Now I can see the button styles. Let me update the button properties in the CSS variables and the button rules to have a black background with white text:"
- Message 2:** "Now I need to update the actual button CSS rules to use these new variables:"
- Message 3:** "Perfect! I've successfully changed the button styling to have:"
- Changes made:**
 - 1. **Added new CSS variables:**
 - `--button-background-color: #000` (black background)
 - `--button-text-color: #fff` (white text)
 - 2. **Updated button background behavior:**
 - Changed default `background-color` from `transparent` to `var(--button-background-color)` (black)
 - Changed default `color` from `var(--text-color)` to `var(--button-text-color)` (white)
 - Updated hover background to `#333` (dark gray) for a subtle hover effect
 - Removed the complex box-shadow from default state for a cleaner look
- Message 4:** "Now all buttons will have a black background with white text, and on hover they'll change to a slightly lighter dark gray (#333) with an accent shadow effect."

Content Update Panel (Right):

- Preview Content Code Changes**
- Select page:** `/docs/aem-devlive-demo-agenda`
- 3. Content Update**
 - Change the hero title of content/drafts/index to be more sporty
- 4. Design Update**
 - Now change the general button background to be black with white text
- 5. New Page Generation**
 - Now let's generate a new landing page to promote a new opening in San Francisco. Use pre approved text from WKND-Content-Repository and pre approved images from WKND-Image-Catalog and follow the briefing san-francisco-opening-briefing in docs. Use available blocks. Create the new page san-francisco-opening
- 6. Figma-to-Component**
 - I have a figma frame selected, please create a new block hero-trends (don't reuse an existing one) and then create a sample page for it (using sample images and make sure it adheres to the content structure you design for the new block)
- 7. Push Changes and Preview in AEM**



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ACT IV · Q1 2026

Everything in the browser.



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An AI agent in the cloud.

A PLG Chrome extension: one click, no chat, migrate the page you're looking at.

The agent runs on multiple Cloudflare Workers

orchestrator · playwright · LLM sandbox · monitoring ...

- Mar 3, 2026: one-click auto-pipeline ships
- Mar 18, 2026: Chrome Web Store submission assets committed



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95% shipped.

Then we met Slicc.

Slicc already solved the problem we were 95% done solving ourselves.



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Slicc: an AI agent that lives in your browser.

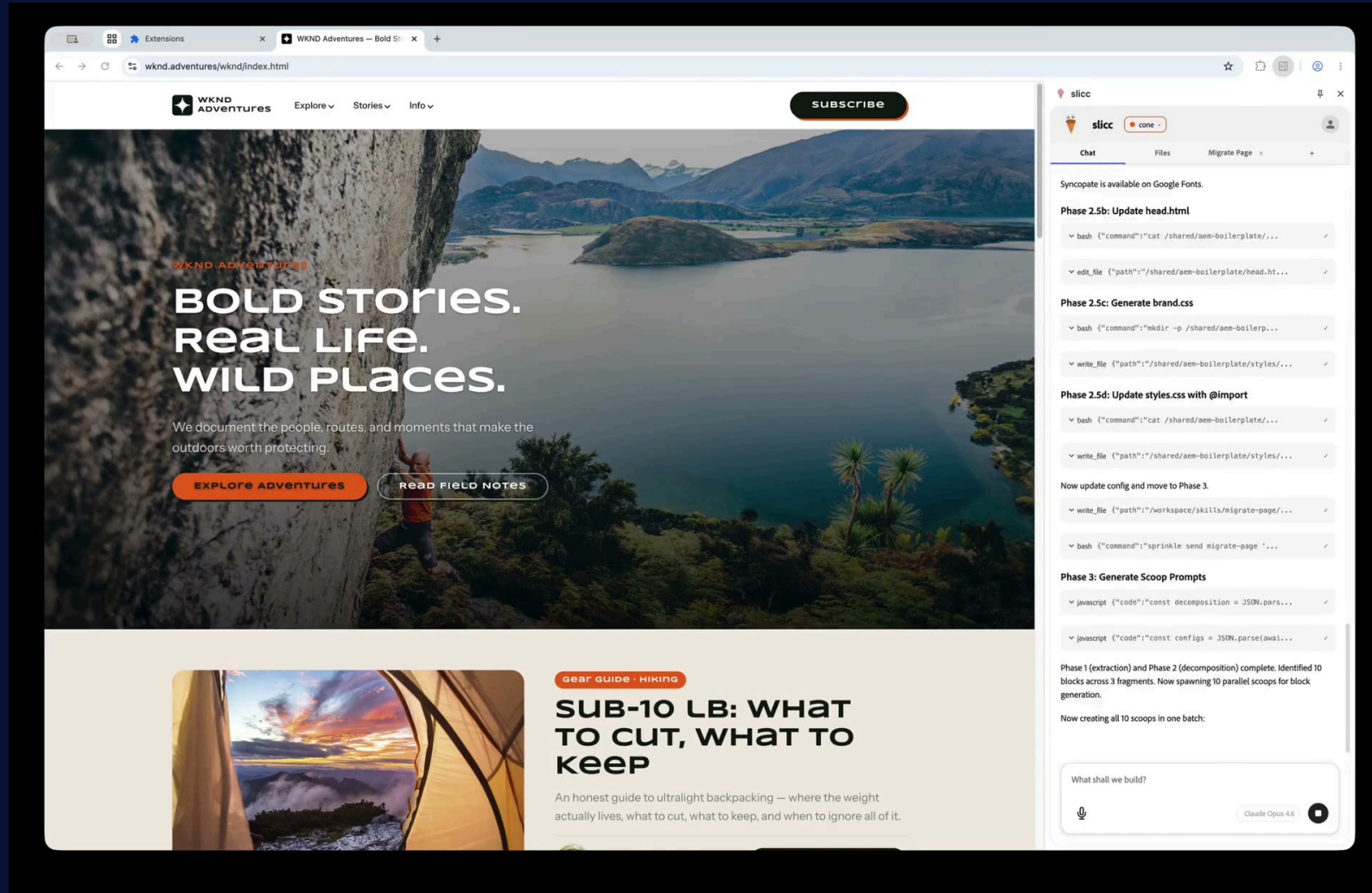
Inside one tab: a **filesystem**, a **shell** (bash in WebAssembly), **real browser access** (CDP) and **skills**. **No server at all.**

- Single-page migration, all in the browser
- Our migration skills run there, ready for you to try

Summit lab: 91 attendees · 91 browsers · 91 migrations.

Zero infrastructure on our side.

Video Recap



The screenshot displays the WKND Adventures website and a Slicc AI interface. The website features a large hero image of a person climbing a rock face, with the text "BOLD STORIES. REAL LIFE. WILD PLACES." and a "SUBSCRIBE" button. Below the hero image is a section titled "SUB-10 LB: WHAT TO CUT, WHAT TO KEEP" with a "GEAR GUIDE · HIKING" tag. The Slicc AI interface on the right shows a chat window with a list of tasks and a "What shall we build?" prompt.

WKND Adventures Explore ▾ Stories ▾ Info ▾ **SUBSCRIBE**

BOLD STORIES. REAL LIFE. WILD PLACES.

We document the people, routes, and moments that make the outdoors worth protecting.

EXPLORE ADVENTURES **READ FIELD NOTES**

GEAR GUIDE · HIKING

SUB-10 LB: WHAT TO CUT, WHAT TO KEEP

An honest guide to ultralight backpacking — where the weight actually lives, what to cut, what to keep, and when to ignore all of it.

slicc **cone**

Chat Files Migrate Page x

Syncopate is available on Google Fonts.

Phase 2.5b: Update head.html

- bash ("command": "cat /shared/aem-boilerplate/...
- edit_file ("path": "/shared/aem-boilerplate/head.ht...

Phase 2.5c: Generate brand.css

- bash ("command": "mkdir -p /shared/aem-boilerp...
- write_file ("path": "/shared/aem-boilerplate/styles/...

Phase 2.5d: Update styles.css with @import

- bash ("command": "cat /shared/aem-boilerplate/...
- write_file ("path": "/shared/aem-boilerplate/styles/...

Now update config and move to Phase 3.

- write_file ("path": "/workspace/skills/migrate-page/...
- bash ("command": "sprinkle send migrate-page '...'...

Phase 3: Generate Scoop Prompts

- javascript ("code": "const decomposition = JSON.parse...
- javascript ("code": "const configs = JSON.parse(swai...

Phase 1 (extraction) and Phase 2 (decomposition) complete. Identified 10 blocks across 3 fragments. Now spawning 10 parallel scoops for block generation.

Now creating all 10 scoops in one batch:

What shall we build?

Claude Opus 4.6



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ACT V - EMA AND BEYOND

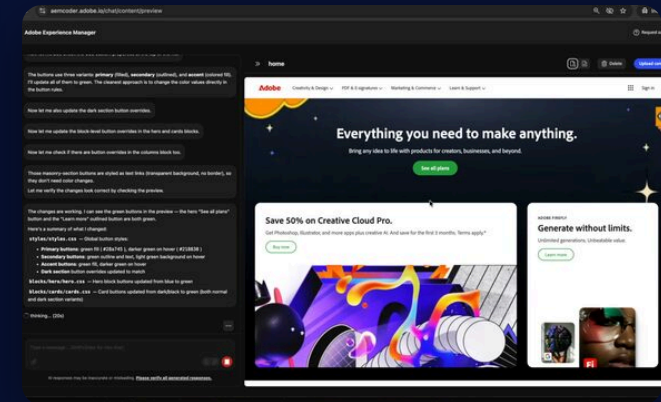
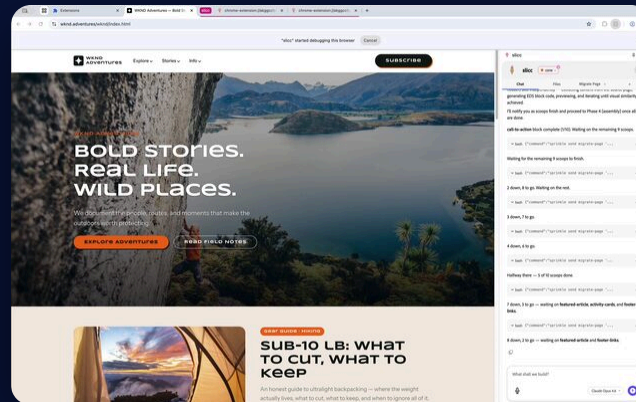
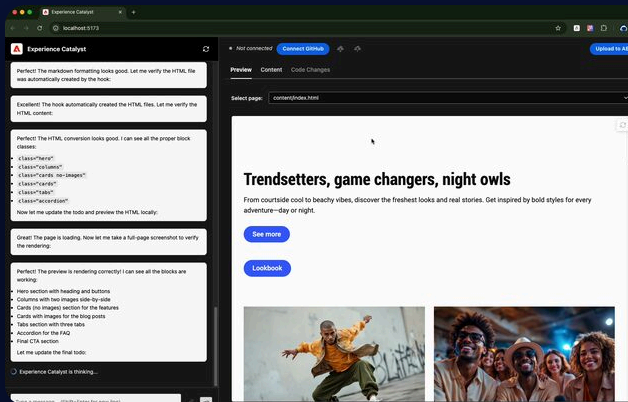
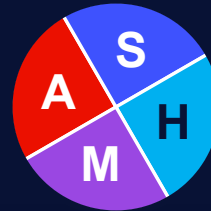
The road ahead...

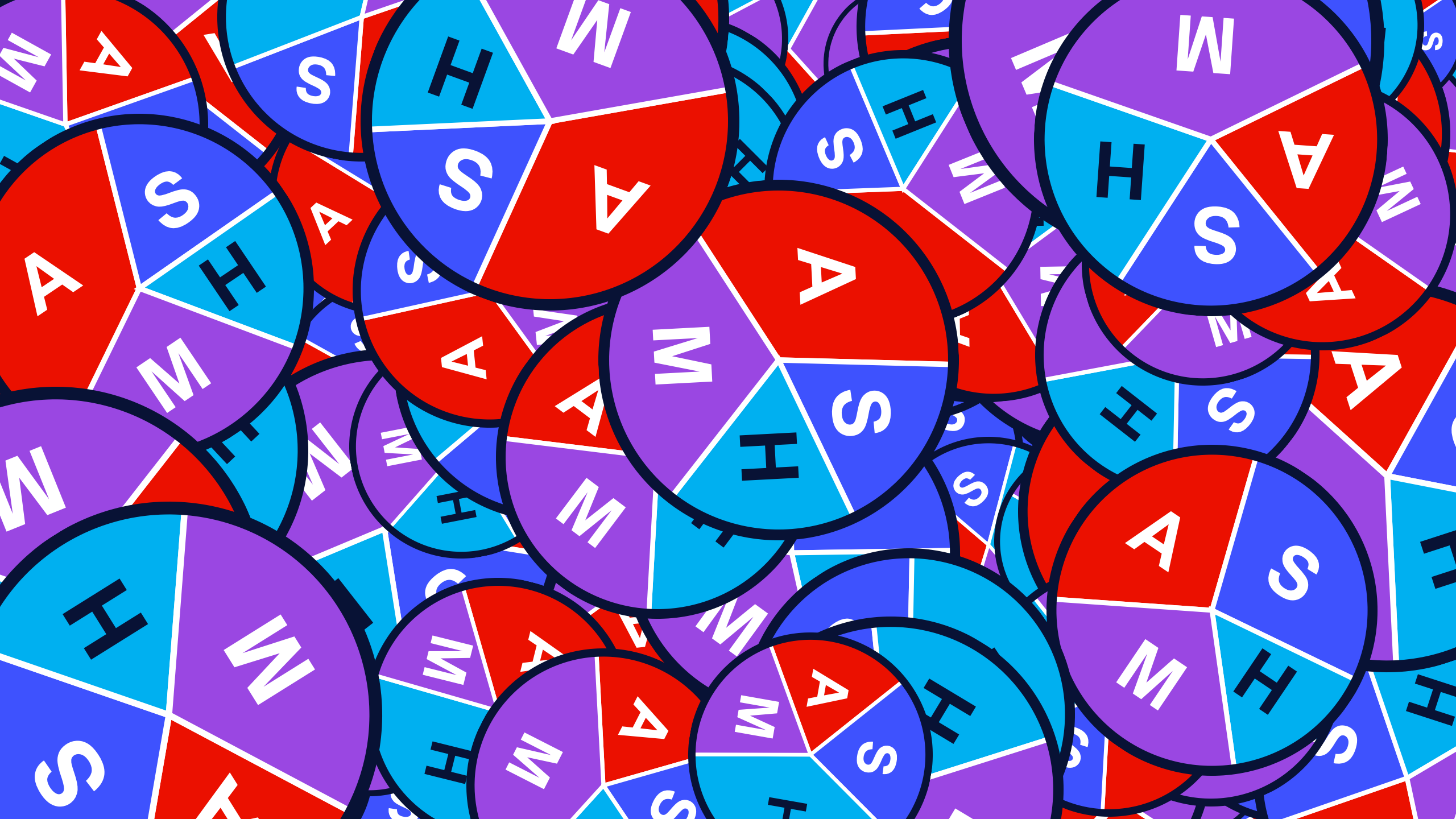
AI Cloud Workers

Skills

Harnesses

Models (LLMs)







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ONE MORE THING...

1-click migration, in the cloud.

- A full migration takes a while, so we made it a one-click cloud experience
- Give it a few hours: pixel-perfect, minus glitches and integrations
- Then continue the work in EMA



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LIVE DEMO

CAN EVERYONE HERE TRY THIS TODAY?

Yes. Bring your own site.

One click, a few hours: your site on Edge Delivery Services.



aemcoder.adobe.io/auto



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Thank you. Questions?

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Karl Pauls · kpauls@adobe.com

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