



Colin Johnston

Digital Product Design

Samples of my recent product design work

May, 2021

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Hello, I'm Colin!

I'm pleased to present three recent product design projects.

I have over 10 years of experience leading design teams and facilitating cross-functional collaboration to deliver compelling and highly usable experiences that empower people to succeed. I seek to ground my work in a deep understanding of a business, its customers, and what their essential needs are. I strive to be a strong advocate for the user.

For my work with Solano Labs and Rollbar—both market leading technology companies—I immersed myself in complex business and technology challenges and thorough user research. By investigating where key business problems and customer problems intersected, I was able to help dramatically improve core product offerings, decrease customer attrition, and increase market share.

In my collaboration with Paul Saffo—an internationally known speaker and essayist—I brought my love of branding and creative direction to invigorate his online presence and grow his business. I believe branding is an essential component of user experience.

Across every project I'm focused on understanding and communicating how design can solve both business and people problems, how to craft a solution that will help a business grow, and always being an advocate for the people interacting with the product itself.

Sincerely,

Colin Johnston

Approach

My design approach is rooted in the design thinking process:

- Discover
- Define
- Design
- Prototype
- Test

I start any design effort by communicating with research, product, and technology partners. I ground my work in a deep understanding of the business and its customers.

A function of discovery is to gain sufficient understanding of a problem to create a customer-centered problem statement. The define stage requires considerable communication to align everyone towards a solution.

This process is cyclical and iterative. Ideation in the design phase can often result in further definition; testing often leads to further design iterations.

It's important to explore innovative ideas, but equally important is converging on a solution in a practical time frame. It's also essential to remain flexible—not every project is the same.

Contents

- | | | |
|---|-------------|-----------------------------------|
| 1 | Solano Labs | Solano CI Session View |
| 2 | Paul Saffo | Silicon Valley Forecaster Website |
| 3 | Rollbar | Account Dashboard |

Solano Labs

Solano CI Session View

Overview

Solano Labs' Solano CI is a platform for engineers that provides a critical function called continuous integration. Solano CI enables Agile software teams to break down large monolithic applications into smaller projects and services which can be rebuilt, tested, and deployed more frequently.

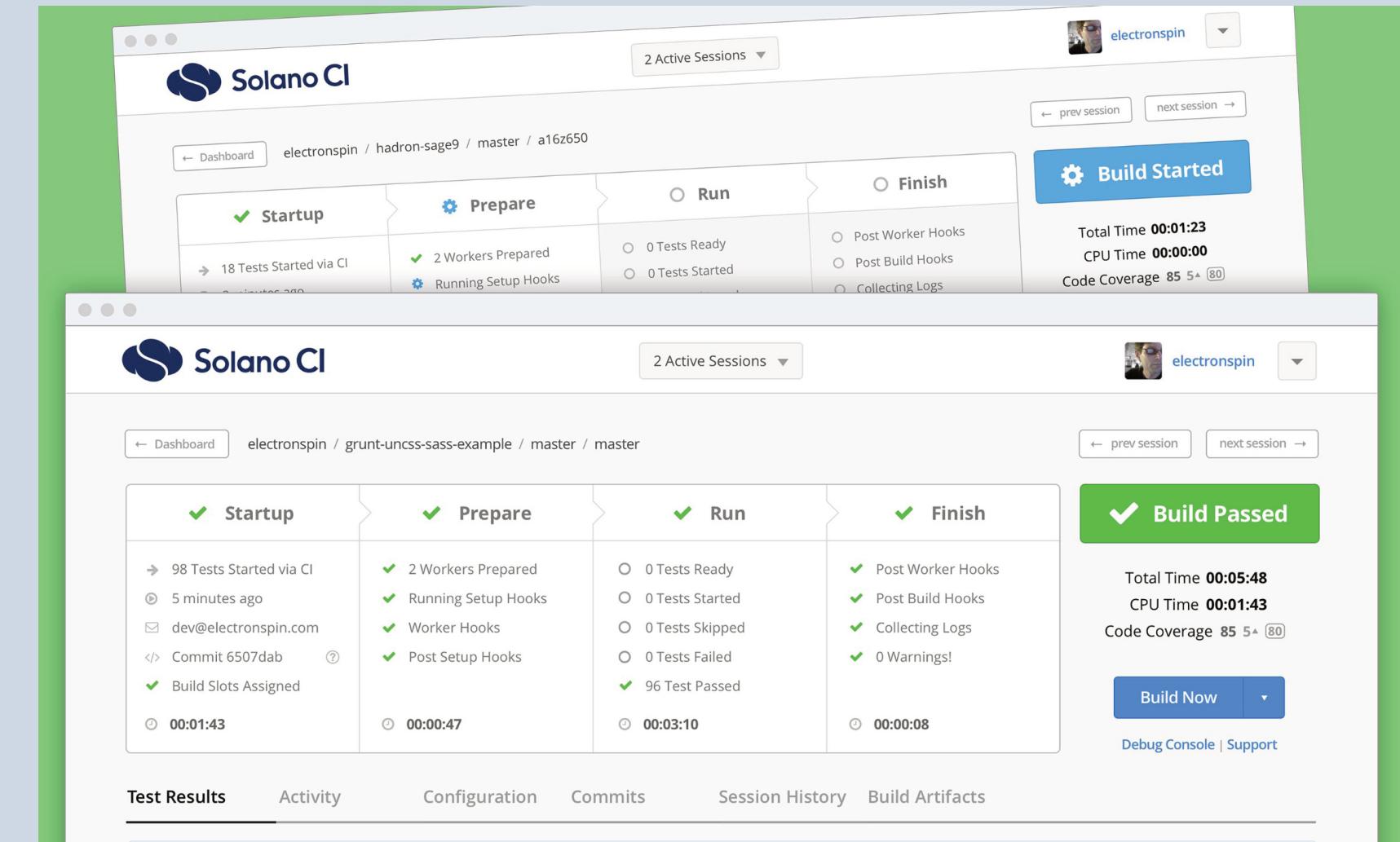
The Session View—the core of Solano CI—is a comprehensive real-time report of build progress and test results for a single software project. Since its initial release incremental changes to the system cause increasing usability and technical issues, the most critical being diminished trust in reporting accuracy.

Problem

Engineering teams rely on continuous integration and testing tools to manage complex software development life-cycles. If these mission-critical tools introduce frictions or inaccuracies of any kind that result in delayed or broken software release, this can cause expensive missed go-to-market opportunities.

Outcome

The new Session View increases the value and accuracy of the status report with a simplified, intuitive interface and a clear, precise data visualization. We increased user confidence in the system and overall trust in Solano CI.



Discovery

User Research

We studied customer feedback from support channels, and our team of engineers using Solano CI provided valuable insights.

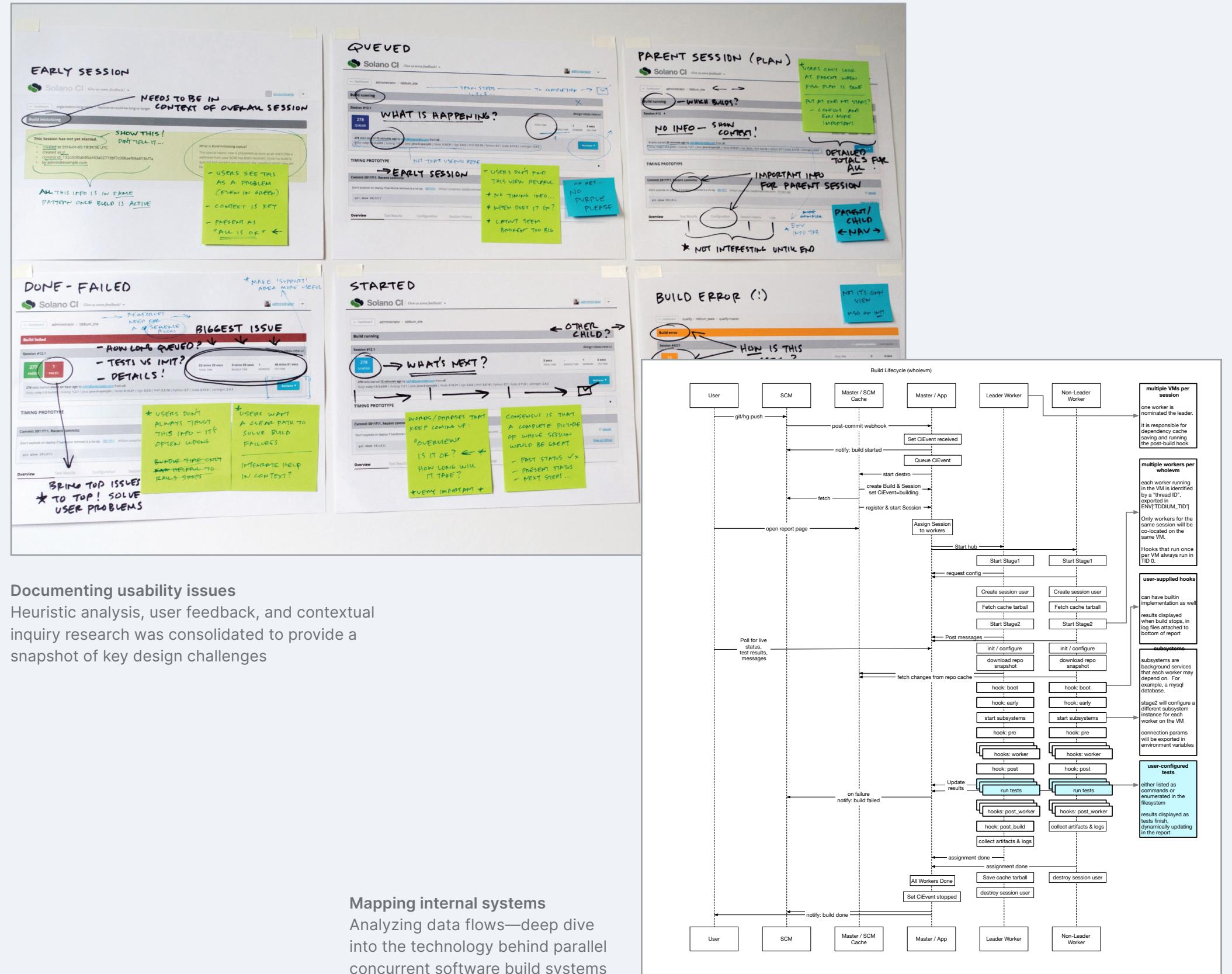
I led customer interviews and contextual inquiries with key customers to better understand the challenges they faced.

Technology Research

I facilitated internal research to audit how a wide variety of software languages and test suites performed across our entire backend platform. The goal was to look for patterns—success, failure, accuracy—to find a solution to the critical customer trust issue.

Approach

My rationale was that if we radically simplify the session view to present only the most critical status and timing info, as well as ensure all data points are 100% accurate, we could improve both usability and customer trust.



Ideation & Design

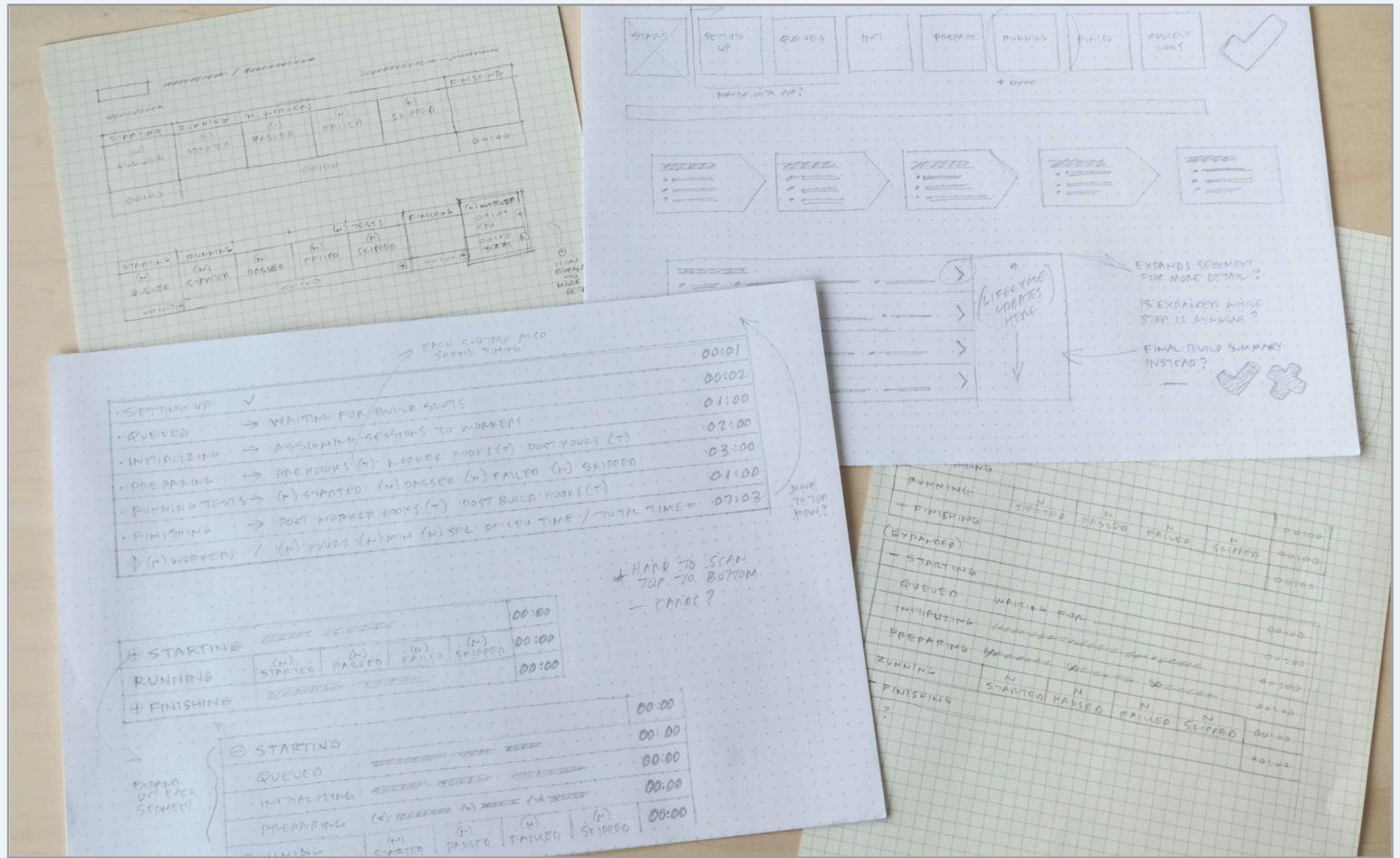
Early Concept Sketches & Wireframes

Using research findings I set out to create a new interaction model for the session view that prioritized ease-of-use and increased trust in the data presentation.

Design Objectives for a Better Experience

Based on research and user analysis, I prioritized solutions to these problems:

- Nearly impossible to get a complete overview of build status
- Inconsistent views for different session types causes high cognitive load
- Poor discoverability of important data that leads to expensive errors
- Inaccurate or incomplete reporting data reduces overall trust in the system



Wireframes

Developing a consistent layout and component structure across multiple build configurations and test scenarios

Session View v2: Base

CI Logo accountname ▾

Dashboard organization-long-name / reponame-could-be-long-or-longer / branchname-cloud-be-really-even-longer-than-this / 00000000 prev session next session

Startup	Prepare	Run	Finish	Build passed
98 Tests Started via CI 5 minutes ago by email@example.com Commit a0b1c2d [PR]	6 Workers Prepared Setup Hooks Worker Hooks Post Setup Hooks	98 Tests Ready 00:00:00	Post Worker Hooks 00:00:00	00:03:26 Total 00:02:35 CPU code coverage 75 0 [75]
Waiting for Build Slots 00:00:00	00:00:00	00:00:00	00:00:00	Build Now ▾ Debug Console Support

Test Results Activity Configuration Session History Build Artifacts

Pencil sketches

Rapid, low-fidelity explorations of information architecture, interaction, and flows

Prototype & Test

Prototyping for User Testing

Through a process of moderated and unmoderated user testing we sought to reveal where we hit the mark with our solution, and where it might need improvement. I iterated on the designs multiple times informed by these user tests.

Real-world Testing

There was no practical way to deliver our initial prototype to customers using real-time data, so the engineering team built the new session view into the production app. We allowed users to test it as an 'alpha' feature behind a feature flag.

```

1 ---  
2 system:  
3   debug:  
4     execsrv: true  
5     disable_openat: false  
6     scheduler: 'RSwap'  
7     queue:  
8       - branch: "{production,release}"  
9         queue: 'production'  
10      - branch: "*"  
11        queue: 'default'  
12    ruby_version: "ruby-1.9.3-p545"  
13    bundler_version: "1.7.12"  
14  coverage:  
15    version: 2  
16    enabled: true  
17  hooks:  
18    pre: bundle exec rake tddium:pre_hook  
19    worker_setup: bundle exec rake tddium:db_hook
  
```

Browser-based prototype
Proof-of-concept to gain alignment with stakeholders and get early feedback from key customers we had interviewed in the research phase

Test Name	Status	Duration
spec/lib/zygote_spec.rb	passed	57 secs
bundle exec rake admin_docs:deploy	passed	15 secs
spec/models/account_charges_spec.rb	passed	2 mins 19 secs

Data-driven prototype
Early-stage prototype with live data for user testing. This allowed us to validate complex system feedback design patterns that changed in real time

Final Design

High-fidelity Mockups & Brand Alignment

The visual design was informed by my work-in-progress style guide and design system.

Screenshot of the original Solano CI Session View, showing a 'Build failed' session. The session details include:

- Session #12.1**
- 277 PASSED**, **1 FAILED**
- 53 mins 25 secs TOTAL TIME**, **3 mins 59 secs BUNDLE TIME**, **1 WORKERS**, **48 mins 51 secs CPU TIME**
- 278 tests started about an hour ago by [colin@solanolabs.com](#) from cli
- Ruby: ruby-1.9.3-p545 | Golang: 1.2.1 | Java: Java-6-openjdk | Node: 0.10.31 | Iojs: 3.0.0 | PHP: 5.5.16 | Python: 2.7 | Scala: 2.11.0 | Leiningen: 2.4.2
- Actions** button
- Commit 5911f11. Recent commits:**
- Don't explode on deploy if backbone removal is a no-op. [5911f11](#) William Josephson (wj@solanolabs.com) 29 days ago
- git show 5911f11**
- View on Github** button
- Overview** tab selected, other tabs: Test Results, Configuration, Session History, Logs

Session View – before

The original session view was hard to use and presented inconsistent and inaccurate data

Screenshot of the new Solano CI Session View, showing a build timeline and summary:

- 2 Active Sessions** dropdown
- User profile: **electronspin**
- ← Dashboard**, **electronspin / grunt-uncss-sass-example / master / master**, **← prev session**, **next session →**
- Build Passed** status indicator
- Total Time 00:05:48**, **CPU Time 00:01:43**, **Code Coverage 85 5▲ [80]**
- Startup**: 98 Tests Started via CI, 5 minutes ago, dev@electronspin.com, Commit 6507dab, Build Slots Assigned, 00:01:43
- Prepare**: 2 Workers Prepared, Running Setup Hooks, Worker Hooks, Post Setup Hooks, 00:00:47
- Run**: 0 Tests Ready, 0 Tests Started, 0 Tests Skipped, 0 Tests Failed, 96 Test Passed, 00:03:10
- Finish**: Post Worker Hooks, Post Build Hooks, Collecting Logs, 0 Warnings!, 00:00:08
- Build Now** button
- Debug Console | Support**
- Navigational tabs: **Test Results**, **Activity**, **Configuration**, **Commits**, **Session History** (selected), **Build Artifacts**

Session View – after

The new session view design improved overall usability by showing the entire build and test session in an easy-to-scan timeline

Paul Saffo

Silicon Valley Forecaster Website

Overview

Paul Saffo is a forecaster and futurist. He explores the dynamics of large-scale, long-term change; he teaches forecasting at Stanford University, chairs the Future Studies and Forecasting track at Singularity University, and serves on the board of the Long Now Foundation.

Problem

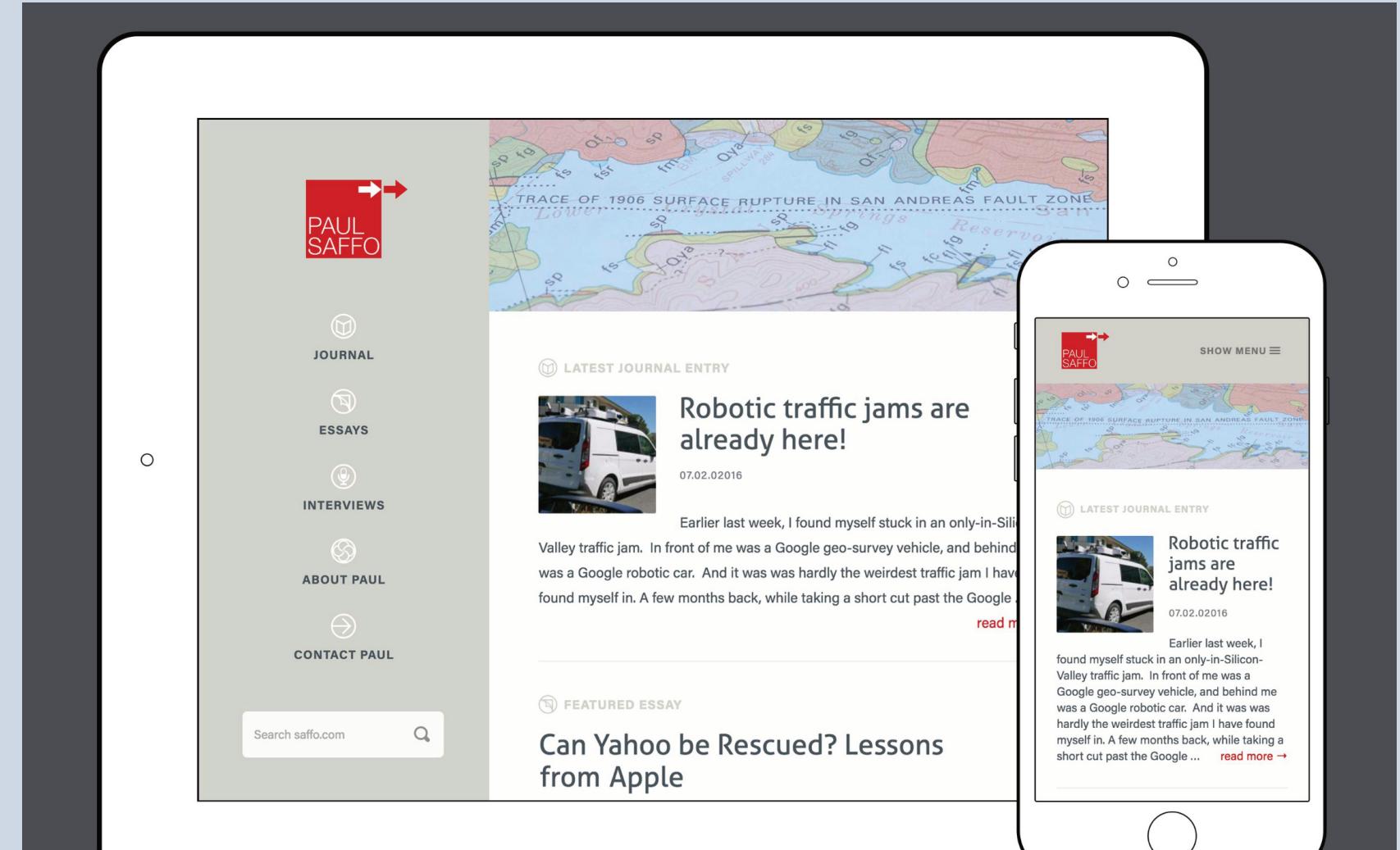
Paul has a rich collection of content—journal entries, essays, and interviews—and is a well known brand in Silicon Valley and internationally.

Paul's existing website was no longer providing his current or potential clients with an experience that would enable him to sustain and grow his business.

Outcome

A refreshed visual and brand design that expresses the rational, intellectual clarity of Paul's forecasting work and the inventiveness of Paul himself.

The new site delivers an improved user experience and makes Paul's large collection of content accessible across a wide variety of devices; it has impressed many key clients and prospects, and helped him book a considerable number of new speaking engagements.

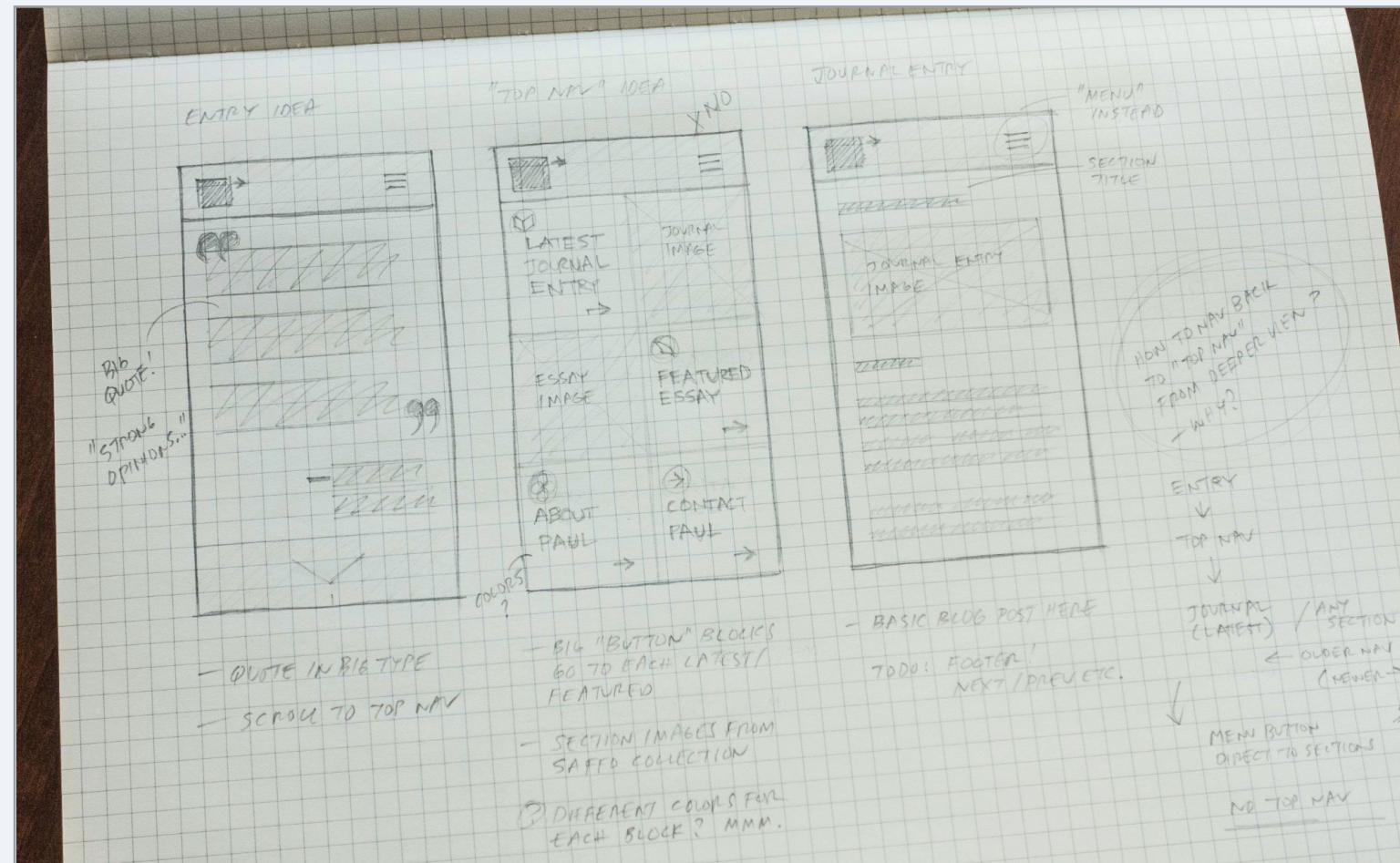


Ideation

Sketches

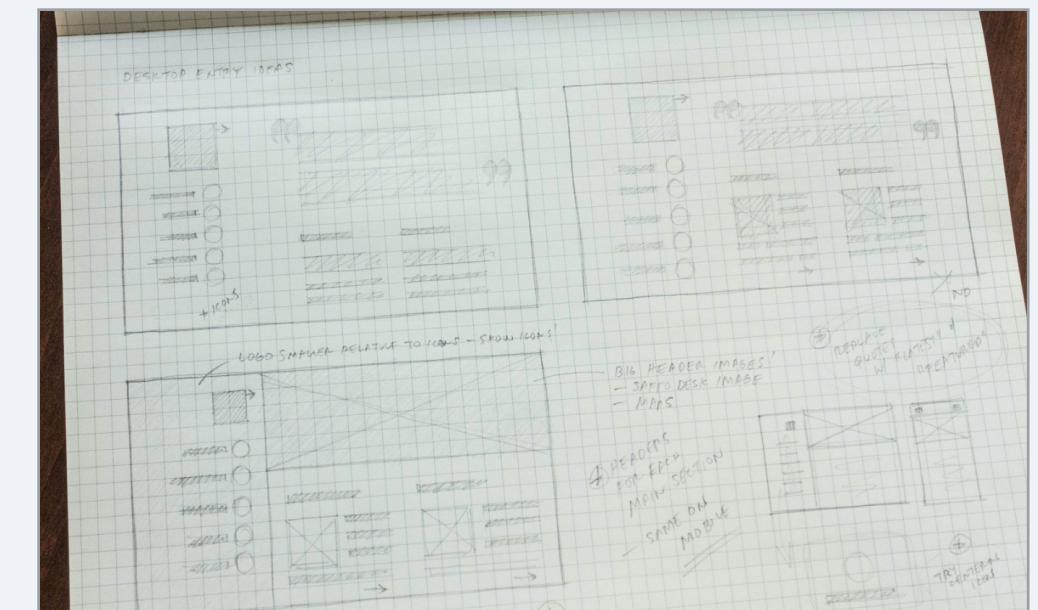
I created numerous sketches to find ways of simplifying a potentially complex interface down to its essentials.

For this project I was also particularly focused on setting the stage for a more integrated identity and prominent iconography.



Mobile-first concept sketches

An essential requirement of the design was for all content and navigation to be optimized for mobile users



Visual Design

Branding & Aesthetics

My visual design strategy was to frame the entire site in the updated brand, which is anchored by the new logo (which I previously redesigned) and supported by the icons and updated color scheme.

I framed the content in each section with a large header image that signals what is within it. Some of these headers are very literal; others are 'stories' that become clearer once you acquire more knowledge of Paul's content.

PAUL SAFFO WEBSITE REDESIGN **STYLE BOARD 1.0**

IDENTITY REFERENCE



PAUL SAFFO

COLORS



VISUALS



ADJECTIVES

Clear Perceptive Explorative

LINKS / BUTTONS

[Text Link base](#) [Text Link hover](#)

[Button base](#) [Button hover](#)

TYPGRAPHY

Predicting the future by inventing it.

HEADER 1 Adelle

HEADING 2 Adelle

WHAT IS THE LONG NOW FOUNDATION?

SUBHEAD Adelle

Paul is a forecaster with over two decades experience exploring the dynamics of large-scale, long-term change. He teaches forecasting at Stanford University and chairs the Future Studies and Forecasting track at Singularity...

BODY TEXT Adelle Sans

PAUL SAFFO WEBSITE REDESIGN **STYLE BOARD 2.0**

IDENTITY REFERENCE



PAUL SAFFO

COLORS



VISUALS



ADJECTIVES

Rational Clear Inventive

LINKS / BUTTONS

[Text Link base](#) [Text Link hover](#)

[Button base](#) [Button hover](#)

TYPGRAPHY

Predicting the future by inventing it.

HEADER 1 Aller Regular

HEADING 2 Aller Bold

WHAT IS THE LONG NOW FOUNDATION?

SUBHEAD Aller Regular Uppercase

Paul is a forecaster with over two decades experience exploring the dynamics of large-scale, long-term change. He teaches forecasting at Stanford University and chairs the Future Studies and Forecasting track at Singularity...

BODY TEXT Acumin Pro

Style boards

I explored a variety of aesthetic choices to best communicate Paul's brand identity. Typography and color are core design elements of the new design



Photography

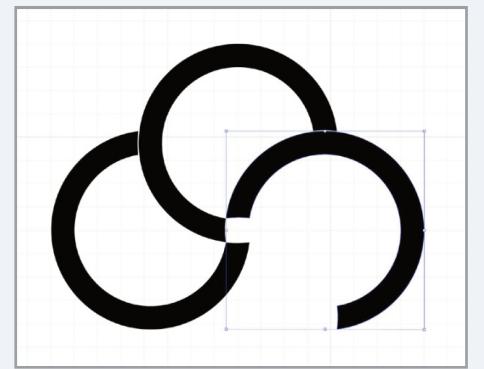
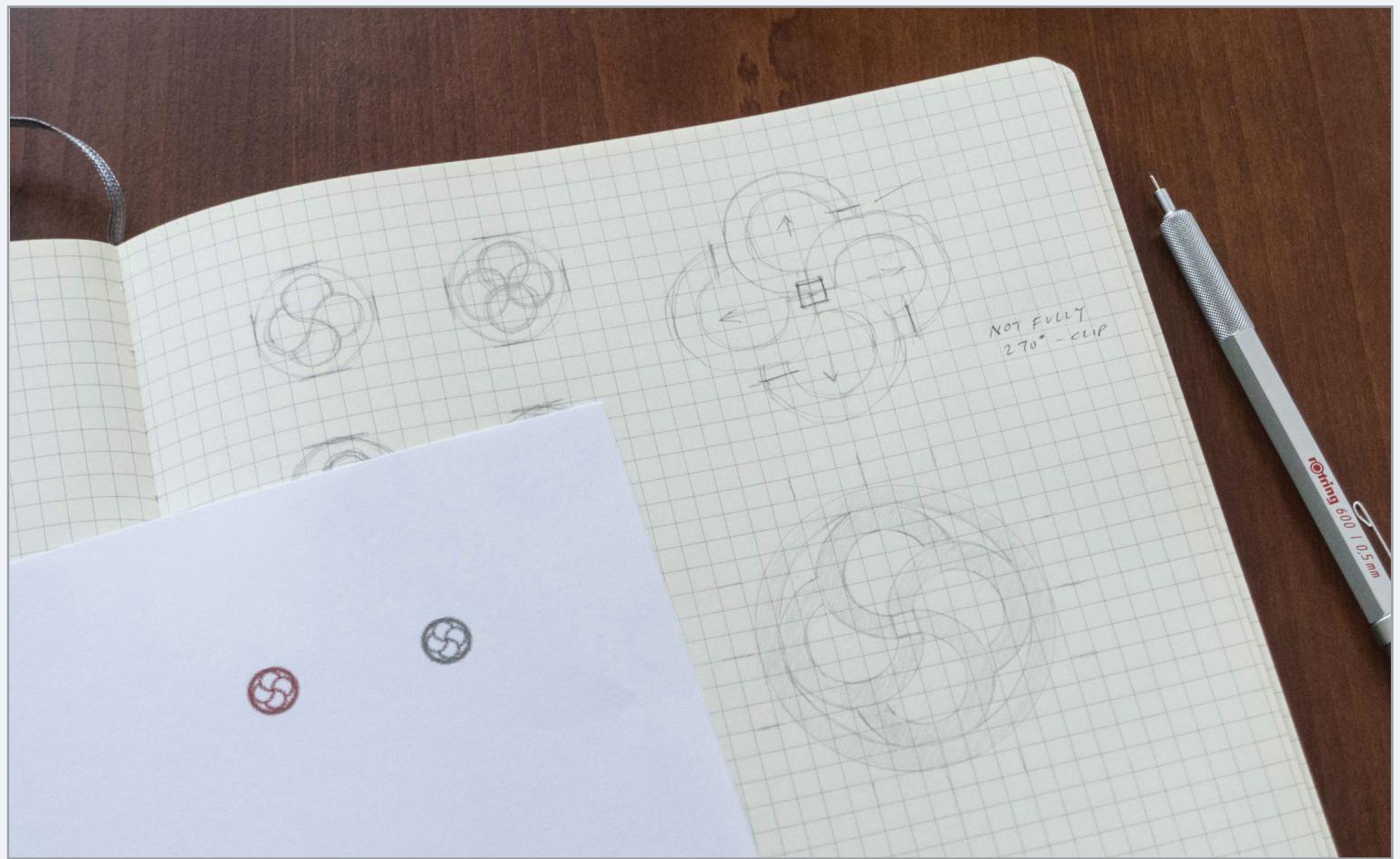
I worked with Paul to produce original photography for certain sections. I experimented with treatments that would harmonize with the brand aesthetics

Iconography

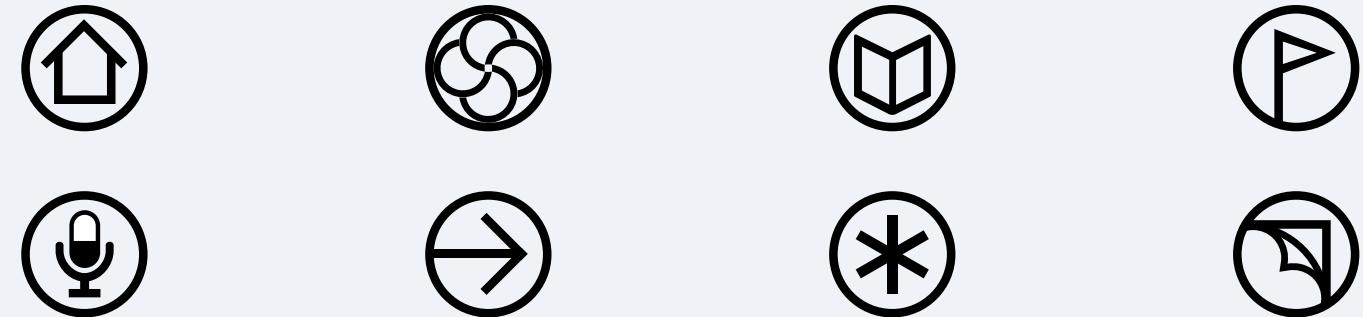
Custom Icon System

Paul is known for his love of maps. I designed a set of icons that evokes navigation and wayfinding.

The icons serve functionally in the site navigation component, but also serve as a bridge to Paul's brand identity—in the final desktop site I feature them prominently.



Hand-crafted symbols
I drew each symbol in pencil to get a feel for its qualities before bringing the work in to my digital drawing tool

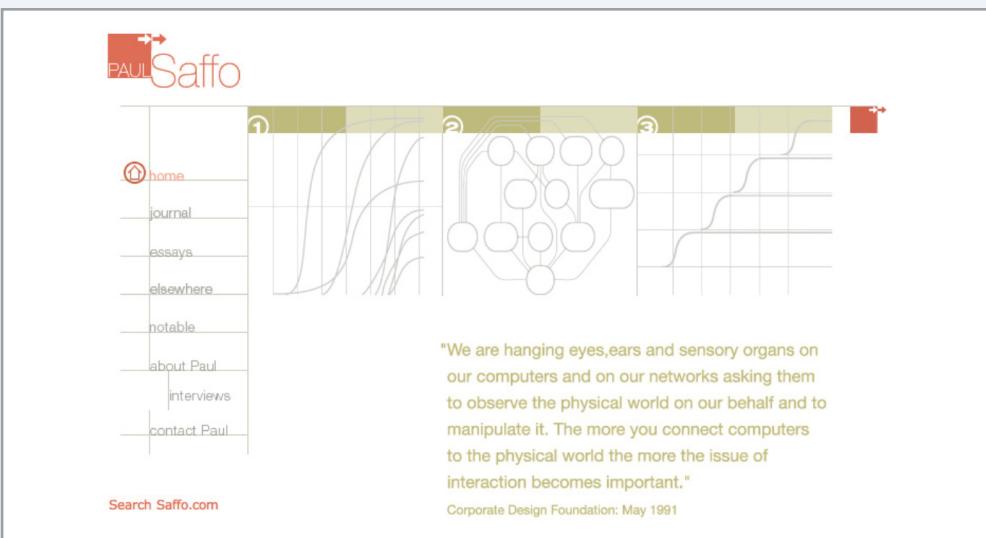


Final icon designs
Scalable vector graphics (SVGs) are crisp and clear on any device at any size

Final Design

Multi-device Mockups

With any adaptive experience, I design the desktop and mobile views side-by-side to ensure visual consistency.

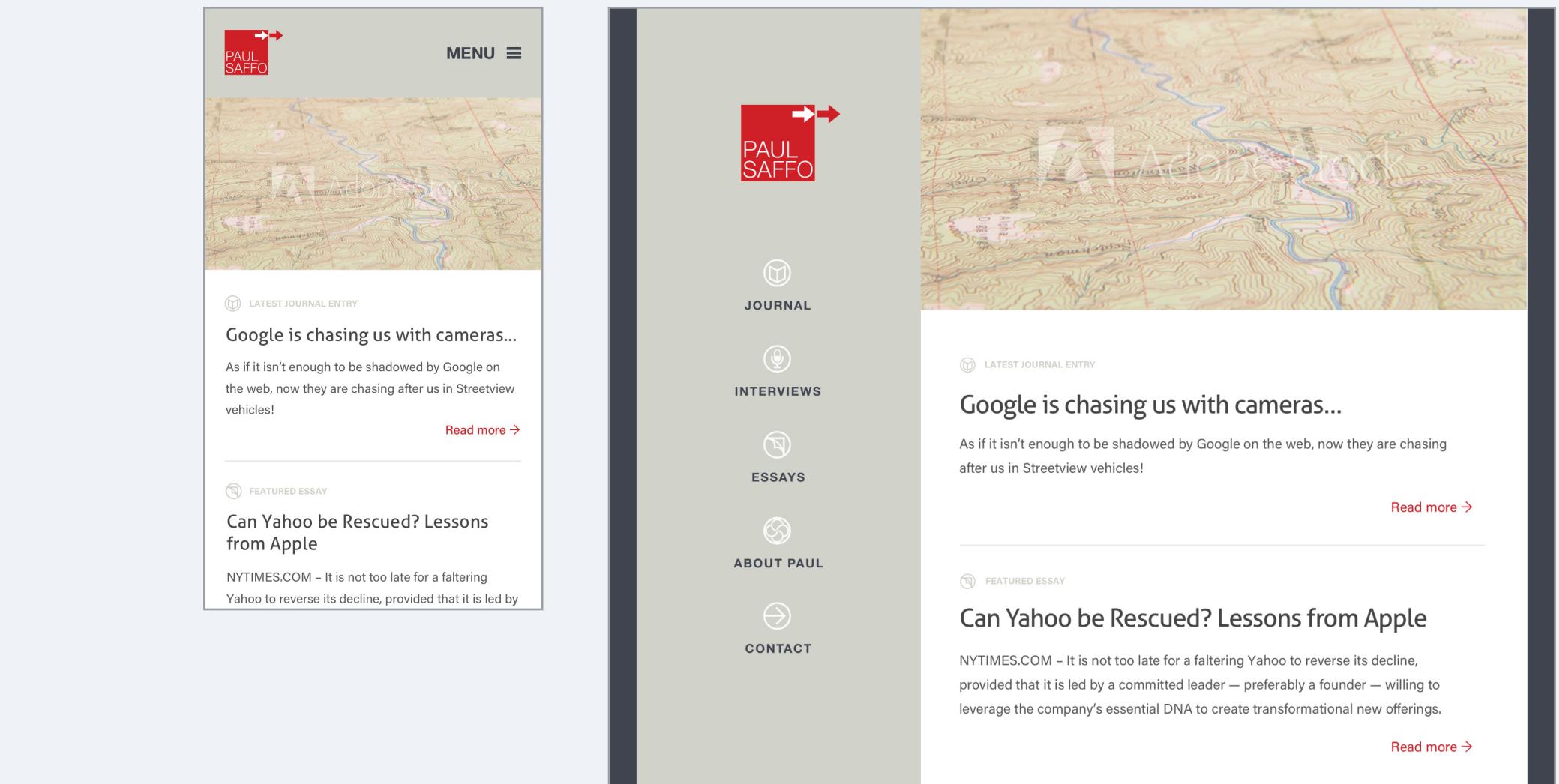


saffo.com – before

While the old site had a certain 1990s-era visual appeal, it was hard to use and was practically inaccessible on mobile

saffo.com – after

An accessible experience integrating enhanced branding, a strong aesthetic, and improved multi-device accessibility



Rollbar

Account Dashboard

Overview

Rollbar is a real-time error reporting and debugging tool for software engineering teams.

The Account Dashboard is a new view in the Rollbar web app specifically designed to give engineers and managers a complete status overview of all active projects across their account instance.

Problem

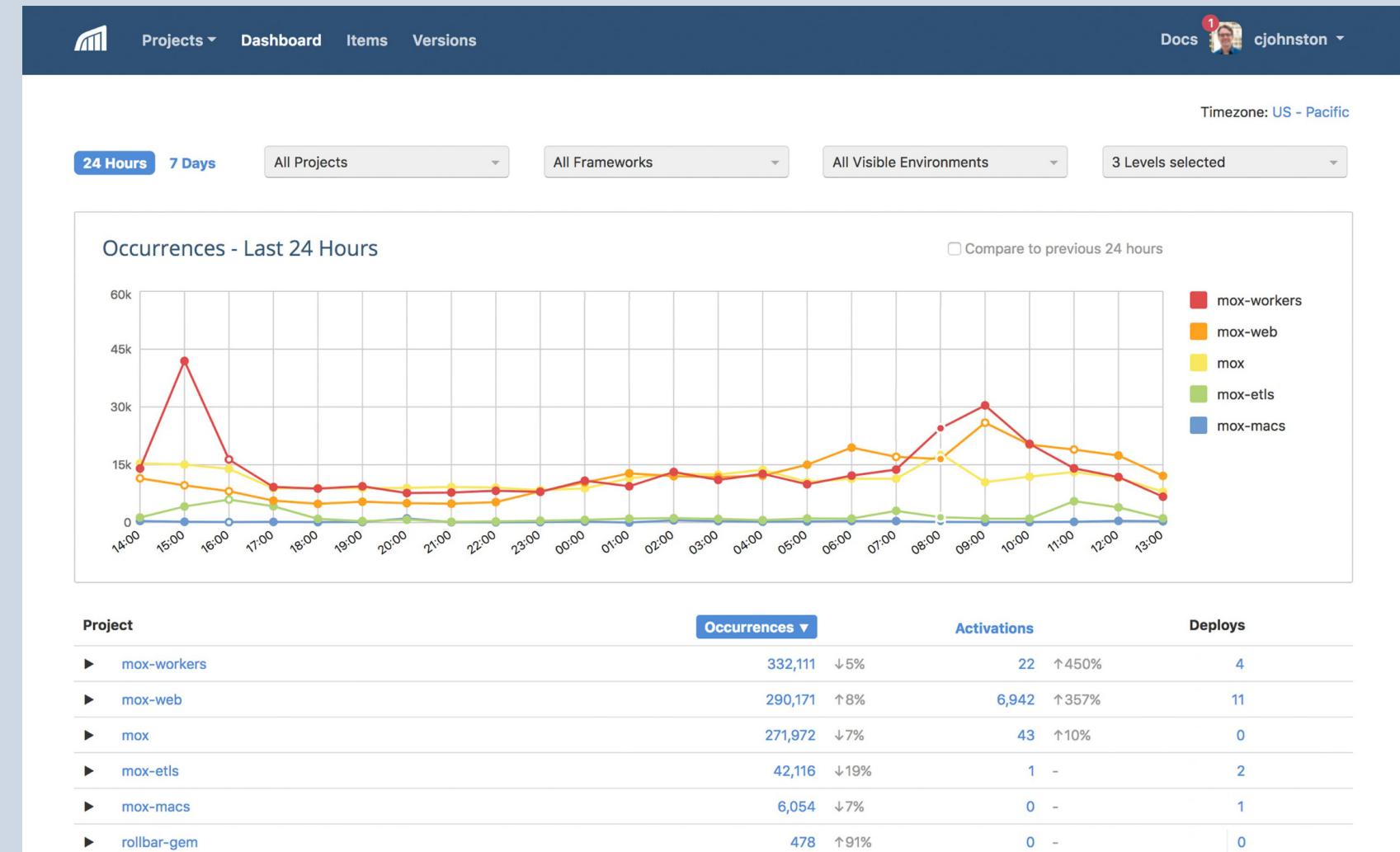
Rollbar customers have software projects composed of numerous applications and micro-services, each of which is accessed as a separate project. The lack of a comprehensive projects overview makes it much harder to mitigate potentially expensive failures.

Zeroing in on important issues across multiple projects is inefficient, time-consuming, and costly.

Customers were becoming frustrated with this problem and switching to our competitors.

Outcome

The project was a major win for Rollbar. Customer commitment to the product strengthened and attrition numbers decreased, especially among enterprise customers.



Discovery

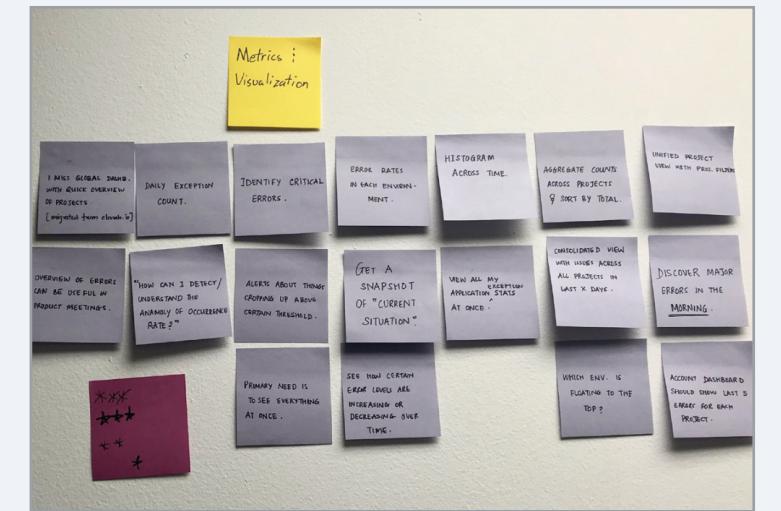
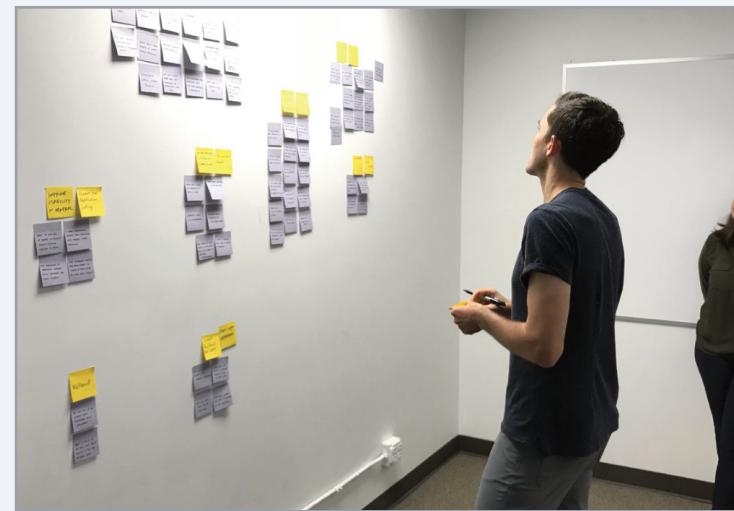
In-depth User Research

I conducted numerous interviews with customers, specifically engineering team leads at larger organizations. When it was feasible we went to customer offices and observed users directly in their workflows.

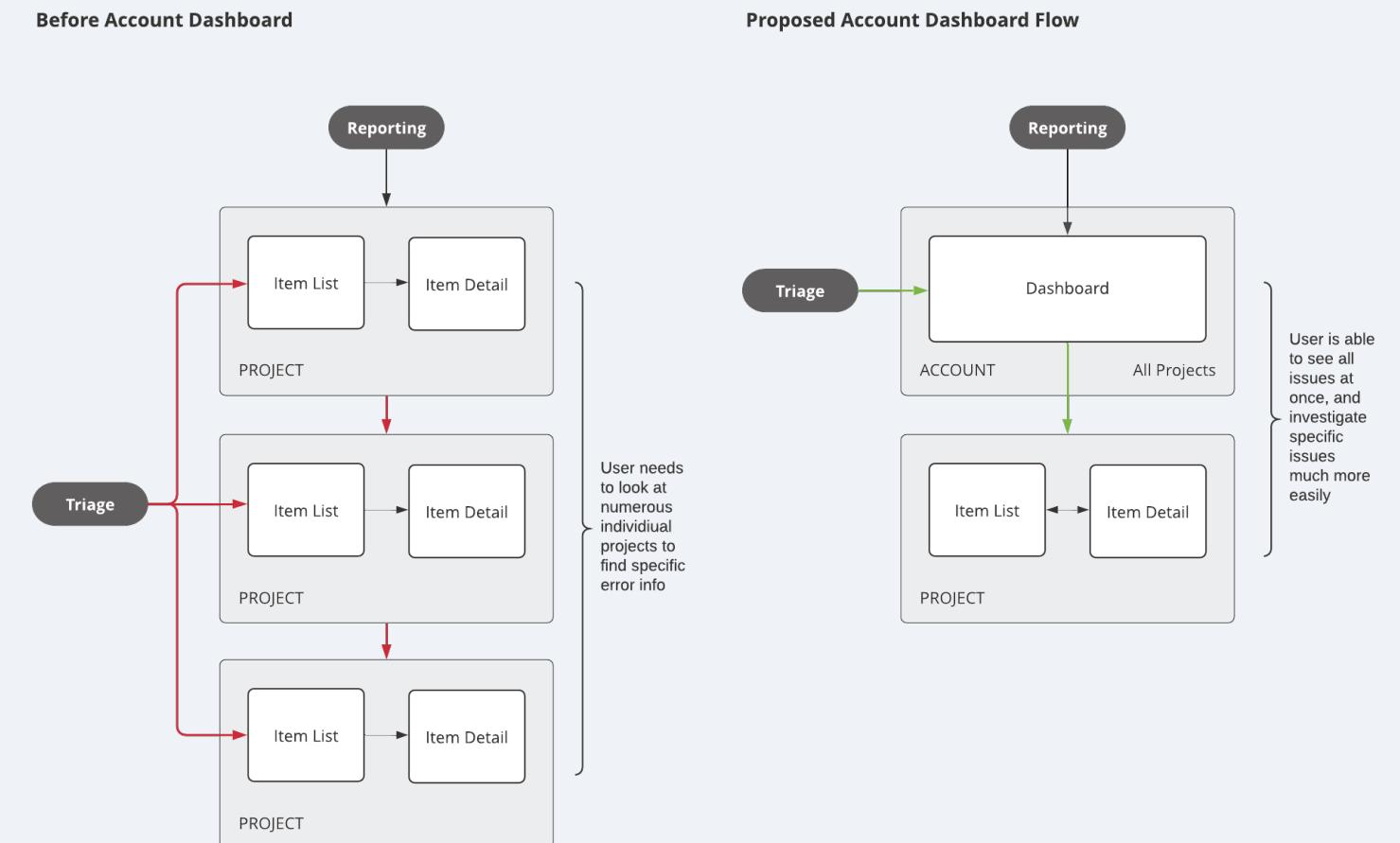
Research-informed Design Decisions

Our research and testing revealed that customers typically had one of two distinct use cases: reporting or triage. One group of users wanted to see easily configurable reports of overall status, the other group wanted a way to quickly locate problem areas to solve issues more efficiently.

Diagramming user pain points
Documenting our research findings and developing our initial rationale.



Affinity mapping exercise
Inputs from our contextual inquiry sessions.



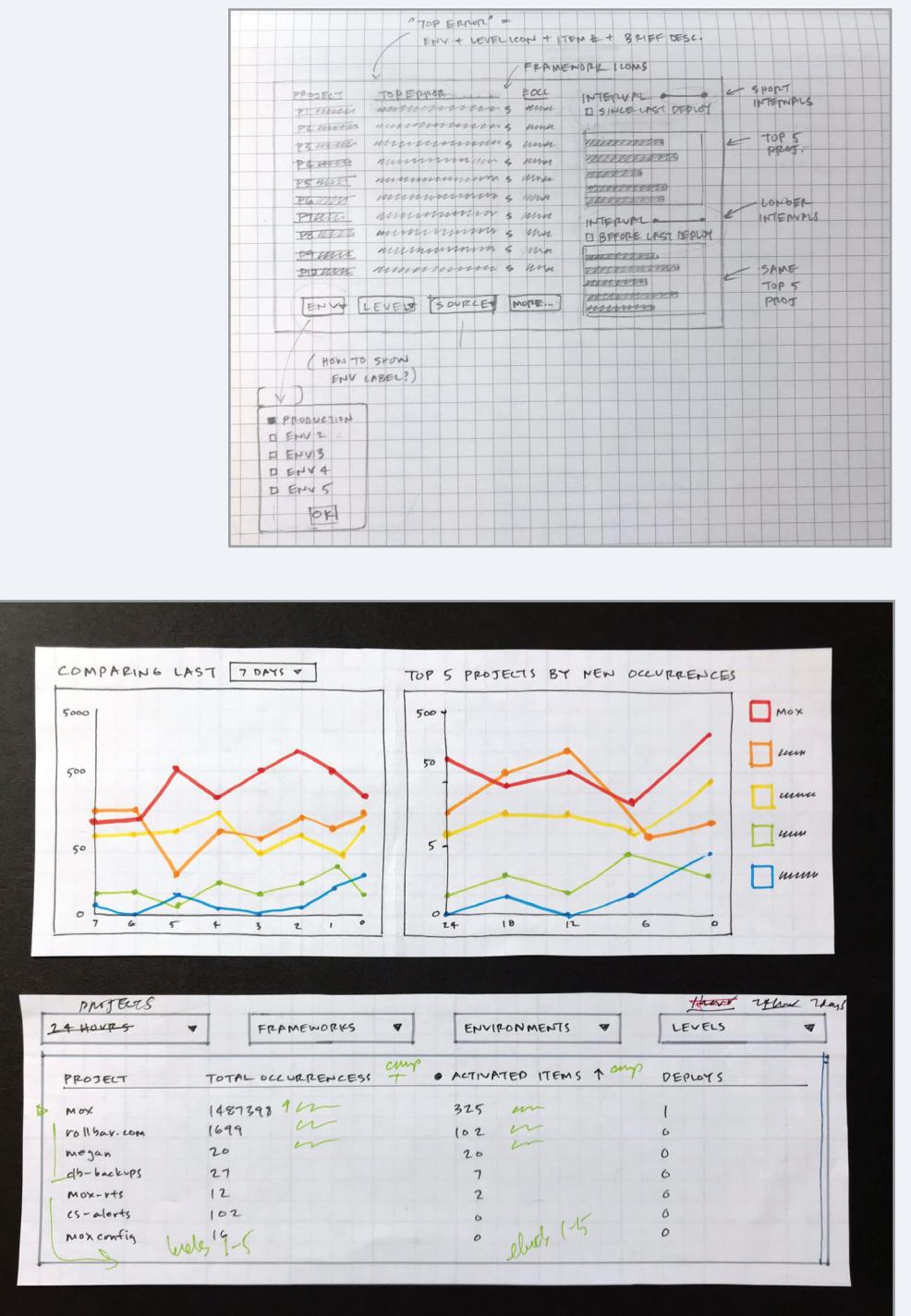
Ideation

Early Concepts & Sketches

From pencil sketches to pen-and-ink wireframes I generated over 100 ideas for various use cases. I encourage stakeholders at this early stage to keep an open mind when presented with a wide variety of concepts..

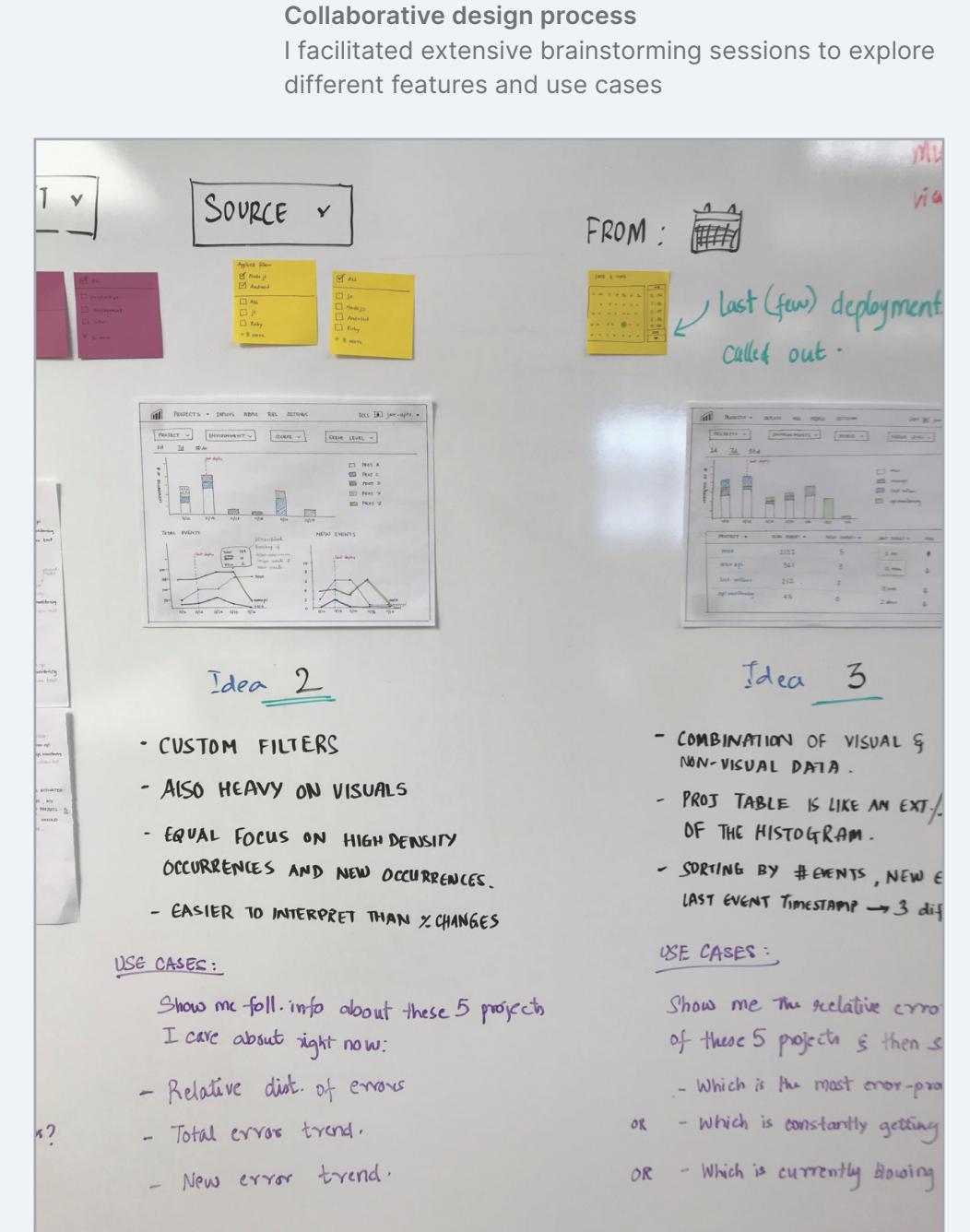
Design Charettes

By bringing the Product team into the design process, we quickly connected product design and business strategy. Real-time group collaboration—when properly structured—yields better design decisions faster.



Rough concepts

Rapid sketches and low-fidelity wireframes to explore different structures

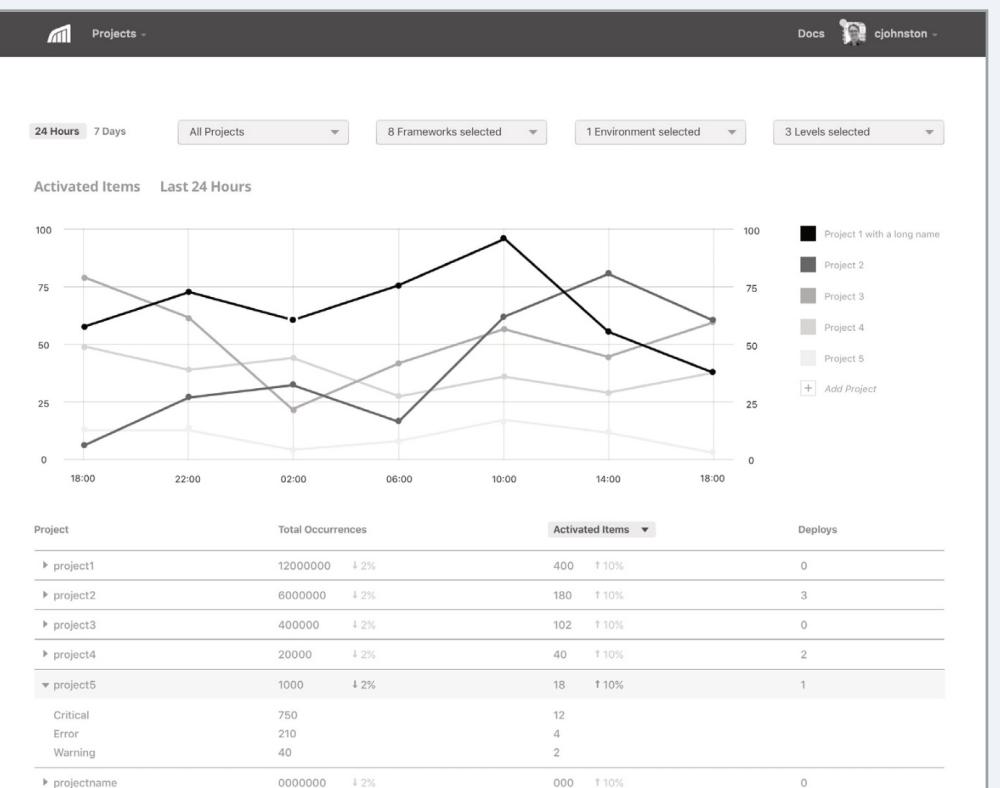


Design

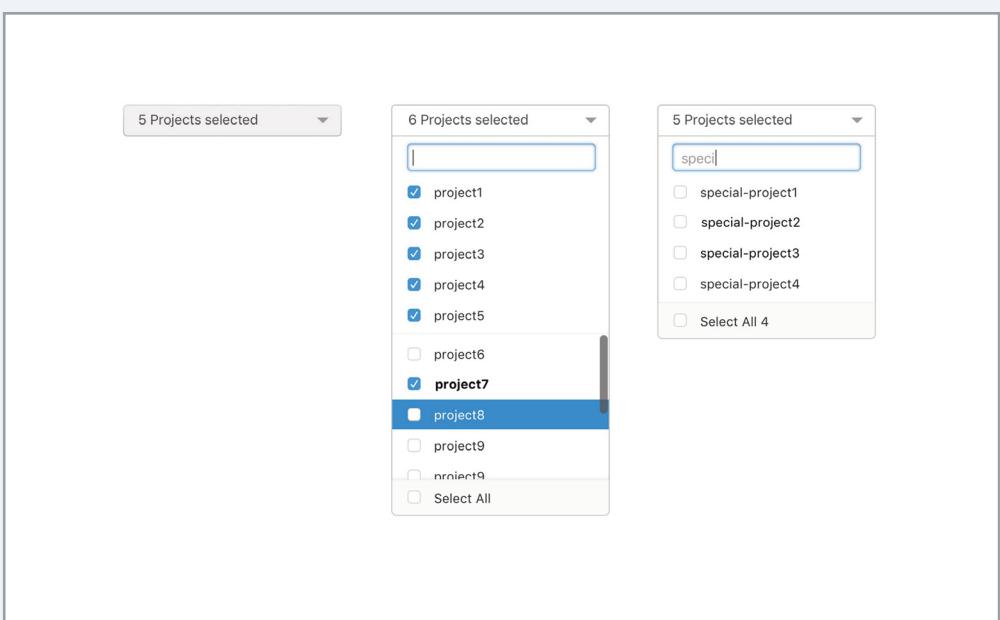
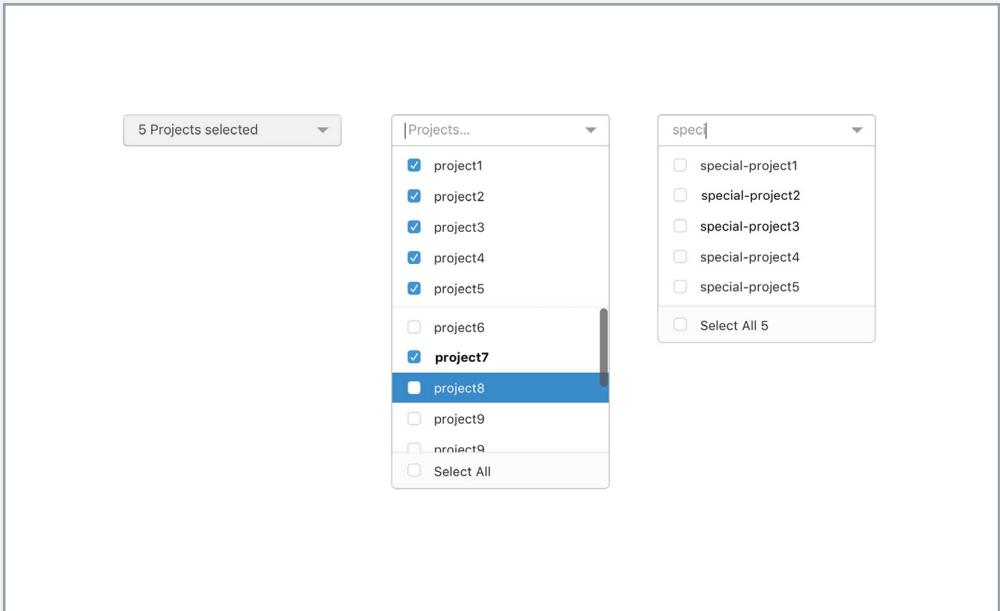
Connecting Research and Design

To serve both the reporting and triage use cases we designed an experience to:

- Provide a dedicated view showing all the projects in an account
- Present a clear visual representation of the health of selected projects
- Surface all filters available in the individual project view, making it easy for teams to drill down into issues across languages, environments, and error levels



High-fidelity wireframes
Taking outputs from ideation sessions, I produced all wireframes in grayscale to avoid distracting focus from structure and interaction



Evolving the 'combobox'
A key component of the new session view experience was powerful but intuitive filtering controls. We opted for a control that showed selection count even when active because it increased user efficiency

Delivery

Design Documentation for Developers

For this project, we relied mostly on existing component patterns that we had previously built into our design system. For new components, I created comprehensive annotated documentation to describe to front-end developers how the component should function.

Step-by-step storyboard showing functionality and interaction of the select combobox.

This is a refined version of what we currently have for the Owner dropdown on the Items view.

① Default Select Combobox:
This is the Projects filter.
The label shows that 5 projects are currently selected.

② Active Select Combobox:
User has clicked the menu.
1. Menu drops down and focus is on the search field allowing user to immediately enter a search string (see #3 below for more details).
2. Top section of the dropdown shows all currently selected projects.
3. Second section of the dropdown is a fixed-height scrollable portion that contains all the other projects in the current account.
3A. The label of a newly selected project is in bold.
3B. The list element containing a project name is highlighted when cursor hovers it.
4. A fixed menu footer contains option to select all projects (and when checked selects all projects).
4B. If all projects are selected this label changes to 'Deselect All' (and when checked deselects all projects).
5. The form changes are submitted and the menu collapses when the user clicks away from the menu.

③ Active Select Combobox—with Filtering in progress:
User has started typing into the search field.
1. Listed items in dropdown menu remain in place until the user types a character.
1A. Search field is autocomplete.
2. Fixed menu footer provides option to select all projects shown by current search filter (and when checked selects those projects).
2B. If all currently shown projects are selected this label changes to 'Deselect all X Projects' (and when checked deselects all projects).
3. If user selects project(s) and then changes the filter such that previously selected project(s) are no longer shown, those previously selected projects become deselected. (This is controversial perhaps, so I have ideas for how to do differently).
4. The form changes are submitted and menu collapses when the user clicks away from menu.

Final 'combobox' design spec
Developers use these functionality specifications to construct the working component. In most cases, styles are included as subcomponents already built into the design system

Final Design

A Simple Solution to a Complex Problem

The result was a simple yet powerful solution that aggregated project data onto a single view, making reporting and triage much easier.

The positive impact on customer efficiency was immediate for early beta testers; what often took engineering teams hours now took as little as minutes, saving companies money.

Customer Acclaim

"The Account Dashboard makes it dead simple to know where our engineering time has the highest leverage regarding issues affecting our customers and shoppers."

— Jason Kozemczak, Tech Lead at Instacart

This screenshot shows the 'Items' section of the Rollbar Account Dashboard. It lists 20 errors from the 'mox' project over a 24-hour period. Each error entry includes a small bar chart icon, the count of errors (e.g., 2,891,811), the duration (e.g., 4 secs), the error ID, and a brief description. The columns are labeled '24hr Trend', 'Total', 'IPs', 'Last 1', 'Item', 'Environment', 'Level', and 'Owner'. There are also filters for 'Framework', 'Environment', 'Owner', and 'Status' at the top.

24hr Trend	Total	IPs	Last 1	Item	Environment	Level	Owner
2,891,811	2,605	4 secs	#356790	CarfError	production	Error	—
3,375,682	2,531	4 secs	#187441	CSRF token mismatch in OAuth flow	production	Error	—
74,038	12	34 secs	#8524	Uncaught SyntaxError: Unexpected token else	production	Error	—
20,131	24	47 secs	#444423	TypeError: Cannot read property 'incrPrevTotalCount' of undefined	production	Error	—
37,035	3	57 secs	#336538	MultipleResultsFound: Multiple rows were found for one() on helpscou...	production	Error	—
2,572	70	1 min	#445309	Error	production	Error	—
1,992	4	1 min	#445878	TypeError: Cannot read property 'incrPrevTotalCount' of undefined	production	Error	—
28,945	-	3 mins	#417466	JSONDecodeError: invalid control character u'\u0013' at: line 1 column 1022...	production	Error	—
31,660	-	3 mins	#87906	UnicodeEncodeError: 'ascii' codec can't encode characters in position 11-1...	production	Error	—
14,663	3,218	5 mins	#417105	HTTPNotFound: The resource could not be found.	production	Error	—
14,467	-	6 mins	#416246	TypeError: expected string or buffer	production	Error	—
119	-	6 mins	#12197	Raw item with crash report doesn't have trace	production	Error	—
6,430	567	8 mins	#428400	SAMLAuthenticationRequired	production	Error	—
581,882	0	8 mins	#277148	iOS pipeline missing macOS symbols	production	Error	—

Before – repetitive overload

The Item View is rich in project data. But having to wade through many individual screens to find an issue is difficult

After – powerful simplicity

High-level actionable data from all active projects in one view saves time

This screenshot shows the simplified Rollbar Account Dashboard. At the top, there are dropdowns for 'Timezone: US - Pacific', 'Projects' (set to 'mox'), 'Dashboard', 'Items', and 'Versions'. Below the timeline chart, there are summary sections for 'Occurrences - Last 24 Hours' and 'Project' metrics.

Occurrences - Last 24 Hours

This chart tracks the number of occurrences for five projects over a 24-hour period. The y-axis ranges from 0 to 60k. The legend includes:

- mox-workers (red)
- mox-web (orange)
- mox (yellow)
- mox-etls (green)
- mox-macs (blue)

Project

Project	Occurrences ▾	Activations	Deploys
mox-workers	332,111 ↓5%	22 ↑450%	4
mox-web	290,171 ↑8%	6,942 ↑357%	11
mox	271,972 ↓7%	43 ↑10%	0
mox-etls	42,116 ↓19%	1 -	2
mox-macs	6,054 ↓7%	0 -	1
rollbar-gem	478 ↑91%	0 -	0