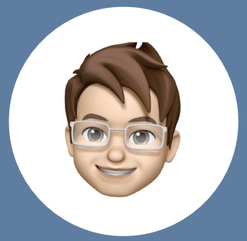


Colin Johnston

Digital Product Design

Samples of my product design work from the last five years

May, 2021

colin@colinjohnston.com | www.colinjohnston.com

Hello, I'm Colin!

I'm pleased to present three product design projects I've worked on over the last five years.

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

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.

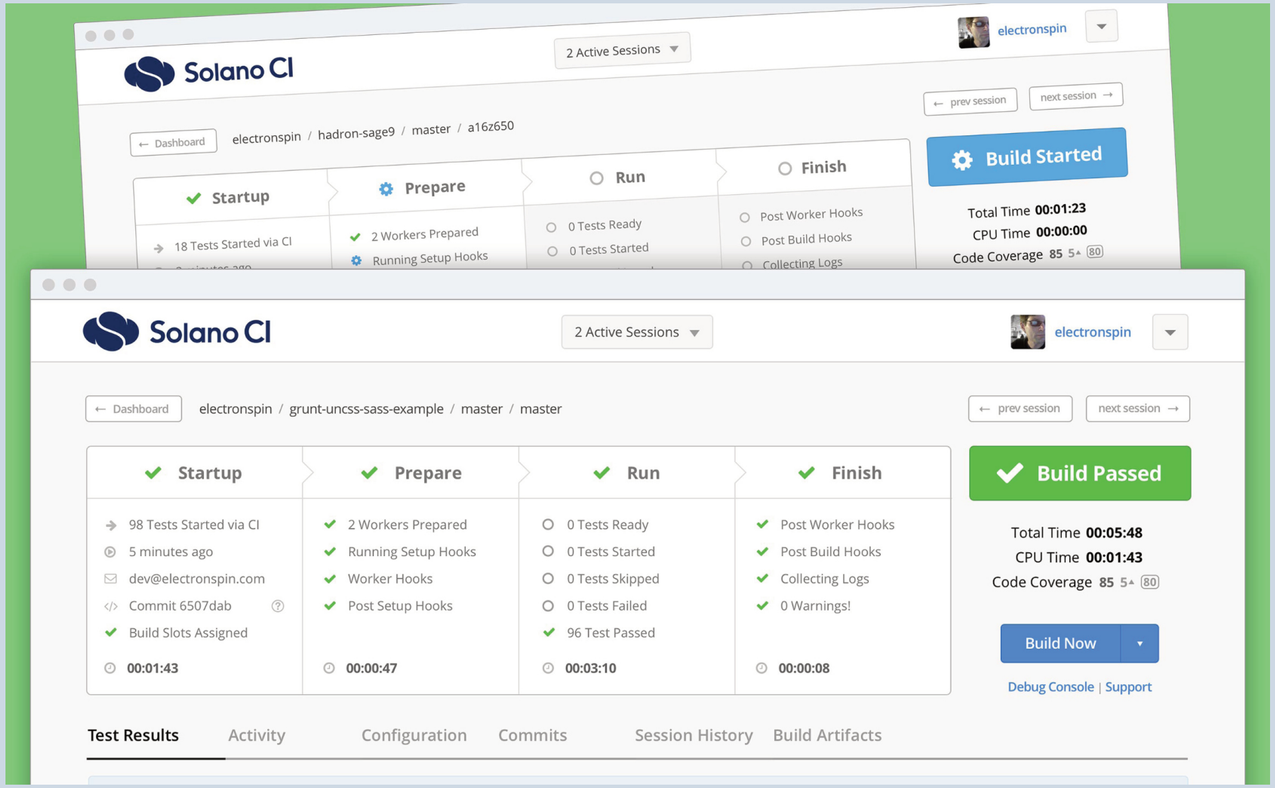
The Session View—the core of Solano CI—is a comprehensive real-time report of build progress and test results for a single software project. Since its initial release incremental changes to the system cause increasing usability and technical issues, the most critical being diminished trust in reporting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

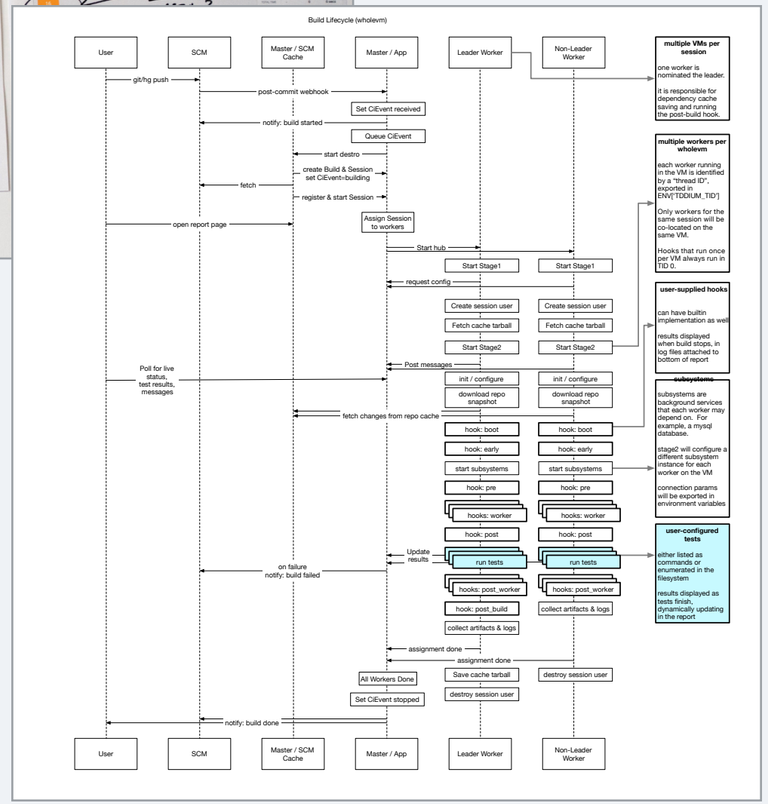
Technology Research

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.

Documenting usability issues
Heuristic analysis, user feedback, and contextual inquiry research was consolidated to provide a snapshot of key design challenges



Mapping internal systems
Analyzing data flows—deep dive into the technology behind parallel concurrent software build systems

Ideation & Design

Early Concept Sketches & Wireframes

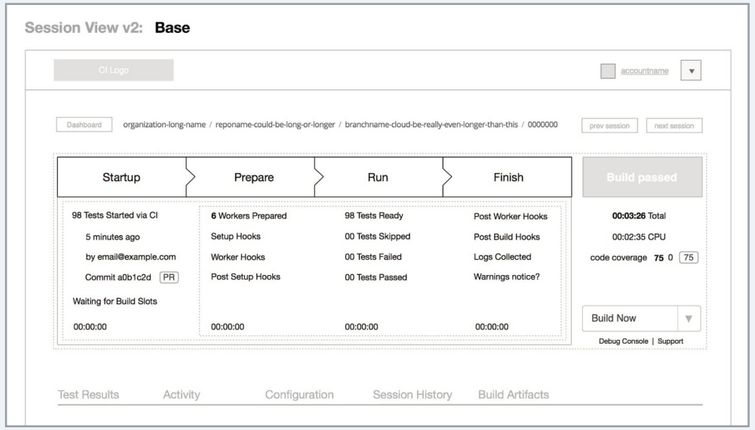
Using research findings I set out to create a new interaction model for the session view that prioritized ease-of-use and increased trust in the data presentation.

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

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



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

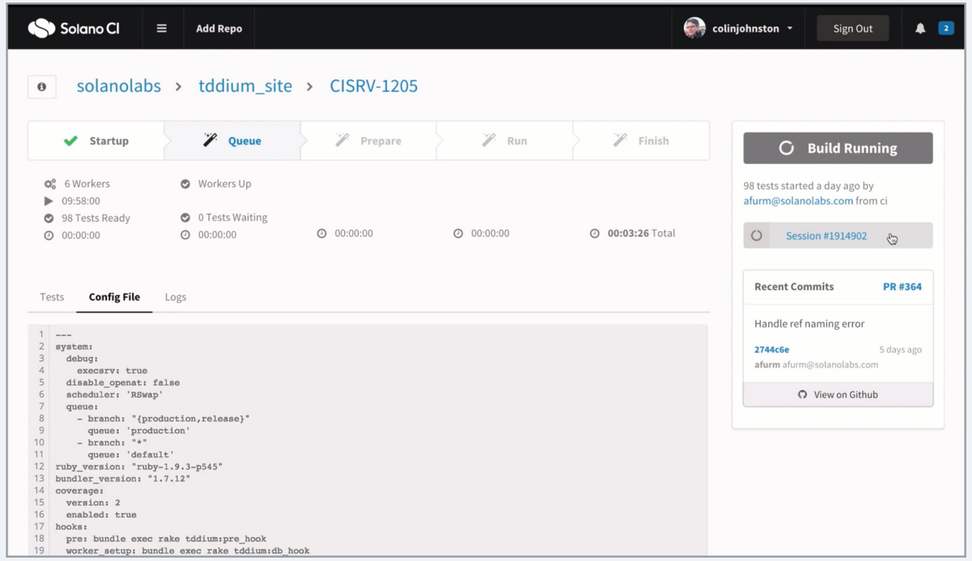
Prototype & Test

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.

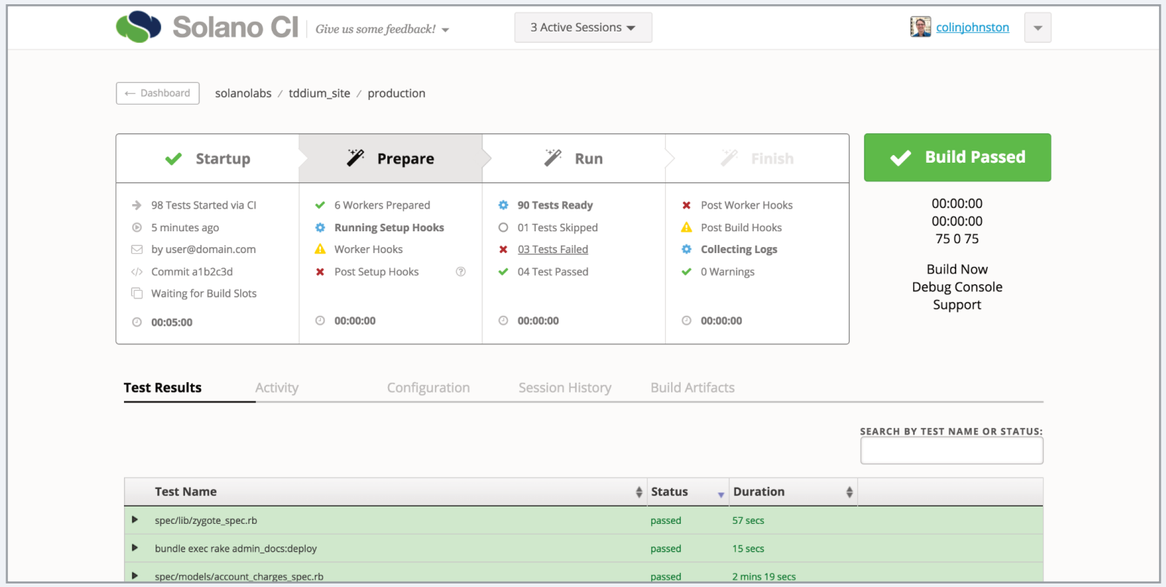
Real-world Testing

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.



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

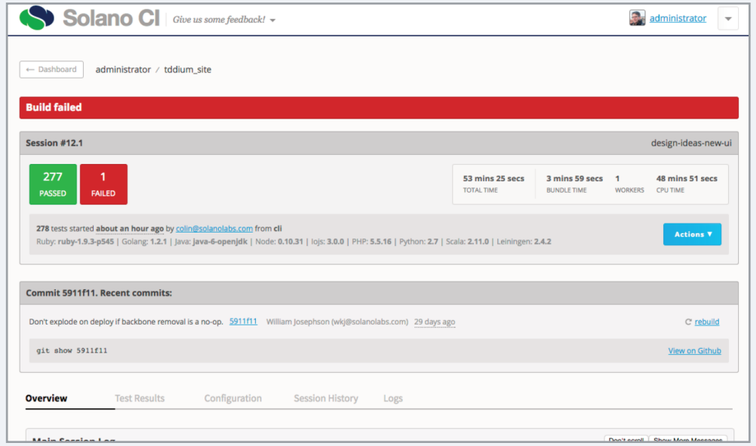
Data-driven prototype
Early-stage prototype with live data for user testing. This allowed us to validate complex system feedback design patterns that changed in real time



Final Design

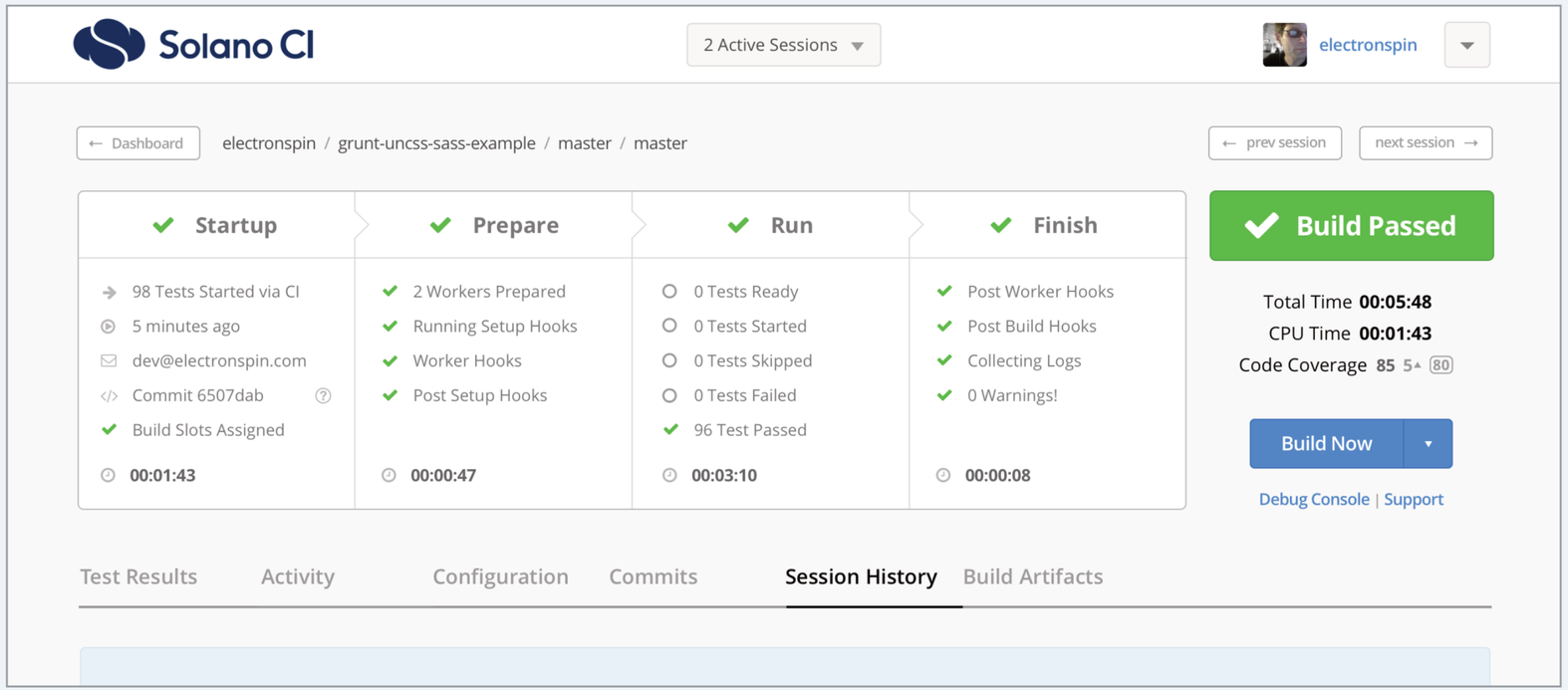
High-fidelity Mockups & Brand Alignment

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



Session View – before
The original session view was hard to use and presented inconsistent and inaccurate data

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

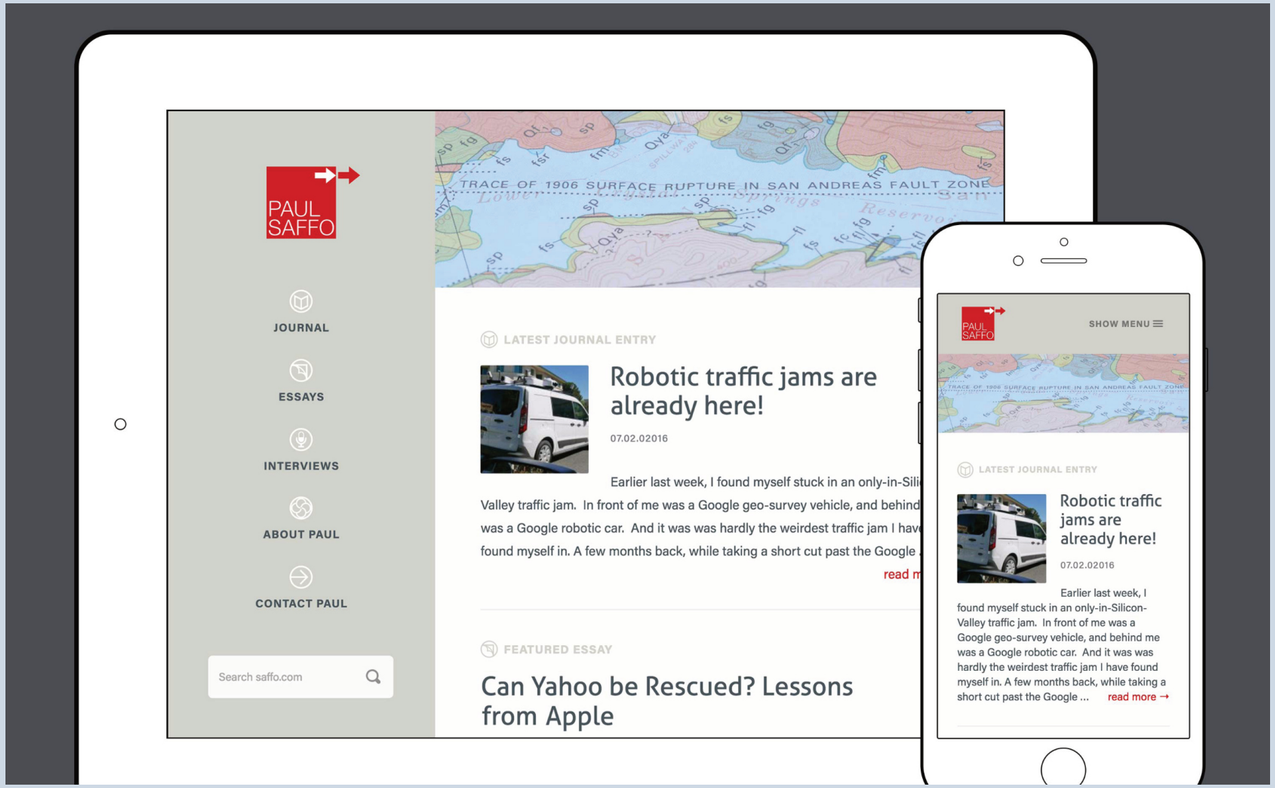
Paul has a rich collection of content—journal entries, essays, and interviews—and is a well known brand in Silicon Valley and internationally.

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.

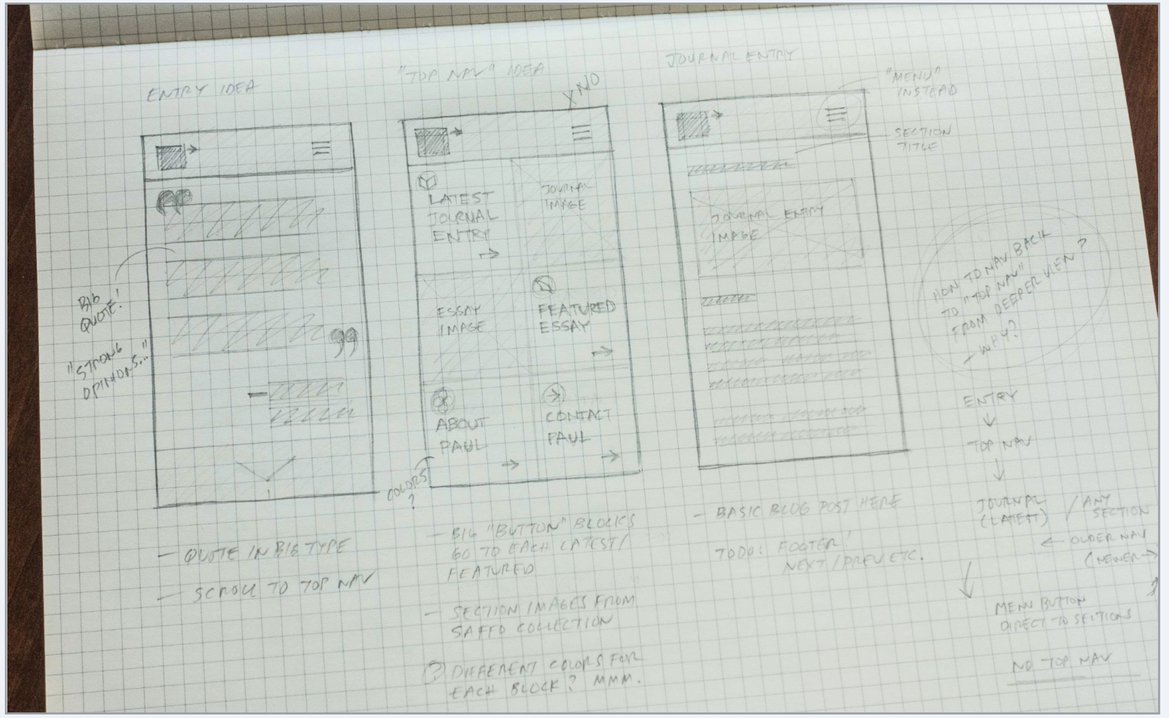


Ideation

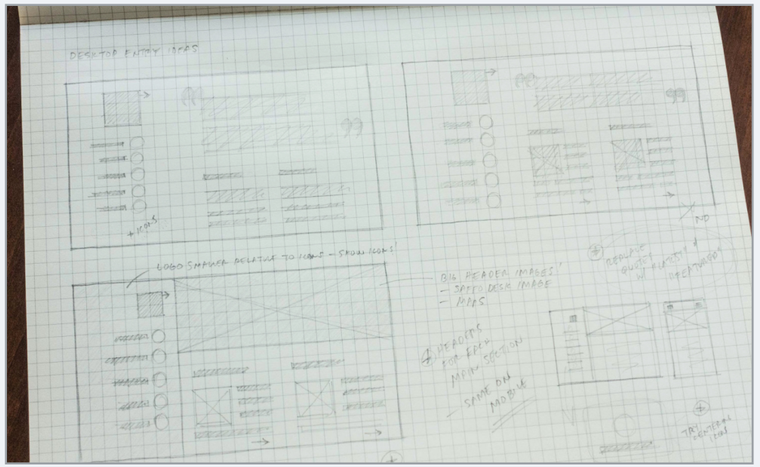
Sketches

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

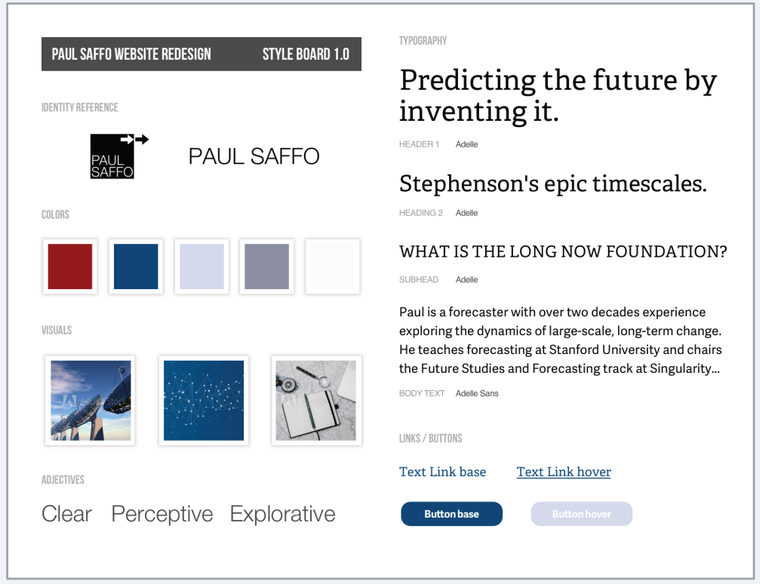


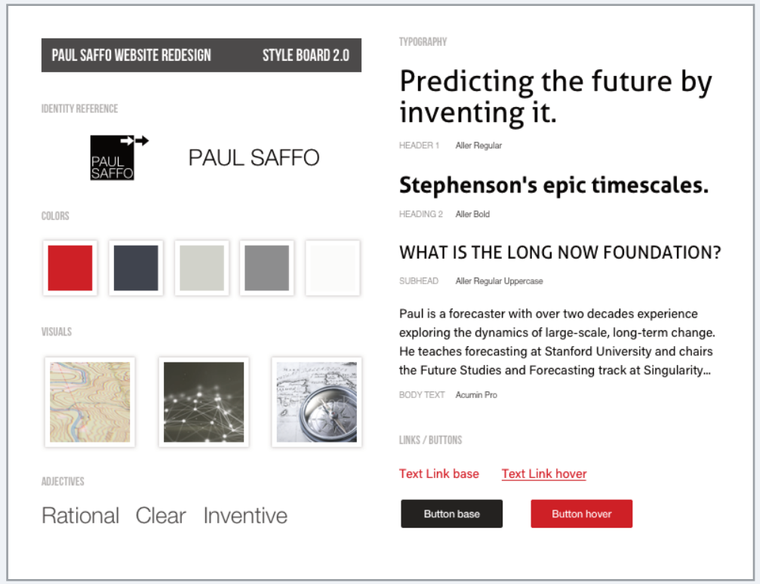
Visual Design

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.





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

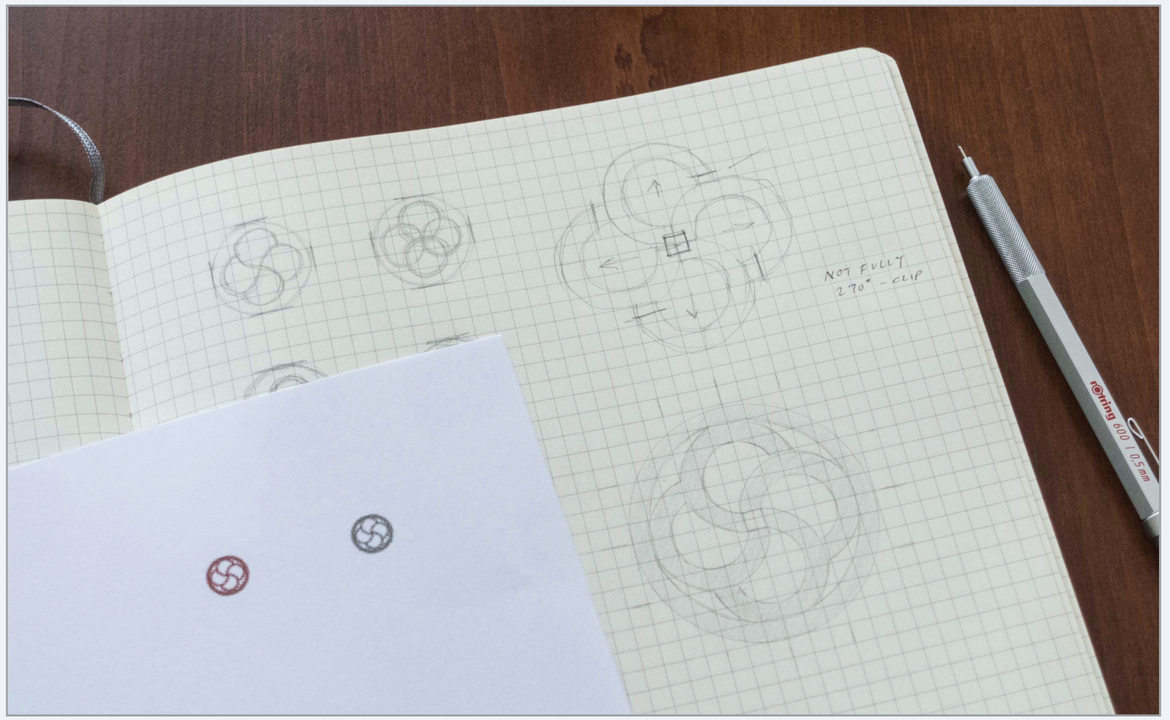
Photography
I worked with Paul to produce original photography for certain sections. I experimented with treatments that would harmonize with the brand aesthetics

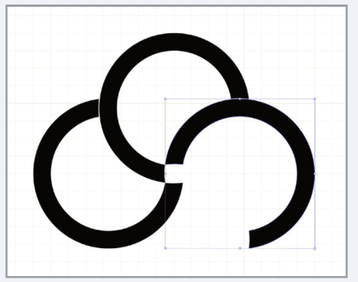
Iconography

Custom Icon System

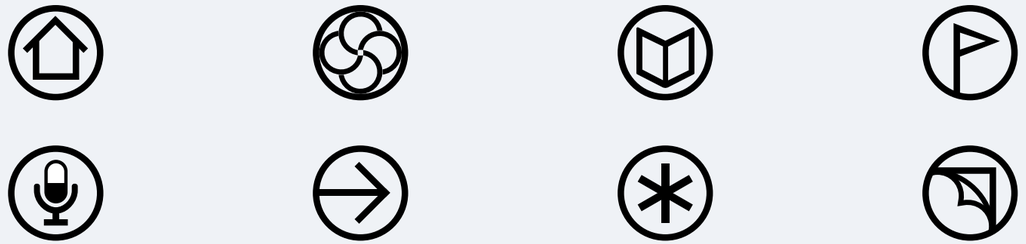
Paul is known for his love of maps. I designed a set of icons that evokes navigation and wayfinding.

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

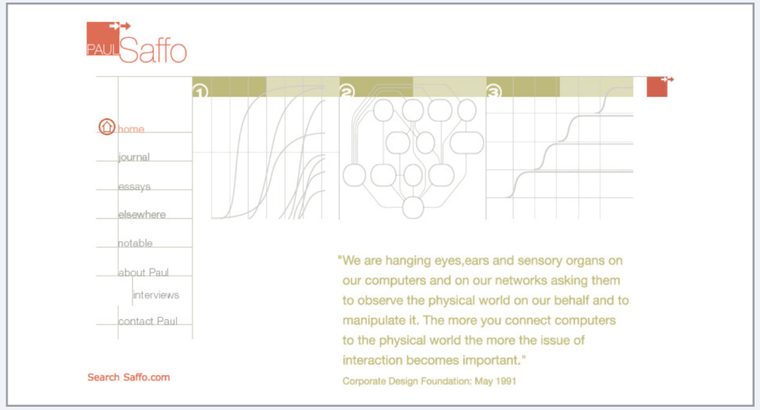


Final icon designs
Scalable vector graphics (SVGs) are crisp and clear on any device at any size

Final Design

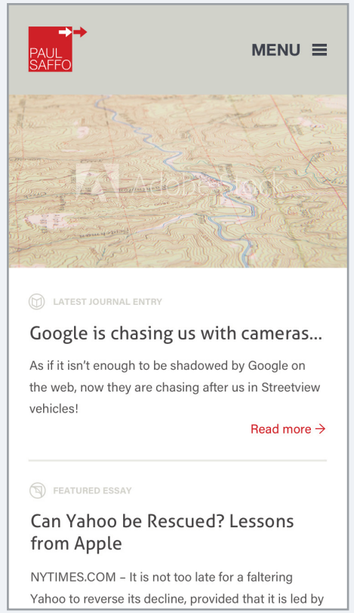
Multi-device Mockups

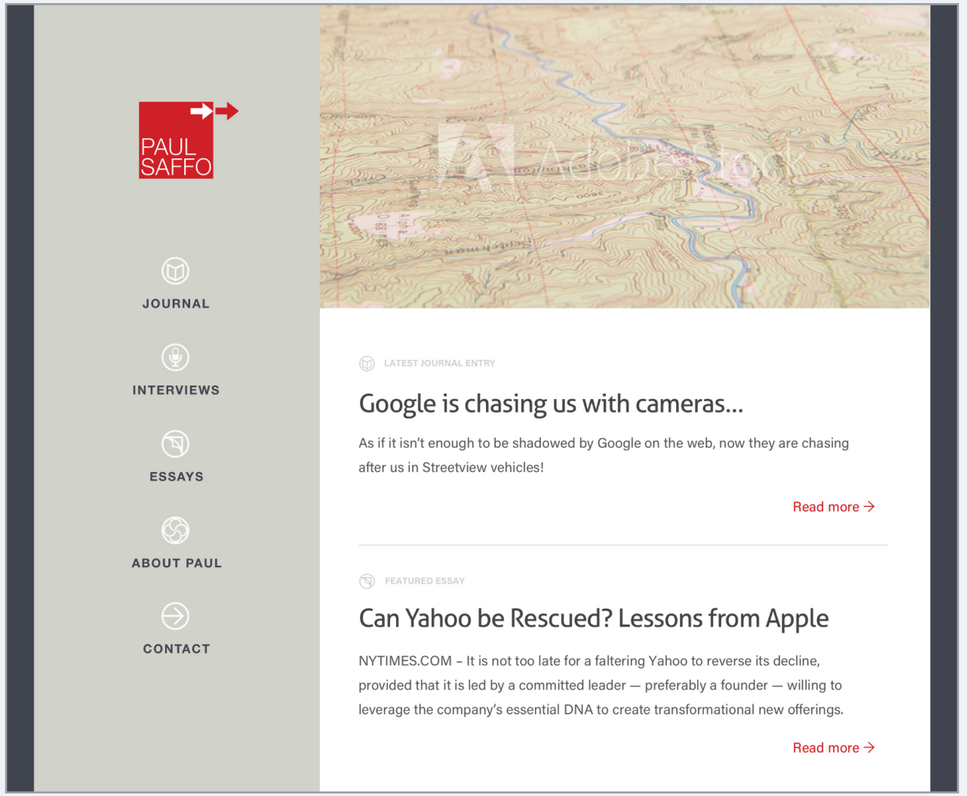
With any adaptive experience, I design the desktop and mobile views side-by-side to ensure visual consistency.



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.

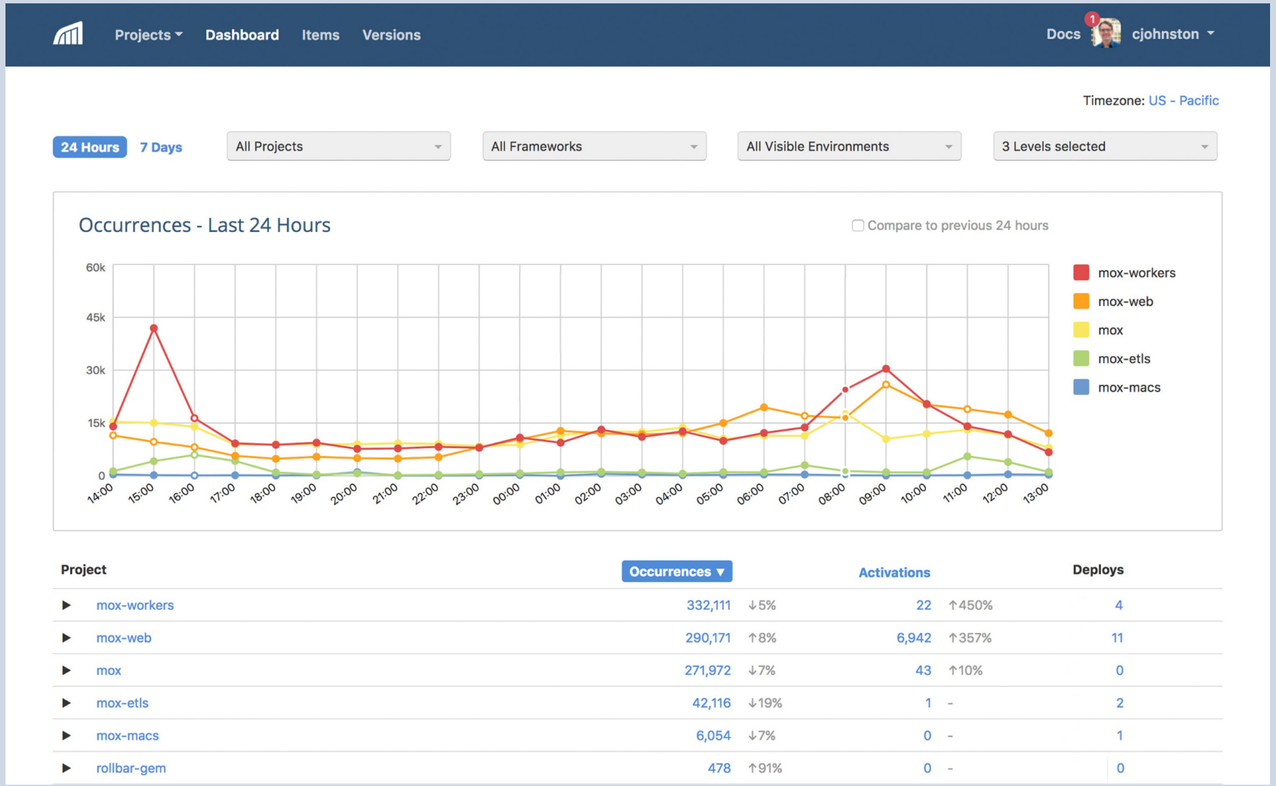
Problem

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.



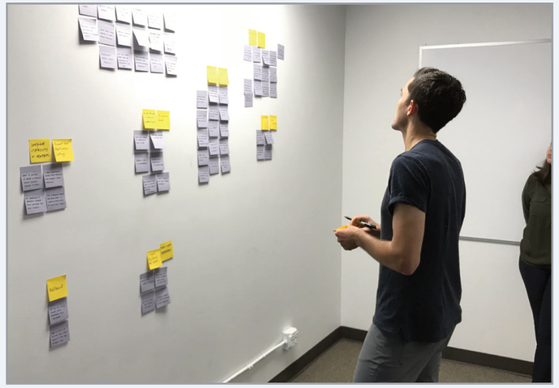
Discovery

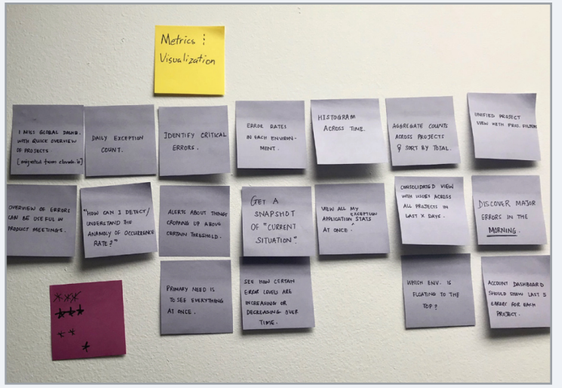
In-depth User Research

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

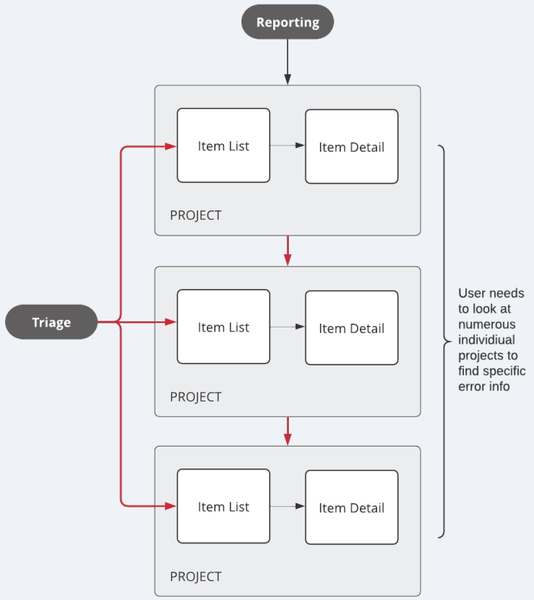
Our research and testing revealed that customers typically had one of two distinct use cases: reporting or triage. One group of users wanted to see easily configurable reports of overall status, the other group wanted a way to quickly locate problem areas to solve issues more efficiently.



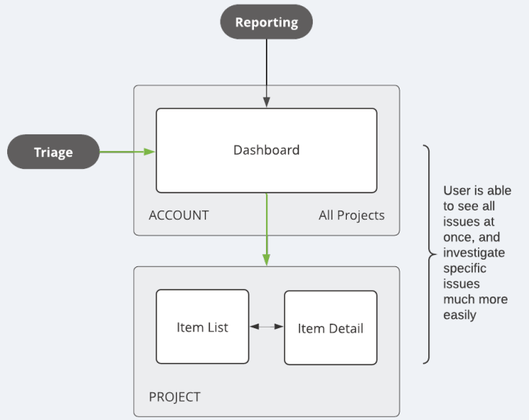


Affinity mapping exercise
Inputs from our contextual inquiry sessions.

Before Account Dashboard



Proposed Account Dashboard Flow



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

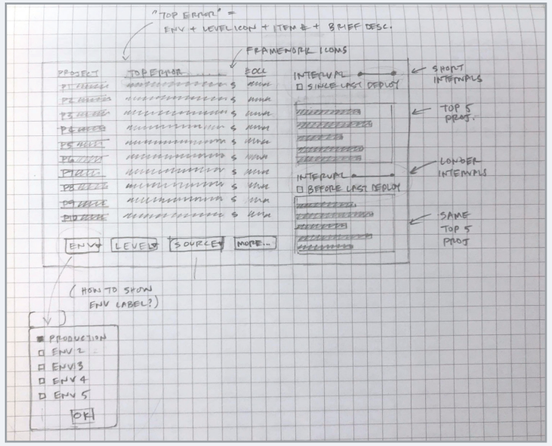
Ideation

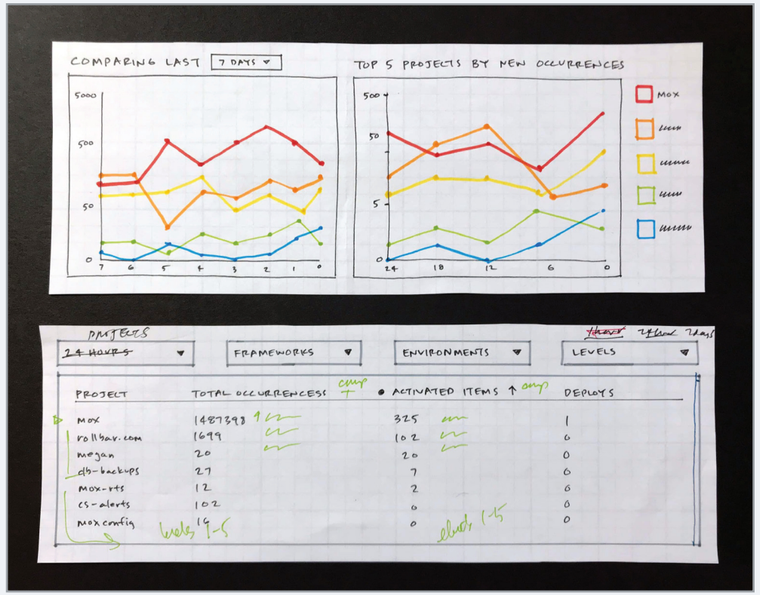
Early Concepts & Sketches

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

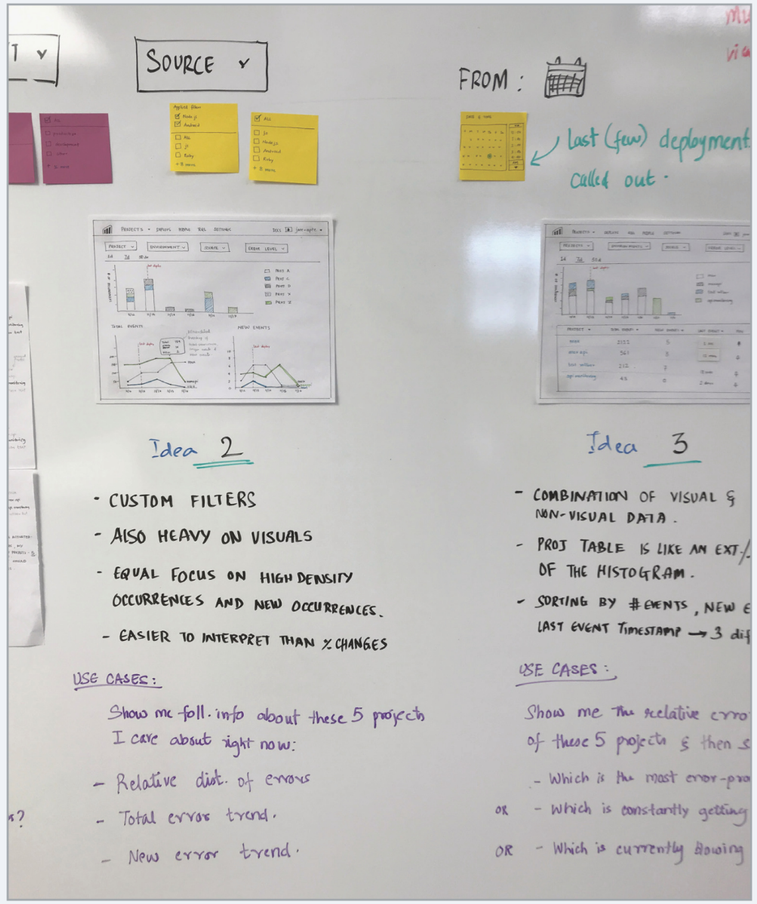
By bringing the Product team into the design process, we quickly connected product design and business strategy. Real-time group collaboration—when properly structured—yields better design decisions faster.





Rough concepts
Rapid sketches and low-fidelity wireframes to explore different structures

Collaborative design process
I facilitated extensive brainstorming sessions to explore different features and use cases

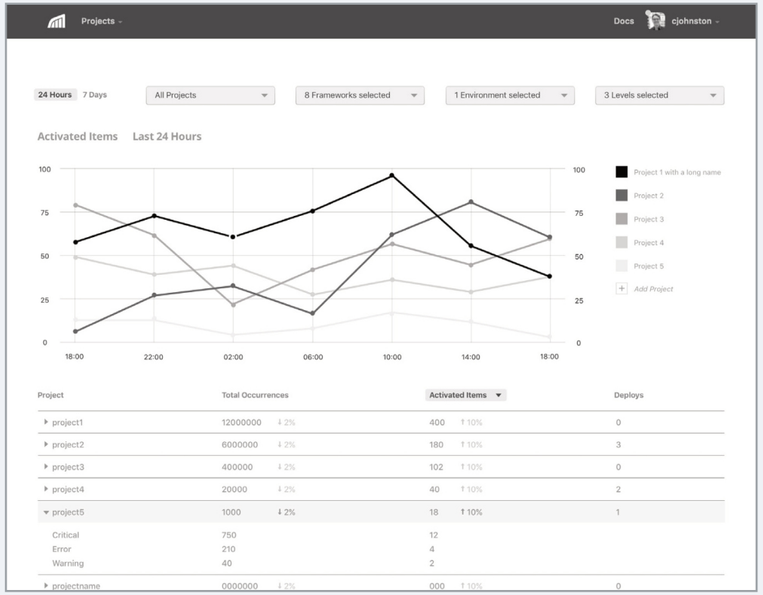


Design

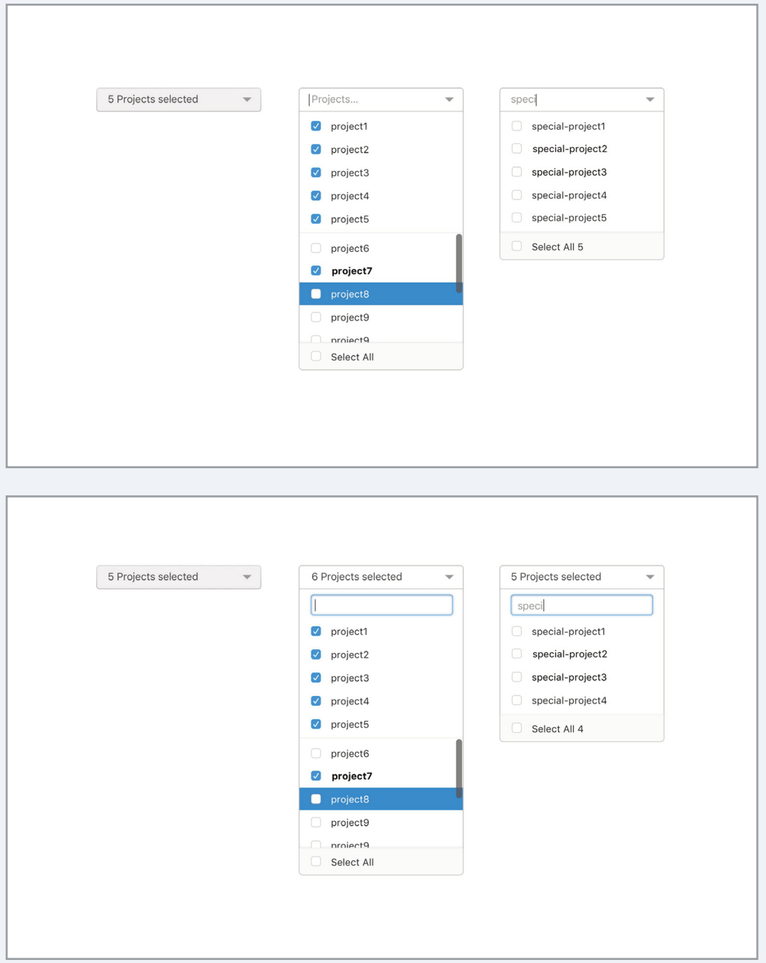
Connecting Research and Design

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

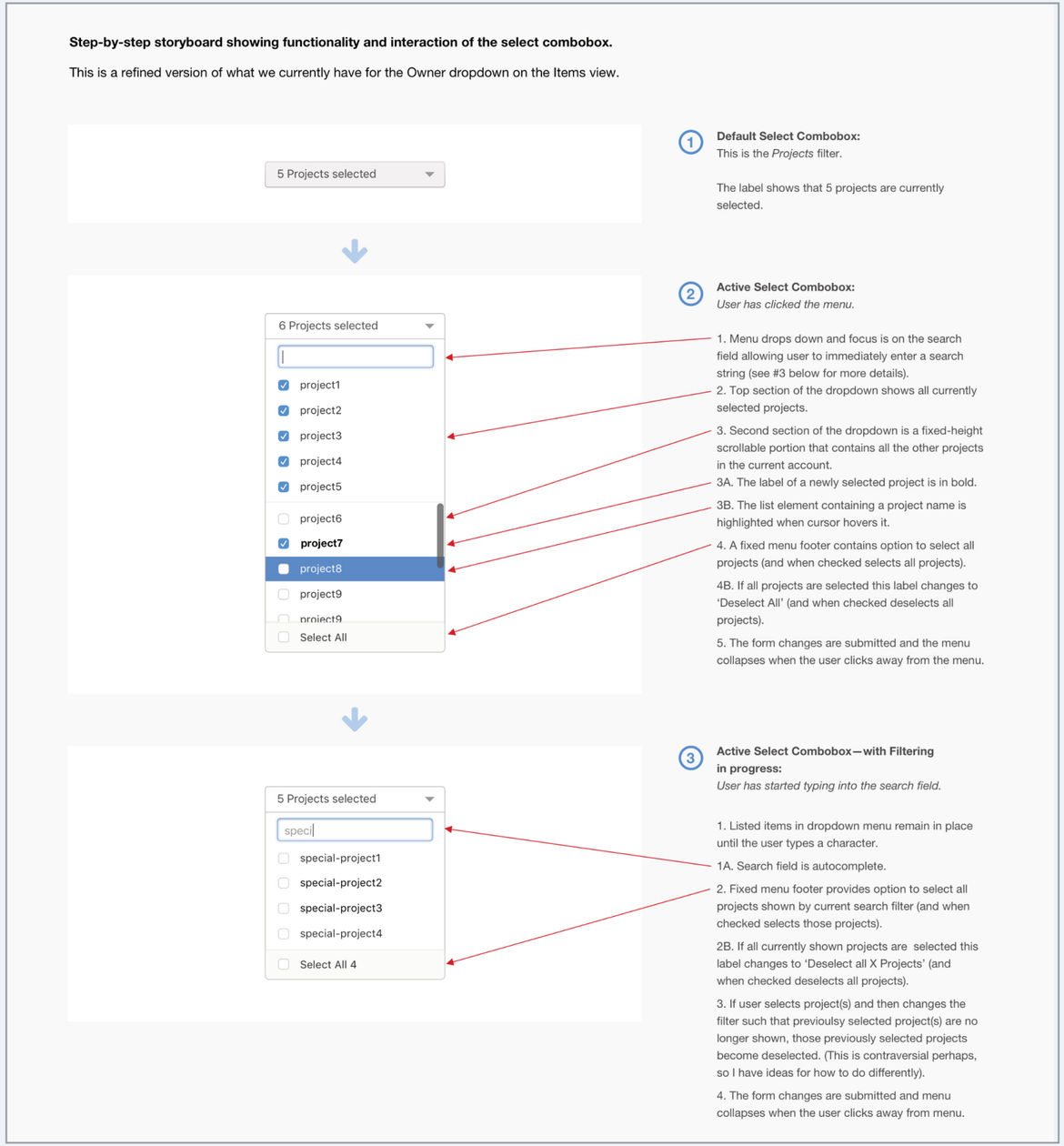


Evolving the ‘combobox’
A key component of the new session view experience was powerful but intuitive filtering controls. We opted for a control that showed selection count even when active because it increased user efficiency

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.



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

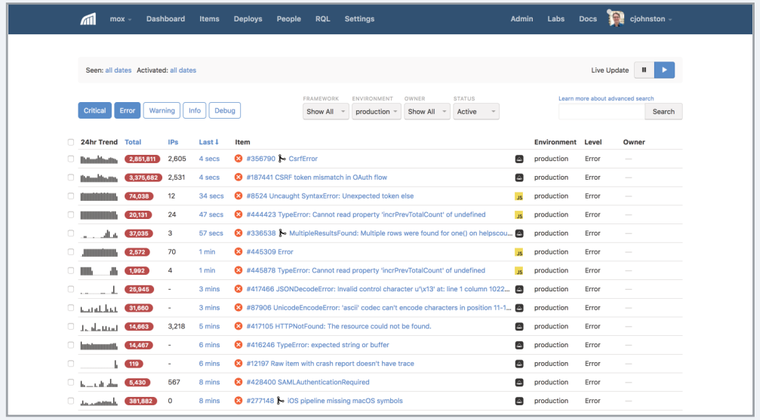
The result was a simple yet powerful solution that aggregated project data onto a single view, making reporting and triage much easier.

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



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