



# Colin Johnston

## Digital Product Design

Samples of my product design work from the last five years

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## 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

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# 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.

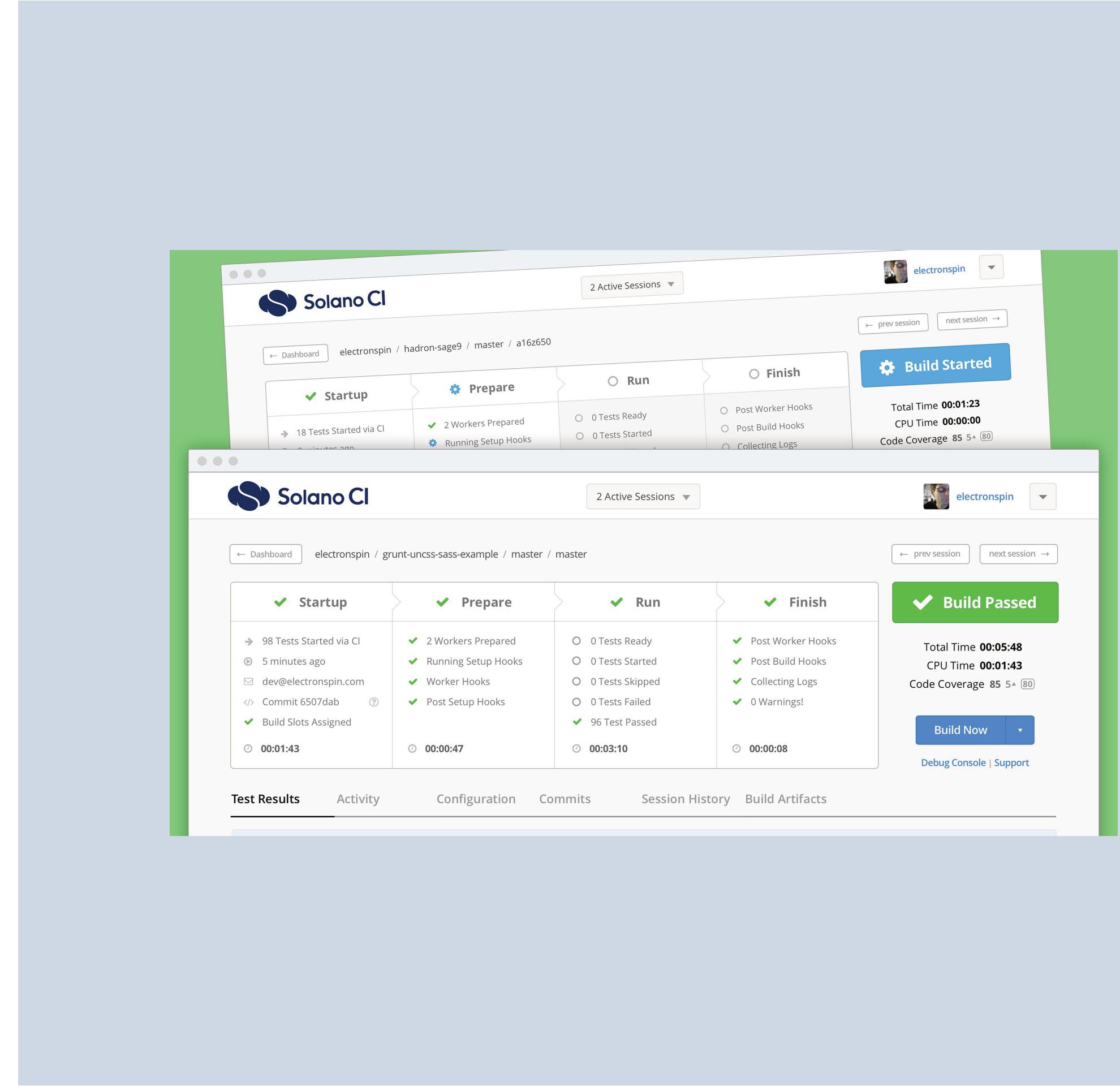
The Session View—the core of Solano CI—is a comprehensive real-time report of build progress and test results for a single software project. Since its initial release incremental changes to the system cause increasing usability and technical issues, the most critical being diminished trust in reporting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

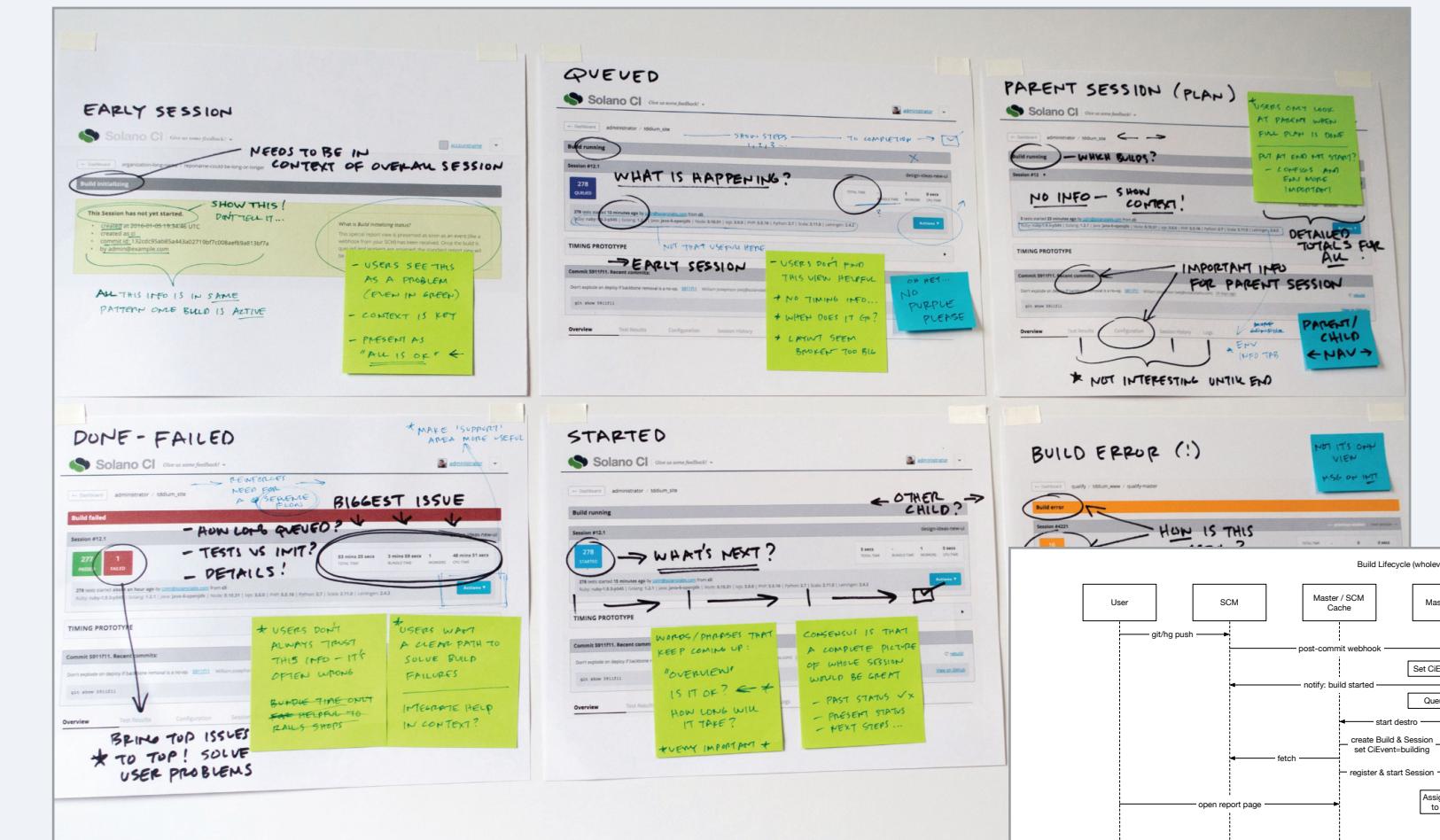
I led customer interviews and contextual inquiries with key customers to better understand the challenges they faced.

### 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.

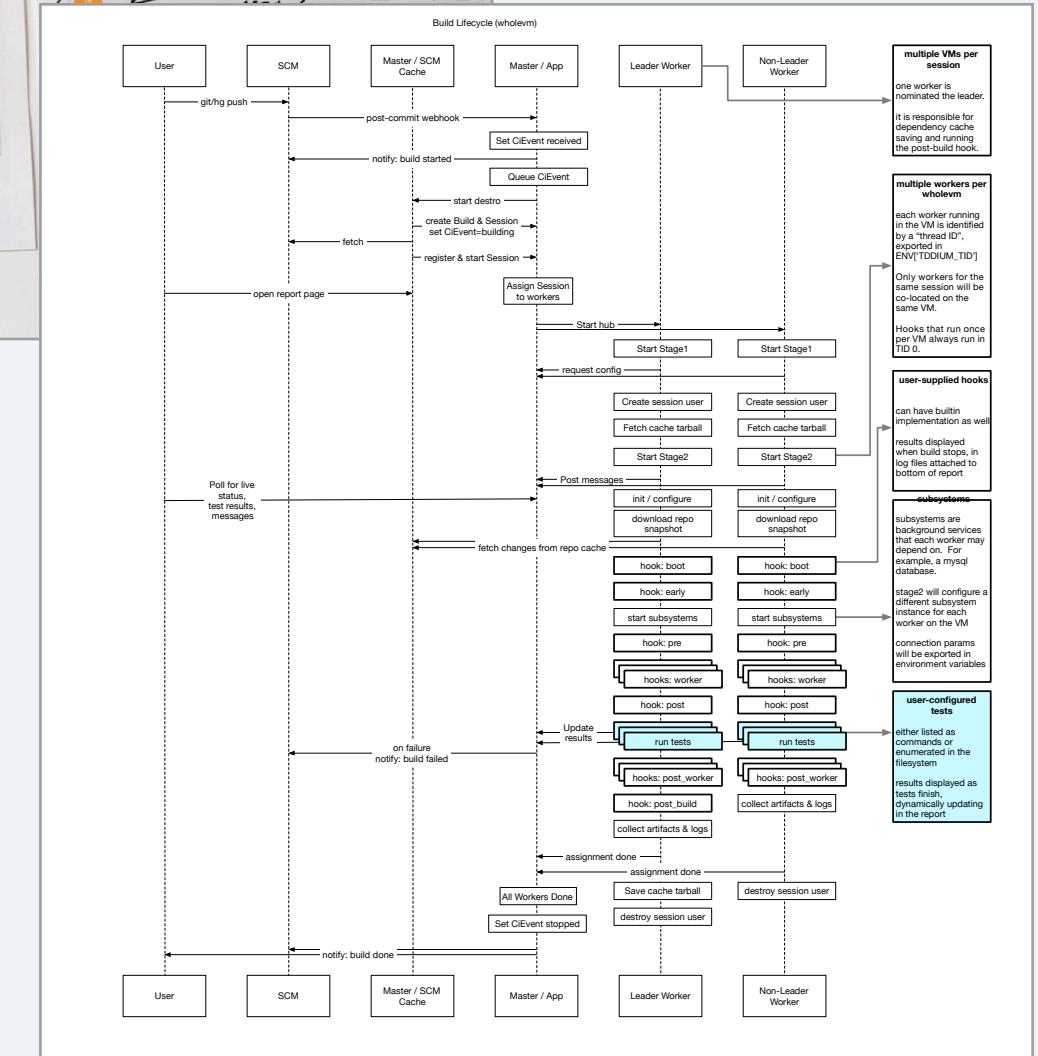


### Documenting usability issues

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

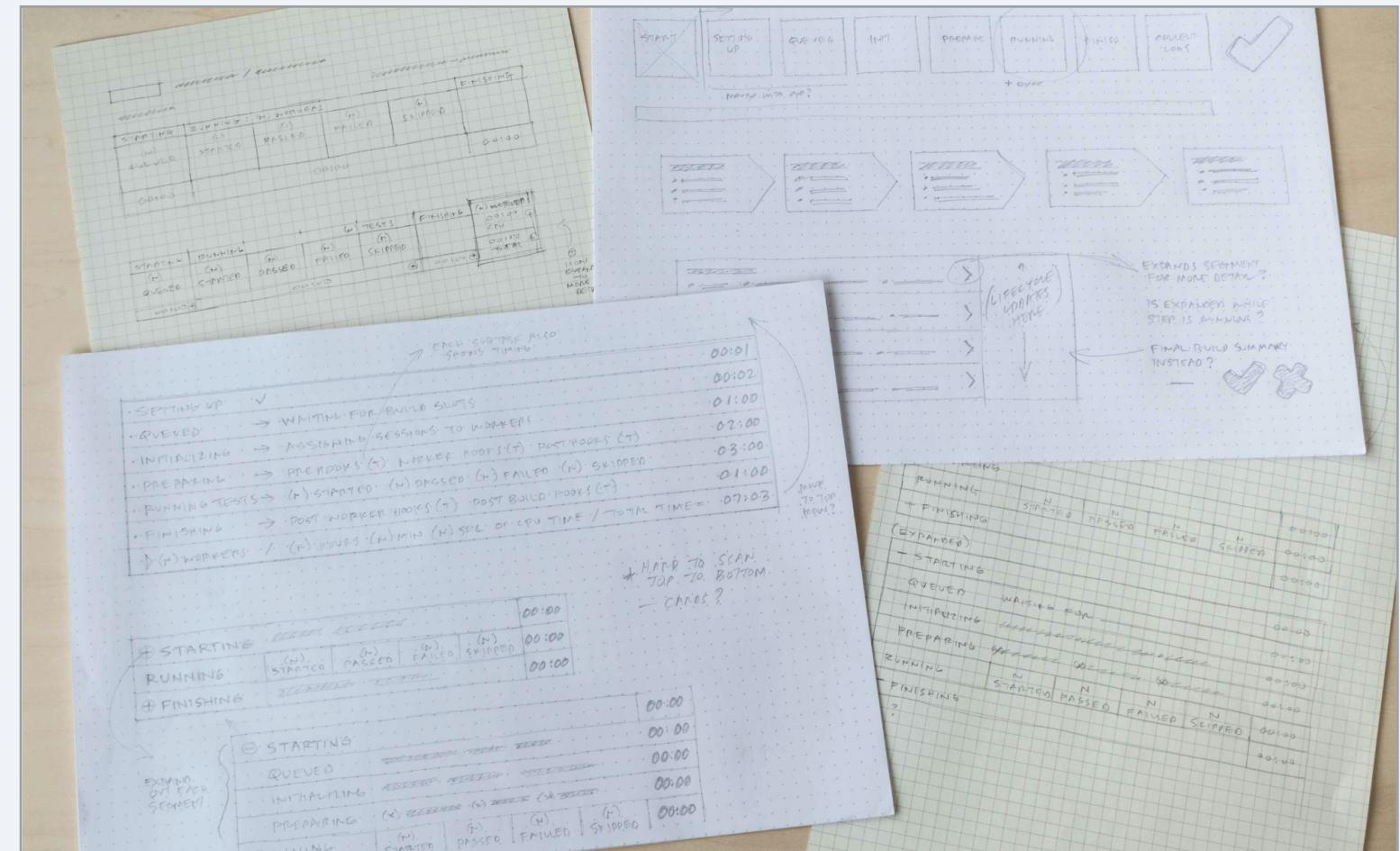
### Early Concept Sketches & Wireframes

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:

- 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 / 0000000
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 Tests Skipped 00 Tests Failed 00 Tests Passed	Post Worker Hooks Logs Collected Warnings notice?	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. The top bar shows the Solano CI logo and a feedback link. The main header indicates a 'Build failed'. Below it, a summary card shows 'Session #12.1' with 277 passed and 1 failed test. It also displays total time (53 mins 25 secs), bundle time (3 mins 59 secs), workers (1), and CPU time (48 mins 51 secs). A message below states '278 tests started about an hour ago by colin@solanolabs.com from cli'. The commit history section shows 'Commit 5911f11. Recent commits:' with a message from William Josephson. The bottom navigation includes 'Overview', 'Test Results', 'Configuration', 'Session History', and 'Logs'.

### Session View – before

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

Screenshot of the redesigned Solano CI Session View. The top bar shows the Solano CI logo and a dropdown for 'administrator'. The main header indicates '2 Active Sessions'. The session details show a 'Build Passed' status with a green checkmark. To the right, performance metrics are listed: Total Time 00:05:48, CPU Time 00:01:43, and Code Coverage 85 5▲ 80. Below this is a 'Build Now' button and links for 'Debug Console' and 'Support'. The central area displays a timeline of the build process: Startup, Prepare, Run, and Finish. Each step is marked with a green checkmark and contains detailed sub-tasks and their statuses. The 'Session History' tab is currently selected at the bottom.

### 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.

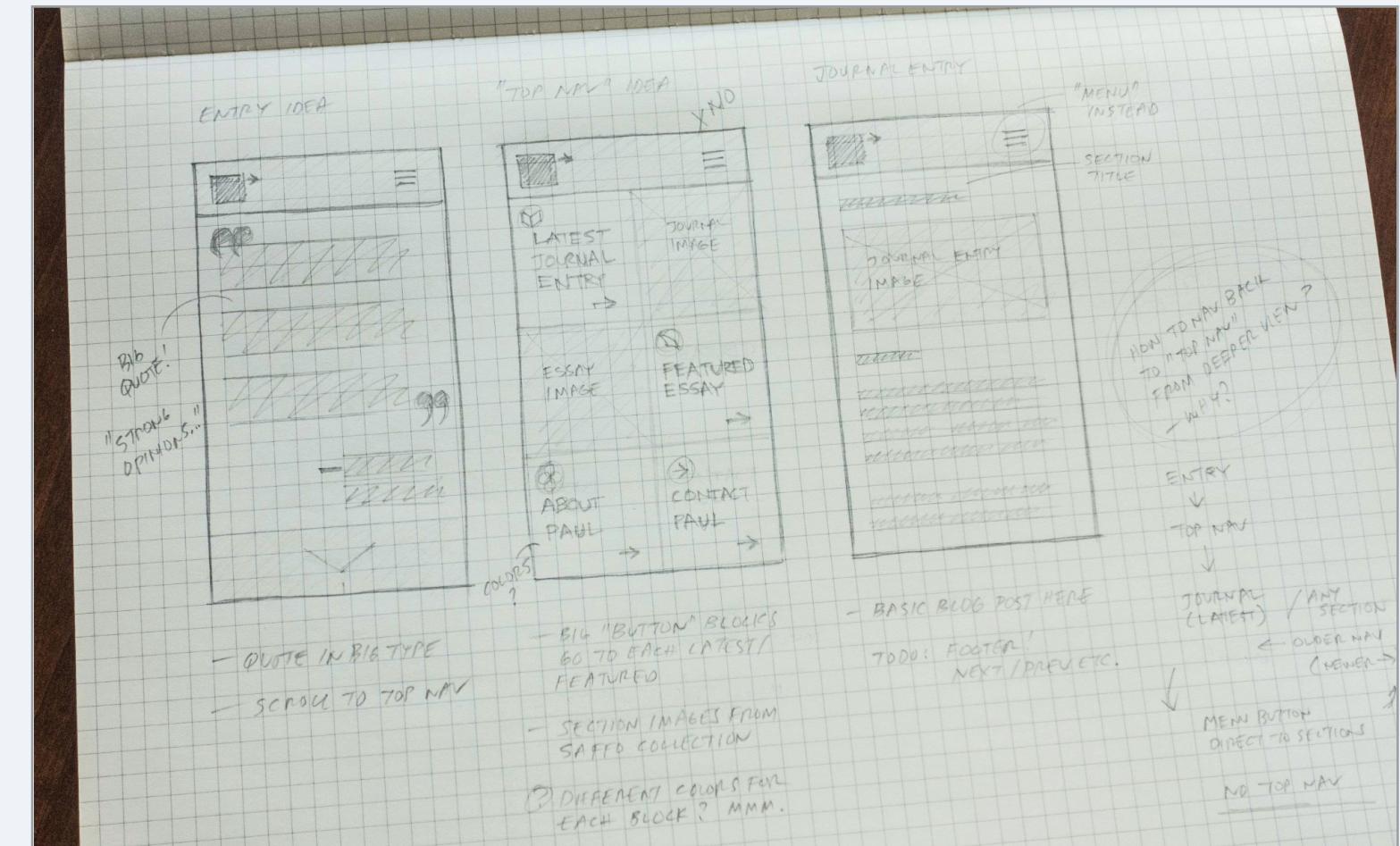


## Ideation

### Sketches

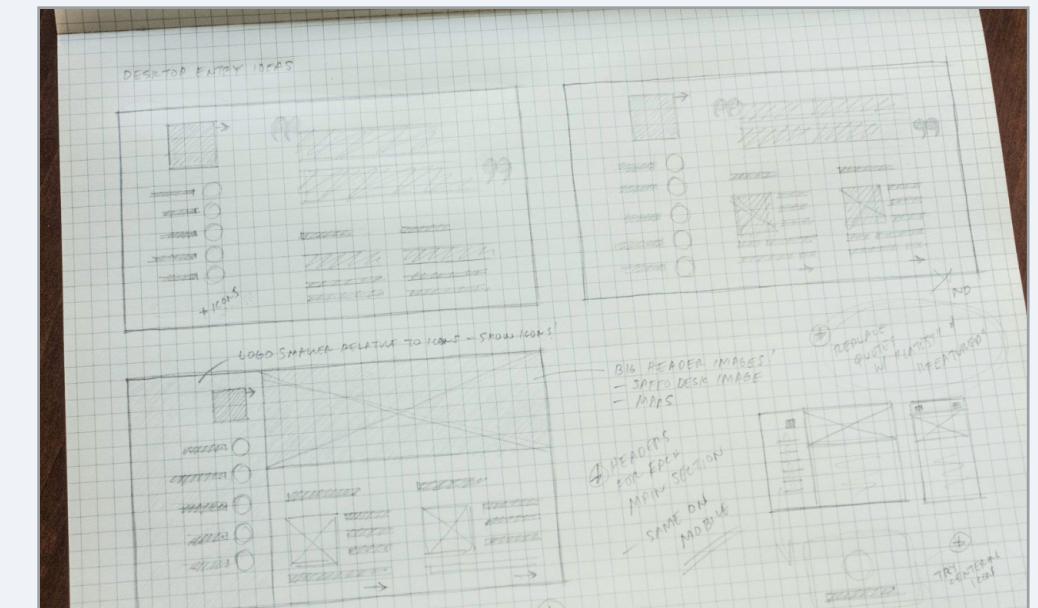
I created numerous sketches to find ways of simplifying a potentially complex interface down to its essentials.

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

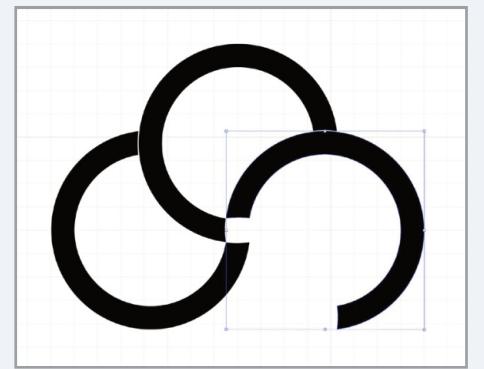
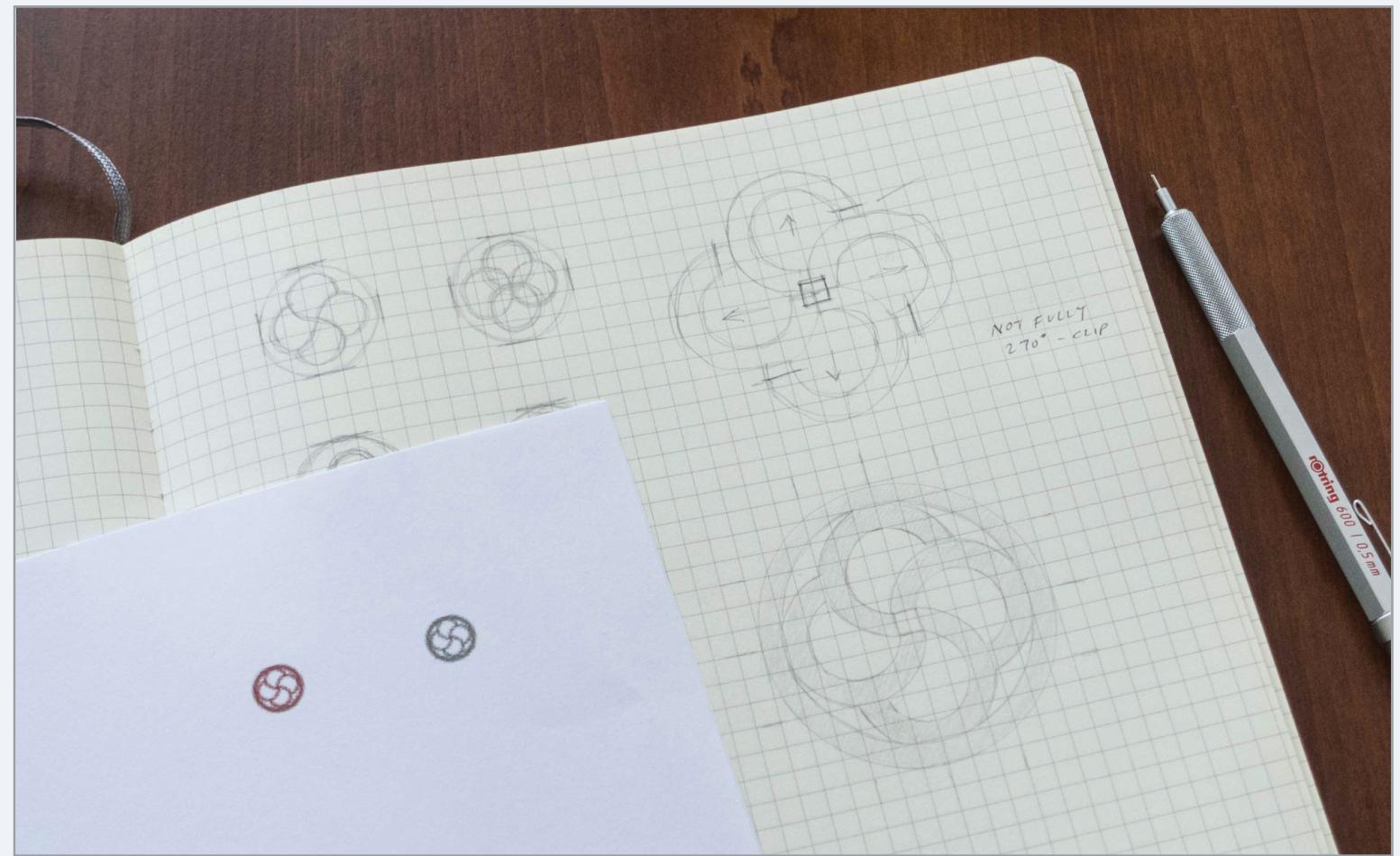
I worked with Paul to produce original photography for certain sections. I experimented with treatments that would harmonize with the brand aesthetics

## Iconography

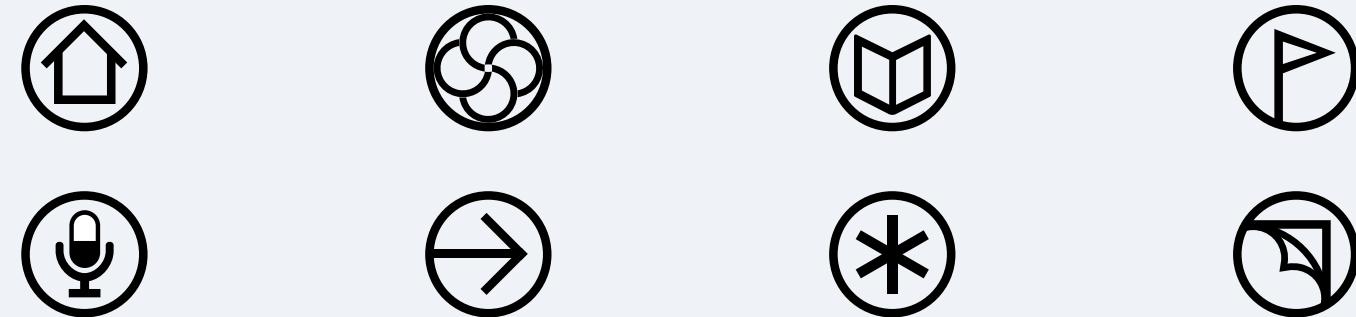
### Custom Icon System

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

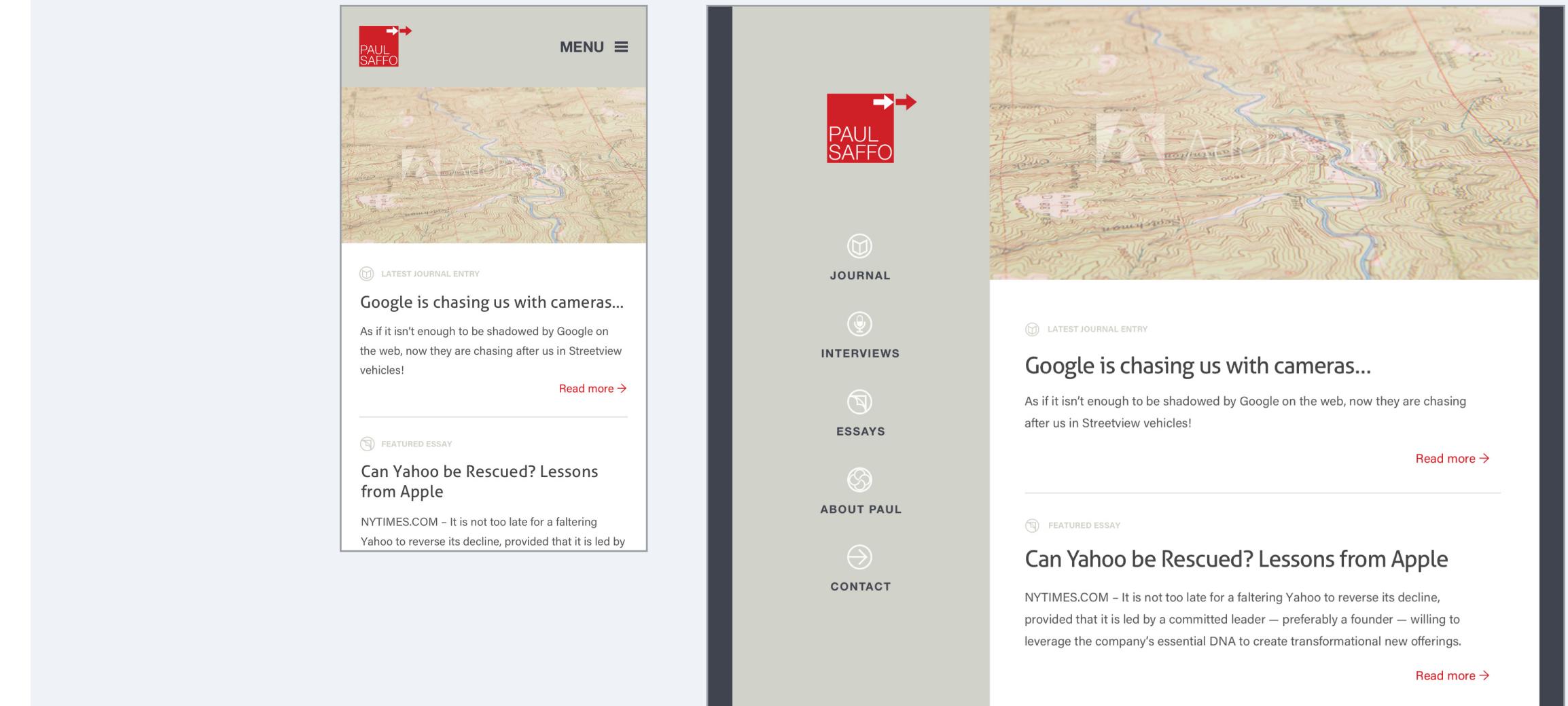
### Multi-device Mockups

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

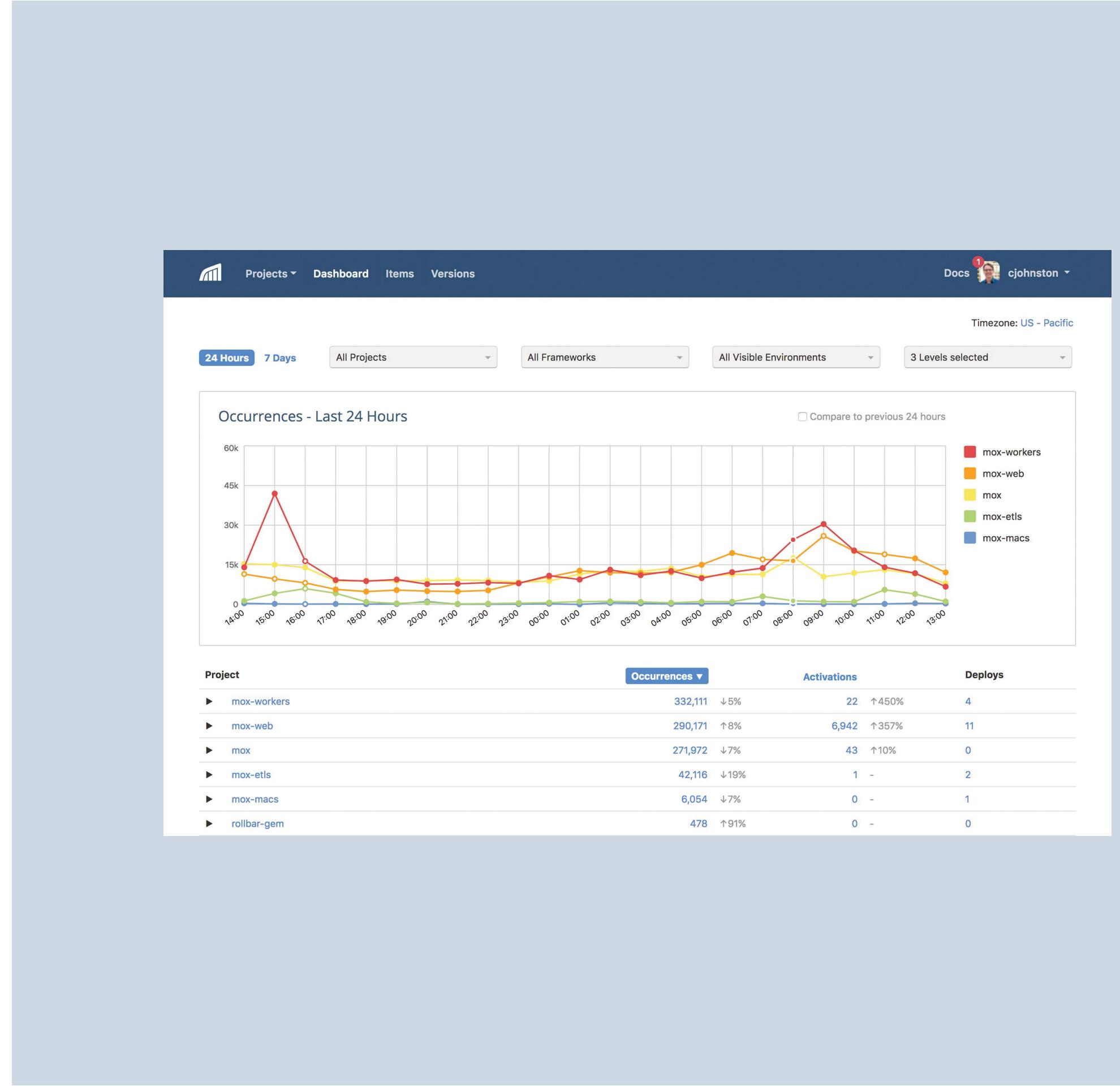
Rollbar customers have software projects composed of numerous applications and micro-services, each of which is accessed as a separate project. The lack of a comprehensive projects overview makes it much harder to mitigate potentially expensive failures.

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.



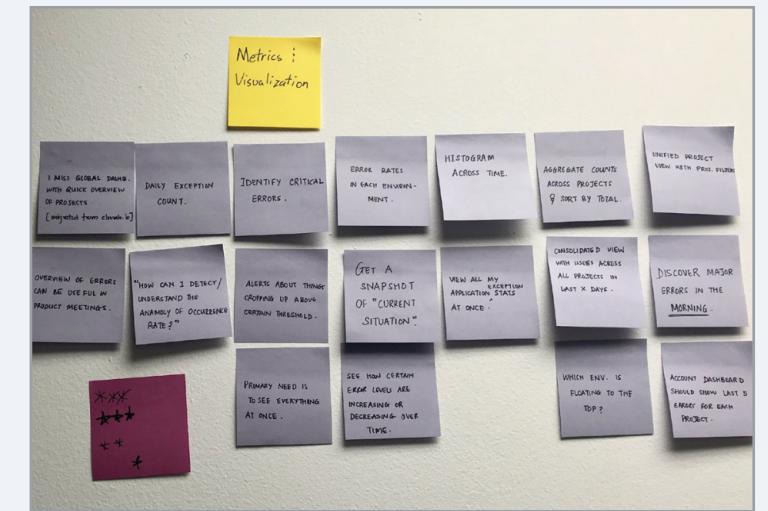
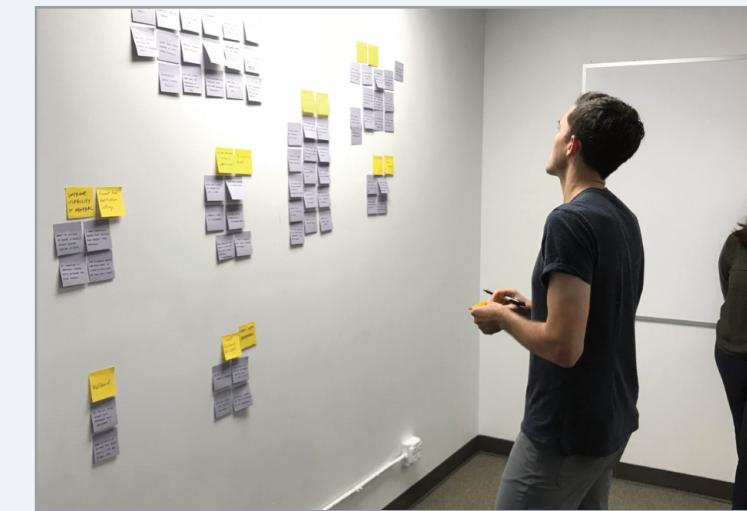
## Discovery

### 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.

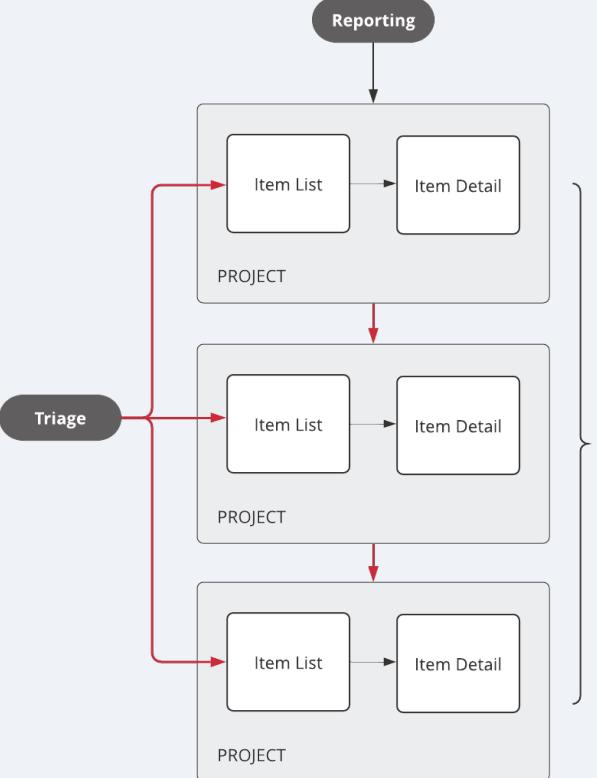
### Research-informed Design Decisions

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.



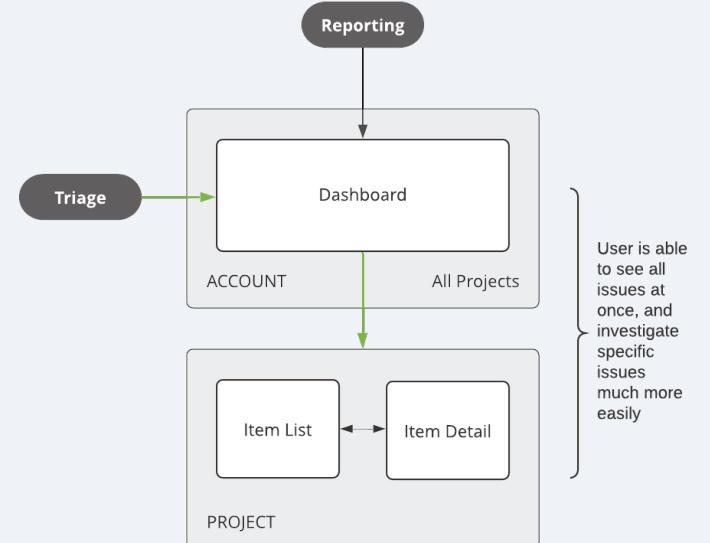
**Affinity mapping exercise**  
Inputs from our contextual inquiry sessions.

### Before Account Dashboard



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

### Proposed Account Dashboard Flow



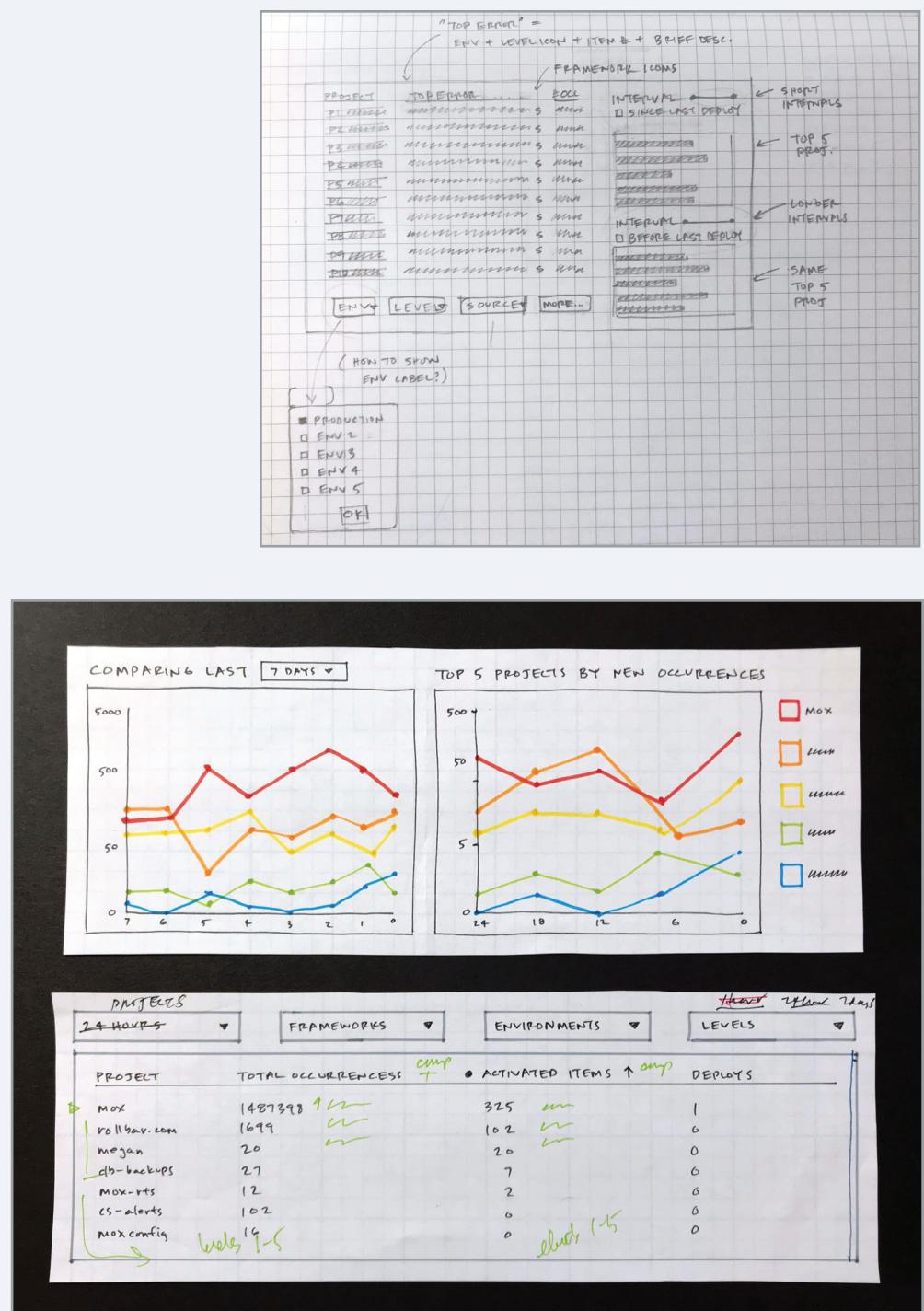
## Ideation

### 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..

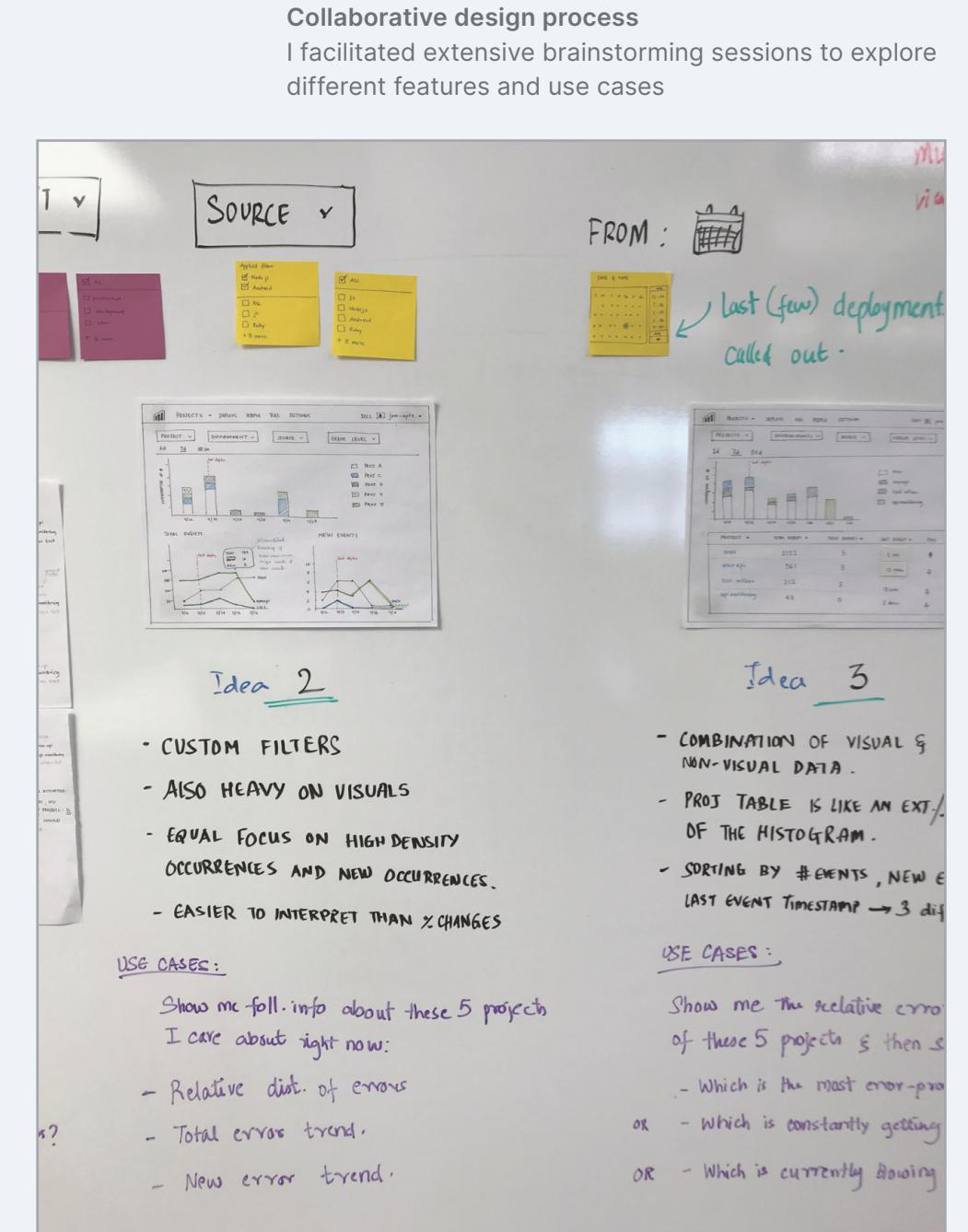
### Design Charettes

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

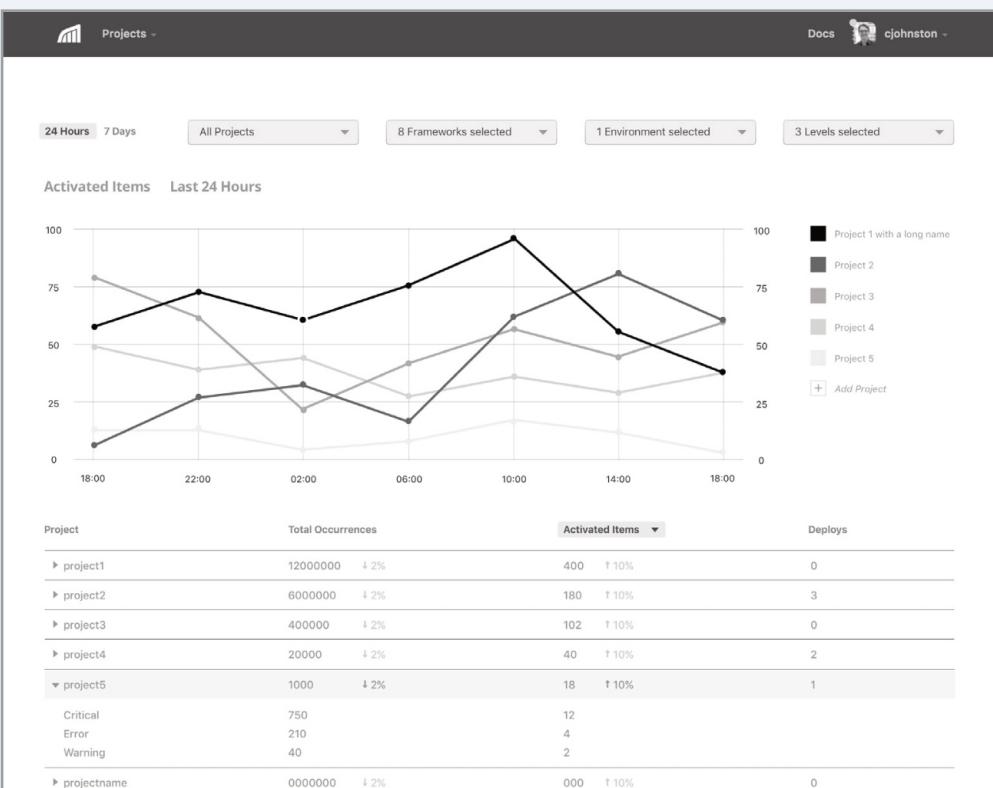


## Design

### Connecting Research and Design

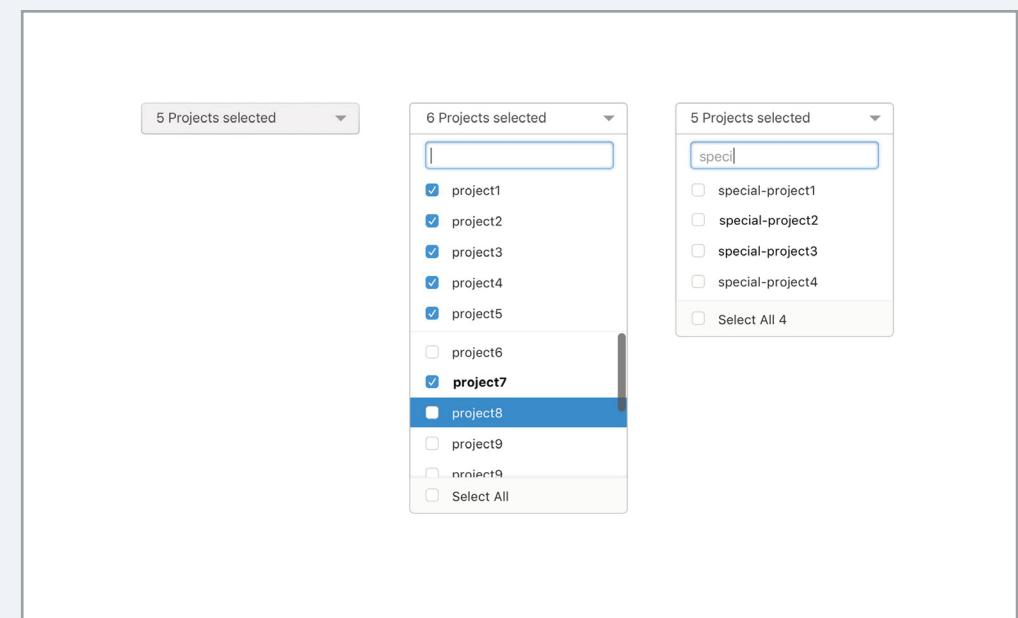
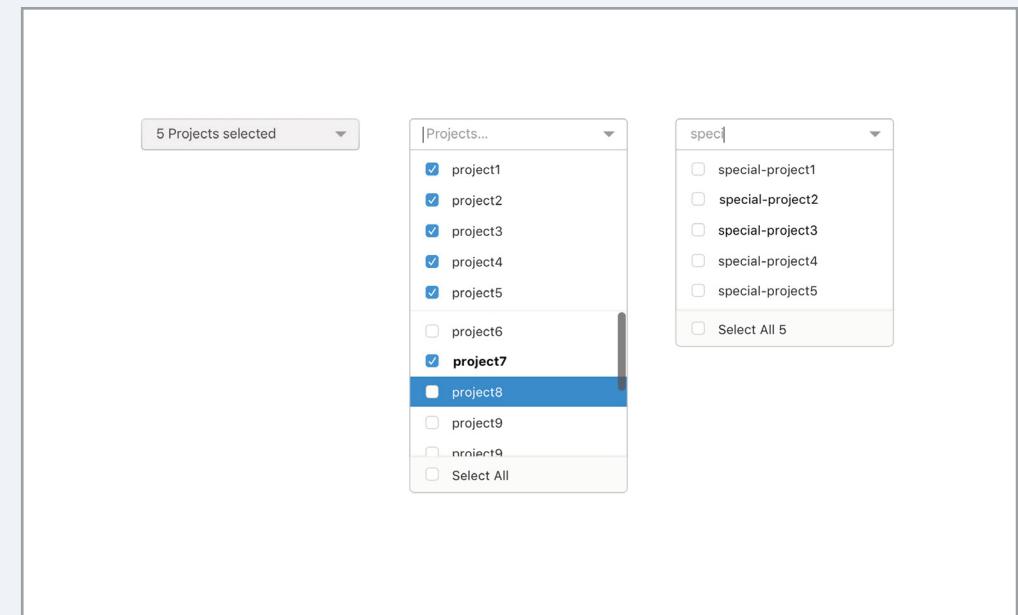
To serve both the reporting and triage use cases we designed an experience to:

- 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.

The storyboard illustrates the interaction of a 'Select Combobox' component across three states:

- 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. The dropdown shows a list of projects. Project 7 is bolded and highlighted when the cursor hovers over it. A fixed menu footer contains an option to select all projects (and when checked selects all projects). If all projects are selected, the label changes to 'Deselect All' (and when checked deselects all projects).
- ③ Active Select Combobox – with Filtering in progress:** User has started typing into the search field. The dropdown shows a filtered list of projects matching the search term 'spec'. A fixed menu footer provides an option to select all projects shown by current search filter (and when checked selects those projects). 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).

**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 error items from different projects. Each item includes a small icon, the project name, the error type (e.g., 'CarfError'), and a detailed description of the error. The items are sorted by 'Last I' (last occurrence). The interface includes filters for 'Framework', 'Environment', 'Owner', and 'Status'.

Project	Error Type	Description	Environment	Level	Owner
rollbar.com	CarfError	#356790	production	Error	—
CS-Alerts	CSRF token mismatch in OAuth flow	#187441	production	Error	—
moxapi	Uncaught SyntaxError: Unexpected token else	#8524	production	Error	—
moxrts	TypeError: Cannot read property 'incrPrevTotalCount' of undefined	#444423	production	Error	—
rollbar.js	MultipleResultsFound: Multiple rows were found for one() on helpscou...	#336538	production	Error	—
rollbar.com	TypeError: Cannot read property 'incrPrevTotalCount' of undefined	#445309	production	Error	—
CS-Alerts	JSONDecodeError: invalid control character u'\t' at: line 1 column 1022...	#417466	production	Error	—
moxapi	UnicodeEncodeError: 'ascii' codec can't encode characters in position 11-1...	#87906	production	Error	—
rollbar.com	HTTPNotFound: The resource could not be found.	#417105	production	Error	—
CS-Alerts	TypeError: expected string or buffer	#416246	production	Error	—
moxapi	Raw item with crash report doesn't have trace	#12197	production	Error	—
rollbar.com	SAMLAuthenticationRequired	#428400	production	Error	—
CS-Alerts	iOS pipeline missing macOS symbols	#277148	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', '24 Hours' (selected), '7 Days', '5 Projects selected' (set to 'All Frameworks', 'All Environments', '3 Levels selected'), and a 'Compare to previous 24 hours' checkbox. Below this is a line chart titled 'Occurrences - Last 24 Hours' showing the number of occurrences for five projects over a 24-hour period. The chart includes a legend for 'rollbar.com' (red), 'CS-Alerts' (orange), 'moxapi' (yellow), 'moxrts' (green), and 'rollbar.js' (blue). The chart shows a significant peak for 'rollbar.com' around 12:00 UTC. Below the chart is a table with summary statistics for each project: Occurrences, Activations, and Deploys.

Project	Occurrences	Activations	Deploys
rollbar.com	243 ↓10%	4 -	0
CS-Alerts	25 ↓52%	0 ↓100%	0
moxapi	12 ↓76%	0 -	0
moxrts	6 ↓54%	0 -	0
rollbar.js	0 -	0 -	0