

Amazon

A-to-Z

Safety feature

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Role

- Led UX & UXR

Timeline

- 3 months

Stakeholder

- Amazon Employees (Associates), WHS
Sketch & Invision, Figma and Internal Design System

Team Structure

AWS ProServe Team

- Designer
- Backend Dev
- Frontend Dev
- Manager
- Business Analyst/Product Owner
- Security Engineer

Workplace Health & Safety

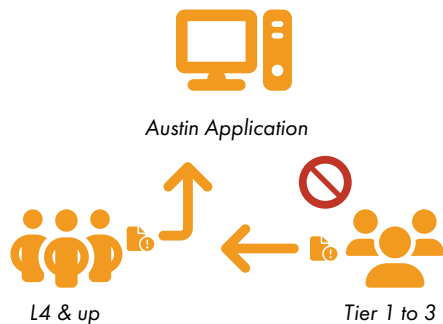
- Client

Platform

- Integrate with A-to-Z
- Send data over to Austin

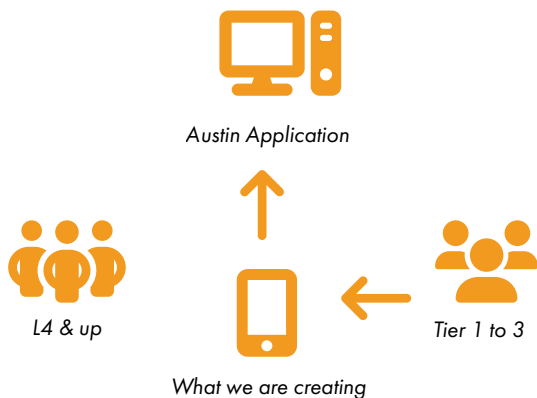
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Overview



- A proprietary application was internally developed for leaders and managers to self-report hazardous conditions in the work environment.
- Tier 1 to 3 employees were required to fill out paper forms and submit them to their managers
- Managers have to manually enter them into the online interface.

Problem Statment



- Create an application that is an easy and quick way for all employees to use
- Maintaining compatibility with the existing backend and data model
- Keep a successful submission rate when users submit concerns

Challenges

Maintaining data integrity with a significant increase in user population

- Experienced managers served as QA for the data entry in the legacy system
- Hazard classifications are not intuitive by nature; the UI must guide less experienced users toward making the correct decisions

The new application must conform to the existing backend and data model

- Existing data model uses very technical hazard terminology that requires extensive experience in hazard classification to understand

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Rapid Prototyping

- Understanding the goal of the project due to time restraints, the team wanted final designs out as soon as possible.
- Create the final prototype based on best practices quickly and the detailed business requirement documentation produced by the Workplace Health & Safety team.
- Once the first round of designs were complete I created a research/usability test plan.
 - *Worked with a diverse group of users to test the current designs from all around the world with different positions and years at Amazon.*

Research Study

- I found ten different images of safety concerns around a warehouse.
- I would review each image with each user and collect the selected submission choice. While the users would choose the selection they think best fits, I would ask, "Why did you choose that option" etc.

Correct

Incorrect

	Image 1	Image 2	Image 3	Image 4	Image 5	Image 6	Image 7	Image 8	Image 9	Image 10
User										
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Findings

- After conducting this study with 15 users and ten images, the average number of correct submissions where ~51 %
- The biggest issue was the terminology was very complex for users that hasn't worked in a fulfillment center or workplace safety.
- The test showed that users are either spending a lot of time on the dropdown lists or just selecting the first option they see that fits.

Hazard group ▼

Hazard categories ▼

Hazard type ▼

Correct

Incorrect

	Image 1	Image 2	Image 3	Image 4	Image 5	Image 6	Image 7	Image 8	Image 9	Image 10
User	Correct	Incorrect	Correct	Incorrect	Correct	Correct	Correct	Correct	Correct	Correct
User	Incorrect	Incorrect	Correct	Incorrect	Correct	Correct	Correct	Incorrect	Correct	Correct
User	Incorrect	Correct	Correct	Incorrect	Incorrect	Correct	Correct	Incorrect	Correct	Incorrect
User	Correct	Correct	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
User	Incorrect	Incorrect	Correct	Incorrect	Correct	Correct	Correct	Correct	Correct	Correct
User	Incorrect	Correct	Incorrect	Correct	Correct	Correct	Correct	Correct	Correct	Correct
User	Incorrect	Incorrect	Incorrect	Incorrect	Incorrect	Correct	Incorrect	Incorrect	Incorrect	Incorrect
User	Correct	Incorrect	Incorrect	Incorrect	Correct	Incorrect	Incorrect	Correct	Correct	Correct
User	Incorrect	Correct	Incorrect	Incorrect	Correct	Incorrect	Correct	Incorrect	Incorrect	Incorrect
User	Correct	Correct	Correct	Correct	Correct	Incorrect	Correct	Correct	Correct	Correct
User	Incorrect	Correct	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Correct
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User	Correct	Correct	Incorrect	Incorrect	Correct	Correct	Correct	Incorrect	Correct	Incorrect
User	Correct	Incorrect	Correct	Incorrect	Correct	Correct	Correct	Correct	Correct	Incorrect

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Iterate

- Displaying all the options for each hazard section will allow the users to select the best one that fits their concern or suggestion by seeing all the options on one screen.

The image shows three mobile app screens side-by-side, each representing a different step in a hazard selection process. Each screen has a progress indicator at the top with three circles. The first screen, titled 'Hazard group', shows two radio button options: 'Hazard group 1' and 'Hazard group 2'. The second screen, titled 'Hazard categories', shows four radio button options: 'Hazard categories 1', 'Hazard categories 2', 'Hazard categories 3', and 'Hazard categories 4'. The third screen, titled 'Hazard type', shows four radio button options: 'Hazard type 1', 'Hazard type 2', 'Hazard type 3', and 'Hazard type 4'. Each screen has a large orange button at the bottom.

- Not having the ability to change the terminology was a big issue. I was able to write up simple and clean descriptions for all the hazard groups and hazard categories and work with an Amazon UX writer that was able to even help simplify but relay a clear description.

Hazard group 1

Clear description on what hazard group 1 means and what options fall under it



Hazard group 2

Clear description on what hazard group 2 means and what options fall under it



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Data

- After completing those two changes, I was able to gather another 15 employees with diverse backgrounds within Amazon and conduct the same test.
- The accuracy was improved from 51% to 93%.

	Correct	Incorrect								
	Image 1	Image 2	Image 3	Image 4	Image 5	Image 6	Image 7	Image 8	Image 9	Image 10
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