

Haven

Hi-Fi Prototype Check-in

Your space, your way.

Presentation Outline

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- 04 UI Revisions Slide 00

- 05 Prototype Demo + Progress Slide 00

- 06 Thank you + Qs Slide 00

- 07 Appendix Slide 00

Meet the team



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Problem/Solution Overview

- (a) Gen Z and digital natives want curated spaces but lack the tools or budget for professional design help.
- (b) Sharing ideas with friends is fragmented and unstructured when shared through images or over group chats

HE Results

TL;DR: Flows are screwed up, limiting users' freedom in-app

1-3: lots of overlap

3&4:
some overlap



Severity#	Count
1	9
2	24
3	24
4	9

To address this, we are making Haven's navigation much more robust in our Hi-Fi Prototype. No more starting over after selecting furniture, for example.

These changes *mostly* manifest in small changes we're making directly in code. We'll now go on to talk about some more major revisions via Figma Screenshots

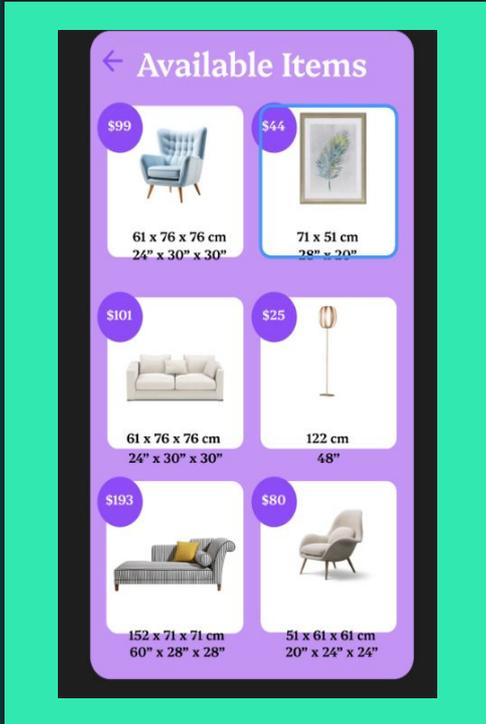
Most Violated Heuristics

**H11: Accessible
Design**

9 violations

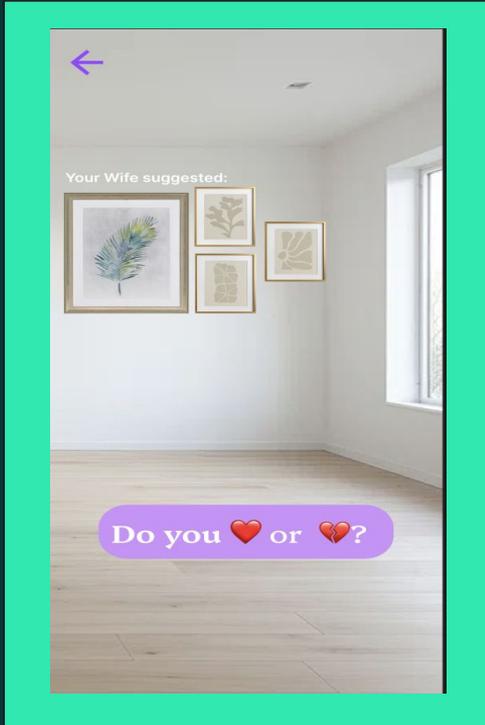
**H3: User Control
& Freedom**

8 violations



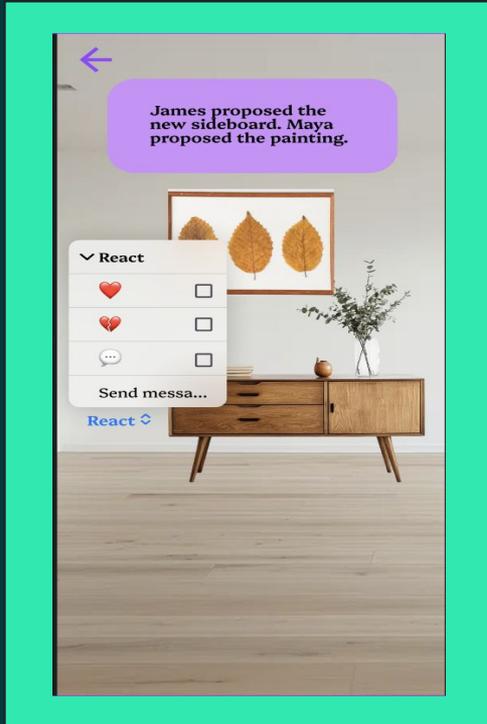
Simple Task

- No undo/redo or re scan options, forcing users to restart entire flows (H3).
- Grayed-out or ambiguous icons appear disabled, misleading the user (H11).
- Inconsistent back button placement across screens disrupts navigation (H4).
- Accidental actions (e.g., placing an item) occur without confirmation (H5).



Moderate Task

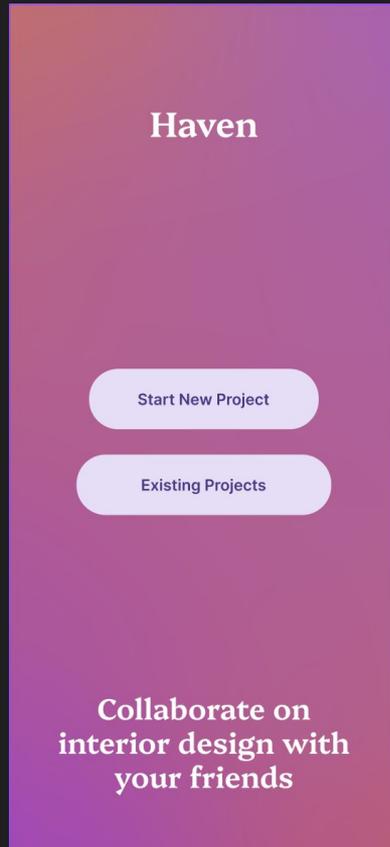
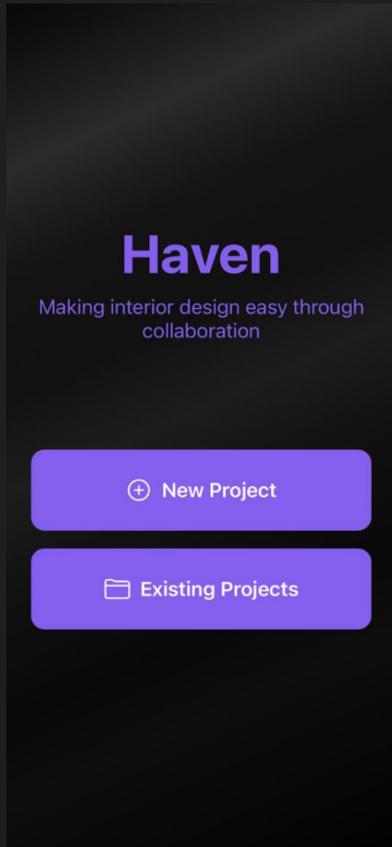
- Notification wording is unclear ("new activity" doesn't specify where) (H1).
- Users can't edit or delete comments, reducing control (H3).
- Reaction options are limited, restricting expressive communication (H7).
- No visual distinction between old vs. new feedback, causing confusion (H5).



Complex Task

- No indicators of new or urgent suggestions, slowing prioritization (H1).
- Users can't batch-manage feedback (mark all, approve all) (H7).
- Navigation lacks structure, users must manually explore each section (H3).
- Text labels blend into backgrounds, reducing readability (H11).

UI Revisions



Create a more balanced “fun but functional” feel

Make the home screen feel more purposeful

Increase clarity for first-time users

Strengthen collaboration message

Improve contrast + readability

UI Revisions

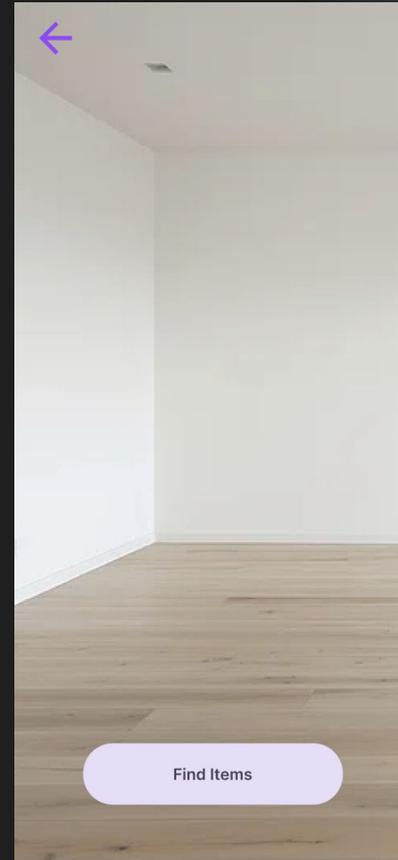
Guidance was unclear

Students needed to know *what items* they can try

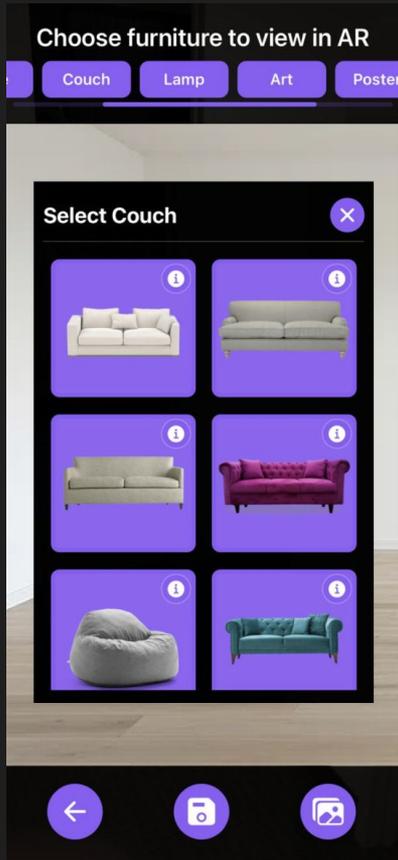
Added quick-access category tabs

Added navigation for flexibility

AR mode now feels more complete & interactive



UI Revisions



Reduce clutter

Improve direction

Support focused browsing

Make information optional

Simplify decision-making

UI Revisions

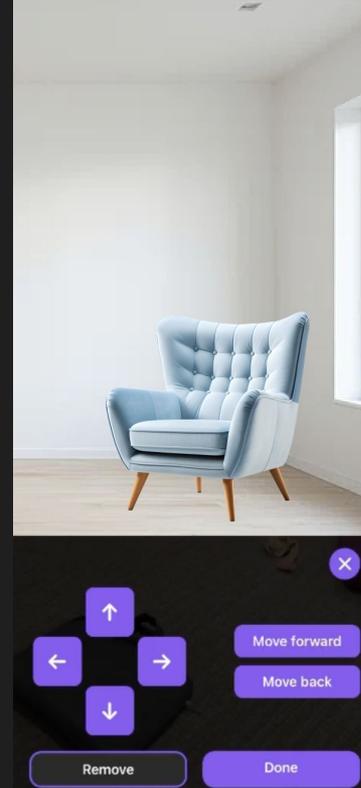
Clearer interaction model

Higher confidence in placing items

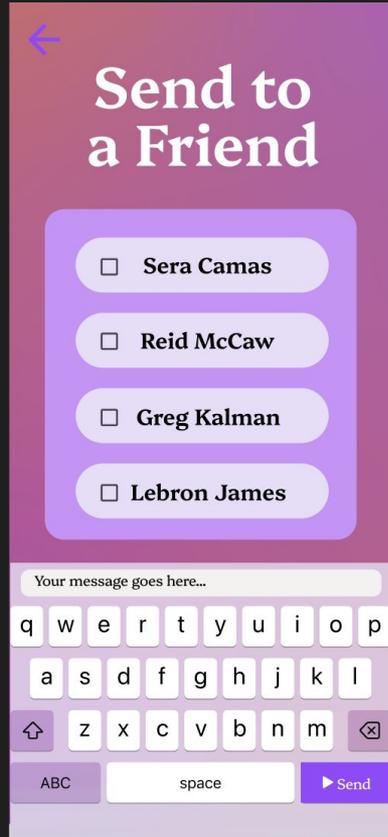
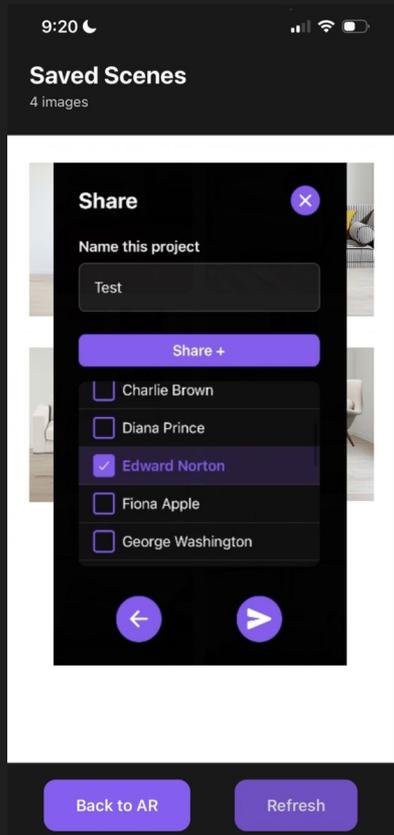
Supports precision adjustments

Better user learning (no guessing)

More predictable + controlled AR experience



UI Revisions



Needed to support more than a few friends

Old layout was too tight + text-heavy

Hard to distinguish selected vs unselected

No clear primary action

Wanted a friendlier, more social feel

Prototype Info (Part 1)

Tools Used

- React Native + Expo
- TypeScript, AsyncStorage

Used cross-platform mobile framework with AR capabilities for 3D object placement and plane detection

AI Usage and Implementation

- Cursor
- Claude

Worked well for rapid prototyping: AR integration with ViroReact, state management, custom animations

Implemented Features

- AR furniture placement and editing
- Capturing of scenes
- Sharing with friends

Enabled real-time plane detection, tap-to-place, furniture editing, image capture & gallery with local storage, project naming, sending to friends and selection

Prototype Info (Part 2)

Unimplemented Features

- More detailed furniture information
- 3D objects as furniture
- Entering existing projects to edit

Need to add furniture info content, rotation controls, Existing Projects save/load, 3D model integration, furniture position persistence, scaling controls

Wizard of Oz Techniques

- Mock recipients list for sending projects and messages

Enables us to simulate the flow sharing a project with a friends without dealing with needing a backend

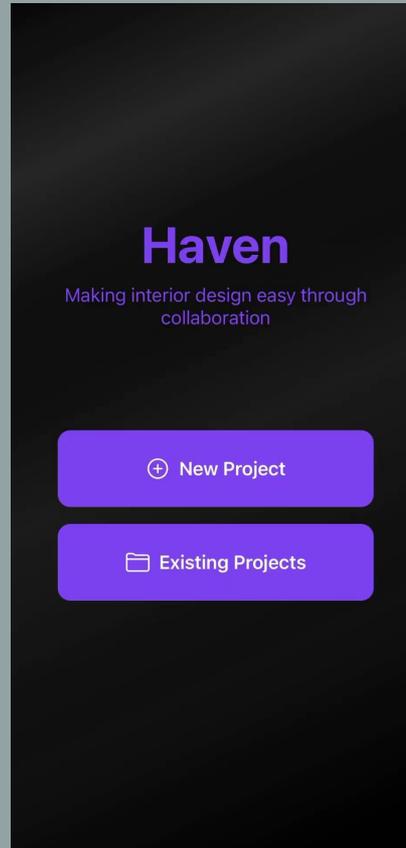
Issues and Plan to Finish

- Sharing functionality
- Using 3D objects as furniture
- Faster rendering

We tried to use 3D objects as .obj files but they took too long to render and sometimes crashes the app. Need to flesh out real sharing with friends

Plan: Focus on improving core functionality for Task 1 before finishing Task 2/3 over break, as they will tie in easily

Hi-Fi Task 1: Plan + share a layout



A white, curved line starts from the top left corner and extends towards the center of the slide.

Thank you!

+ Questions