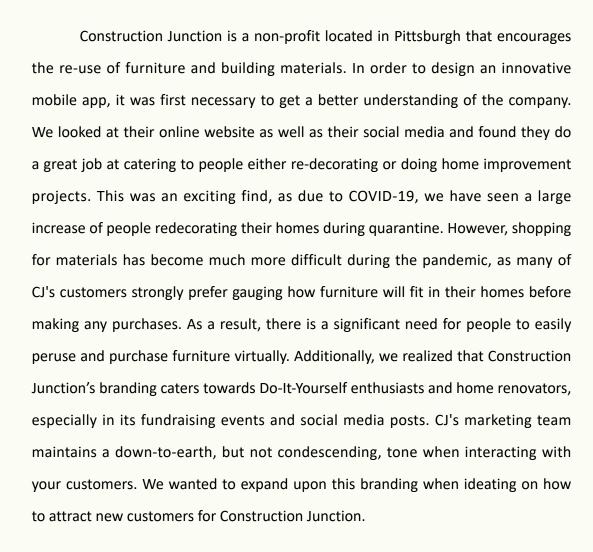
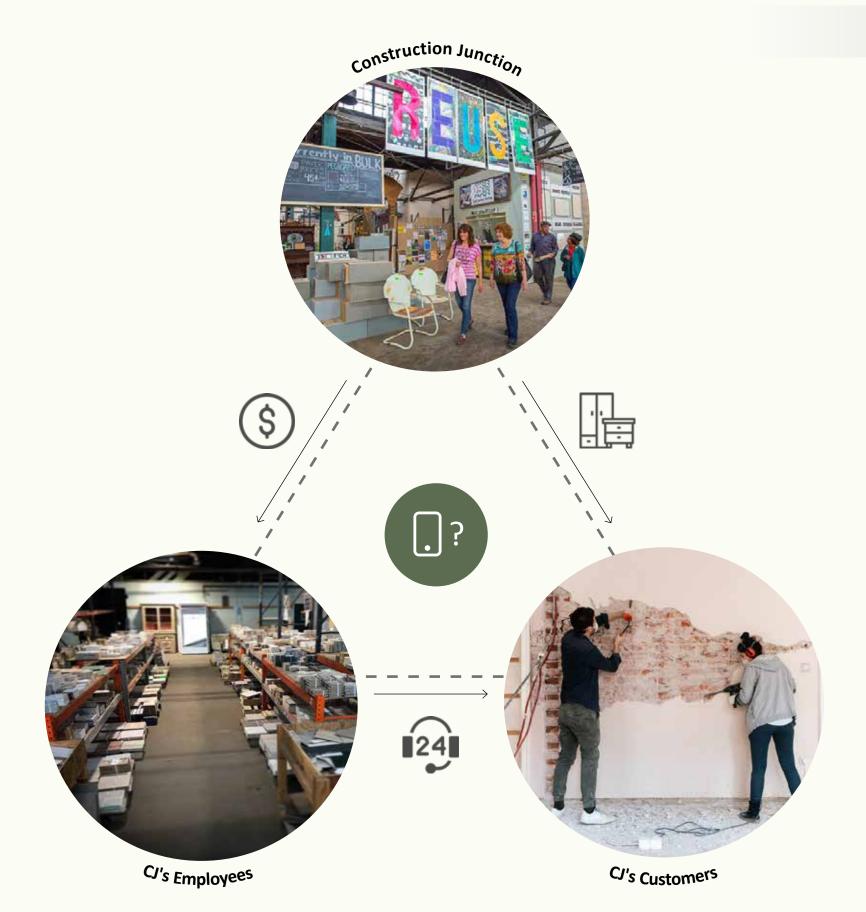
In this project, we worked as a team of four to design a mobile app service for the furniture reuse company Construction Junction in the local Pittsburgh community. The goal is not only to cope with changes and challenges brought by the current pandemic situation, but to think about how to leverage the affordances of the mobile technology to greatly enhance the experience of Construction Junction's stakeholders at any time. After intensive research and ideations, our group decided to focus on buyers of furniture pieces and to provide a service that will bridge the missing link between buyers and Construction Junction's offerings. Emphasis is put on designing the microinterations between the users and app interfaces, within which native mobile technologies are incorporated.

Eric Li Monica Chang Rachael Lee Zach Van Cleef



### **INITIAL RESEARCH**









When I renovate my home, I can't decide if Construction Junction's offerings will look good in my space. Help me decide if there is quality furniture that will help re-decorate my space.

Construction Junction Brand Voice Cart			
Trait	Description	Do	Don't
Quirky	Our content is unique and eclectic.	Highlight novelty.	Be too silly.
Friendly	Our voice is welcoming and attentive to customers' needs.	Always use soft tones and easy-to-understand vocabulary.	Be overbearing.
Informative	Our content should be clear and well-documented.	Give users access to relevant information so that they can make informed decisions	Be too dry.

### **PROBLEM SPACE -- VOICE & TONE**

Focusing on buyers, we delved into their pain points and discovered that the shopping experience could be quite troublesome. As CJ's has a vast assortment, it is difficult for buyers to find exactly what they are looking for when shopping online and in-person. It is easy to feel overwhelmed by their selection and often requires hours of searching before finding the pieces that fit best in their space.

We really wanted to highlight what makes Construction Junction so special. Staying true to who they were, we focused on designing a voice and tone that would properly reflect the company, while still providing customers a great shopping experience. Looking at their unique inventory, we thought that quirky would be a perfect fit. Since it is a retail store, being friendly allows customers to have an enjoyable shopping experience. And finally, when shopping for furniture and building materials it is necessary to have all the information at your fingertips. Being informative helps customers take charge of their own experience and find the right pieces for their projects.

A mobile shopping app that allows customers to easily visualize recommended pieces in their own homes.



### **FINAL PROTOTYPE -- MICROINTERATIONS**

As this project was focused on designing a native mobile app, we wanted to make sure we optimized for the platform. Taking into consideration the limitations as well as the various features, we each brainstormed ideas that leveraged the functionalities of a mobile app as well as for our target user.

After careful consideration, we decided to focus on the following native mobile functions that arouse comfortable micointeractions between the user and interface. First, the AI item detection allows users to take a picture of their space and it quickly identifies the items in the space and predicts the user's favored styles, such as "vintage", "modern", or "eclectic". Then based on that, the AI recommendation system prompts the users with recommended items from Construction Junction's inventory that best match their styles, but they are also allowed to explore the inventory on their own. After the users have selected several candidate items, they can open the AR camera and drag items into their space to visualize how they would look in the real setting, so that they won't have to worry about decision-making.



## **Item Recognition**

Create a personal style profile based on items that are already in your home.

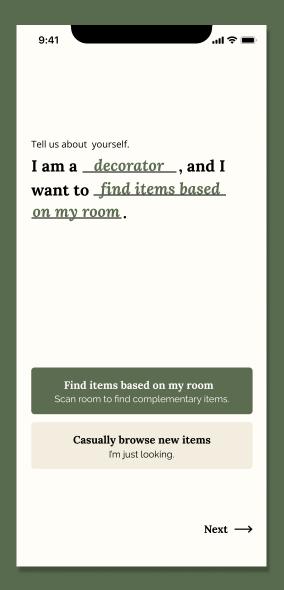
# Recommendation Algorithm

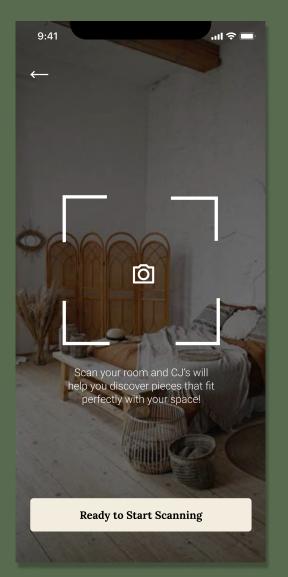
Discover complementary products that easily fit into your space.

## AR Furniture Placement

Mix, match and visualize multiple pieces from the comforts of your home.

### HI-FI HIGHLIGHTS







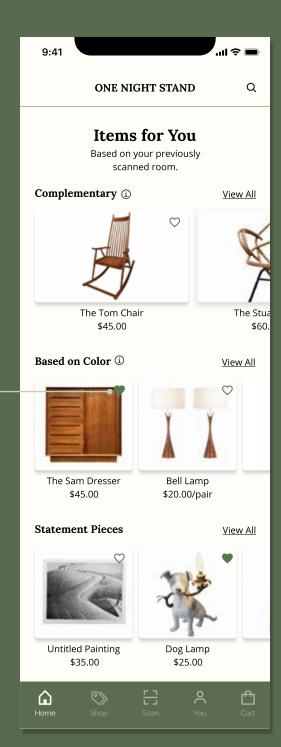


Rescan My Room

System automatically determines your style profile based on the images recognized

Favorite items to

revisit later



O1 Onboarding style profile quiz for first time users

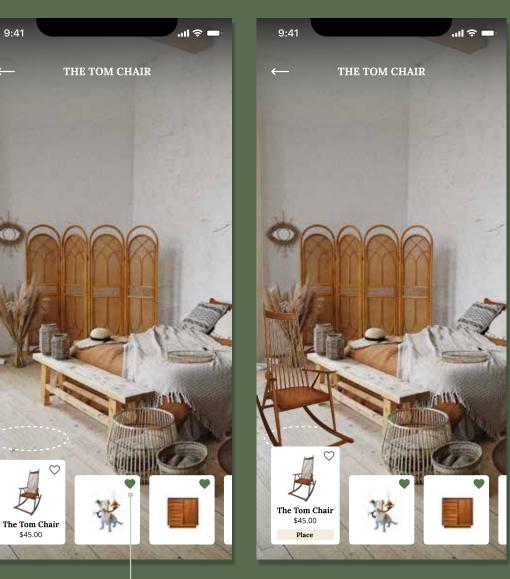
02 Image recognition to help determine style profile

Recommendation algorithm to determine complementary items

### HI-FI HIGHLIGHTS [CONT.]

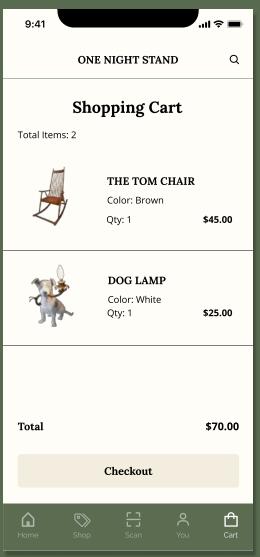


AR Camera feature highlighted upon first time use



Add items directly to your cart





Favorited items saved for easy access

Product pages with clear description of the item

AR Feature allowing for easy visualization of items in personal space

06 Easily accessible check out page