USER TESTING

Test Design

For these tests, users were given the product and asked to explore its features without guidance or input. If a tester encountered an issue or got stuck, the problem was noted and explained by the tester. If they broke something or reached a bad endpoint, the app was restored to its previous state, and the bug was documented.

The tasks assigned to testers varied slightly, but each tester completed the following:

- create several new categories
- create several new products
- Filter through different option in the table
- Update product info
- Delete a product
- Update category info
- Export to CSV

Beyond these tasks, testers explored and interacted with the product freely based on their own curiosity and needs.

Testers

1: Cody

At home, I had one of my family members test the app as well. I briefly explained what it did and showed them the user docs: https://423s25.github.io/repo1/user-documentation.html as well. I watched them add products, update inventory, etc. and asked for their feedback. In addition to reinforcing many of the things that I learned from testing earlier with my peer, I noticed other areas that need work:

- BUG- if a user deletes a product and then refreshes, they will get a 404 not found
- The buttons for deleting and updating info for products needs to be much more clear.
- The buttons for donations vs. purchased are confusing (we are going to remove these anyways)
- There are a few places where our user docs could be more clear/worded better

Overall, the user testing went well. My family member is in their 50s, not the most tech savvy, and was able to navigate the interface with relative ease (excluding some of the sticking points already mentioned). They even called it "pretty straightforward".

2: Quinlin

This was with a math & econ major:

They really seemed to want screenshots/more precise instructions on how to do things.
 This could be added later when the design of the site is more final, but it seems like this would really help with usability

- The user docs seem lacking, too vague, and not quite up to date with the latest the application has to offer
- Some buttons are in unintuitive spots. For example, the add category button is on the right of the screen, but the edit/delete is in a sidebar on the left
- They seemed to like the mobile experience more, likely because it is a simplified view without the controls the admins need. The flow and order of actions seemed more intuitive there
- The error messages could be improved to offer more precise feedback on what is wrong with the data entered in a form

3: Teddy

My mom

- told me the same comments as Jenna did about unit type stuff being confusing in how it is titled
- She said it is kind of hard to tell what you are supposed to do when you first open it without directions.

4: AJ

I gave the app to my grandpa and told him to go wild.

- Somehow he did not break that app or hit a bad endpoint. I think the main thing I learned from this was that the intuitiveness of some features could use some improvement.
- It was not clear that a category needed to be made and he did not understand why
 making a new product was not working.
- Adjusting the stock and product information was difficult for him to figure out.
- Like the feedback from In Class, he thought that the banner at the top worked like a filter. This is a must add as other group members also got this feedback

Overall the testing went well. My grandpa is 90 years old and is the kind of guy to say "they gotta give me a job testing the computers cuz ill find a way to break em". With all the talk he did not break it. With this in mind, the app does need to be more intuitive for the end user. This test was helpful for me in gaining an outside perspective about the app.

5: Matthew

The user was a friend of mine who is an electrical engineering major, so I suppose he has some CS knowledge, but he has no knowledge of the program itself. Like the previous test, he tested two different branches, and was made aware that the add product button wasn't working immediately (again, this was fixed). The user test was similar in that my friend ended up putting letters in number based inputs, which has no error at all. My friend didn't recommend anything in the styling, but it did take a bit for him to complete some tasks (such as changing the color). Another thing I notice is that both users ended up adding products first instead of categories (in which categories need to be made first). Something I didn't realize that ended up happening was that the "export csv" function in the reports still works despite there being no items in the database. Nothing breaks, but it might be something we may have to look into.

<u>6: Emma</u>

Tester: Torie Keto

Background: Graphic Design student, unfamiliar with the app

For this test, I asked a friend from outside the class to try out our app. I gave them a quick overview of what the system does (an inventory tool for a warming shelter) and gave them theoretical tasks geared toward the features I wanted them to test, including adjusting stock and adding/updating products.

- They really liked the visuals on the reports page and said it was easy to see which items were running low.
- They appreciated that there was a mobile version—it made sense to them for volunteers to have something quick and easy to use on-site.
- They confused the "New Product" button with adjusting stock—they thought it would let them edit an existing item, not create something new.
- In the "Add Unit" section, they were distracted by an icon that didn't seem to do anything—it gave the impression it was clickable when it wasn't.
- On the individual item page, the button still said "New Product" even when updating an item. They suggested changing it to "Update" in that context so it's clearer.

Seeing someone new navigate the app was super helpful. It reminded me how important language and labeling are—small changes can really shape the experience. We'll be updating some of our button wording and simplifying visuals in a few spots to help reduce confusion.

7: Luke

I had a fellow graphic design student test the website

- They like the table with the sliding bar indicating the stock
- Some of the button names were confusing for them
- When they first opened the website they were unclear of all of the features in the app.

The test went well and the tester had an overall positive experience. Seeing an outside perspective on the project helped me understand how to better optimize the UX going forward.

Summary

For user testing, each team member was tasked with finding a non-CS major to test our software. The testers were given the website URL but received no instructions on how to operate it unless they were truly stuck.

The most common feedback from testers was that more instructions were needed to understand the app's capabilities. Many also found the layout of certain pages unintuitive and difficult to navigate.

From these tests, our group learned that we need to improve user documentation. This can be achieved by adding a link to a user docs on the website, providing a tutorial on how to use the system. Additionally, the bugs identified by testers will be addressed, and better error messages will be implemented for form submissions and route errors.

User testing also taught us that features that seem intuitive to developers may not be intuitive to end users. Furthermore, testers explored scenarios that we had overlooked during development, uncovering bugs in the system.

As a result of these tests, we plan to implement the following:

- enhance our user documentation, make it more accessible.
- adjust the layout of certain elements to create a more intuitive user experience.
- Add error and 404 pages.
- Add error messages for form validation
- Fix specific bugs found by the testers