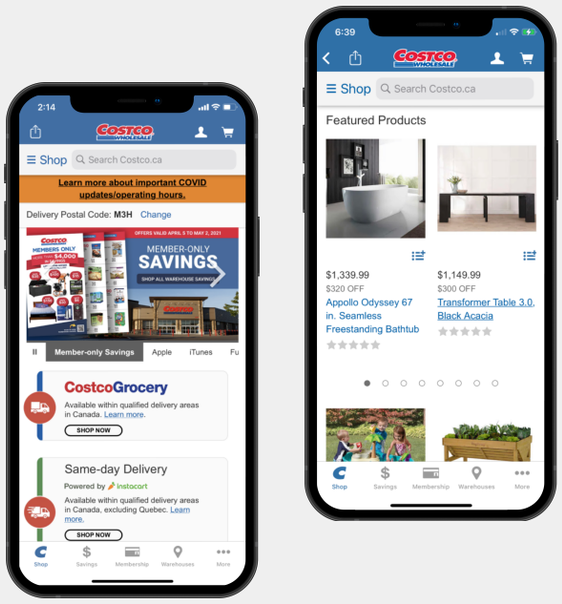
Heuristic Evaluation and Redesign

Timeline: 2 weeks

My Role: UX/UI Designer

Team: Wedad Masoudi, Raquel Marin, Malek Bsat

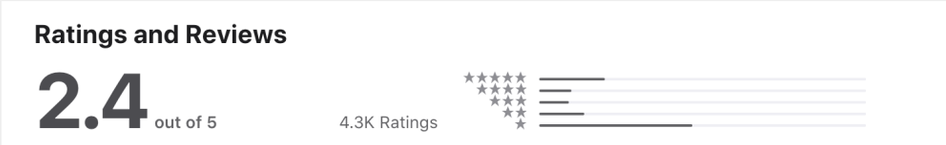


Introduction

This is a project that was completed during my journey at BrainStation as part of the User Interface component of the course. We are required to conduct a practical **heuristic evaluation** of an existing digital product of our choice and create improved designs based on usability assessment and heuristic evaluation.

For this project, I collaborated with two other designers to evaluate **Costco App**. We found that the Costco app provided several opportunities for improvement.

An overall user rating of **2.4** on the app store drove us to investigate where areas of improvement might lie. We found that users were frustrated and would like to have a seamless experience



Great store but bad app Aug 11
★★☆☆☆ SLP 86

The app should save the location once it's set. It asks about the location multiple times even during one use which is very annoying.

Check out is horrible Feb 1
★☆☆☆☆ Nickbi

I have things in my cart but it won't let me check out - horrible app don't waste your time -

Not a very good online shopping experience Mar 31
★★☆☆☆ xgfgjik

This Costco app still hasn't learned from their users. Browsing and finding products is somewhat cumbersome. Check out is not user friendly. I quit after being frustrated with the process. Very poor selections of products you can actually order online. I guess they want you to shop in person instead so that you can spend more than you intended to. This app really needs to change. I get a better shopping experience elsewhere.

Current User Journey

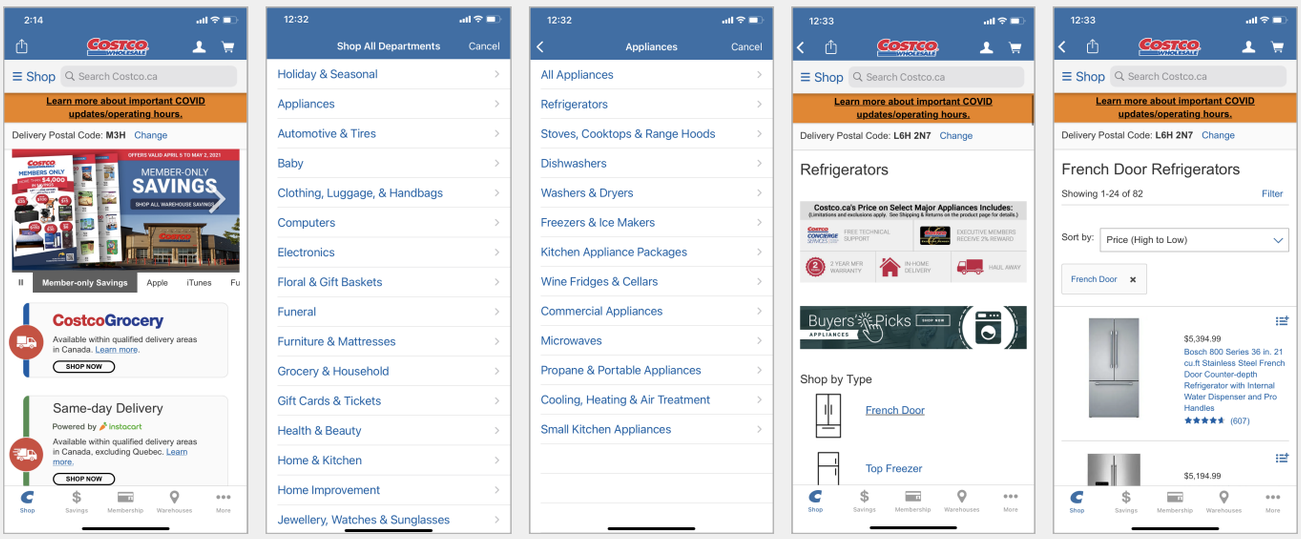
Although Costco is a known brand, we discovered that purchasing a product can be difficult for users who are not tech-savvy.

We examine the **"buying a product"** task flow in the app using **Jakob Nielsen's Heuristics**, concentrating on shortcomings that cause the user to abandon it.

Users encounter around 10 screens when they want to buy a product. We divided those screens into different categories to show the full user's journey.

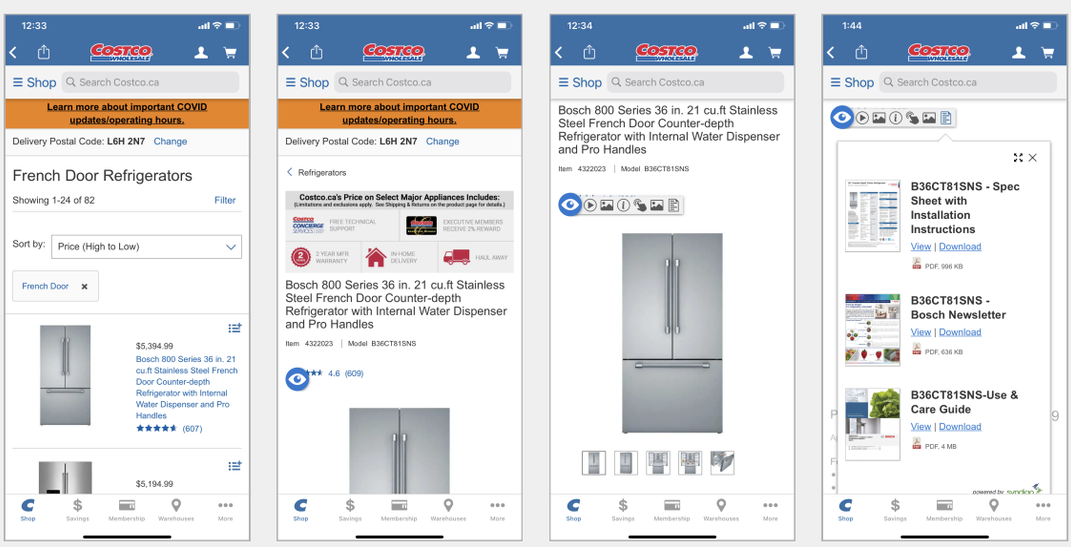
/Search

Just to find a specific product, users need to navigate through 5 screns.



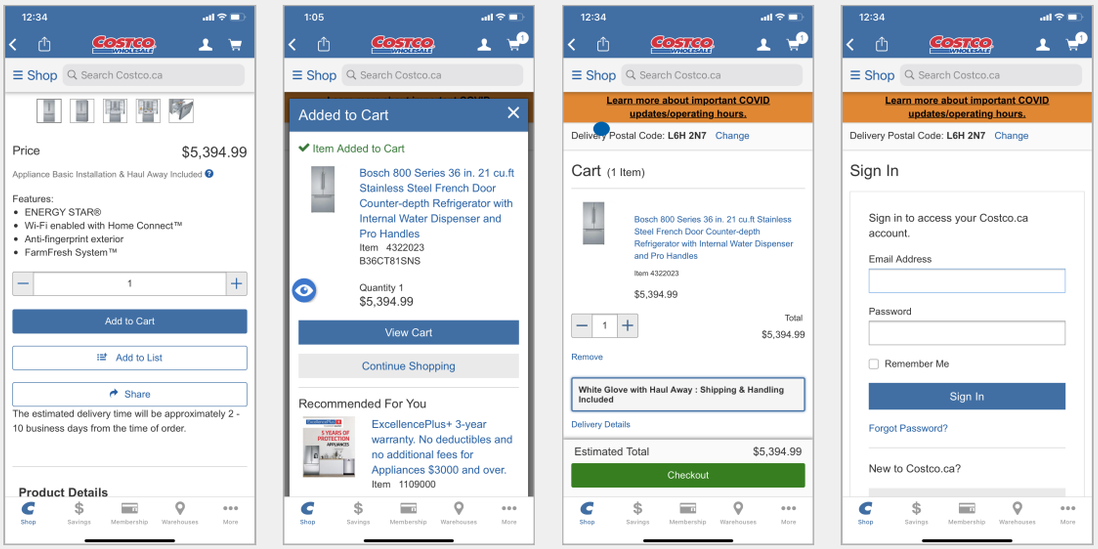
/Details

After finding the product they would like to buy, they need to scroll to see specific details and add to cart, this makes the process longer than expected.



/Add to cart & payment

Finally adding to the cart and proceeding to check out can take some minutes if users are not logged in.



Heuristic Evaluation

For this specific task flow, we found violations in **6** out of 10 heuristics.

- Visibility of system status
- Recognition rather than recall
- Error prevention
- Aesthetic and minimalist design
- Consistency and standards
- Help and documentation

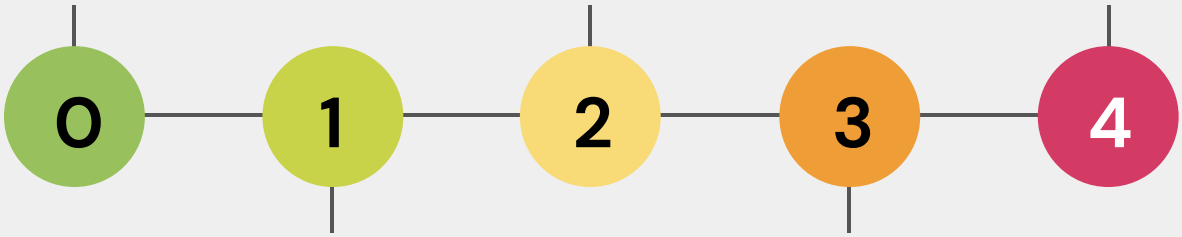
/Severity Rating Scale

Severity ratings can be used to allocate the most resources to fix the most serious problems and can also provide a rough estimate of the need for additional usability efforts. The following **0** to **4** rating scale has been used to rate the severity of usability problems in this study (based on Jakob Nielsen's study).

This is **not** a usability problem at all

Minor usability problem: Fixing this should be given low priority

Usability catastrophe: Imperative to fix this before product can be released



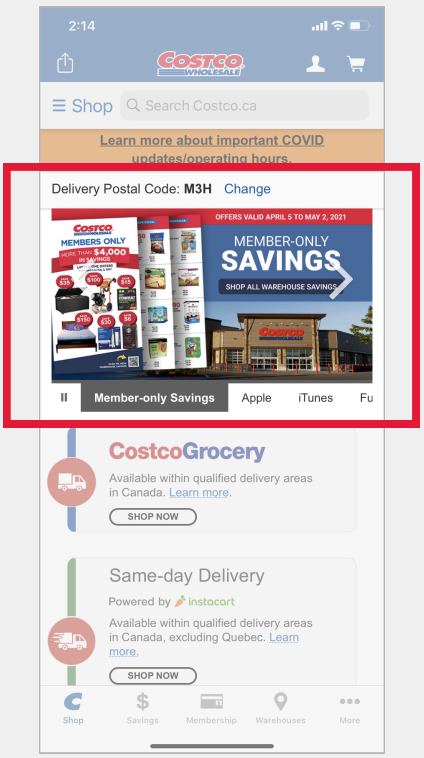
Cosmetic problem only: need not be fixed unless extra time is available on project

Major usability problem: Important to fix, so should be given high priority

Analyzing the Problem

Now I'll be walking through the results of our heuristic evaluation for the screens that were found to have the **most severe** heuristic violations.

/Home



Aesthetic and Minimalist Design

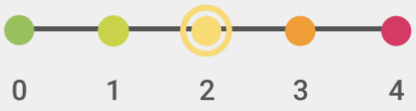
Busy graphics distract from the rest of the content on this screen.

Recommendation

- Less saturated banner
- Minimal but impactful imagery
- Increase white space around different components

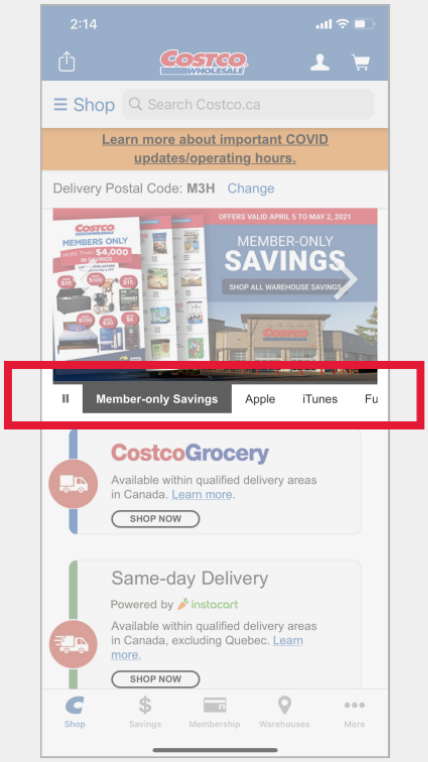
Consistency and standards

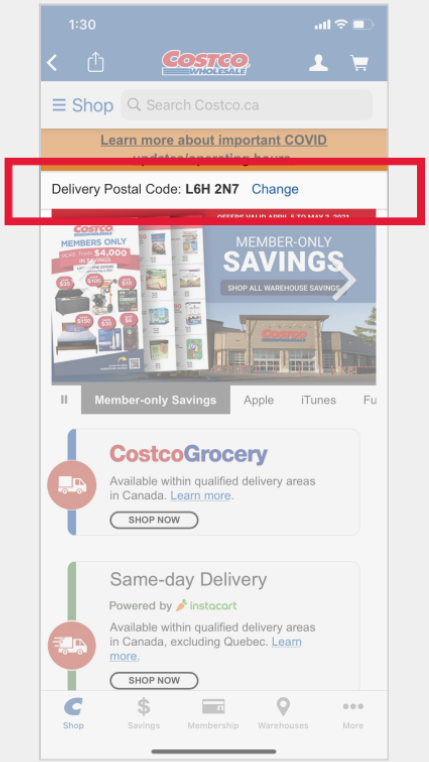
Carousel title placement in the middle of the screen does not follow conventions; it looks like a navbar.



Recommendation

- Carousel with just images. show progress with different icons, like pagination. Keep title in the image rather than outside.





Recognition rather than recall

Users shouldn't be asked to enter their postal code every time they make a purchase.

Recommendation

- App remembers user's postal code when logged in.

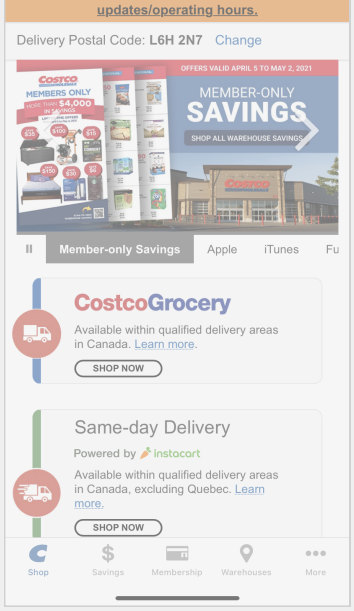
Visibility of system status

Users should be able to know that

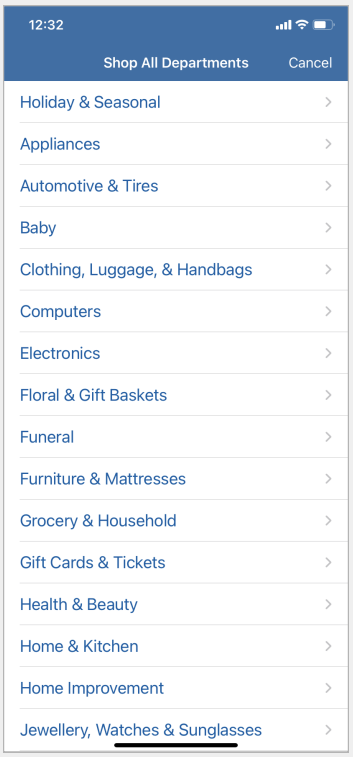
they are logged in.

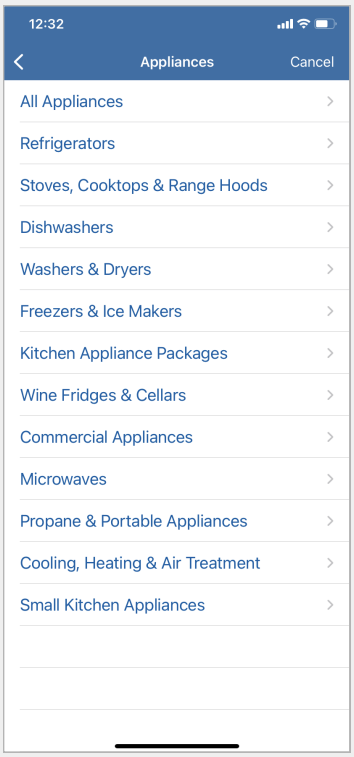
Recommendation

- Addition of title “Welcome back, user” to keep user informed.



/Shopping by department





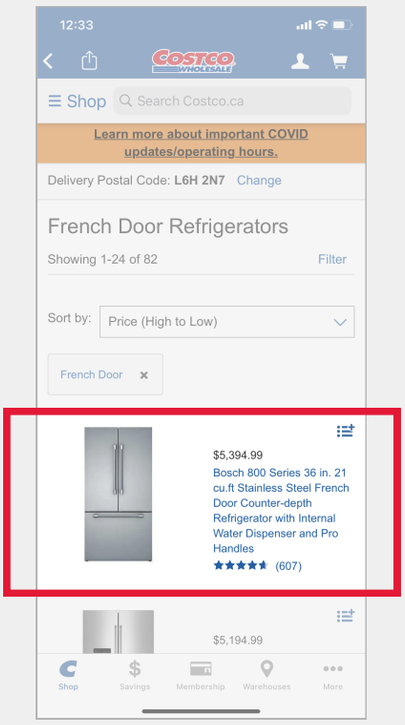
Aesthetic and Minimalist Design

Lack of hierarchy on a content-heavy screen makes it hard to identify specific categories.

Recommendation

- Providing a hierarchy and adding icons or images

/Product List



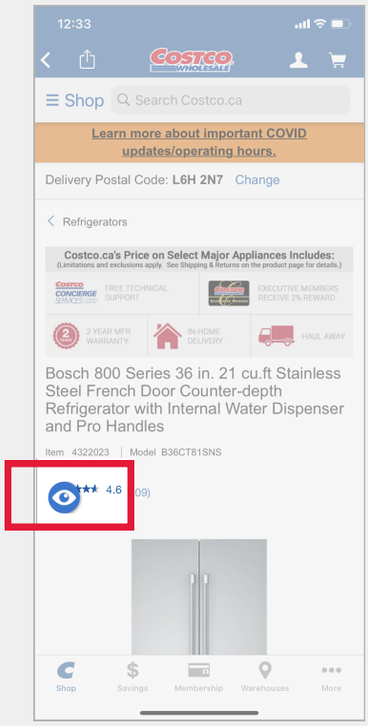
Consistency and standards

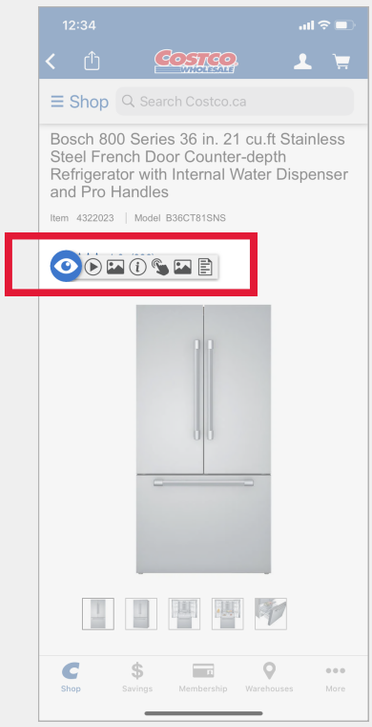
"Add to wishlisht" icon isn't clear. Users expect to be able to add to cart from this page.
Missing a "view product" CTA.

Recommendation

- Change icoStar rating
- Product Features listn to cart.
- Needs a label or could be a "Save for Later" button instead.
- Add "view details" button.

/Product Detail





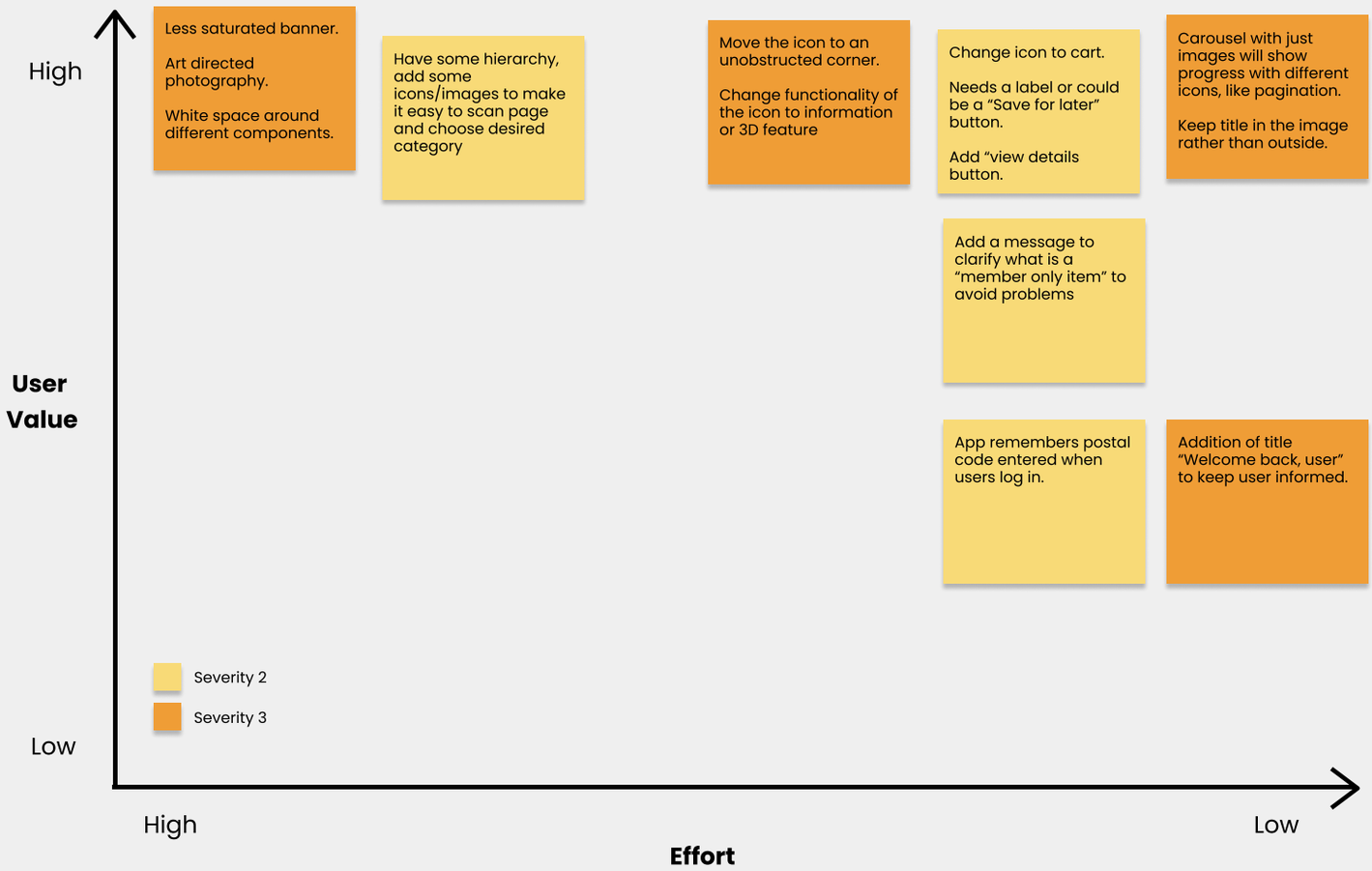
Help and Documentaion

Eye icon functionality not clear. It blocks ratings and makes it inaccessible to the user.

Recommendation

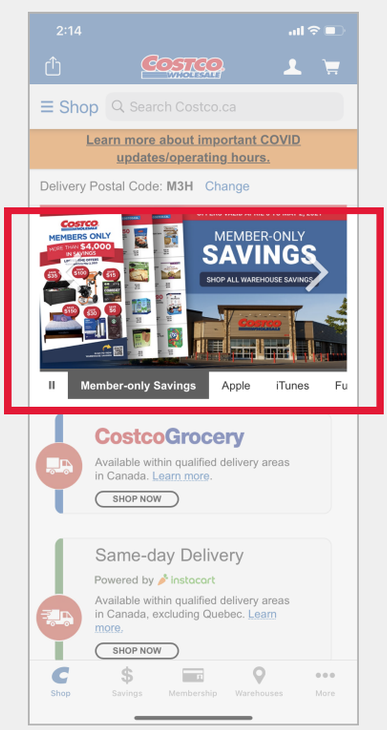
- Move the icon to an unobstructed corner
- Change functionality of the icon to information or 3D feature

After analyzing the severity of each heuristic, we created a **prioritization matrix** to help us determine what adjustments are needed to provide an ideal experience.

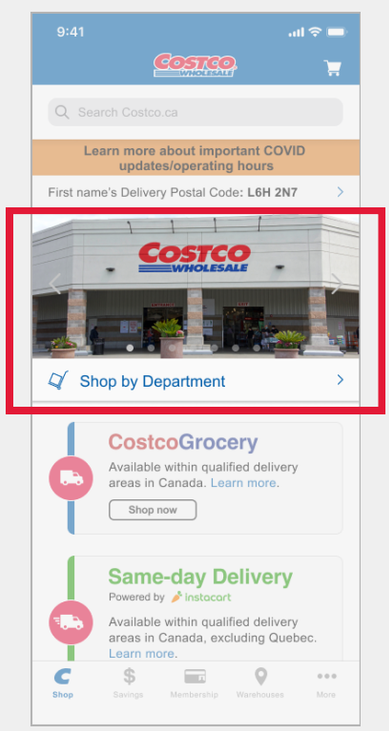


Designing for Usability

The UI redesign's goal was to develop a beautiful design that solved the usability issues that came to light during our heuristic analysis.

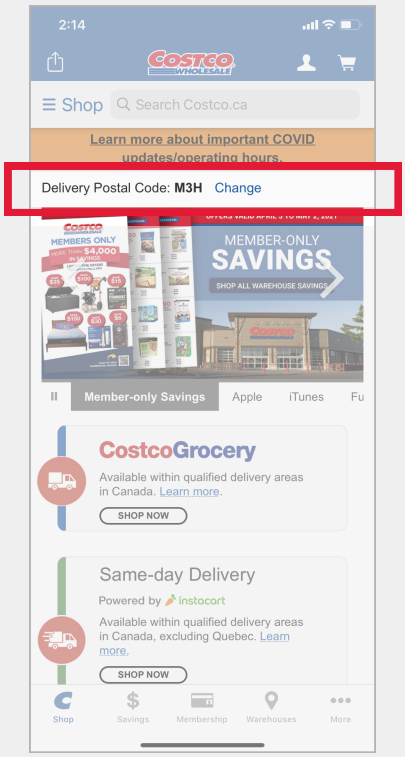


Before



After

- Pagination
- Shop by Department button



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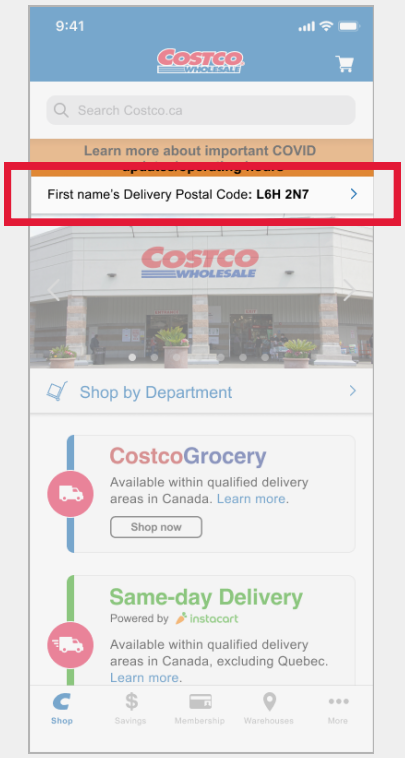
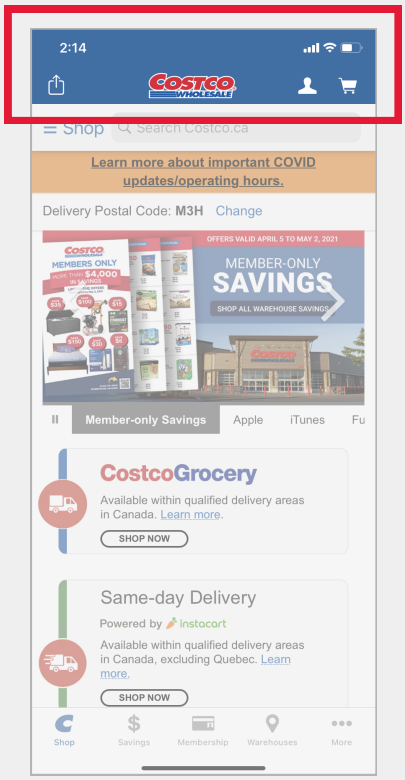


After

- User's first name is displayed when logged in
- Arrow



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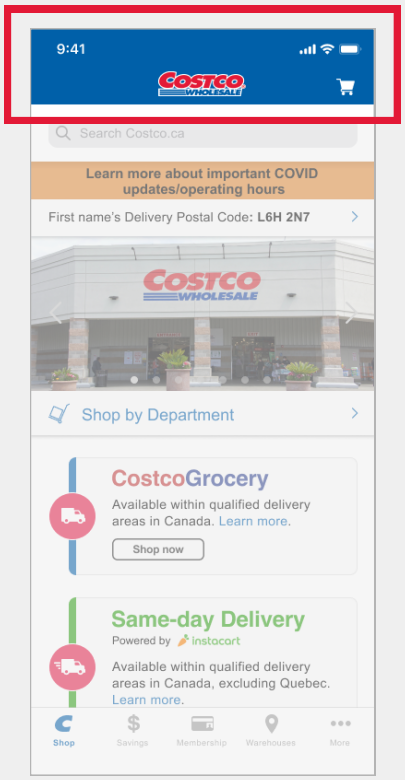
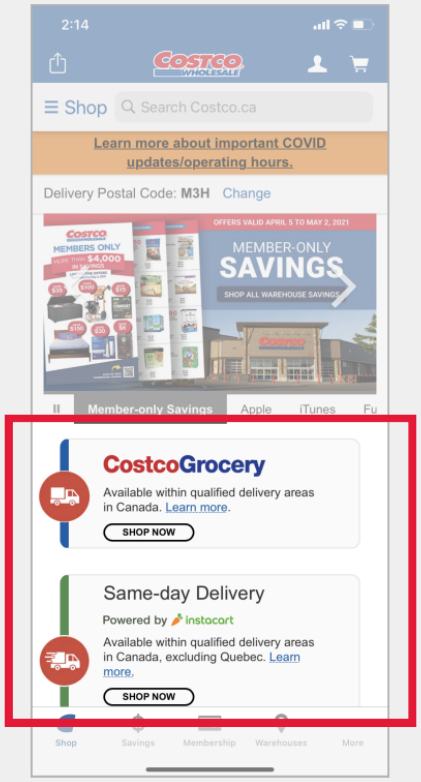


After

- Decluttered header



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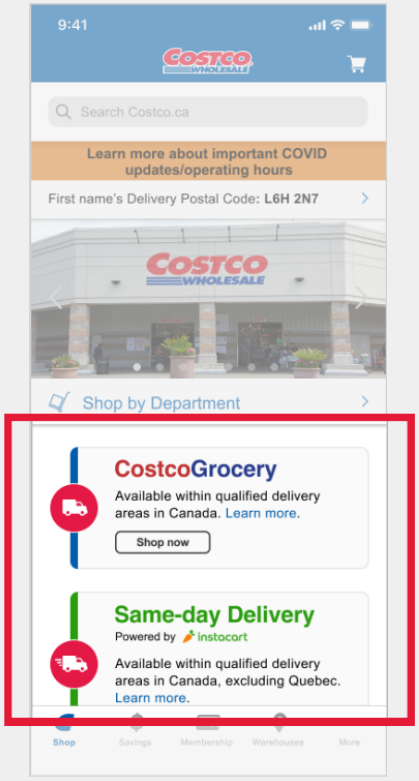
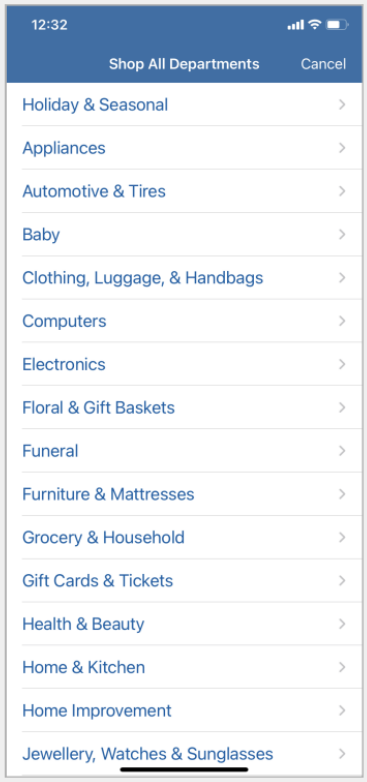


After

- Consistent typography and buttons



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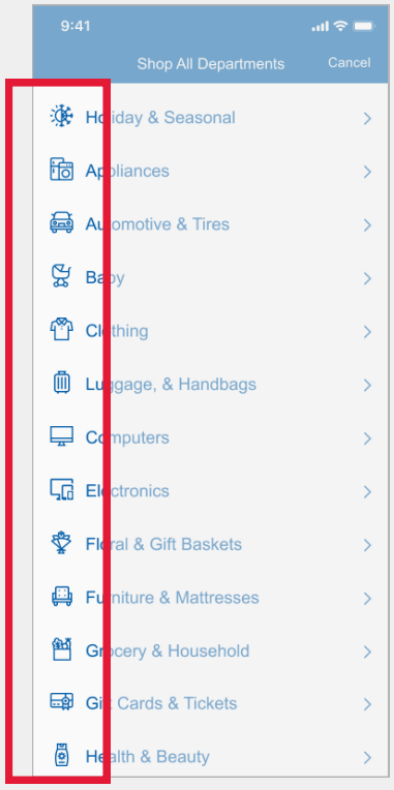
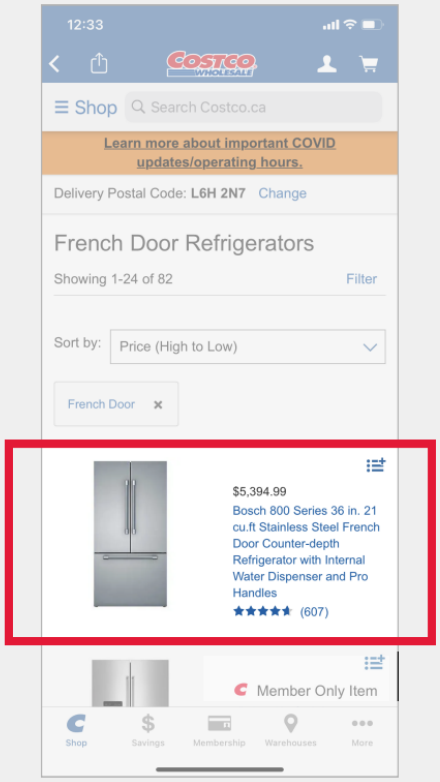


After

- Icons



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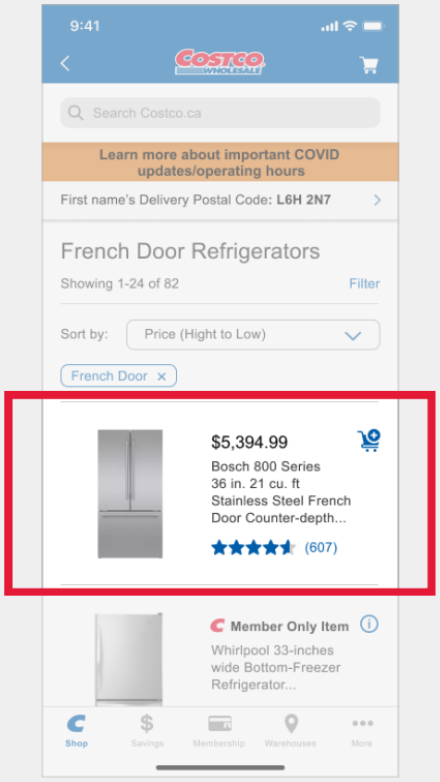
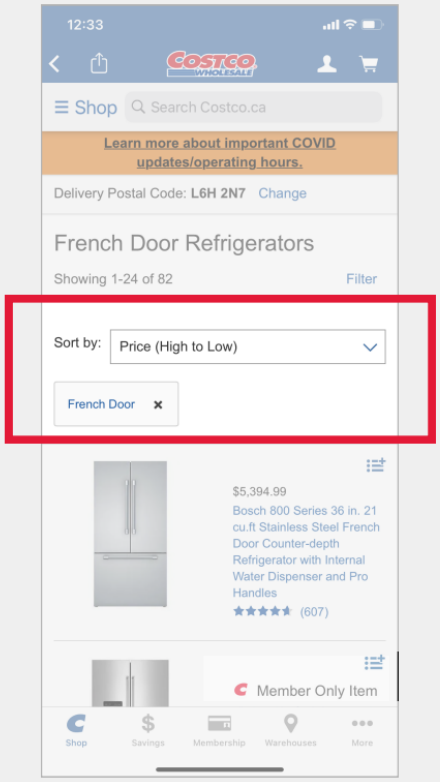


After

- Icon
- Price
- Ratings



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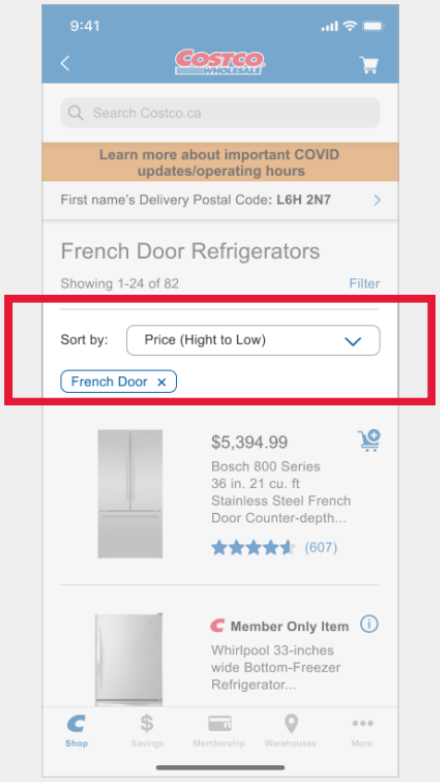
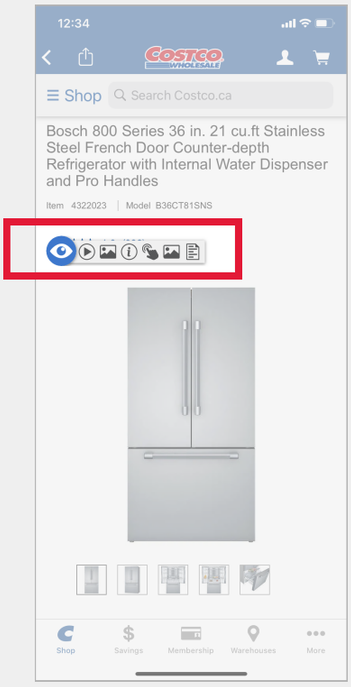


After

- Consistent components



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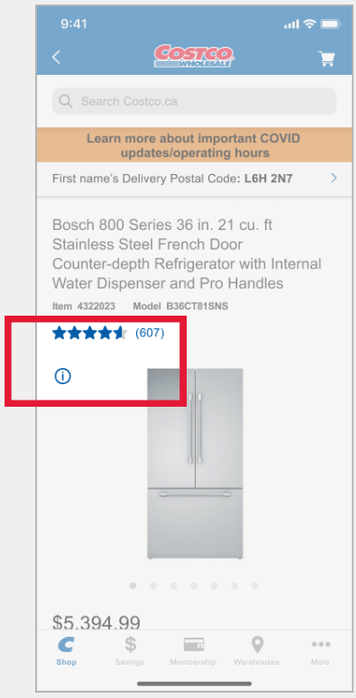
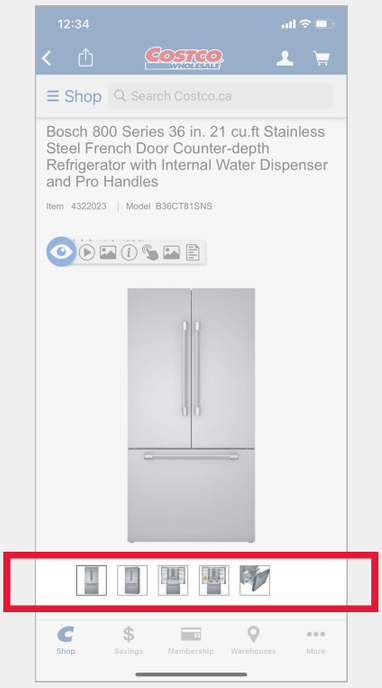


After

- Star rating
- Info icon instead of eye icon



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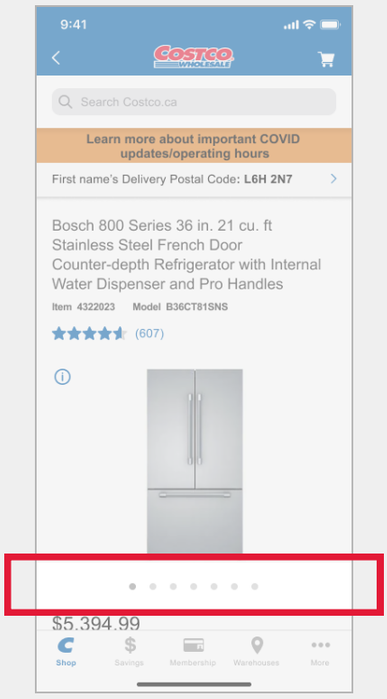

After

- Pagination

Next Steps

- Analyzing more flows in this app.
- Creating **User Interface library**.

Thank you For Reading