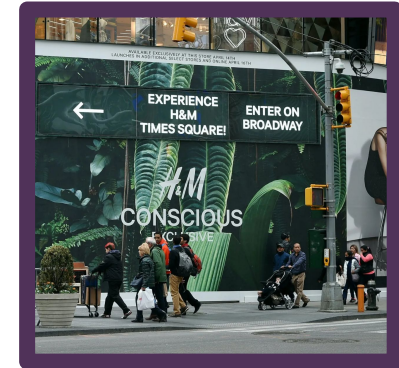# Online Shopping UI
SENG 310 - Group 14

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Introduction

As online shopping grows rapidly, surges in counterfeit product, greenwashing, fake reviews, and unclear sourcing practices have become steadily more apparent. Our team developed a centralized online shopping assistant interface designed to address these concerns and streamline the research, fact checking, and other key workload factors that a user faces when shopping online.

Goals and Motivation

01. **Goal:** Enable consumers to verify product authenticity

02. **Goal:** Identify and prevent dropshipping and copied designs

03. **Goal:** Provide ethical and sustainability ratings for products

04. **Goal:** Improve transparency and trust in online shopping

05. **Motivation:** Counterfeit goods and dropshipping lead to distrust and frustration
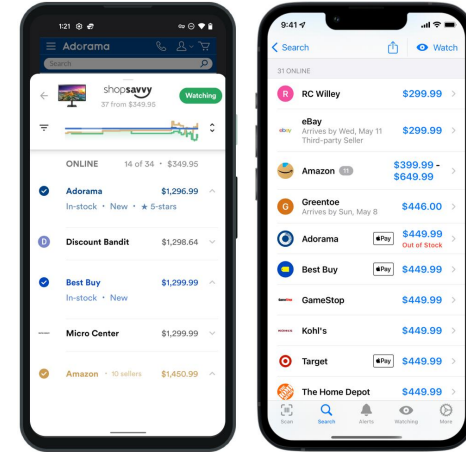
06. **Motivation:** Consumers struggle to assess ethical and sustainable practices when shopping online

Related Work [Interface]

ShopSavvy
- **Price Comparison Tool**: Helps users compare prices for products across online and local stores

- **Barcode Scanning:** Barcode scanner to check product prices, reviews, and availability

- **Price Tracker & Alerts:** Price fluctuation tracker and alert setting for price drops on products

Compare Ethics
- **Business-focused:** Helps businesses communicate ethical certifications on e-commerce platforms

- **Sustainability Verification**
    - AI tools to assess and verify environmental and social impacts of products
    - Ensures businesses sustainability claims are accurate and transparent

4

Related Work [Features]

Some existing tools address certain features and aspects of our interface which inspired their combination and cohesion. For example:

Reverse Image

Sustainability Scoring

Price Comparison

Key User Research Findings

Research Methods

Interviews: Examined trust, ethics, and price sensitivity factors in online shopping
Ethnographic Observation: Analyzed real user behaviour while verifying product authenticity, sustainability, and ethicality

Major Findings

Ethics & Sustainability

- Users dislike drop-shipping and unoriginal products
- Concerns about labour practices, sourcing, and environmental impact

Trust Factors

- Trust Cues: Authentic reviews, professional UI, verified stores
- Distrust Cues: Overloaded pages, flashy ads, fake urgency

Price Sensitivity

- Balance between price and ethics most sought
- Users want price comparisons but won't overpay for sustainability

Research Challenges

- Verifying authenticity requires manual research
- Cross-referencing prices and sustainability data is time consuming

Prototype Evolution

01.

Low-Fidelity

Paper sketches focusing on feature selection, layout concepts, and early task flows.

Issues

Lack of feedback.

02.

Medium-Fidelity

Clickable Figma version with simplified navigation and refined layout.
Feature include lowest price of item, and sustainability score.

Issues

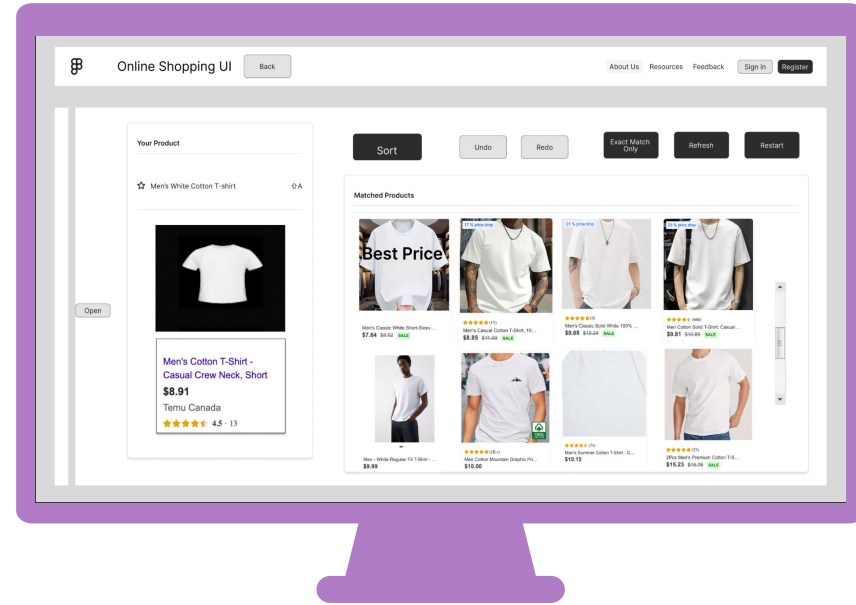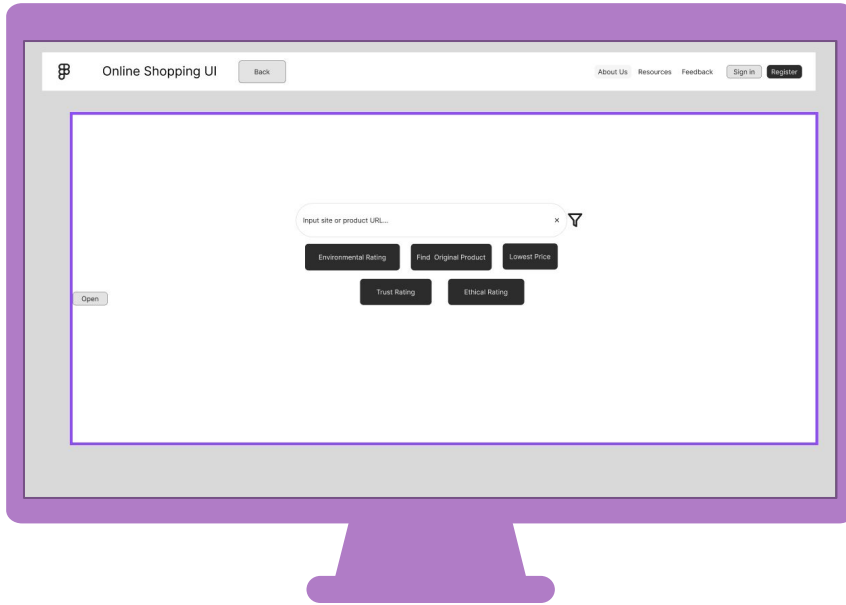Uncertainty with some aspects of the tool

03.

High-Fidelity

Polished version used for user testing. Changes:
- Added clearer indicators
- Fixed navigation issues
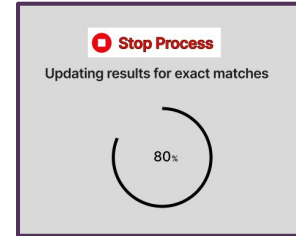- Improved discoverability

Present Design

Key Final User Evaluation Results

1.

100% Success with task 2

2.

Time to complete task 2

3.

Similarity to existing shopping sites

4.

Confusion with how to search

5.

Unsure on how the results where to be interpreted
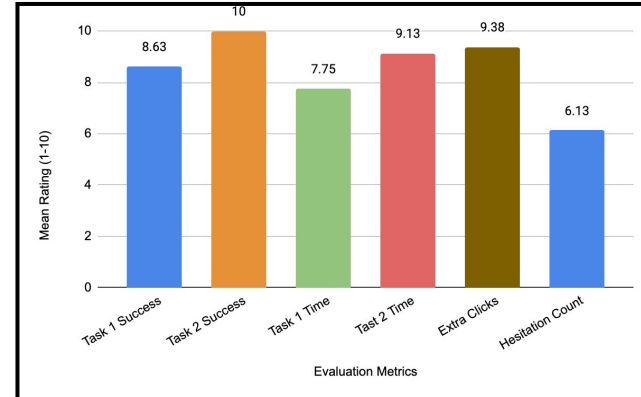
6.

Lack of system feedback

Lessons Learned

User Expectation:
- **Problem**
  - Misalignment with URL input
  - Search by product name or keyword
- **Solution**
  - Informative & complete feedback

Learning Curve:
- Increased efficiency after completing Task 1
  - Greater success & time scores
- Boost in confidence & error recovery

Future Work

Give the user more feedback from the system such as more explanation what hovering over certain buttons.

Make the URL search function easier to understand but having instructions right as you open the page.

Make the search results be shown as an expanding menu rather then all at once so to not overwhelm the user.

Make the functions more obvious, as not all functions were clear to users

Conclusion

Key Takeaways

- User evaluations confirmed strong usability, especially in the vital functions of our system.
- User feedback, iterative design, and pilot testing were all essential methods in improving our systems layout, navigation, and feedback.

Broader Impact

- Helps reduce decision fatigue for online shoppers
- Contributes to user-centered practices for transparency and sustainability in e-commerce
- Offers a replicable model for future tools with a similar mission

References

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- Amazon CA price tracker, price history, price watch, price drop alerts, and price notifications. (2023). Camelcamelcamel.com. https://ca.camelcamelcamel.com/

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References

Image Addresses

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Thanks!