

GR2: Brainstorming

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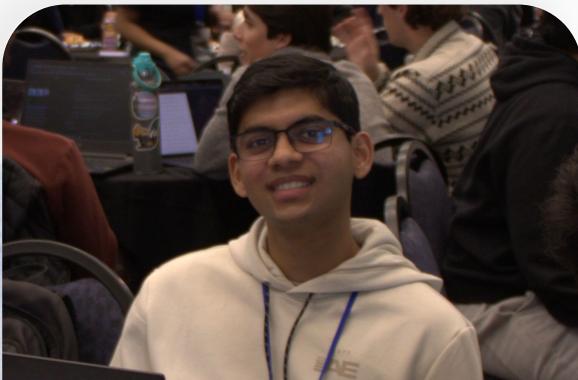


The Team



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More Interviews



Focused Domain: Improving Online Shopping for College Students

Unique Interests and Habits

We noticed that younger shoppers have more unique interests and habits when shopping. They interact with more niche online shopping sites rather than using the main ones like Amazon, and thus, any solution in this area will have a greater impact on them.

LLM Familiarity

Since younger users are more familiar with other LLM and AI applications, we imagine that designing an AI agent will best fit the needs of shoppers of such an age.

New Interviewees



Captain Carter

An SBCC student living in Tropicana Del Norte who does not shop online often



The Wasp

Another SBCC student living in Tropicana Del Norte that spends money freely on online things on instagram.

New Questions

How does being on a student budget affect the way you shop online?

Do you feel that social media or online advertisements influence your decision to buy or to not buy something?

Can you tell us about how your shopping experiences interact with the rest of your schedule, especially as your student? We'd like to hear about how you balance shopping with your other responsibilities as a student.

Can you tell me about a time when you felt pressured to buy something online?

How do shipping costs and delivery time affect your decision as a student?

Interview with Captain Carter

SBCC student living in Isla Vista

At Tropicana del Norte; 30 minutes

*Non-User: Rarely uses online shopping,
preferring in-person shopping instead.*

Interviewed by Rishik (interviewer) and
Ved (notetaker) using iPhone voice memos
for transcription and notes app for written
notes.



Empathy Map

Captain Carter

"If it's, like, a more practical item, then... I'll look it up online to see which stores have it and then compare prices."

"What's the worst quality of this product versus the best quality of this product? And do they cancel each other out?"

"I almost never buy clothes online, because they can be so tricky with how they fit."

"I'm always looking for good deals. So, like, I'll sign up for stuff if it gives me a discount."

"I like the ones that are, like, known for making neutral reviews based on how they really feel about products."

"There was a fabric Company that I was looking at buying fabrics from... but then I learned that all of those were sponsored reviews."

"Seeing what's available or seeing how things, like, change in price is really interesting to me, like, depending on season or what's in style."

"So, like, if I'm doing, like, a poster board or something like that, I would wait until, like, the very last minute to actually go to the store and buy the poster board."

Occasionally goes shopping with friends or family.

Buys expensive products if they have better reviews.

Clicks the prime button on Amazon, since those products are more vetted.

Looks at the best and the worst reviews.

Immediately scrolls past options out of her price range.

Window shops to observe availability, prices, and trends.

Buys school supplies in person to avoid shipping fees.

Shops on the weekend or in the evening to fit her schedule.

Say Think

In-person shopping can be a fruitful social activity.

Clothes that are old and dated are not desirable.

Products that have more reviews are more reliable, even if they are expensive.

If a website offers a huge discount, it is too good to be true.

Cheap products may be dangerous, especially when applied on herself.

Using online resources to streamline in-person shopping is more successful than shopping online.

Shopping is more than just buying; it is an experience that lets you engage with the world.

College students should be mindful that shopping does not interfere with studies.

Finding reliable and cheap stores is worth the time and the effort.

Pleased to go shopping with a group of loved ones.

Delighted to see what is trending or in season.

Stressed when having to buy something for a deadline.

Faithful when products have been reviewed by many non-bot users.

Eager to find the exact item she was looking for when there were no other options.

Continues to scroll for additional options even when she has found a viable option.

Untrustworthy of products that are cheap or have too few reviews.

Intrigued by products that complement items she already owns.

Disappointed when websites endorse a product that turns out flawed.

Do Feel

Empathy Map

Captain Carter

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"So, like, if I'm doing, like, a poster board or something like that, I would wait until, like, the very last minute to actually go to the store and buy the poster board."

"Buying some lipstick or makeup product from some unknown company, you run the risk of it having, like, toxic things in it or untested things in it."

"I like the ones that are, like, known for making neutral reviews based on how they really feel about products."

Occasionally go shopping friend fam

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at the and worst news. on the weekend or in the evening to fit her schedule.

Mentally notes if the reviews she reads may be from a bot.

Continues to scroll for additional options even when she has found a viable option.

Pleased to go shopping with a group of loved ones.

Delight see what trending in sea

Stressed when having to buy Untrustworthy products that are cheap or have too few reviews.

Faithful when products have been reviewed by many non-bot users.

Elated to find the exact item she was looking for when there were no other options.

Hesitant to select a product to buy without checking reviews.

Intrigued by products that complement items she already owns.

Say Think

Cheap products may be dangerous, especially when applied on herself.

In-person shopping can be a fruitful social activity.

Shopping is more than just buying; it is an experience that lets you engage with the world.

Clothes that are old and dated are not desirable.

Products that are have more reviews are more reliable, even if they are expensive.

marginal amount of convenience of not going to the store.

Finding reliable and cheap stores is worth the time and the effort.

Do Feel

Untrustworthy products that are cheap or have too few reviews.

Intrigued by products that complement items she already owns.

Conscientious of the risks of buying.

Insights and needs

Captain Marvel

Insight: Although Captain Marvel is highly price-conscious, her primary driver is trust, not savings. She prioritizes vendor vetting, review authenticity, and perceived safety over speed or convenience, even willing to pay more and spend extra time researching to avoid low-quality, toxic, or misleading products.

Need: Captain Marvel needs to feel confident that the products she considers, especially practical or personal items, are high-quality, safe, and ethically sourced, even if it means having to expend excessive effort filtering through unreliable reviews, sponsored content, or misleading pricing cues.



Interview with The Wasp

SBCC student living in Isla Vista

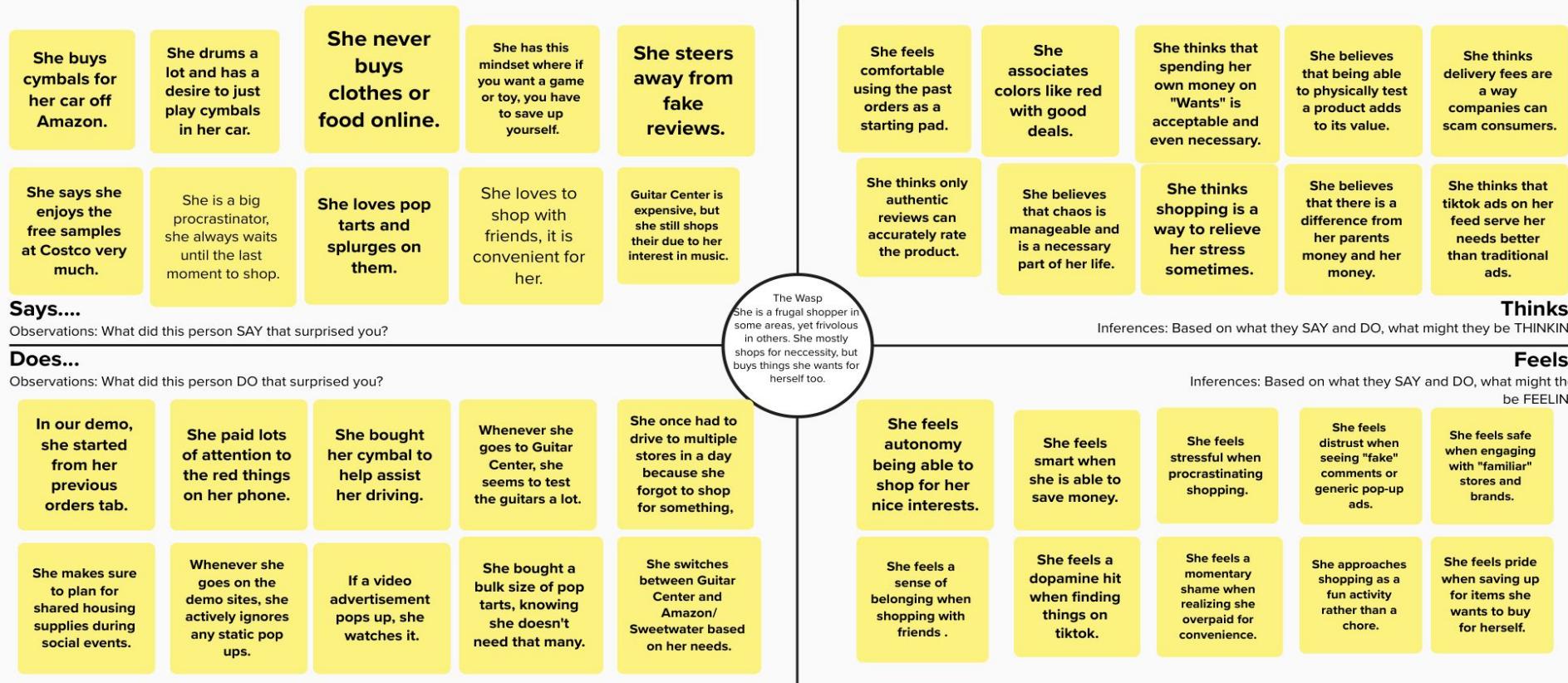
At Tropicana del Norte; 30 minutes

Interviewed by Rishik (interviewer) and Daniil (notetaker) using iPhone voice memos for transcription and notes app for written notes.



Empathy Map

The Wasp



Empathy Map

The Wasp

She buys cymbals for her car off Amazon.

She says she enjoys the free samples at Costco very much.

She drums a lot and has a desire to just play cymbals in her car.

She is a big procrastinator, she always waits until the last moment to shop.

She never

She drums all the time onto her wheel, so she wants to get one of those so that she can just crash it whenever she wants.

them.

She has this mindset where if you want a game or toy, you have to save up yourself.

She loves to shop with friends, it is convenient for her.

She steers away from fake reviews.

Guitar Center is expensive, but she still shops there due to her interest in music.

She feels comfortable using the orders starting

She thinks auto reviews accurate the p

She associates

She believes that red things on her shopping list indicate deals.

She thinks that spending her own money on "Wants" is acceptable and even necessary

She thinks shopping is way to relieve her stress sometimes.

She believes She believes only authentic reviews from real people are an accurate evaluation metric.

money.

She thinks delivery fees are a way companies can scam consumers.

She thinks that ads on her feed serve her needs better than traditional ads.

Thinks...

Inferences: Based on what they SAY and DO, what might they be THINKING?

Says....

Observations: What did this person SAY that surprised you?

Does...

Observations: What did this person DO that surprised you?

In our demo, she started from her previous orders tal

She likes to test things out physically before buying them.

She paid lots She bought her cymbal to help assist her driving.

If a video advertisement pops up, she watches it.

Whenever she goes to Guitar

During the demo, she immoderately went to previous orders to check what she wants.

She once had to drive to multiple stores in a day because she forgot to shop for something,

She switches between Guitar Center and Amazon/weetwater based on her needs.

She feels autom being a shop for nice int

She feels sense belonging shopping friends .

She is relaxed when she shops in familiar stores like Costco.

She feels stressful when procrastinating shopping.

She feels a momentary shame when realizing she overpaid for convenience.

She feels a sudden rush of desire when she sees unique hacks on social media, contrary to her usual personality.

She feels pride in saving up items she wants to buy for herself.

Feels...

Inferences: Based on what they SAY and DO, what might they be FEELING?

Feels...

She feels safe when engaging with "familiar" stores and brands.

She feels pride in saving up items she wants to buy for herself.

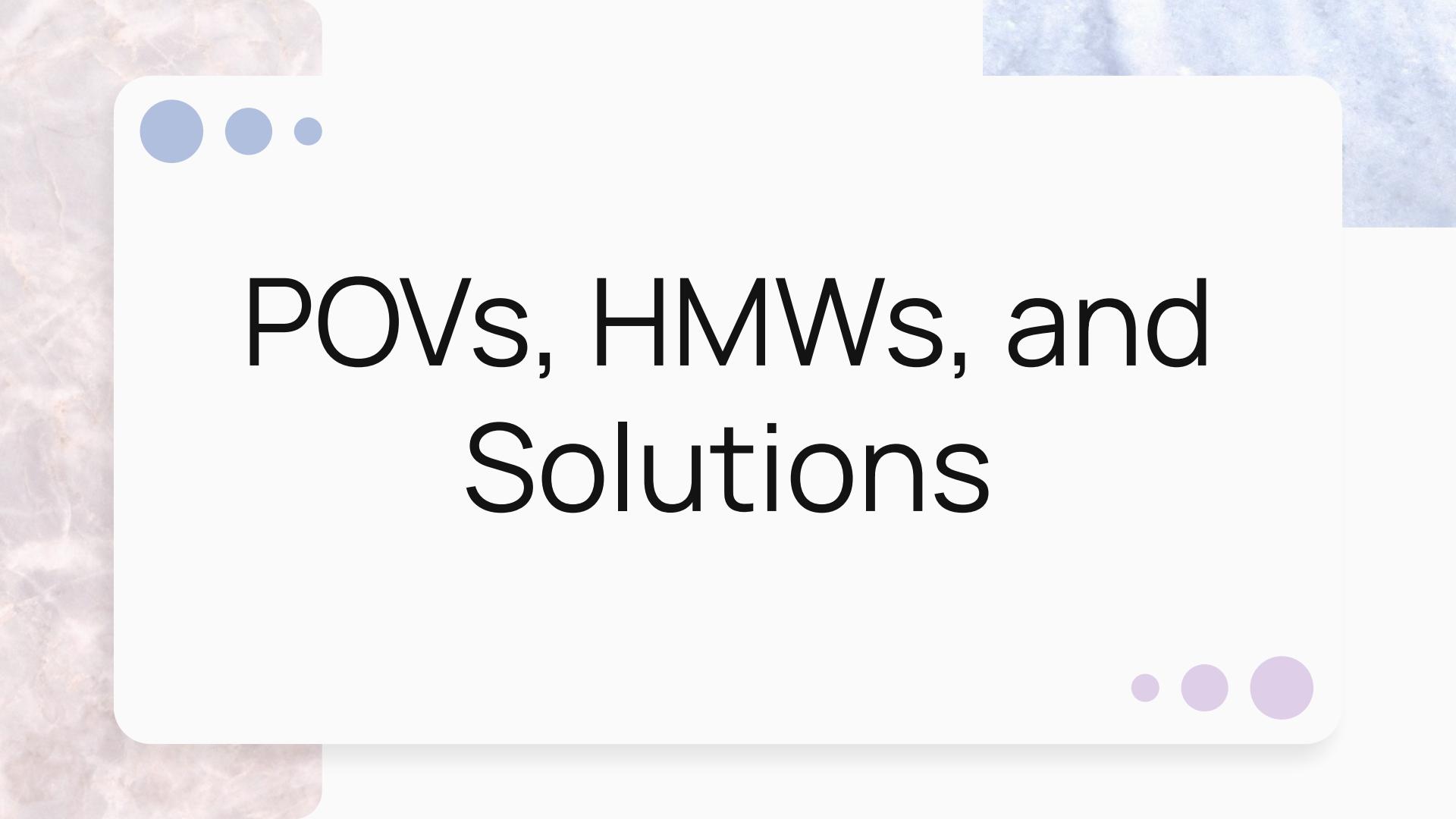
Insights and needs

The Wasp

Insight: She views her spending habits as responsible and measured. She often looks at visual queues like red items in order to buy something, but she sometimes impulsively buys items that are low-quality or unnecessary.

Need: She needs a trustworthy way to validate that the viral gadgets and deals she discovers on social media are actually worth her limited personal funds.





POVs, HMWs, and
Solutions



POV 1

Scarlet Witch

We met...a college student from Los Angeles who enjoys shopping as a social and emotional experience.

We were surprised to notice...that in person environments make her more impulsive and emotionally driven, whereas online shopping makes her calmer, more analytical, and heavily reliant on reviews, rewards, and trust signals.

We wonder this means...she values feeling confident and justified in her purchases, balancing excitement and self-control by using technology to reduce risk and guilt, especially for products applied to her body or purchased online.

It would be game changing to...modify the shopping experience such that she is able to enjoy it while still remaining rational and analytical instead of impulsive.



10 HMWs

Scarlet Witch

Make online shopping more exciting?

Eliminate the need to switch between multiple apps to validate a product?

Help users avoid bad products before they see them?

Enable groups of shoppers to analyze shopping decisions together?

Remove stress from second guessing purchases?

Make the value of a product feel transparent?

Reduce regret from impulsive purchases?

Use past purchases to guide future purchases?

Make product discovery feel like a personalized playlist instead of endless scrolling?

Use brand loyalty to help curate products?

POV 2

Captain Carter

We met... an SBCC student staying at her dorm in Isla Vista who does not frequently shop online.

We were surprised to notice... she says she values price, but she is actually willing to pay more and spend extra time researching to avoid low-quality, toxic, or misleading products.

We wonder this means... she defines getting the most value for her money as purchasing products she can trust, even at a higher upfront cost.

It would be game changing to... help her feel confident in selecting high-quality products without spending a lot of time or money on unreliable options.



10 HMWs

Captain Carter

Make it easier for her to identify trustworthy products without relying on too many websites?

Make it faster to search for products online?

Reduce the negative impact of paid reviews?

Stop online sites from advertising low quality products?

Encourage honest reviews?

Stop low quality products from becoming trending?

Make shoppers feel confident in what they buy?

Make evaluating products feel like checking a nutrition label?

Make researching feel lightweight, not time consuming?

Make researching fun?

POV 3

The Wasp

We met... an SBCC Student that tends to buy things that she sees on social media.

We were surprised to notice... that usually she spends conservatively on things like food and clothes, but she indulges on things she sees in her social media feed.

We wonder this means... she believes that her social media feed is better curated for her than traditional outlets.

It would be game changing to... help her align her spending on social media-influenced purchases with the same care she applies to everyday necessities.



10 HMWs

The Wasp

Replicate the reliability of in person stores into a social media feed?

Distinguish from products she might need and products that are just trendy?

Encourage users to test products with the same rigor as products from stores?

Allow her to be more mindful of shopping online, as when she shops in person?

Reduce reliance on social media feeds?

Amplify the satisfaction of getting personalized recommendations?

Make traditional shopping feel as curated as a social media feed?

Reframe social media shopping from impulse-driven to intention-driven while keeping it enjoyable?

Help her distinguish between genuine recommendations and persuasive marketing?

Help her maintain a sense of control over spending without feeling restricted or judged?

HMW 1

Scarlet Witch

How might we make product discovery feel like a personalized playlist instead of endless scrolling?



10 Solutions Scarlet Witch

A daily “for you” app that shows a small daily set of curated items based on past likes and purchases.

An app that queries the user’s mood and reshuffles the product to match the vibe.

A Tinder-style product discovery app that quickly learns preferences through skips and saves.

How might we make product discovery feel like a personalized playlist instead of endless scrolling?

A Spotify-Wrapped style app to share yearly shopping experiences with friends.

An app for 5-minute “playlist sessions” to highlight small, curated sets of items.

An app where users can upload photos of outfits they like and get similar-vibed recommendations.

An app to highlight shopping playlists sorted by budget.

An app that generates a library shelf showing the most relevant items for the user.

An app where users can follow companies like content creators and engage with other, similar subscribers.

An AI agent that passively analyzes scrolling and pausing to learn and showcase your preferences.

HMW 2

Captain Carter

How might we make researching for trustworthy online products fun?



10 Solutions

Captain Carter

A social media app where users can share videos of products working correctly.

A review platform where users earn rewards for spotting fake reviews.

A personal AI “shopping buddy” that researches products alongside you and explains findings in plain, friendly language.

How might we make researching for trustworthy online products fun?

A virtual trial room where you can simulate testing products on yourself.

An app that shows “expectation vs. reality” with swipeable posts.

A collaborative playlist-style platform where users curate lists of products they personally trust.

A product review sites that uses Gen Z culture to engage the audience.

A detective-style game where you hunt for clues for whether or not this product is reliable?

An app that lets you compare products side-by-side in simulated “battles” and tournament brackets?

An app that displays product information in a scrollable, timeline format.

HMW 3

The Wasp

How do we allow users to be more mindful of costs when shopping online, like when they shop in person?



10 Solutions

Captain Carter

A translator app that shows what regular items could be bought at the same price as the item on your feed (e.g. 1 phone accessory = 5 eggs).

A reality check app that scrapes Reddit to showcase real opinions from real people.

A cooldown app that forces the user to wait before buying something new.

How do we allow users to be more mindful of costs when shopping online, like when they shop in person?

An app that makes monthly costs of buying similar items transparent to the user.

An app that monitors for impulsive shopping behavior and notifies loved ones for approval if necessary.

An app that allows user to budget and limit spending specifically for social media shopping.

An app that detects expensive brands in their shopping feed and swaps them with affordable ones.

An app where users can set restrictions on what they plan on buying and alarms the user if distracted by other items.

An app that integrates with finance institutions to make balances visible when shopping online.

An online marketplace with no return-policy to discourage users from buying more than needed.

Experience Prototyping

Solution 1

Solution: a mood-based shopping app where users can select a mood and see recommendations reshuffle to match their vibe.

Assumption: Selecting a mood before browsing helps users discover relevant products more efficiently and enjoyably than browsing a standard, infinite product feed without any preferential context.



Experience Prototype 1

Roles: Rishik (Facilitator / System), Residential Assistant working in Santa Barbara (Participant), Ved and Daniil (Notetakers)

Scene: The participant is shopping online for clothes and accessories and wants to discover items that feel exciting but still relevant to their personal style.

Procedure:

In the first experiment, the participant browses a traditional endless product feed for 3–5 minutes and selects the items they would consider buying. They then rate enjoyment, confidence, and overwhelm.

In the second experiment, the participant selects a mood and is then shown products which adhere to the mood they selected for the same amount of time, then selects some items and rates the same criteria.



Results 1

Although both experiences offered products from the same stores, the participant reported feeling more focused, excited, and confident during the mood based browsing experience. In the standard feed, the participant described the experience as “random” and noted that she had to scroll a lot more to find relevant products. In contrast, selecting a mood helped the participant feel guided and intentional, and they expressed that the products “made sense together” and better reflected what she was looking for. The participant also reported less fatigue and aimless scrolling and higher enjoyment in the second experiment, supporting the assumption that mood based curation creates a more engaging and effective product discovery experience.



Solution 2

Solution: a platform that allows users to compare products in interactive side-by-side simulations and tournament-style matchups.

Assumption: Seeing both products side by side and comparing them together enables users to make better judgements rather than reading all the reviews of one product first and then reading all the reviews of the second afterwards.



Experience Prototype 2

Roles: Ved (Facilitator / System), Anonymous Student we met at a Dining Hall (Participant), Rishik and Daniil (Notetakers)

Scene: The Participant is using our “app” to buy a shirt and wants to compare different options.

Procedure: For experiment 1, we present details (price, ratings, reviews, brand reputation, consistency) for option 1 completely before doing option 2. For experiment 2, we intersperse these details about both products. We ask the participant about their confidence with their decision after each experiment.



Results 2

Despite the fact that the differences between the two options were almost exactly the same in both rounds of the experiment, the participant expressed higher confidence in his decision in the second round. In the first round, due to large amount of context he received, he ended up fixating on one piece of information (the price). In the second round, being able to compare corresponding aspects of products must have helped him get a holistic view of the decision. His explicit response was that he felt that the product he selected in the second round better “matched [his] vibe.” This shows that our assumption was correct, and this is a viable project for our audience.



Solution 3

Solution: An app that detects expensive and over-budget products in one's shopping feed and automatically replaces them with affordable products.

Assumption: When an AI rewrites a user's query using their constraints, users will find a satisfactory option much faster without extra scrolling.



Experience Prototype 3

Roles: Daniil (Facilitator / System), Anonymous student at UCSB Library (Participant), Ved and Rishik (Notetakers)

Scene: Participant finds an interesting item on Tiktok and attempts to find it on Amazon.

Procedure: We presented the participant with two different product scenarios to "use" and evaluate. We chose a target product by searching through a mock Tik Tok feed with items that could be varied in many aspects: calculators. First we tested his ability to find a product using the standard approach: typing a query and scrolling through the items. We then refined his query with AI based on his needs and previous orders in order to have key details about the product. We finally evaluate the difference of the feeds, average price, and how each one mirrors what he would like to buy.



Results 3

For our first experiment with the calculators he was overwhelmed with the different models available. He had to scroll through multiple pages to find something that he wanted, and on average prices ranged from 150\$ - 300\$, beyond the amount he would theoretically spend on a calculator. We then refined the query through AI to filter out irrelevant products. This time, most of the first page was filled with results he would actually buy. The calculators he saw were also more relevant to the types he bought in the past and is looking for. He stated "This could be very useful". He did note that maybe doing this manual process every time he buys something could be time consuming. With these results we understood how useful AI can be at saving time for the consumer while shopping, but we need to figure out how to allow the user to quickly use the app.





What next?

After discussing among ourselves and conducting experience prototypes, we have decided to go forward with solution 1, which is to build a platform that lets you filter your product feed by mood. This will help users feel like their product feeds are more curated towards them as a person. It serves students our age, who are familiar with using such filters on other applications such as social media apps. It may leave out people who want a broader perspective on what products to buy as well as those that are uncomfortable with personalized data in general.



Appendix: Addressing Feedback

Some our feedback asked us to specify what domain of online shopping we are going to focus on. We decided to focus on online shopping, and in particular, the kind of products that college students would typically buy online..

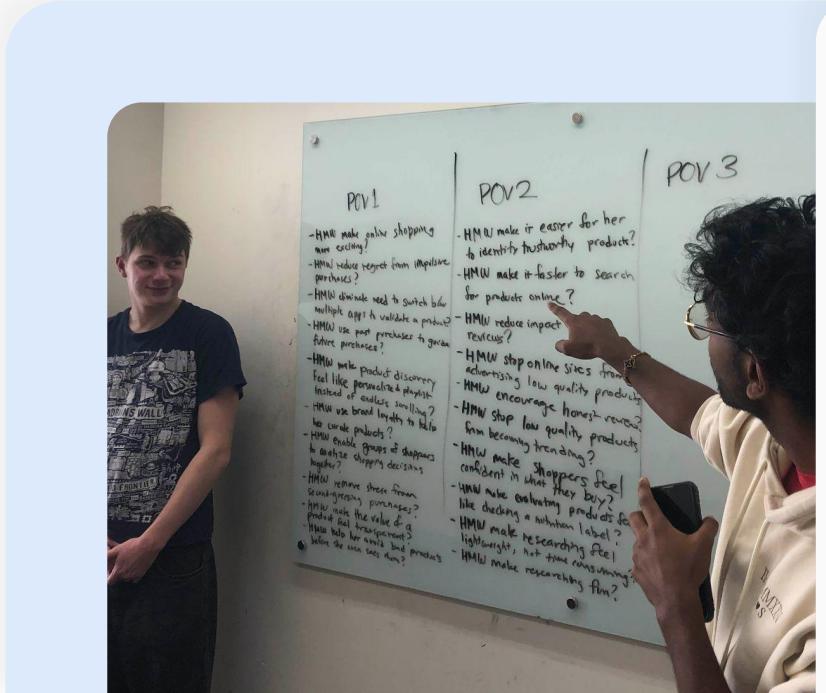
One of our peers suggested that we interview someone who is mostly distrustful of online shopping, since we did not cover that in GR1. That is why we interviewed Captain Carter, who is not a frequent online shopper.

Another peer suggested that we look into how different emotions shoppers have may influence how they shop online. That is why we looked into mood-based shopping as one of our solutions for experience prototyping.

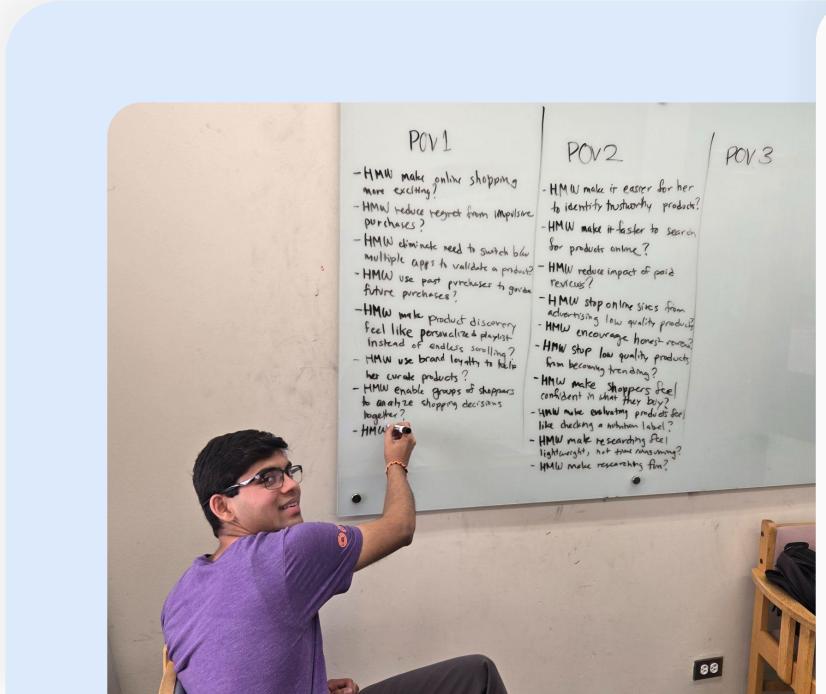
Finally, our peers also suggested we include feedback from people of other genders rather than just girls. Although all of our interviewees were girls, we did end up including boys during our experience prototyping.

Appendix: Brainstorming Pictures

We are at the library brainstorming HMWs and Solutions!



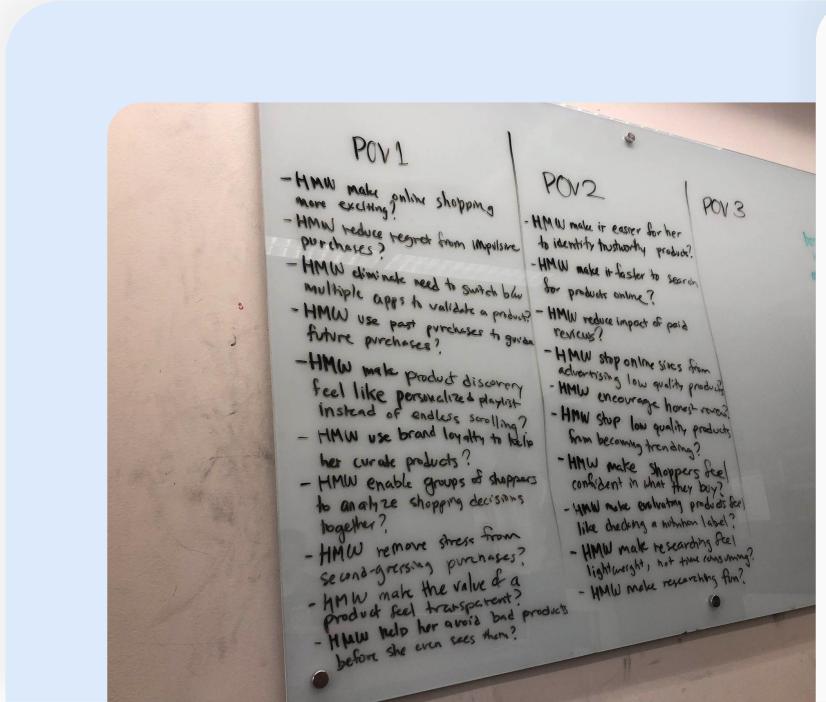
Appendix: Brainstorming Pictures



More pictures of us brainstorming!

Appendix: Brainstorming Pictures

Here is a picture of our whiteboard during the brainstorming session.



Thank you!