



## Final Project Report: Advanced Prototyping and User Research

Computer Science Department

COMP332, HUMAN COMPUTER INTERACTION

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G8: Ethical Jewellery Marketplace

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- **Note :** We modified all (phase 1 ) as your feedback

## Phase One: Double Diamond Design Process

### Introduction

Today, a lot of people care about where their products come from and how they are made. When it comes to jewelry, many buyers want to make sure that the pieces they buy are made in a fair and honest way. Sadly, many jewelry brands do not show clearly how they get their materials or how the jewelry is made. That's why we came up with the idea of an **Ethical Jewelry Marketplace** a platform where people can find and buy jewelry that is ethically sourced and handmade with care.

To understand what users really need and what problems they might face, we created a survey and shared it with potential users. Through the survey, we collected important information about their shopping habits, what they look for in jewelry, and what worries them when buying. Some of the main problems users talked about were the lack of clear information about where the jewelry comes from, limited customization options, and trust issues with online sellers.

After gathering all these insights, we started thinking about solutions that could make the experience better. We will talk more about these solutions later, along with how we plan to design a platform that is easy to use, transparent, and trustworthy for everyone.

## User Insight

After conducting a user survey, we collected important information about users' behaviors, needs, and challenges when purchasing ethical jewelry. Here is a summary of the main insights:

### 1. User Values and Awareness

- Most users don't care about ethical sourcing and environmental responsibility when choosing jewelry.
- Many users are willing to pay a bit more if they are sure the product is handmade and fairly sourced.

### 2. Pain Points and Challenges

- Users often feel there is not enough information about where and how jewelry materials are sourced.
- Trusting online jewelry sellers is a common issue due to lack of transparency.

### 3. Shopping Behaviors

- The majority of users prefer shopping online but expect clear, honest information about the products.
- Users like to support small businesses and artisans but find it hard to discover reliable ethical brands.

# Competitive Analysis

## 1. The Ethicalist

### *Overview:*

The Ethicalist is a platform that focuses on offering ethically sourced and handcrafted jewelry. It emphasizes transparency in sourcing, telling the story of the artisans behind each piece, and promoting sustainability. Their goal is to offer customers a clear and trustworthy way to buy jewelry that aligns with their ethical values.

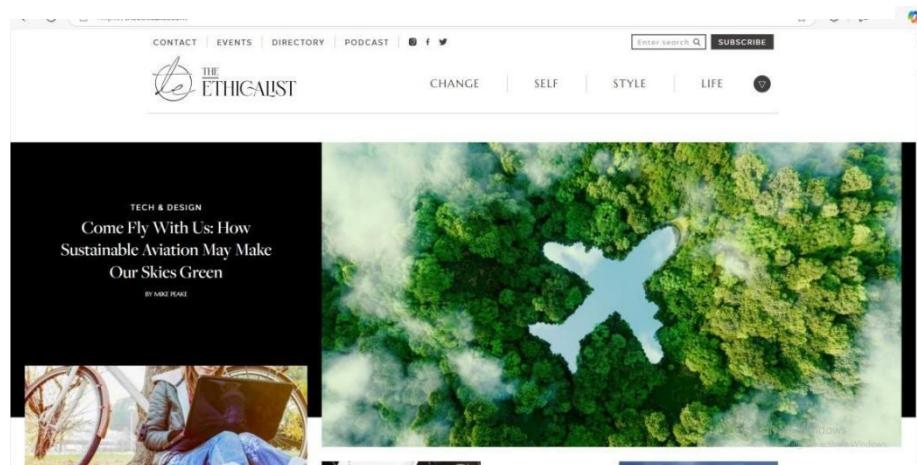
- *Strengths:*

- Strong focus on transparency and ethical sourcing.
- Detailed artisan stories build trust with customers.
- Eco-friendly practices are highlighted in marketing and products.
- Clean and simple website design that is easy to navigate.

- *Weaknesses:*

- Limited selection of jewelry styles.
- Customization options are minimal.
- Higher price points may deter customers looking for more affordable options.

# THE ETHICALIST



## 2. Mejuri

### *Overview:*

Mejuri is an online jewelry retailer that combines minimalist design with a focus on ethical practices. They offer a wide range of high-quality jewelry pieces made from recycled materials like gold. Mejuri has gained popularity for its modern and stylish jewelry, as well as its commitment to ethical sourcing, making it a strong player in the ethical jewelry market.

- *Strengths:*

- Wide variety of contemporary jewelry designs.
- Transparent pricing with details on materials like recycled gold.
- Easy online shopping experience with clear product descriptions.
- Offers flexible payment options, including installment plans.

- *Weaknesses:*

- Ethical and environmental aspects are not always front-and-center in marketing.
- Limited options for customization or personalized pieces.
- Some users have reported delays in shipping and slow customer service responses.

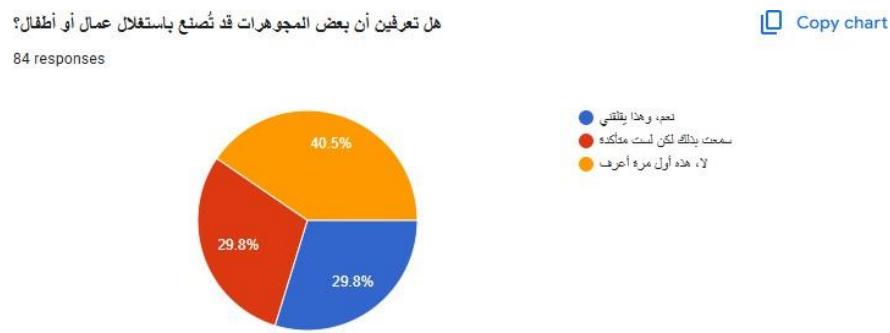


## Problem Statement

We received 84 responses to our survey, which was shared via WhatsApp and Messenger through university group chats, family, and friends. This allowed us to gather input from a diverse group while ensuring accessibility and relevance to our research goals. Most of the participants were women, primarily between the ages of 18 and 35, and the majority lived in urban areas. Many had previous experience purchasing handmade or ethically sourced jewelry, which gave us valuable insight into the preferences and behaviors of our target audience. Based on the feedback we gathered, we identified the most common problems users face and brainstormed potential solutions that directly address their needs and help enhance their overall experience:

### Problem 1

Many people are not aware of what ethical jewelry truly means or why it is important. There is a general lack of education about how jewelry sourcing impacts the environment, communities, and labor practices. As a result, users often make purchases without considering whether their jewelry is ethically made.

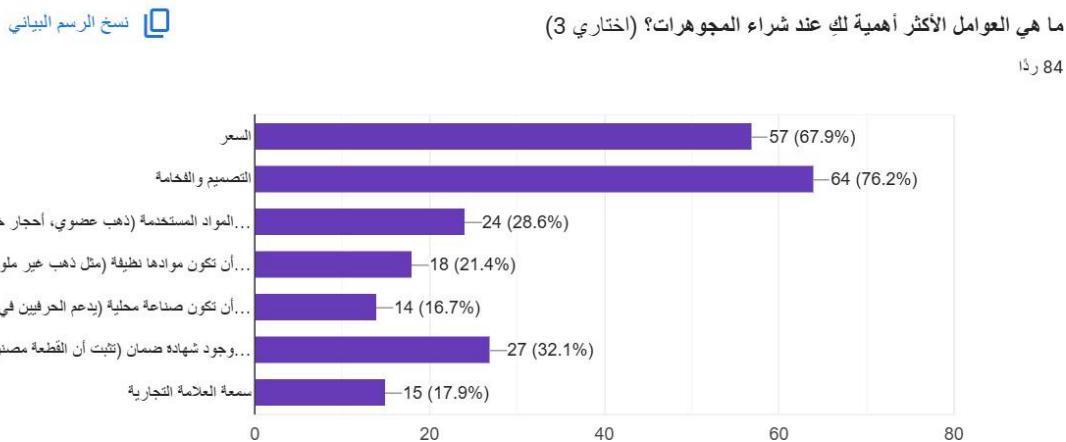


### Solution:

To address this, we will create educational campaigns on our platform. These campaigns will include blogs, articles, short videos, and social media posts that explain the concept of ethical jewelry in simple and engaging ways. We aim to raise awareness, educate users about the importance of ethical choices, and build trust by showing the positive impact of their purchases.

## Problem 2

The results showed that most buyers are more focused on the design and luxury of jewelry, with less than 30% giving importance to environmental concerns. Naturally, women love to wear beautiful, luxurious pieces, so the appeal of stunning designs and elegance tends to outweigh the consideration of eco-friendly options.



## Solution :

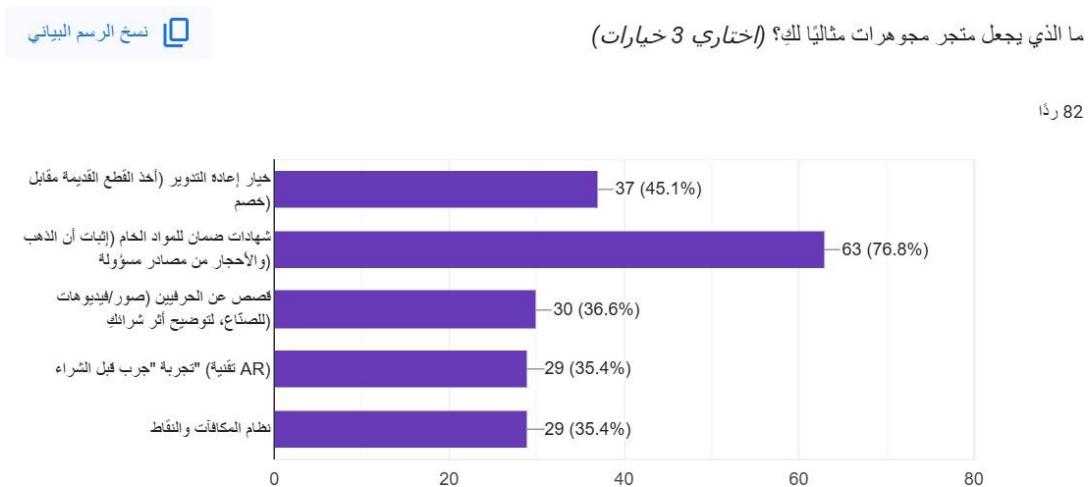
- 1) Collaborating with Popular Brands: We can team up with well-known jewelry brands to create special collections using recycled metals and lab-grown diamonds, while making sure the designs are still luxurious and beautiful. Recycled metals help reduce the need for mining, which is better for the environment, and lab-grown diamonds are a more sustainable choice with less impact on nature. This partnership will help build trust in eco-friendly jewelry and attract customers who want both style and sustainability, making ethical jewelry more appealing.
  
- 2) Introducing a Rewards Program: We could create a rewards program where customers earn points for buying eco-friendly jewelry or recycling their old pieces. We can also offer discounts or special perks for those who support environmental causes, encouraging them to return while doing something good for the world. In fact, a fair number of people (35.4%) believe that a rewards and points system makes a jewelry store ideal for them, highlighting that customers appreciate these types of incentives.

### Problem 3

Many ethical jewelry brands face a real challenge: their designs often feel repetitive. Even though these brands stand for important values like sustainability and fair labor, customers especially those looking for meaning and uniqueness can quickly lose interest when every piece starts to look the same. The emotional connection fades, and with it, the desire to buy.

### Solution :

The key is to make the experience personal. Let customers play a role in creating their jewelry by choosing their own metal, gemstone, and adding a custom engraving. Offer limited-edition collections that tell real stories and reflect different values or inspirations. Add a 3D or AR preview so they can see the piece before buying and feel confident it's truly made for them. This way, every item feels special, not just because of how it looks, but because of the story behind it and the person who helped shape it.



## Problem 4

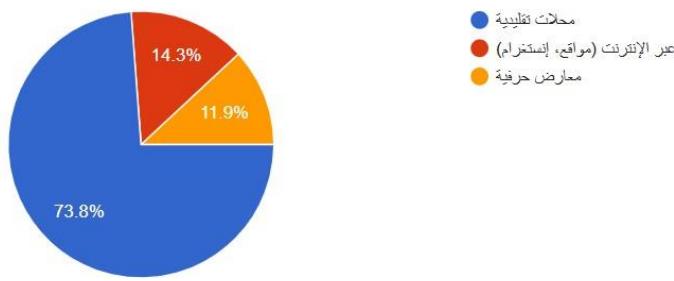
### People do not trust online jewelry sales.

Despite the growing trend of e-commerce, buying jewelry online remains challenging for many users due to a lack of trust. Worries regarding material authenticity, ethical sourcing, product quality living up to expectations, and fear of being conned surface. This distrust is intensified by cognitive limitations like trust and security, problems establishing reliability without physical examination, and a lack of emotional connection with digital goods all serve to exacerbate this mistrust.

نسخ الرسم البياني

كيف تفضلين التسوق للمجوهرات؟

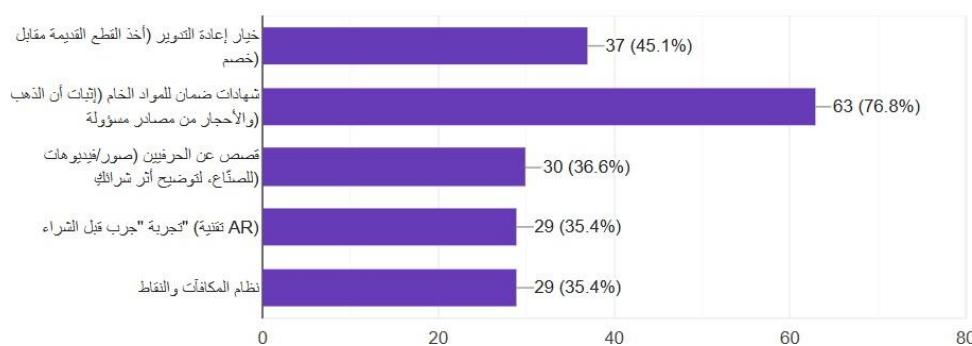
رداً 84



نسخ الرسم البياني

ما الذي يجعل متجر مجوهرات مثالياً لك؟ (اختاري 3 خيارات)

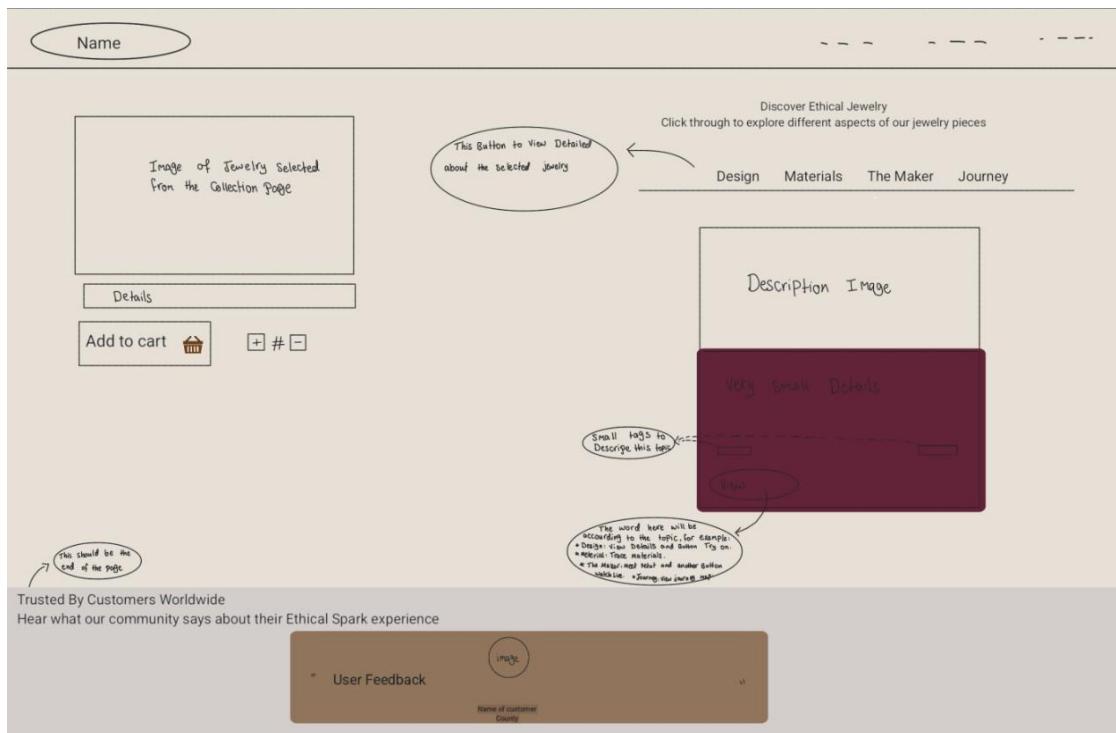
رداً 82



## Solution

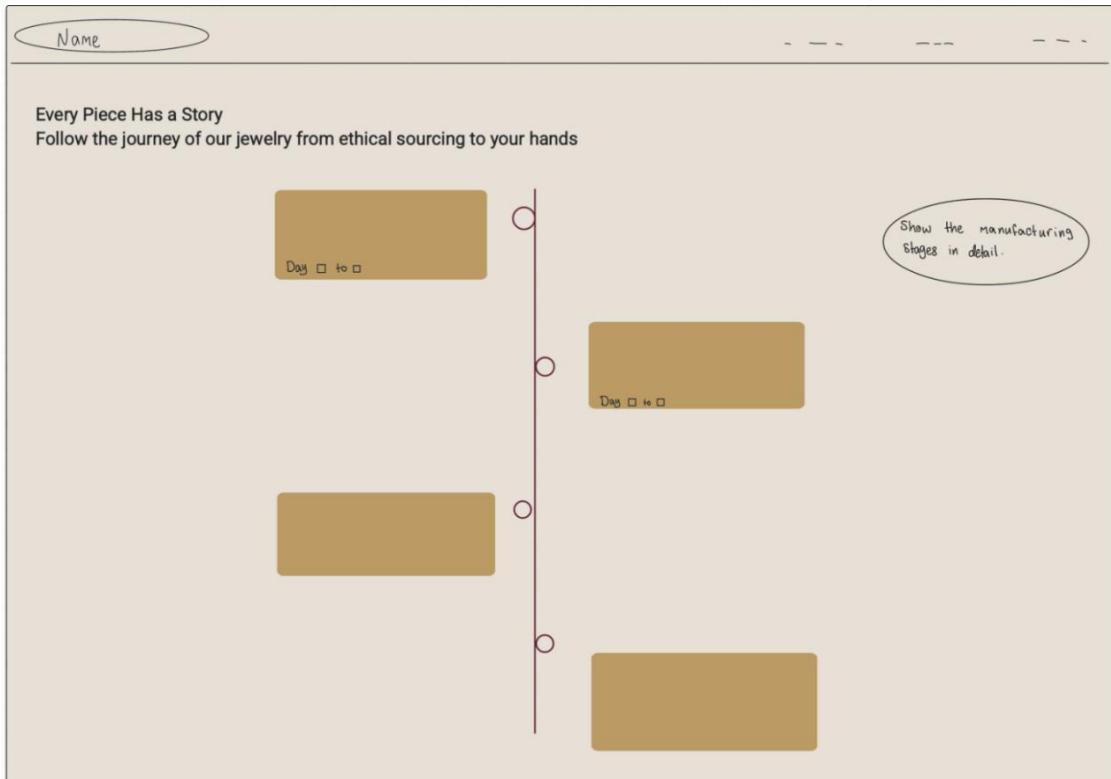
To overcome trust problem in online jewelry sales, we propose an Ethical Jewelry

Marketplace that goes beyond traditional e-commerce techniques by addressing both emotional and cognitive needs through:



### Journey Transparency ("Trace My Jewelry"):

Every jewelry piece comes with a live interactive story map showing its journey from ethical sourcing to your hands, with photos, videos, and artisan profiles to reduce cognitive overload and build emotional trust.



#### **Artisan Live Streams ("Meet the Maker"):**

Customers can watch short real time sessions of artisans crafting pieces, creating a strong emotional connection and validating authenticity.

#### *Try at Home (Virtual Trial Only):*

Offer customers an AR-based "try-on" experience that allows them to virtually test products from the comfort of their homes before making a purchase.

Name

### Try Before You Buy

Our augmented reality technology lets you see how jewelry looks on you before purchasing



#### 1. Open Camera

Access your smartphone camera through our app or website



#### 2. Select Jewelry

Choose from hundreds of pieces in our collection



#### 3. Position View

Point at your hand, wrist, or face to see the jewelry



#### 4. Confident Purchase

Buy knowing exactly how it will look on you

Start Virtual Try-on

## Problem 5

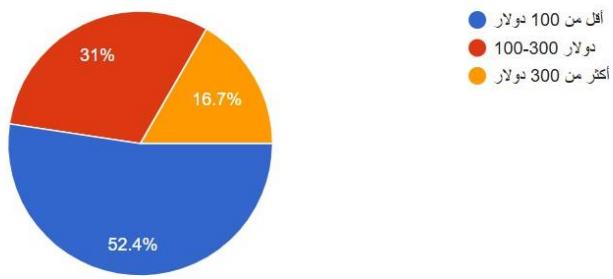
### *Rising prices of ethical jewelry*

Some people may believe that ethical jewelry is expensive or find it challenging to learn how to make it. Additionally, many may not fully understand the effort behind pricing these pieces, especially since they are sourced responsibly without harming the environment or exploiting labor, including child labor.

نسخ الرسم البياني 

ما هو أكبر مبلغ تنفقينه عادةً على قطعة مجوهرات واحدة؟

رداً 84



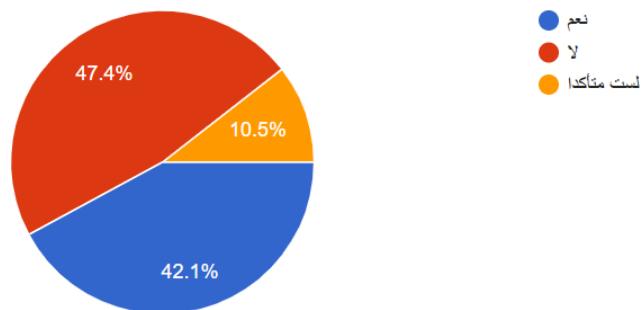
**Figure 13:Problem 5 Statistic**

## Solution

To address these concerns, we start our presentation by explaining the production process, which involves multiple meticulous stages to ensure the highest quality, making each piece a durable and trustworthy accessory. We also break down pricing through a clear, easy-to-understand chart. To guarantee quality, every piece undergoes rigorous testing. Plus, to make our jewelry more accessible, we offer a rewards and discount system to help customers save on their purchases.

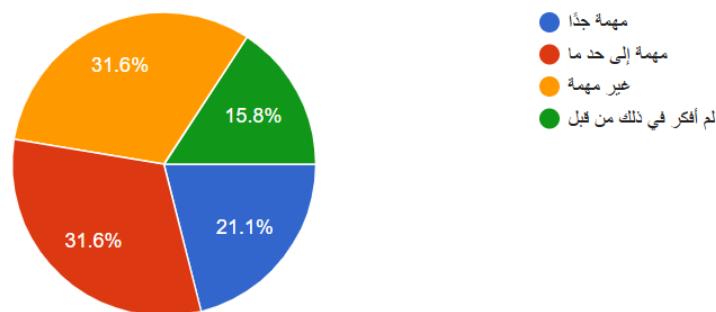
[نسخ الرسم البياني](#)

هل سبق لك أن اشتريت مجوهرات ذات مصدر أخلاقي؟



[نسخ الرسم البياني](#)

ما مدى أهمية أن تكون المجوهرات التي تشتريها مصنوعة بطريقة إтика (مثل التجارة العادلة، صناعة يدوية، صديقة للبيئة)؟



The survey results revealed that a significant portion of participants had previously purchased ethically sourced jewelry, while others had not or were unsure. Responses also varied regarding the importance of ethical production, with some considering it very important or somewhat important, while others found it unimportant or had never thought about it before. These findings highlight a growing awareness among certain users, as well as an opportunity to increase education and awareness around sustainability and ethical practices in the jewelry industry.

# Personas

Based on our research & Focus group, each persona represents a group of users who might use our platform.

## First persona

**Layali Tarefi**



AGE 38  
EDUCATION Masters in Medical Laboratory Science  
STATUS married  
OCCUPATION Homemaker & Owns a Home-based Arabic Food Shop  
LOCATION Ramallah  
MONTHLY INCOME 3500S

**Quotation:**  
I used to prefer shopping from physical stores, but with the current developments, I have become interested in shopping online.

**Personality:**  
Mindful Maternal  
Practical  
Community-Oriented

**Bio:**  
Layali lives with her husband and two children, Abdul Jabar and Khaled. She enjoys shopping for jewelry but is often mindful of the price. While she considers the cost, especially when it comes to protecting her children from child labor, she doesn't mind paying a little more for jewelry if it's for a good cause. Layali often buys rings and bracelets, with her spending on accessories varying based on her income. However, if the jewelry is eco-friendly or for the benefit of her kids, she is willing to spend around \$300. Layali prefers to try the jewelry in person before purchasing and is motivated to buy from new stores if she finds unique, eye-catching designs. She also enjoys discounts that she can use for future purchases.

**Goals:**

- Ethical Shopping: Prioritizing eco-friendly and ethically produced jewelry.
- Family First: Ensuring products are safe for her children.
- Budgeting: Balancing her spending on jewelry based on her income and household needs.

**Motivations:**

- Supporting brands that align with her values (ethics, sustainability, and child protection).
- Finding unique designs that resonate with her personal style.
- Looking for deals and discounts to make her purchases more affordable.

**Behaviors:**

- Shops in-person for jewelry to try it on before buying.
- Actively looks for jewelry that supports sustainability and child protection.
- Tends to purchase from brands that offer future discounts for repeated purchases.

**Pain Points:**

- High prices for ethically produced jewelry.
- Limited availability of unique designs in stores.
- Overwhelmed by the range of options in the online market.

## Second persona

**Noor Ibrahim**



AGE 30  
EDUCATION Marketing Specialist  
STATUS Single  
LOCATION Ramallah  
TECH LITERATE High

**Quotation:**  
I am used to with online service and I usually do my online shopping from Instagram.

**Personality:**  
Introvert Thinker  
Spender Tech-savvy

**Bio:**  
She is passionate about sustainability and aims to make ethical choices in her daily life. She enjoys discovering new brands that align with her values.

**Goals and Motivation:**

- Support ethical and sustainable jewelry brands
- Make purchases that align with personal values
- Contribute to positive social and environmental impact

**Behaviors:**

- Shops online regularly for accessories and gifts
- Follows sustainability influencers and ethical fashion pages
- Reads product reviews before making a purchase

**Pain Points:**

- Difficulty knowing if a brand is truly ethical
- Overwhelmed by too many options and unclear product details
- Limited access to trustworthy ethical jewelry platforms

**Frustrations:**

- Brands claiming to be ethical without proof (greenwashing)
- Lack of transparency about materials and sourcing
- Disappointment when brands prioritize profit over values

## Third persona

**Milar Mohammad**



AGE 27  
EDUCATION Bachelor of Computer Science  
STATUS Married  
OCCUPATION Software Engineer  
LOCATION Ramallah  
MONTHLY INCOME \$2,000

**“** I am used to online service and usually do my online shopping from Shein.

Social Thinker Spender  
Tech-savvy

**Bio**  
She's a software engineer who truly loves her work, but for her, it's not just about the job—it's about living in line with her values. Married and always thoughtful about the choices she makes, she puts a lot of care into selecting jewelry. She won't settle for anything less than eco-friendly and ethically made pieces. But every time she falls for a stunning fair-trade ring or a beautiful recycled-gold bracelet, the price tag stops her in her tracks. It's so frustrating—why should doing the right thing come with such a high cost? She keeps hoping that one day, she'll find that perfect piece that fits both her values and her budget.

**Goals**

- Find ethically sourced jewelry: Seek pieces made from recycled materials or sustainable sources, ensuring ethical production practices.
- Balance values and budget: Find a way to purchase eco-friendly and ethical jewelry without exceeding her budget.

**Motivations**

- Support for fair labor: Motivated by the desire to support fair working conditions and fair wages in the jewelry industry.
- Commitment to personal values: Wants her jewelry choices to reflect her ethical values like sustainability, social justice, and transparency.
- Sense of pride: Feels pride and satisfaction when purchasing jewelry that aligns with her ethical values.

**Behaviors:**

- Prefers to buy from trusted sources: She tends to stick to brands with transparent practices, focusing on those that are certified fair-trade or use recycled materials.
- Research-focused shopping: She spends a significant amount of time researching brands and materials to ensure that the jewelry she buys aligns with her ethical values.

**Pain Points**

- High prices: Ethical jewelry often comes with a steep price tag, making it difficult for her to stay within her budget while supporting sustainable practices.
- Limited availability: There is a lack of variety and accessibility when it comes to ethical jewelry options, making it harder to find pieces that suit her taste and values.
- Guilt over not always affording ethical options: She feels conflicted when unable to purchase ethically-made pieces because of cost, even though it goes against her values.

## Fourth Persona

**Sama Jabareen**



AGE 16 years old  
EDUCATION High school student  
STATUS Single  
OCCUPATION Student  
LOCATION Ramallah  
MONTHLY INCOME 0

**“** I am Active on Instagram and TikTok. And Experienced with online buying yet wary of making purchases without sufficient proof of genuineness

Creative Trendy  
Kind-hearted Curious

**Bio**  
She is a fashion-loving high school student from Palestine. Passionate about ethical jewelry, she seeks stylish, eco-friendly bracelets under \$100 while supporting fair trade artisans.

**Goals:**

- Find cute and stylish bracelets under \$100
- Discover unique handmade pieces that feel special
- Try buying jewelry that's better for the planet (like recycled or natural materials)

**Motivations:**

- Wants to wear jewelry that tells a story or feels meaningful
- Loves supporting small businesses or artists when she can
- Feels good when she buys something that's cool and also kind to the earth

**Behaviors:**

- Shops mostly in malls or local stores with family
- Scrolls through Instagram or TikTok to get outfit and jewelry ideas
- Gets excited when brands show how things are made
- Curious to try features like virtual try-on to see how something looks before buying

**Pain Points:**

- Nice jewelry is often more expensive than she expects
- It's hard to know which online stores are real or trustworthy
- Gets confused by too much information or not knowing which brand to trust

## Fifth persona

**Doua Ali**



AGE 58  
EDUCATION Bachelor's Degree  
STATUS Married  
OCCUPATION Retired Professional  
LOCATION Ramallah  
MONTHLY INCOME \$400 - \$675 USD

**“** I prefer shopping in person. I like to see the jewelry myself and ask questions before I buy.

**Personality**

Traditional Cautious  
Value-driven Family-oriented

**Bio**  
Doua, a 58-year-old retired professional, lives in a peaceful area of Ramallah, Palestine, with her husband Ahmad. She likes shopping for meaningful jewelry, particularly as gifts for weddings and engagements. She enjoys visiting local stores where she can see the products and speak directly with the seller, even though she uses her phone for Facebook browsing and chatting. Doua values brands that feel trustworthy and community-centered. Even though she doesn't understand what "ethical jewelry" is, she likes it when it's presented simply, especially when the products are made with care for both people and the environment.

**Goals:**

- Buy elegant, ethical jewelry that fits her budget
- Have a simple understanding of what "ethical jewelry" means.
- Give gifts that express love and values
- She trusts stores that are open about how their jewelry is made and what she's really paying for.

**Motivations:**

- She feels good when she buys something made with honesty and respect.
- She is drawn to products that tell a story or carry a deeper message.
- She prefers supporting small or local businesses.
- She believes that ethical shopping reflects her values and helps build a better community.

**Behaviors:**

- She prefers shopping in person, where she can see and feel the jewelry before making a decision.
- She feels more comfortable when sellers explain things simply, like where the piece came from and why it costs what it does.
- She trusts stores that treat her with patience and respect, not ones that try to rush or pressure her.
- She's cautious about trying new shops or buying online, especially if she doesn't feel the brand is honest or clear.

**Pain Points:**

- She often feels lost when people talk about "ethical jewelry" using words she doesn't fully understand.
- She sometimes wonders if brands are truly honest, or just using fancy words to sound good.
- She worries about spending her limited budget on something that might not be worth the price.
- She doesn't feel safe buying online, especially from shops she's never heard of or that don't explain things clearly.

## Prototype

We created a dedicated section on our website to explain the concept in a simple and engaging way.

That's why we invited everyone to follow us on social media, where we regularly share helpful information, inspiring stories, and content that reflects the values of responsible beauty and sustainability we believe in.

The image shows two versions of a website section side-by-side. Both versions have a dark red header with the title 'What is Ethical Jewelry?' and a subtext 'Discover the meaning and why it matters.' Below the header is a circular profile picture of a woman wearing a necklace. The left version has a dark red background and features three call-to-action boxes: 'Read Our Blog' (with a subtext about sustainability), 'Watch Short Videos' (with a subtext about engaging videos), and 'Stay Connected' (with a subtext about following on Instagram and TikTok). The right version has a light beige background and similar content, but the 'Stay Connected' box is highlighted with a yellow border and a red arrow points to it from the right.

**What is Ethical Jewelry?**

Discover the meaning and why it matters

Many people don't know what ethical jewelry means or why it's important.

That's why we created this section—to make it simple and inspiring.

**Read Our Blog**  
Easy to understand articles about sustainability, fair trade, and more

**Watch Short Videos**  
Learn through engaging 1 minute videos on ethical practices

**Stay Connected**  
Follow us on Instagram & TikTok for tips, stories & behind scenes content

Read Now Watch Now Follow Us

Let's change the way we shop for jewelry— together.

**What is Ethical Jewelry?**

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Read Now Watch Now Follow Us

Let's change the way we shop for jewelry— together.

The image shows a section titled 'Ethical jewelry from international brands'. It features three images: a woman wearing Cartier jewelry, a Bulgari jewelry box, and a Cartier watch and bracelet set. To the right is a sidebar with a dropdown menu for 'Choose the brand' containing options like Cartier, Bvlgari, Tiffany & co, and Van Cleef & Arpels, along with a search icon. A large 'Shop now' button is at the bottom.

Ethical jewelry from international brands

Cartier

Bulgari

Van Cleef & Arpels

Shop now

### Spin and win

### Loyalty accounts

Loyalty Points  
**26 pts**

Cash Value  
ILS 0.86

History

Date	Activity	Points
May 1, 2025	Earned Spin and Win	1 pts
Apr 27, 2025	Earned 1% pointsback	11 pts

[Cash Out](#)

**EVERY PIECE TELLS A STORY...  
DESIGN YOUR STORY WITH US**

[VIEW COLLECTION](#)
[DESIGN YOUR JEWELRY](#)

**LIMITED-EDITION COLLECTIONS**

NATURE COLLECTION  
2 PIECES REMAINING

HOPE COLLECTION

FREEDOM COLLECTION

**DESIGN YOU OWN JEWELRY**

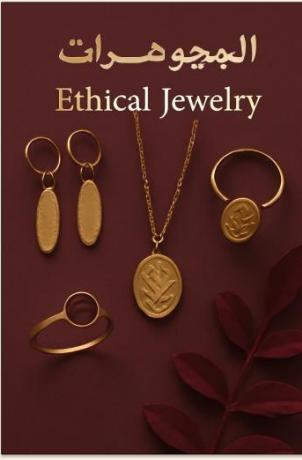
[CHOOSE METAL ▾](#)

[CHOOSE GEMSTONE ▾](#)

[ADD ENGRAVING ▾](#)

[PREVIEW IN 3D/AR](#)

[+ ADD TO CART](#)



**المجوهرات**  
Ethical Jewelry

Ethical jewelry is made from sustainable materials like recycled metals and ethically sourced gemstones. It ensures fair labor practices and reduces environmental impact. This type of jewelry supports workers' rights and promotes transparency in production. Choosing ethical jewelry means investing in beauty while supporting social and environmental responsibility.



Unveil the process that brings excellence to life



Quality that lasts, designs that inspire



How the prices are distributed by percentage



Tap to see your current discounts and total reward points

Stages of the production line for creative jewelry

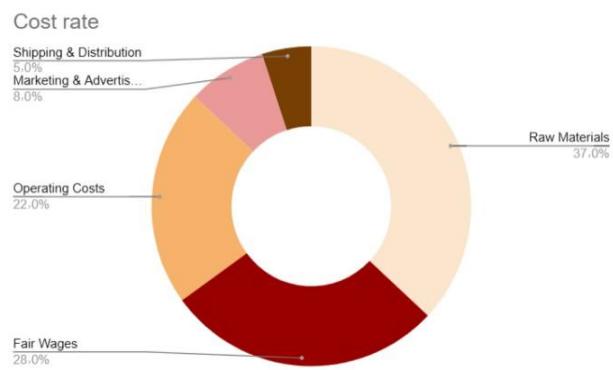




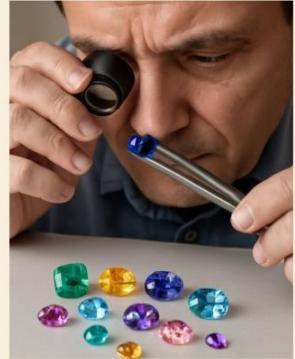



Click here to view part of the production line

It is kind to understand how the prices of ethical jewelry are determined and the efforts involved in obtaining a piece that reflects these details.



Some tests about the quality of jewelry



Discount \$ & your Points

POINTS

**1,250**

REDEEMS IN

**\$12.50**

Labor Day discount 15%

May 1 2025

Eid al-Adha discount 22%

MAY 20 - JUNE 4

## **Phase Two: Advanced Prototyping and User Research**

### **1. User Research Methods:**

#### **1.1 Interviews:**

We conducted one-on-one interviews with a number of users to gather their feedback and evaluate the user experience, which helped us better understand their needs and expectations and support the design development process. Most of the interviews were conducted with university students from our campus, the majority of whom were female ,as well as a few family members to provide a wider perspective. and We asked them these questions:

- 1) What do you think about the "Trace My Jewelry" feature? Do you feel it builds more trust?
- 2) Did you find the "Virtual Try-On" helpful? Did it support your decision-making?
- 3) If you had a custom-designed piece, would you like to see its creation via live stream? Why or why not?
- 4) What makes you trust or not trust an online jewelry store?
- 5) If a jewelry piece is handmade and ethically sourced, what do you expect in return for the higher price?
- 6) When visiting our website for the first time, what catches your attention? And how does that affect your buying decision?

**And these were the answers of each user:**

### User 1 – Interview Summary

When asked about trust, the user emphasized the importance of transparency and customer reviews. These two elements are what make or break their decision to purchase.

Regarding handmade, ethically sourced jewelry, they expected high-quality craftsmanship and attention to detail.

When visiting the website for the first time, they were immediately drawn to the visuals and colors, saying it strongly influences whether they continue browsing or not.

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### User 2 – Interview Summary

This user said that certifications and real photos of the jewelry are essential for building trust. Without them, they hesitate to buy.

They expect excellent customer service and a solid guarantee when paying more for ethical products.

Discounts and offers are the first thing that catch their attention on a site, often pushing them toward making a purchase.

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### User 3 – Interview Summary

This user said trust is built when the maker's name and story are shared. It makes them feel they're buying from a person, not just a company.

They expect unique, personalized designs that reflect the values of the brand.

They said the way products are presented, especially interactive visuals, heavily influences their purchase decision.

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### User 4 – Interview Summary

This user said they never buy from websites that don't clearly show the source of the jewelry. Transparency is non-negotiable.

They expect a premium, all-inclusive shopping experience when paying more.

They focus on ease of navigation and filtering tools on the homepage — it must be easy to find what they want.

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### **User 5 – Interview Summary**

She trusts stores that tell real stories about the artisans. Photos and small video clips about the crafting process are highly valuable.

For higher-priced jewelry, she expects luxury-level quality and refined design. She looks for clean design and clarity on the homepage, avoiding cluttered or confusing layouts.

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### **User 6 – Interview Summary**

She considered the traceability feature essential for building trust. They were excited about the virtual try-on, calling it a fun and engaging tool. The live stream option was especially appreciated as it added a personal touch and transparency to the buying process.

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### **User 7 – Interview Summary**

She expressed that the 'Trace My Jewelry' feature gave the brand a unique edge. They found the virtual try-on very helpful and intuitive. Although they hadn't tried live streams before, they were curious and interested in the concept, especially for personalized items.

## **1.2Focus Groups:**

### **Focus Group Discussion: focus group -1-**

#### **Basic Information :**

- **Number of participants:** 6 individuals
- **Facilitator:** Walaa Jaradat
- **Age range:** 22-35 years old
- **Discussion duration:** 40 minutes
- **Date conducted:** [2/6/2025]

#### **Discussion Introduction**

In the focus group session I facilitated, we centered the discussion on two innovative digital solutions for our ethical jewelry platform: **Augmented Reality (AR) visualization** and **user interface preferences**. The goal was to gauge participants' reactions, understand their level of engagement, and assess how convincing they found these features in addressing common barriers to ethical jewelry adoption.

#### **The two key ideas we explored were:**

##### **AR Virtual Try-On & Transparency Tools**

I demonstrated how AR could allow users to visualize jewelry on themselves in real-time

##### **Interface Design for Ethical Decision-Making**

We discussed interface options (e.g., graphical, mobile, AR) and how they could simplify ethical filtering or highlight transparency features without overwhelming users.

### **Feature : Augmented Reality (AR) Integration**

The idea of integrating an Augmented Reality (AR) interface sparked a lively discussion among the focus group participants, revealing both enthusiasm and skepticism. Supporters highlighted how AR can empower users to visualize how jewelry pieces would look on their own skin tone and in various lighting conditions, thus boosting confidence in making online purchases. They argued that this feature could reduce uncertainty and the likelihood of returns, especially when it comes to unique or high-value items like ethical jewelry. On the other hand, some participants voiced concerns about the accuracy of AR technology, questioning its ability to realistically capture the color, texture, weight, and drape of handcrafted jewelry. Others pointed out potential accessibility barriers for users who are less comfortable with technology, such as older adults. Ultimately, the group agreed that while AR has the potential to enhance the online jewelry shopping experience, its success depends on addressing these accuracy and accessibility challenges, and it should be offered as an option alongside traditional evaluation methods.

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### **Feature : Interface Design Preferences**

During the discussion on interface design, participants showed a clear preference for graphical and web interfaces due to their simplicity and clarity, especially when it comes to filtering options and browsing jewelry by ethical values or styles. Some participants favored mobile interfaces for their convenience and the ability to shop anytime and anywhere. Touch interfaces were also highlighted for providing quick and intuitive interaction. Augmented reality (AR) interfaces attracted interest from those who wanted to virtually try on jewelry pieces before purchasing. However, some participants were cautious about more complex or unfamiliar types of interfaces, such as holographic or brain-computer interfaces, expressing concern that these might confuse or alienate users. Overall, the group agreed that simple, interactive, and user-friendly interfaces are best, and that new technologies like AR can be added to enhance the experience without making it more complicated.

## **Focus Group Discussion:** focus group -2-

### **Basic Information :**

- **Number of participants:** 5 individuals
- **Facilitator:** Tuleen Rimawi
- **Age range:** 18-22 years old
- **Discussion duration:** 35 minutes
- **Date conducted:** [3/6/2025]
- **Participants(the diff between them help us to have more diff side about the project)**
  - Sara – loves design and fashion, shops online
  - Rula – hesitant to buy online, cares about trust
  - Joud – loves unique pieces, emotional in choices
  - Lina – supports local and artisanal production
  - Laila – cares only about price, initially indifferent to ethics

### **Discussion Introduction**

During the focus group session I facilitated, I primarily focused on discussing two key ideas from our ethical jewelry platform project. The goal of the session was to explore the participants' opinions about these two concepts and observe their engagement and how convinced they were by them.

#### **The two main ideas presented were:**

##### **Live streaming with artisans**

I explained to the girls how we could showcase videos or live streams of the artisans while they're working on the jewelry. This way, the customer can build trust by seeing the quality of the work firsthand, and feel like she's supporting real people, not just buying a product.

##### **Jewelry journey tracking feature**

This is an interactive map or interface that shows the user the production journey of the piece—where the materials came from, who made it, and real photos and videos documenting each step.

We chose to focus on these two ideas in this discussion session first because this age group is generally unaware of the importance and impact of ethical jewelry, and second because these are among the key features that could make the platform stand out, increase its credibility, and enhance the user's sense of transparency and alignment with ethical values.

Each idea was presented with examples and visuals, followed by an open discussion where I recorded the girls' real-time reactions and opinions.

### **Feature : Trace My Jewelry – Interactive Journey Tracking**

Purpose: To build trust and emotional connection between the buyer and the product by showing transparency and ethical value.

At the beginning of the session, we presented the project idea clearly and briefly. I explained to the participants that the goal is to sell handmade jewelry in an ethical way, relying on fair sources that respect human rights and the environment, with documentation of every step in the manufacturing process to ensure transparency.

I emphasized the importance of each piece carrying a true story about its origin so that it is not just an ordinary product.

After my explanation, I noticed varied reactions among the participants. Sara was one of the first enthusiastic about the idea, saying she likes that the piece has value and meaning beyond just its appearance. Lina was also very supportive and confirmed that she loves to support local products and handmade crafts. Joud expressed her admiration for the idea and felt that pieces carrying a story become more connected to her.

On the other hand, Rula was skeptical; she said she does not like to buy things whose origin she does not know, and she requested more clarifications on how to ensure the jewelry is truly ethical. Laila was initially less interested in ethics and confirmed that price is the most important factor for her.

During the discussion, I tried to clarify the importance of the idea from a human perspective and explained how poor working conditions truly affect people, and the necessity of responsible alternatives. When we showed some pictures and information about poor working conditions in certain industries, I noticed a change in Laila's viewpoint; she said she might start considering ethics if the conditions are truly respectful.

In the end, we agreed that the idea needs to be presented in a way that combines emotional appeal with clear information so it can reach all groups, whether interested or skeptical. This balance is important to make people not only buy but also feel proud that they are supporting a real and ethical product.

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#### **Feature: Meet the Maker – Live or Recorded Artisan Videos**

Purpose: To humanize the buying experience and highlight the value of craftsmanship behind each piece.

After we finished discussing the Jewelry Journey Tracking feature, I introduced a new idea to the participants called "Meet the Maker," where users can watch live streams or recorded videos showing the artisan working on the piece.

I explained that the goal of this feature is to enhance transparency and human connection, so users feel like they are supporting a real person and can appreciate the piece with the artisan's love and passion.

Opinions varied and the discussion was lively:

Lina was the first to share her opinion enthusiastically:

"It's a beautiful and human idea, it makes me feel like I'm supporting a real person, not just a soulless product."

Joud expressed her love for the idea especially because she highly values handmade crafts:

"I love seeing how things are made, especially if it's handmade. These videos give me a stronger sense of the piece's value."

Sara noticed that this feature adds a rare human touch compared to other websites and said: “I feel it’s a human touch missing from other sites, and it makes the experience more personal.”

Rula was interested in better understanding product quality and said: “This could help me know the quality better, not just a filtered photo or marketing talk.”

Laila was initially skeptical, but after watching some of the videos we showed, she changed her mind:

“Honestly, I watched a video you showed and I liked how carefully they work. I felt there’s real care, not just words.”

I tried to guide the discussion to focus on the importance of highlighting artisans as people with stories and skills, which increases customer trust and encourages purchase.

In conclusion, we all agreed that this feature adds great value to the platform, provided that the videos are short, engaging, and easily accessible to users.

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### **Focus Group Discussion: focus group -3-**

#### **Basic Information :**

- **Number of participants:** 6 individuals
- **Facilitator:** Sadeel Jabareen
- **Age range:** 30-40 years old
- **Discussion duration:** 30 minutes
- **Date conducted:** [3/6/2025]

#### **Feature : Core Concept: Handcrafted and Fair-Source Jewelry**

The discussion on the core concept of the platform selling ethically handcrafted jewelry from fair sources revealed a wide range of opinions among participants. Some were strongly in favor of the idea. Participant 5 began by saying, “I really like the concept. It’s meaningful to know that the jewelry I’m buying is supporting real artisans and fair

labor. That makes it feel more personal.” Participant 3 echoed this, adding, “Exactly. Handcrafted jewelry has soul it’s not like the mass-produced stuff you see everywhere.”

However, the group quickly became more divided when Participant 1 shared a contrasting view: “Honestly, I don’t really care if it’s handmade or ethical. I just care about the style and price. If it looks good and it’s affordable, that’s enough for me.” This sparked a brief moment of tension, as Participant 4 responded, “But that’s the problem we’ve gotten used to ignoring where products come from. Supporting ethical sourcing is part of making better consumer choices.”

Still, Participant 6 added a more moderate opinion: “I think the idea is good in theory, but not everyone will care about the ethical side. For some people, it’s just not a priority. Maybe the platform could make the ethical value an optional layer highlight it for those who care, without making it the whole identity.”

As the conversation progressed, it became clear that while several participants valued the ethical and handcrafted nature of the jewelry, others were indifferent, focusing instead on aesthetics, convenience, and pricing. The group agreed that the platform needs to appeal to both value-driven and style-driven users, possibly by offering a strong visual experience alongside ethical storytelling giving users a reason to care, without forcing the message.

### **Feature : Pricing Expectations and Perceived Value**

The focus group conversation about product pricing turned out to be one of the liveliest parts of the session. People had different opinions and weren’t shy to speak up. It started with Participant 2 saying, “Honestly, I don’t mind paying a bit more if I know where the materials came from and who made the jewelry, it feels worth it.” A few others agreed, and Participant 4 added, “Yeah, and if the platform shows the artisan’s story even just a photo or video it helps me understand the price. You’re not just buying jewelry; you’re buying their work and time.”

But not everyone was convinced. Participant 1 said, “That sounds nice, but let’s be real some brands charge way too much just because they say it’s ethical. I’ve seen bracelets cost three times more just for that label.” The room got quiet for a moment, then

Participant 6 jumped in, “That’s true. I’m okay with paying more, but I want to know what I’m paying for. Is it the materials? The artisan’s pay? Shipping? Just give us a breakdown.”

Participant 4 replied, “But you can’t always show every detail. Handmade work is different from factory stuff it’s one of a kind. That’s part of what makes it valuable.” Participant 6 responded, “Sure, but at least give people some idea of where the money goes. Even a rough breakdown would help people trust the price.”

In the end, most people agreed: ethical, handmade products can cost more but there needs to be a clear, honest reason behind the price. Stories and personal touches help, but people also want transparency so they can feel good about what they’re buying.

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### **Feature : Customize Your Jewellery**

When the idea of a “Customize Your Jewelry” feature was introduced, the group had mixed feelings. Participant 3 immediately showed enthusiasm, saying, “I love that! Being able to personalize the piece makes it feel more meaningful like it really reflects my taste, not just something standard.” Participant 5 nodded, adding, “Especially if I’m buying a gift. I’d love to choose the style or maybe add an engraving. It makes it more thoughtful.”

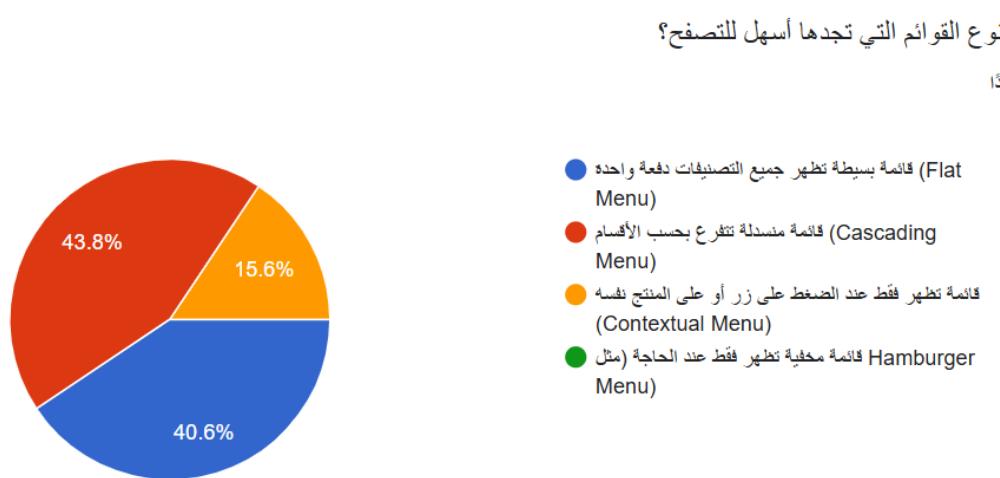
However, not everyone was convinced. Participant 6 raised a concern: “That sounds nice, but won’t customization make the jewelry more expensive or take longer to deliver?” Participant 2 added, “Also, not everyone knows how to design jewelry. I’d definitely need help choosing the right materials or styles.”

Participant 4 offered a middle ground solution: “Maybe the platform could guide users step-by-step like pick the base, then the type of stone or metal, and maybe offer design suggestions. That way it’s still easy.” But Participant 1 shared a simpler view: “Honestly, I prefer just browsing and buying. Custom options are nice, but not something I’d personally use.”

In the end, the group agreed that offering customization is a strong idea, especially for ethical handcrafted jewelry, as it adds personal and emotional value. However, they emphasized it should remain optional and supported with clear guidance. The key is giving users freedom without overwhelming them combining flexibility with ease of use.

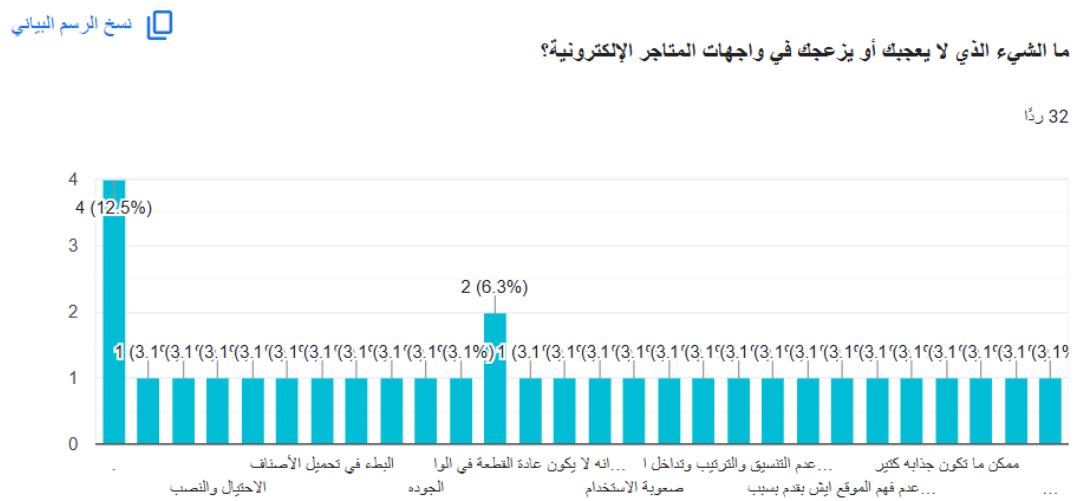
### 1.3 Surveys:

We created a survey consisting of open-ended and closed-ended questions ,and we received 32 responses to our survey, which was shared via WhatsApp and Messenger through university group chats, family, and friends. This allowed us to gather input from a diverse group while ensuring accessibility and relevance to our research goals. Most of the participants were women, primarily between the ages of 18 and 35, and the majority lived in urban areas. Many had previous experience purchasing handmade or ethically sourced jewelry, which gave us valuable insight into the preferences and behaviors of our target audience. Based on the feedback we gathered, we identified the most common problems users face and brainstormed potential solutions that directly address their needs and help enhance their overall experience:

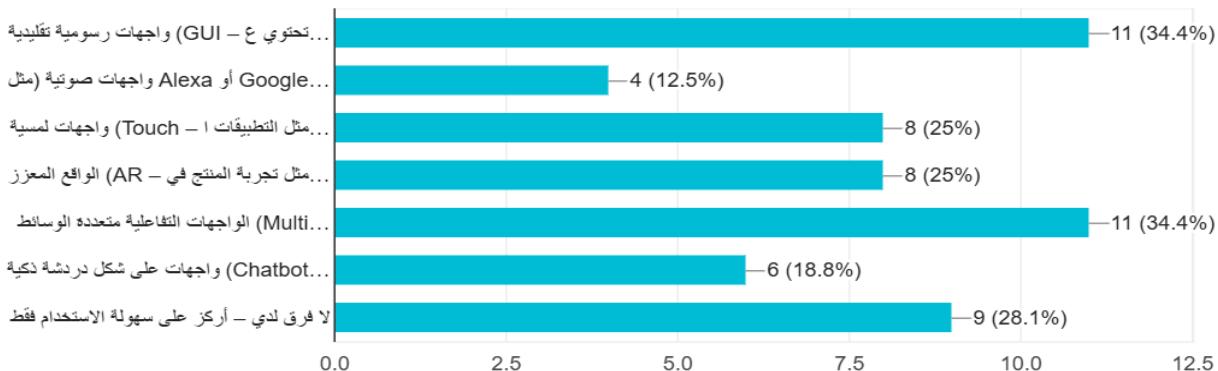


The survey revealed that cascading menus were the most preferred by participants (43.8%), as they found them easier to navigate due to their organized category-based structure. Close behind, 40.6% favored flat menus that display all main sections clearly in one view. Contextual menus received lower preference at 15.6%, and no participants

chose hamburger menus, indicating a clear tendency toward visible and straightforward navigation. These results validate the decision to implement a flat menu in the app interface for better usability.



Survey results indicated that the most common frustration users had with online storefronts was general dissatisfaction or unspecified concerns, cited by 12.5% of respondents. While not detailed, this suggests a widespread sense of discomfort or non-compliance with current user interface standards. More specific issues, each selected by between 3.1% and 6.3% of users, included disorganized designs, poor image quality, unclear product categories, the lack of a transparent return policy, and a general fear of scams or fraud. Other recurring concerns included poor filtering options, inconsistent visual design, and confusion about how the site functions. These findings directly influenced key user interface design decisions for the platform, particularly in streamlining navigation, improving media quality, and incorporating trust-building features such as clear source information and a guided shopping experience. The consistency in user feedback around these pain points underscored the need for an intuitive, user-centric interface to reduce cognitive load and enhance trust.

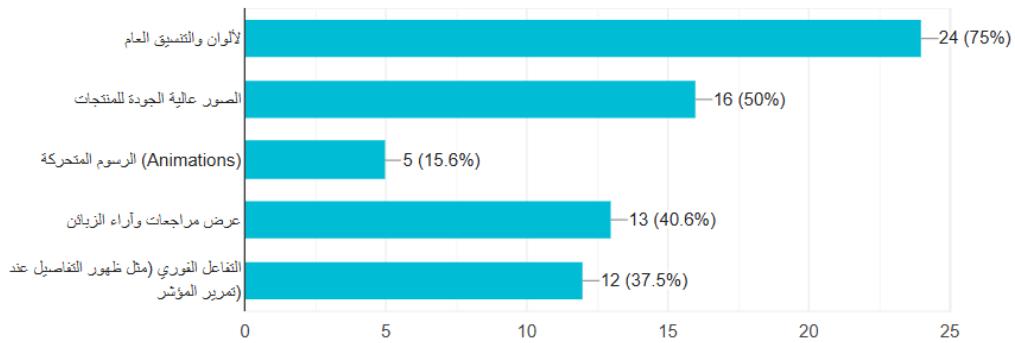


The survey results depicted in the image reveal clear user preferences regarding interface types for shopping interactions. Graphical User Interfaces (GUI) and multimedia interfaces emerged as the top choices, each receiving 34.4% of the votes. This indicates a strong inclination towards visually rich and interactive experiences when users are shopping online. Interestingly, a significant portion of respondents 28.1% indicated that they have no specific preference for the type of interface, as long as the application is easy and simple to use. This highlights the importance users place on ease of use and seamless navigation, suggesting that while advanced and engaging interfaces are attractive, they should not come at the expense of simplicity. Other interface types, such as touch interfaces and voice interfaces (like Alexa or Google), were also represented but to a lesser extent. Overall, the findings suggest that users value both engaging visual experiences and straightforward usability, emphasizing that the success of a shopping platform depends largely on balancing innovation with user friendly design.

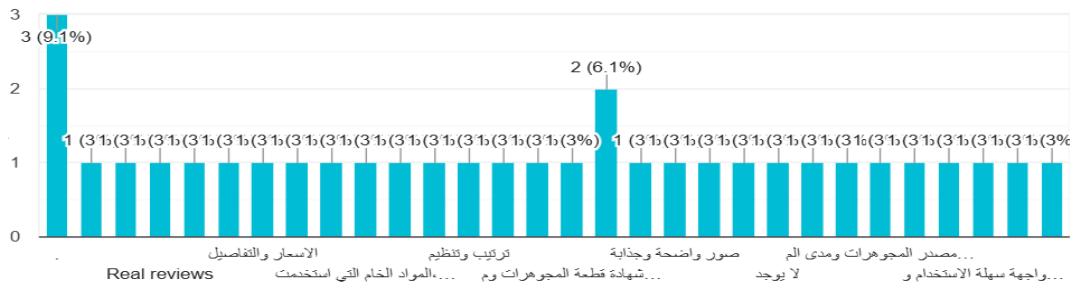
ما أكثر شيء يجذبك بصرياً في واجهة المتجر؟

 Copy chart

32 responses



The survey results revealed that the most visually appealing element in a store interface for users is colors and overall layout, selected by 75% of respondents. Following that, high-quality product images were preferred by 50%, emphasizing the importance of professional visuals in shaping user experience. Additionally, 40.6% of participants valued displaying customer reviews and feedback, as it enhances trust and visual engagement. Interestingly, animations—despite often being used to liven up interfaces—were the least favored, with only 15.6% selecting them, suggesting a user preference for clarity and simplicity. Lastly, hover-based interactions, such as showing more details when hovering, attracted 37.5% of respondents, reflecting an appreciation for dynamic, yet non-intrusive, design elements.



The survey responses revealed that users prioritize clarity, trust, and aesthetic harmony in the interface of an ethical jewelry platform. Key expectations included:

1. **Simplicity and Usability:** Many respondents emphasized the need for a "simple, easy-to-use, and fast" interface with intuitive navigation, "visual consistency," and streamlined purchasing processes (e.g., "clear choices and easy checkout").
  2. **Transparency:** Users demanded visible proof of ethical sourcing, such as "certificates of authenticity," "material origins," and "artisan profiles" to build trust. Phrases like "show the jewelry's source and reliability" and "real reviews" underscored this need.
  3. **Visual Design:** Aesthetically, participants preferred "calm, eco-friendly colors," "modern designs," and "high-quality images" of products from multiple angles. Some suggested leveraging AI or creative displays to enhance engagement (e.g., "innovative product presentations").
  4. **Product Information:** Detailed descriptions—including pricing, materials (e.g., "recycled metals"), and ethical credentials—were deemed critical. A few explicitly mentioned "price breakdowns" and "fair trade certifications."
  5. **Emotional Connection:** A subset of users highlighted the importance of storytelling ("show the piece's journey") and emotional appeal ("colors reflecting sustainability").

Notably, a few respondents admitted uncertainty ("I have no idea"), while others challenged the team to "show creativity" without specific guidelines. These insights collectively stress the need for an interface that balances functionality (e.g., filtering options), trust (e.g., verifiable details), and delight (e.g., immersive visuals).

## 2. Artisans in Ethical Jewelry

Behind every piece of ethical jewelry, there's a pair of skilled hands — a person with a story, a craft, and a purpose.

These artisans, whether women or men, don't just make jewelry — they bring it to life through generations-old techniques, cultural knowledge, and deep personal pride. Most of them work in small local workshops, often in rural or underserved areas, where their craft is not only a source of income but a form of identity and empowerment.

Take SOKO in Kenya for example a platform led by women that connects local artisans directly to the global market. What's beautiful about it is that it uses technology to bring visibility and fair compensation to makers who are often overlooked. According to a study by MIT, artisans on SOKO earn around 25–35% of each sale, compared to the typical 5–10% in traditional channels. That's not just a statistic — that's real change.

Another heart-warming initiative is Paper to Pearls in Uganda, where displaced women handcraft jewellery from recycled paper. These women earn 75–85% of the final price income that goes toward feeding their families, sending children to school, and rebuilding their lives with dignity.

We are a women-led, people-first ethical jewelry brand and tech-powered manufacturing platform built to connect artisans in Kenya with the global market.



"The Women Behind the Craft – SOKO Artisans in Kenya"

### **3. Competitor Analysis: Brilliant Earth – Ethical Jewellery Marketplace**

#### **3.1 Introduction**

To enhance the development of our Ethical Jewellery Marketplace, a competitor analysis was conducted on Brilliant Earth (<https://www.brilliantearth.com/>), a prominent online retailer specializing in ethically sourced jewellery. This analysis evaluates Brilliant Earth's features, user experience, and alignment with our user research findings to inform design decisions for our platform.

#### **3.2 Overview of Brilliant Earth**

Founded in 2005, Brilliant Earth focuses on sustainable and conflict-free fine jewellery, including diamonds, gemstones, and custom rings. The platform prioritizes transparency, ethical sourcing, and user engagement, aligning with our project's objectives.

#### **Key Features:**

1. **Ethical Sourcing:** Conflict-free diamonds and gemstones, often sourced from fair-trade or recycled materials.
2. **Transparency:** Blockchain-tracked diamond origins and artisan profiles.
3. **Customization:** “Design Your Own” tool for personalized jewelry.
4. **Sustainability:** Carbon-neutral operations and eco-friendly packaging.
5. **Trust Elements:** Certifications (e.g., Kimberley Process, Responsible Jewelry Council) and customer reviews.

#### **3.3 Alignment with User Research**

Brilliant Earth's design and features address key user needs identified in our interviews, focus groups, and surveys, providing insights for our platform.

##### **- Transparency and Trust**

1. **User Feedback:** Interviewees (e.g., User 4, User 5) emphasized clear sourcing information and certifications. Surveys highlighted trust-building elements like reviews (40.6%).

**2. Brilliant Earth:**

- Offers a “Diamond Origins” section with blockchain-tracked traceability, similar to our “Trace My Jewelry” feature.
- Displays certifications and reviews prominently, enhancing credibility.

**-User Interface and Usability**

1. **User Feedback:** Surveys favored flat menus (40.6%), high-quality images (50%), and intuitive navigation (75% for colors/layout).

**2. Brilliant Earth:**

- Implements a flat menu with clear categories (e.g., Engagement, Gemstones) and advanced filters.
- Features high-resolution images with 360-degree views and a neutral, elegant color palette.

**- Emotional Engagement**

1. **User Feedback:** Focus Group 2 (e.g., Lina, Joud) valued artisan stories and humanized experiences.

**2. Brilliant Earth:**

- Includes a “Stories” section with artisan profiles and craftsmanship videos.
- Highlights charitable contributions, fostering emotional connections.

**- Customization**

1. **User Feedback:** Focus Group 3 requested guided customization to simplify the process.

**2. Brilliant Earth:**

- Provides a “Design Your Own” tool with step-by-step guidance and live chat support.

### 3.4 Comparative Analysis

Feature	Our Platform	Brilliant Earth
<b>Traceability</b>	“Trace My Jewelry” with interactive maps and videos.	Blockchain-tracked diamonds and artisan profiles.
<b>Virtual Try-On</b>	Proposed AR feature.	AR try-on for rings via webcam/mobile.
<b>Artisan Connection</b>	“Meet the Maker” with live/recoded videos.	Artisan videos (not live).
<b>Customization</b>	“Design Your Own Gemstone Jewelry” with guided steps.	“Design Your Own” with gemologist support.
<b>Navigation</b>	Flat menu with category carousel and filters.	Flat menu with 3D product views and filters.
<b>Trust-Building</b>	Certifications, reviews, traceability.	Certifications, blockchain, reviews, education.
<b>Emotional Appeal</b>	Ethical checkout message, artisan stories.	Charitable stories, eco-friendly packaging.

### 3.5 Insights and Recommendations

- **Strengths:**
  - Blockchain traceability and AR try-on enhance trust and engagement.
  - Educational content on sourcing empowers users.
  - Eco-friendly packaging reinforces sustainability.
- **Recommendations for Our Platform:**
  - Implement live artisan streaming to differentiate from recorded videos.
  - Expand AR try-on to include necklaces and earrings.

- Develop an educational section on ethical sourcing.
- Provide a price breakdown for custom pieces to justify costs.
- Adopt eco-friendly packaging to align with user values.

### **3.6 Conclusion**

Brilliant Earth demonstrates effective practices in transparency, usability, and emotional engagement, validating our user research findings. By incorporating live streaming, broader AR capabilities, and enhanced educational content, our platform can offer a unique and compelling experience for ethically conscious consumers.

## **4.Ethical Sourcing in Jewelry: Where Do the Materials Come From?**

When we talk about ethical jewelry, we don't just mean beautiful design we mean knowing exactly where the materials come from and who is behind each step. Here's how ethical materials are sourced around the world:

**Recycled Gold:** Sourced from old jewelry or electronics, melted down and reused. It reduces mining and environmental harm, and is popular in the U.S. and Europe.

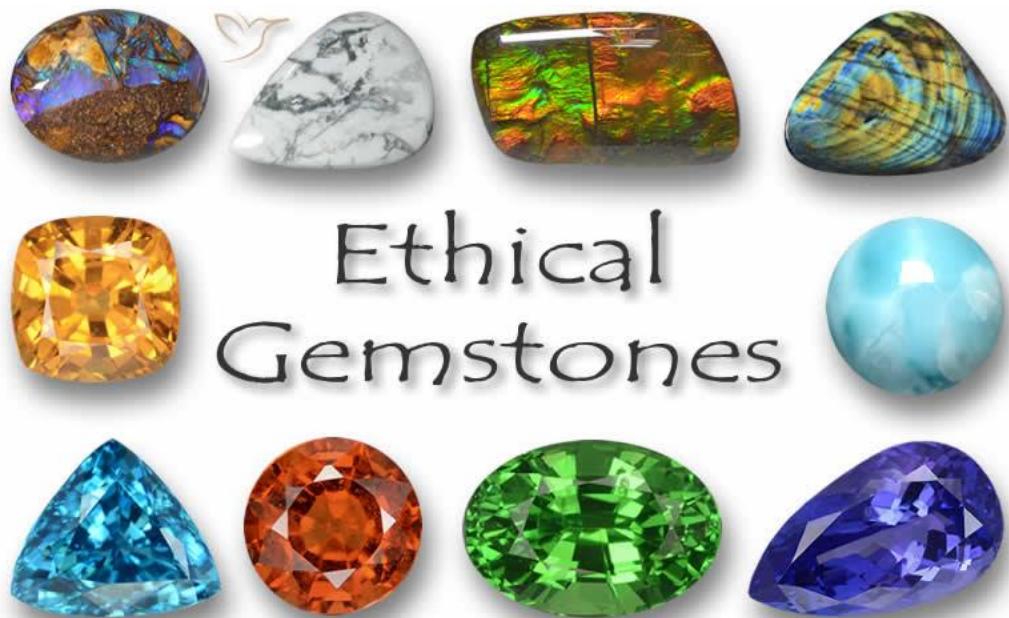
**Fairmined Gold:** Mined under strict conditions in countries like Peru, Bolivia, Ghana, and Colombia no child labor, fair pay, and environmental safety. Comes with certified labels like Fairtrade or Fairmined.

**Conflict-Free Diamonds:** Extracted from peaceful countries like Canada and Botswana, verified by the Kimberley Process Certificate to ensure no links to war or exploitation.

**Lab-Grown Diamonds:** Identical to natural diamonds but made in labs no mining needed, making them cleaner and often more affordable.

Ethically Sourced Gemstones: From places like Sri Lanka and Madagascar, these stones are mined by local artisans using safe, small-scale methods that support entire communities.

These materials are not just chosen for quality but for ethics. They tell a story of sustainability, transparency, and respect for people and planet.

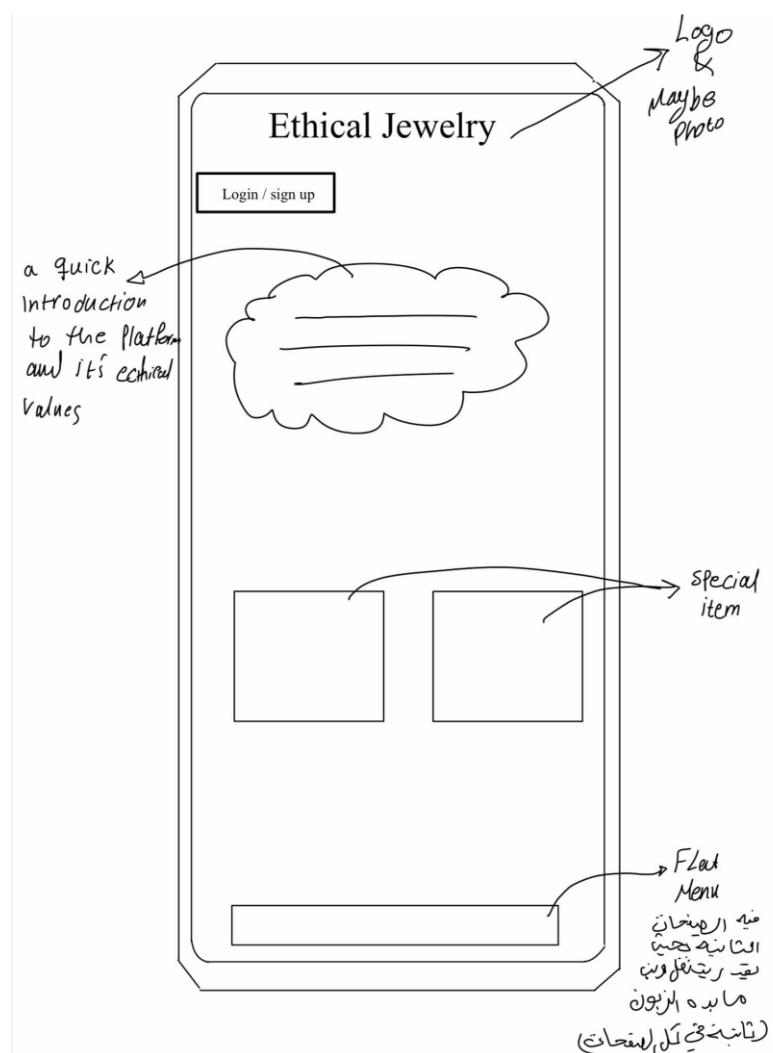


## 5 .Prototype Development and Documentation:

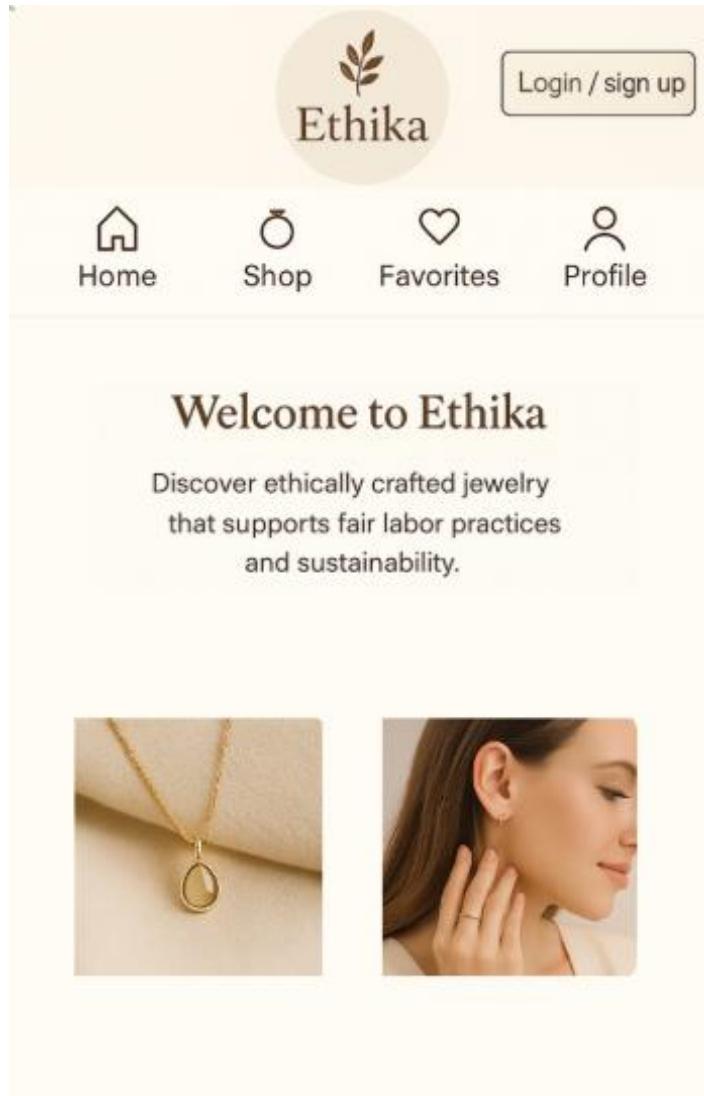
Initially, we began designing our solution as a website (phase 1), focusing on a desktop interface. However, after conducting user interviews and collecting feedback through surveys, we discovered that the majority of our target users preferred using their mobile phones when shopping for jewelry online. Based on this insight, we shifted our design approach and developed our final interfaces specifically for mobile devices. This decision helped us better align with users' real behaviors and ensure a more accessible and convenient user experience.

### 5.1Home Page

-low-fidelity prototype



-High fidelity prototype



In this project, we started by designing low-resolution prototypes for each main screen of the Ethika app. We tested them with people who had previous experience with our project, so their feedback was more helpful and valuable. If they suggested only a small change, we moved directly to the high-resolution version. But if there were multiple suggestions, we updated the low-resolution version and tested it again before working on the final design. This helped us gradually improve the interface based on user feedback.

For example, on the home page, we initially created a simple, low-resolution version and shared it with users. One of the main suggestions was to add a top navigation bar to make it easier to move between pages. We included this in the high-resolution

version, along with soft colors, a clean design, and a welcome message that matches the app's ethical concept. The final version looked simple, clear, and easy to use.

This screen supports several Human-Computer Interaction (HCI) goals:

Ease of use: It's easy to understand and use, even for first-time users.

Efficiency: The navigation bar helps users quickly reach the main sections.

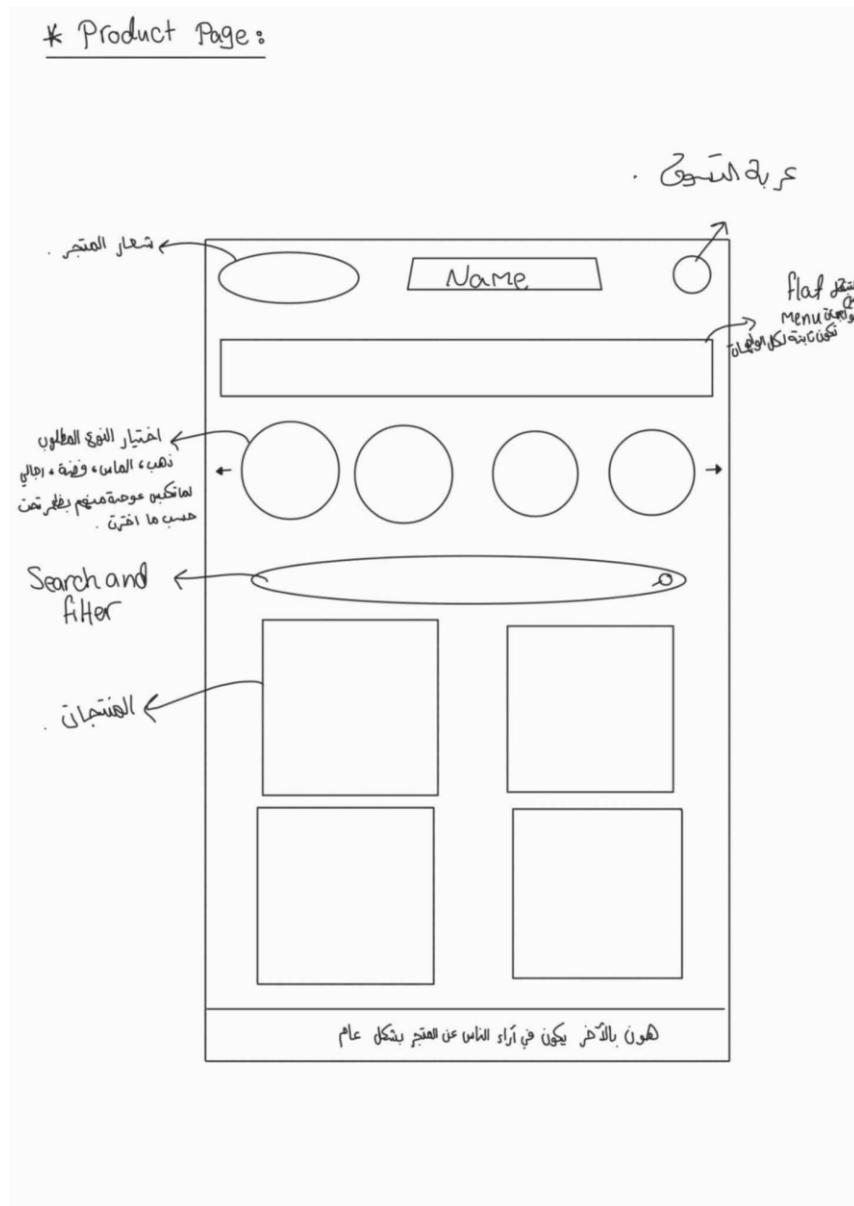
Safety: We designed it to protect personal data through a familiar and secure layout.

Appeal: The overall appearance is elegant and visually pleasant.

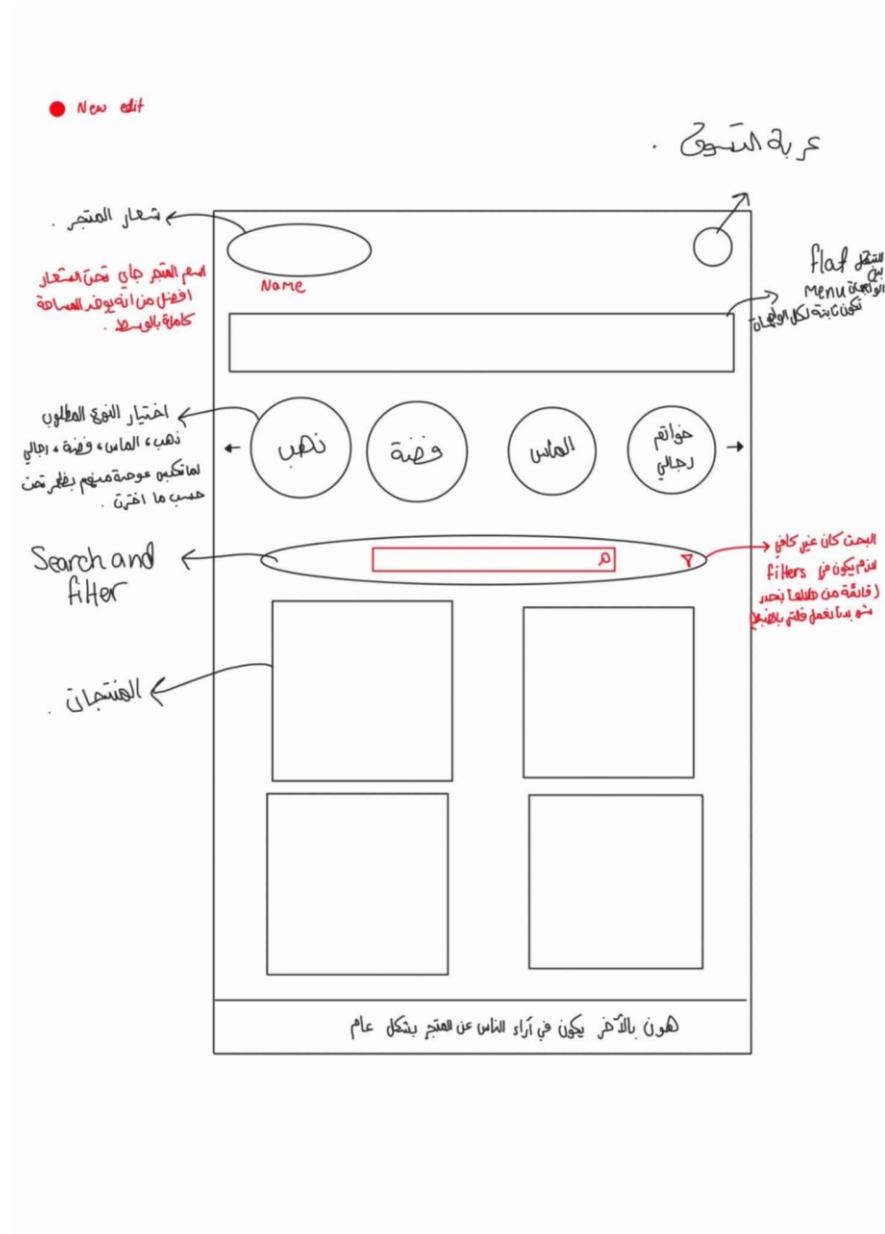
After testing the final version, we received no additional change requests, which made us feel the design met users' expectations.

## 5.2 Products Page

-First low-fidelity prototype



## -Second low-fidelity prototype



-High fidelity prototype



To transition from our low-fidelity prototype to this high-fidelity interface, we followed a structured design process focused on enhancing usability, visual clarity, and alignment with our ethical jewellery marketplace concept. In the low-fidelity stage, we sketched basic layouts to determine the essential user flows such as browsing categories, searching, and viewing products. Once these flows were validated through

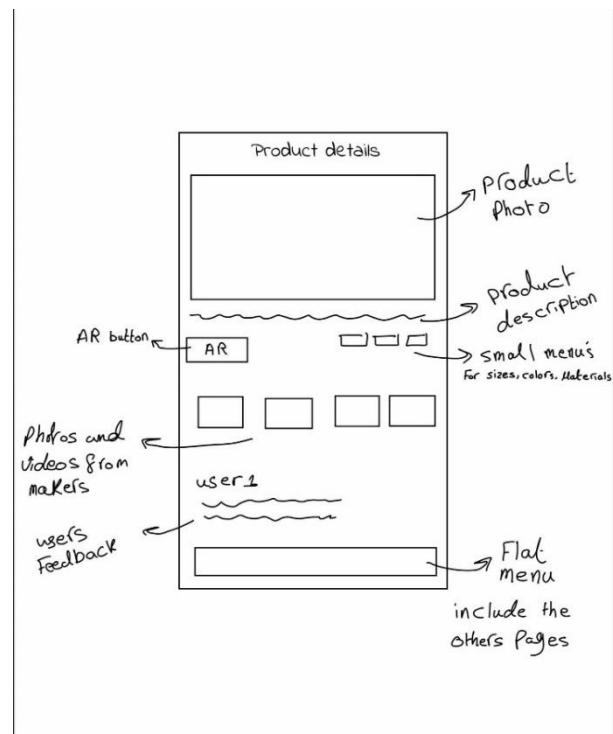
early user feedback, we moved to high-fidelity by refining the visual design and interaction elements to create a realistic user experience.

1. Simplified Navigation: A flat menu with “Home,” “Explore,” and “Profile” options ensures easy access to key areas, minimizing mental effort.,
2. Intuitive Category Carousel: A visual carousel for categories (Diamond, Gold, Men) supports quick browsing, focusing user attention effectively.,
3. Streamlined Search and Filters: A search bar with smart filters (price, material) reduces steps needed to find products, improving efficiency.,
4. Clear Product Cards: Each card features high-quality images, concise names, and clear pricing, respecting memory limitations.,
5. Consistent Visual Design: A beige and deep maroon colour palette enhances aesthetic appeal, reinforcing the brand’s luxurious identity.,

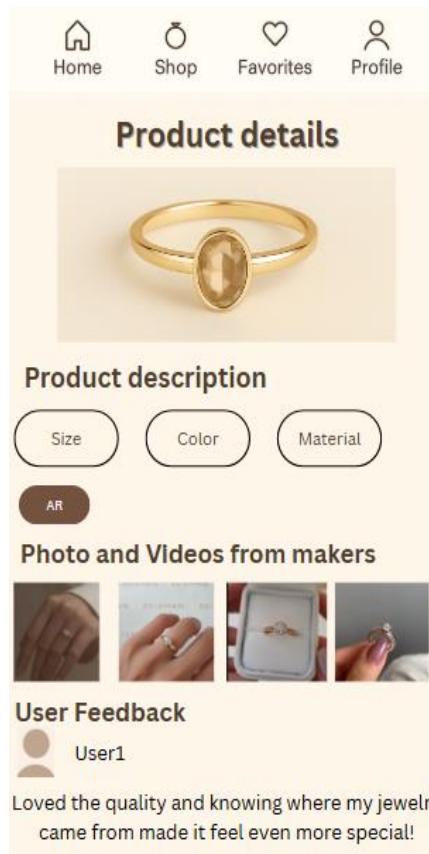
This transition from wireframes to a polished UI not only brings our vision closer to a final product but also prioritizes user experience and brand consistency. The primary HCI goal achieved is Usability, ensuring the interface is easy to learn and use. The design also improves Efficiency by minimizing task completion time and enhances Appeal through its aesthetic coherence, delivering a seamless and engaging user experience.

## 5.3 Product details Page

-low-fidelity prototype



-High fidelity prototype



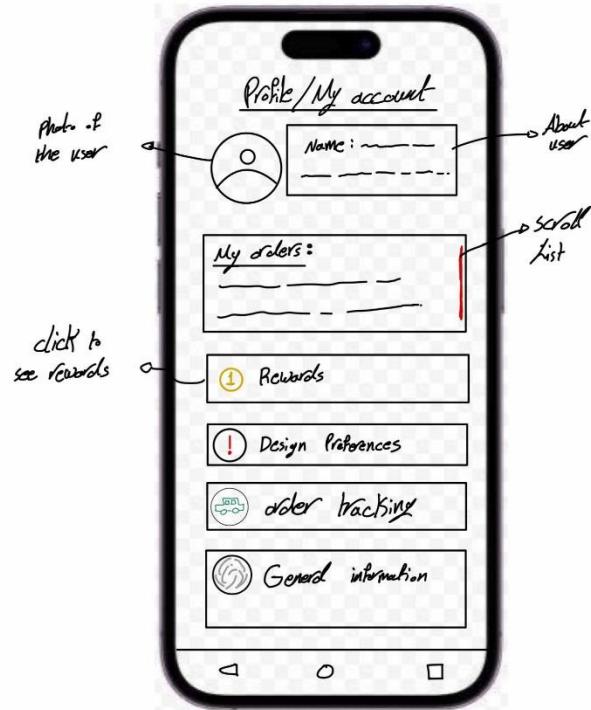
Two versions of the product detail page were developed: a low-fidelity version to outline the general layout, and a high-fidelity version that represents the final functional design of the platform. The interfaces included essential elements such as a product description, size and color selection, visual media from artisans, and user reviews. After interacting with both versions, users expressed complete satisfaction with the browsing experience, noting that the layout was clear, easy to use, and didn't require any changes.

In line with Human-Computer Interaction (HCI) principles, the high-fidelity version of the design successfully fulfilled several key goals that enhanced the overall user experience. It demonstrated usability through a clean and intuitive layout that made navigation simple and straightforward. The inclusion of features such as AR try-on and artisan videos reflected strong utility, addressing diverse user needs. The design supported efficiency by allowing users to quickly access information and make decisions with ease, while ensuring effectiveness by helping them complete tasks like

browsing and purchasing without confusion. Safety was considered through clear product details and user reviews that minimized the risk of errors. The interface maintained strong visual appeal, using high-quality images and a consistent design. Most importantly, the platform fostered trust through transparency in product sourcing and the integration of authentic customer feedback.

## 5.4 Profile/user account

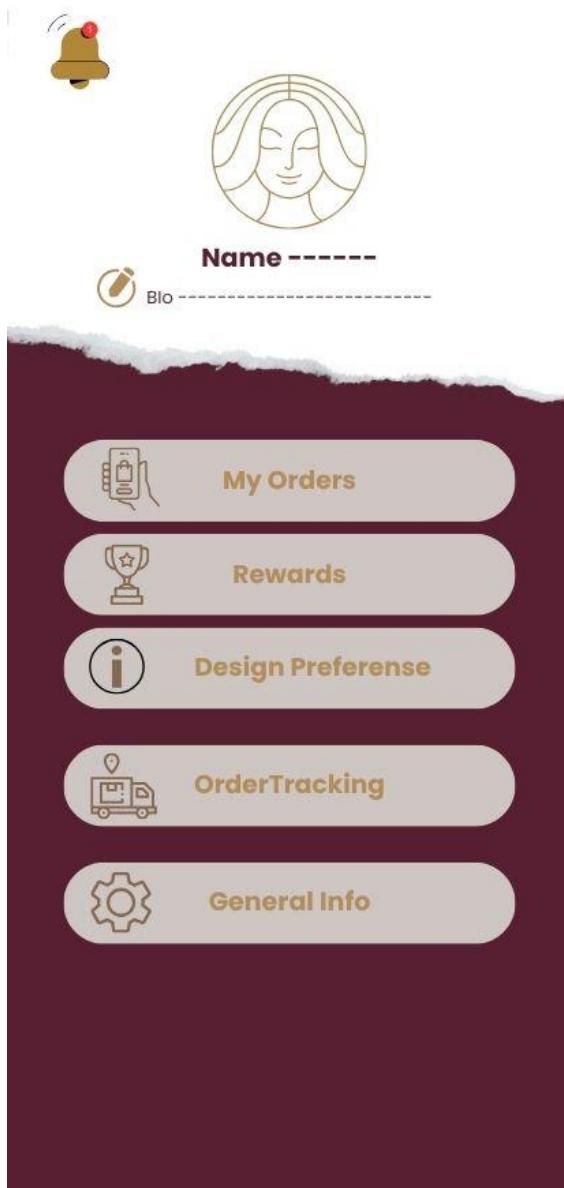
-First low-fidelity prototype



-Second low-fidelity prototype



-High fidelity prototype

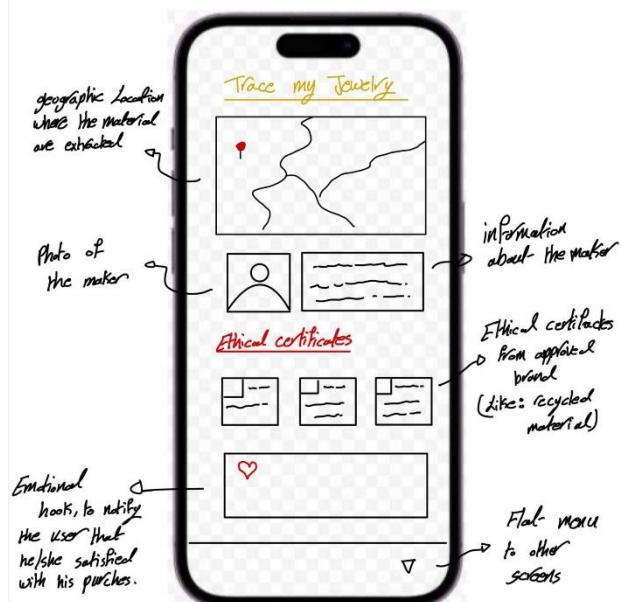


This interface effectively meets several important HCI goals, including Usability, Efficiency, Utility, and Appeal. The layout is clean and well-structured, featuring clearly labeled buttons and icons that direct users to different account functions such as order history, rewards, preferences, and tracking. The use of vertical navigation and high-contrast elements makes interaction intuitive, reducing cognitive load and saving time. This efficiency is particularly valuable for users who want quick access to their account data or who need to monitor ongoing orders. The design also maintains a professional and elegant aesthetic, which enhances the user's emotional connection to

the platform. While Safety features like data protection settings or two step verification are not yet implemented in this version, they can be incorporated in future iterations to strengthen user confidence and align with best practices in secure interface design.

## 5.5 Trace the jewelry

-low-fidelity prototype



## -High fidelity prototype



We started by designing low fidelity prototypes for two essential interfaces in our ethical jewellery platform: the “Profile / My Account” screen and the “Trace My Jewellery” feature. These prototypes aimed to provide users with a clear and functional layout for managing personal details, tracking orders, and exploring the ethical journey of each jewellery piece.

User feedback on both prototypes was largely positive. The “My Account” interface was appreciated for its clean and organized structure, with distinct sections for account information, rewards, preferences, and order tracking. Users found it intuitive and easy to navigate.

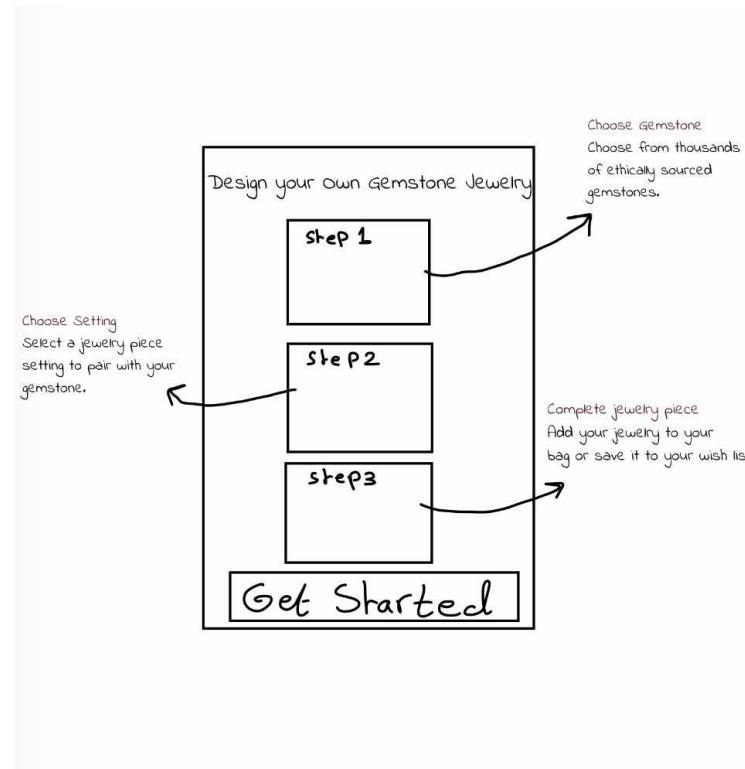
The “Trace My Jewelry” feature was praised for its emotional connection and visual storytelling. Users particularly liked the inclusion of artisan profiles, ethical certificates, and the sourcing journey in a single view. The timeline and supporting visuals were described as informative and engaging.

Based on the positive user response and the absence of usability issues, we moved forward with the high fidelity prototypes. These retained the original clarity while enhancing the overall visual appeal through color, icons, and branding elements. The result was a user-friendly and emotionally impactful interface that aligned well with user expectations.

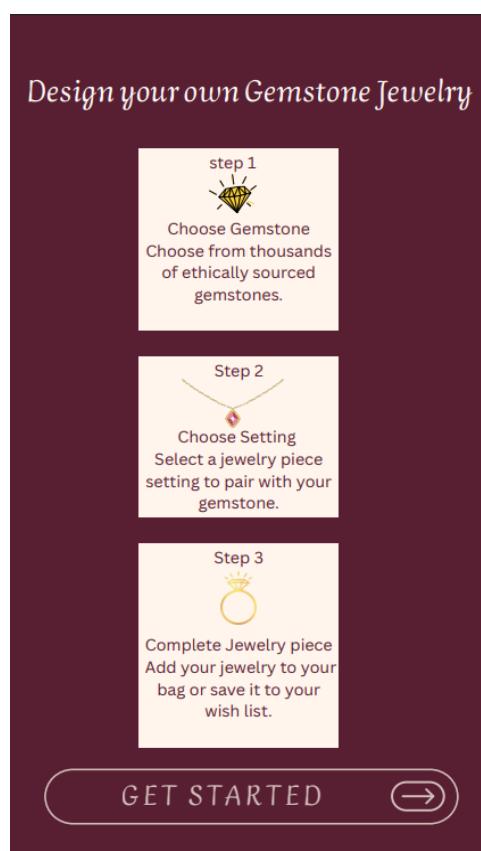
This interface successfully addresses key Human Computer Interaction (HCI) goals, particularly Usability, Appeal, Efficiency, and Utility. The structure is intuitive, guiding the user step by step through the journey of the jewelry piece, from its ethical sourcing to final delivery. Each section, such as the interactive map, artisan information, ethical certificates, and emotional message has been intentionally placed to create a smooth, engaging flow of information. Users can easily understand the origin of their product, which contributes to transparency and builds trust. Furthermore, the visual design and narrative approach add an emotional and human dimension to the interaction, encouraging ethical engagement and increasing the perceived value of the jewelry. This thoughtful integration of functionality and storytelling ensures that users not only find the interface easy to use, but also meaningful and memorable.

## 5.6Design your own gemstone jewelry Page

-low-fidelity prototype



-High fidelity prototype



Initially, we created a low fidelity prototype to visualize the main structure and user flow for the "Design your own Gemstone Jewelry" feature. This prototype was presented to users for feedback. The users expressed their satisfaction with the design, highlighting its simplicity and ease of interaction. They appreciated that there were not too many buttons, and each section of the interface was clearly labeled and intuitive, making it obvious what each part was for. Since users did not request any modifications or express confusion about the layout, we proceeded to develop the high fidelity prototype based on the initial design. The high fidelity version maintained the clarity and simplicity of the low fidelity prototype, while adding color, icons, and visual polish to enhance the overall user experience. This step-by-step approach allowed us to ensure that the final interface was both visually appealing and highly usable, directly reflecting the users' positive impressions and feedback from the early prototype stage.

This interface applies HCI principles to deliver a seamless and efficient jewelry customization experience. Below is how it achieves **key HCI goals**:

### **Safety**

The step-by-step process prevents confusion by focusing users on one decision at a time. No irreversible actions—easy backtracking and adjustments.

### **Effectiveness**

Precisely meets user needs: select a gemstone, choose a setting, and finalize. No unnecessary distractions—only essential features for custom jewelry creation.

### **Efficiency**

Three intuitive steps (Gemstone , Setting , Completion) with a prominent "Start" button. Eliminates guesswork, saving users time.

### **Usability**

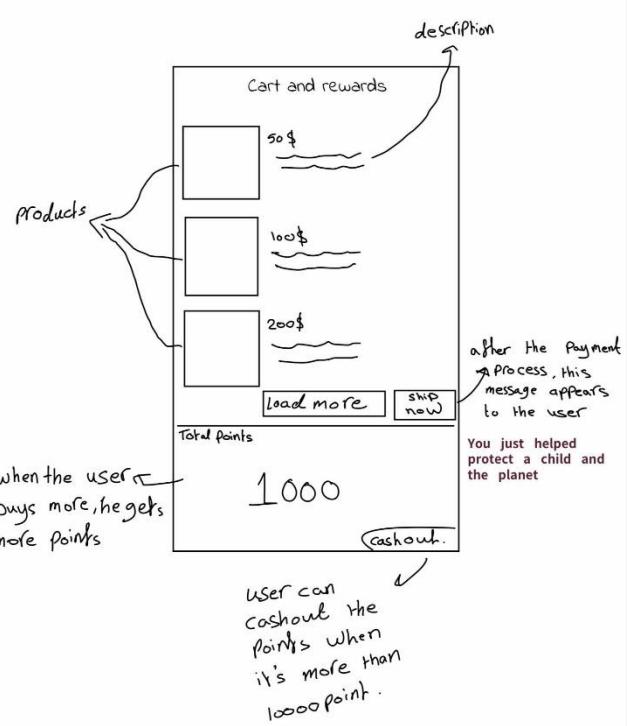
Numbered steps and simple language ensure instant comprehension. Clean layout minimizes clutter, keeping focus on design.

## **Appeal**

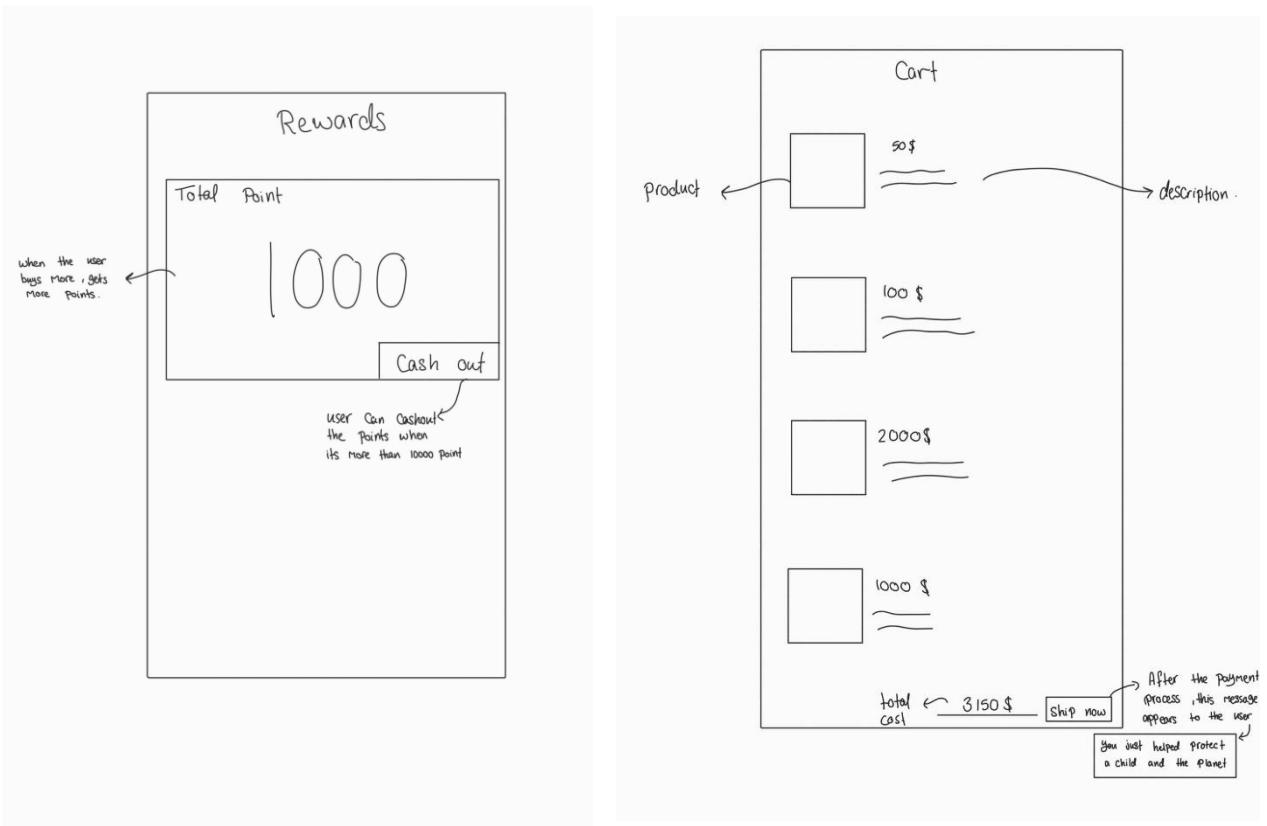
A sleek, uncluttered aesthetic balances luxury and approachability. Thoughtful spacing and typography enhance browsing pleasure.

## 5.7 Cart and rewards page

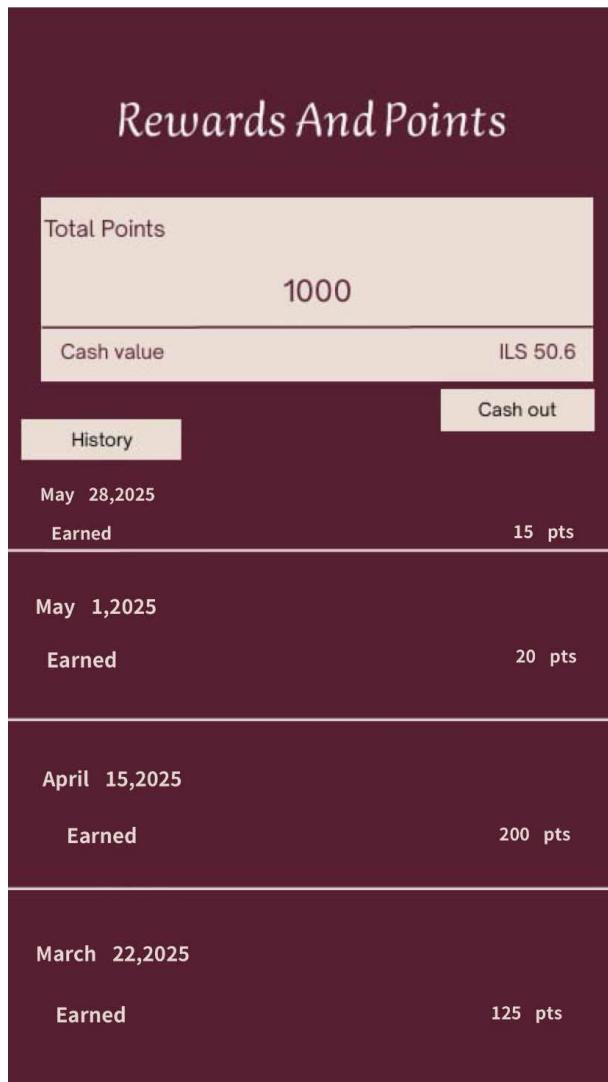
-First low-fidelity prototype



-Second low-fidelity prototype



-High fidelity prototype (Rewards and points page)



We developed two low fidelity prototypes to design the rewards and points feature for the platform. The first prototype combined both the shopping cart and the user's accumulated points in a single interface. When we presented this version to the user, they expressed dissatisfaction, noting that the interface was cluttered and contained too many components. The user suggested that it would be better to separate the cart and the points into different screens, making each interface simpler and more organized. Based on this valuable feedback, we created a second low fidelity prototype, this time focusing only on the rewards and points. When we showed the revised version to the user, they responded much more positively, saying the new layout was clearer and easier to interact with. The user then requested an additional feature: to include a history showing the date when points were earned for each purchase. Taking this suggestion into account, we incorporated a detailed points history in the final high fidelity

prototype, which displays the date and amount of points earned for each transaction, along with the total points and their cash value. This iterative process allowed us to design a more user-friendly and organized rewards system that directly reflected user input at every stage.

This rewards system applies HCI principles to create user-friendly points management experience. Here's how it achieves core **HCI goals**:

### **Safety**

The dedicated interface prevents confusion by isolating rewards from other functions. Clear point values and cash equivalents eliminate uncertainty about redemption worth.

### **Effectiveness**

Focuses exclusively on points tracking with a complete transaction history. Delivers exactly what users need: current balance, earnings timeline.

### **Efficiency**

The history allows users to quickly review their recent point earnings. While the prominent "Cash out" button enables instant redemption, the system intelligently activates this feature only when users accumulate 10,000+ points, ensuring meaningful redemptions while maintaining streamlined navigation.

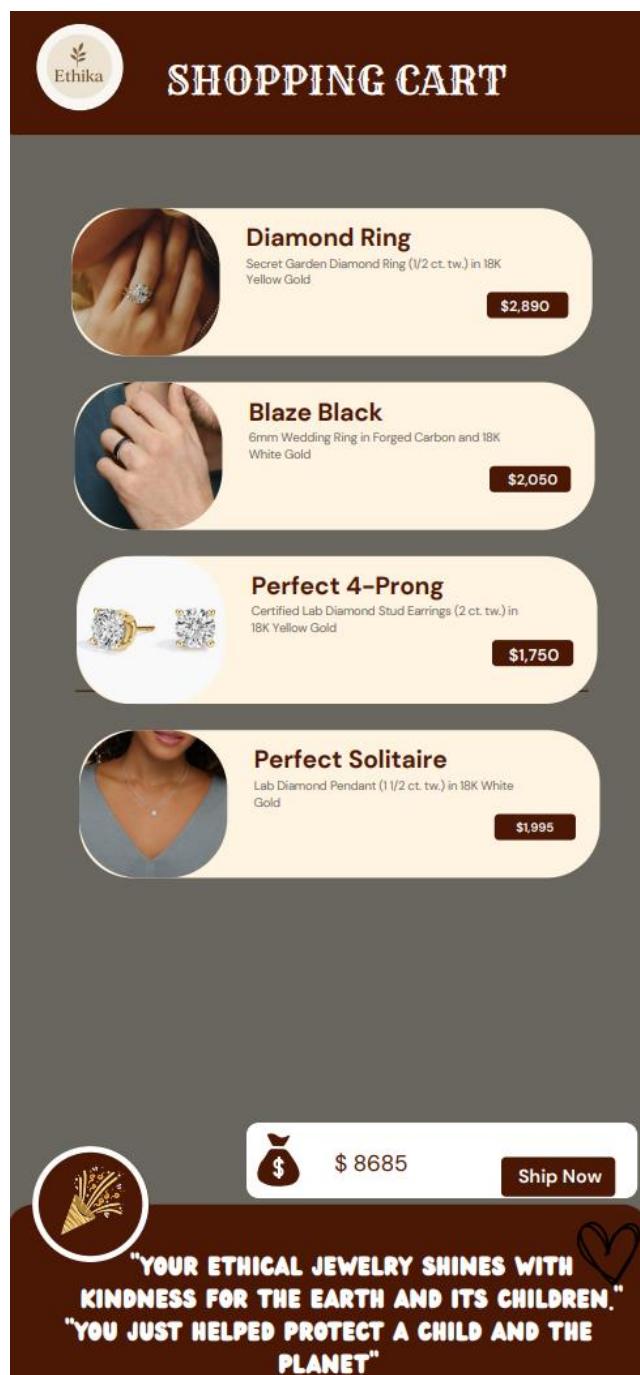
### **Usability**

Clean separation of components and consistent date-point formatting create instant understanding. Minimal interface elements keep focus on essential actions.

### **Appeal**

Uncluttered layout with balanced spacing makes point tracking visually pleasant. Clear value displays (points + cash) enhance satisfaction while maintaining professional aesthetics.

-High fidelity prototype (shopping cart page)

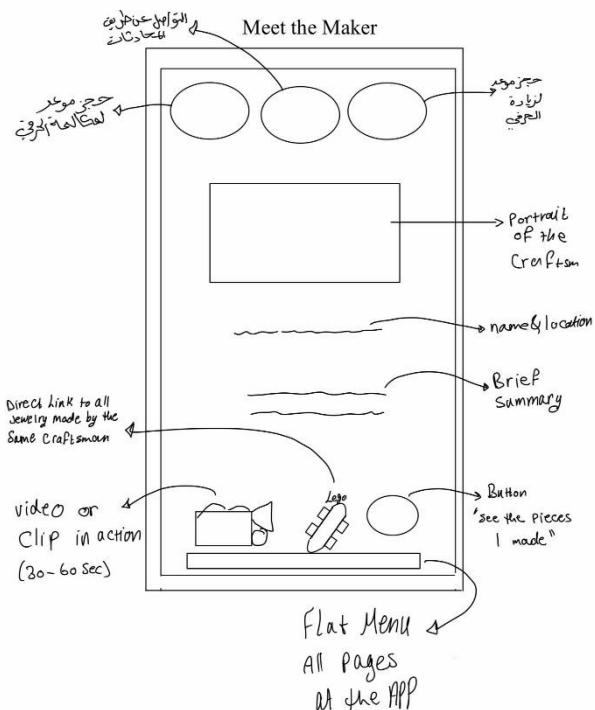


This high-fidelity shopping cart screen was designed to provide a clear and engaging final step in the purchasing process. Building on feedback from the low-fidelity phase, we tackled the initial problem of users feeling disconnected and overwhelmed by a lack of clarity and emotional engagement during checkout, where the interface failed to highlight product details or reflect the brand's ethical mission. To address this, we emphasized readability, emotional connection, and smooth user interaction. Each item

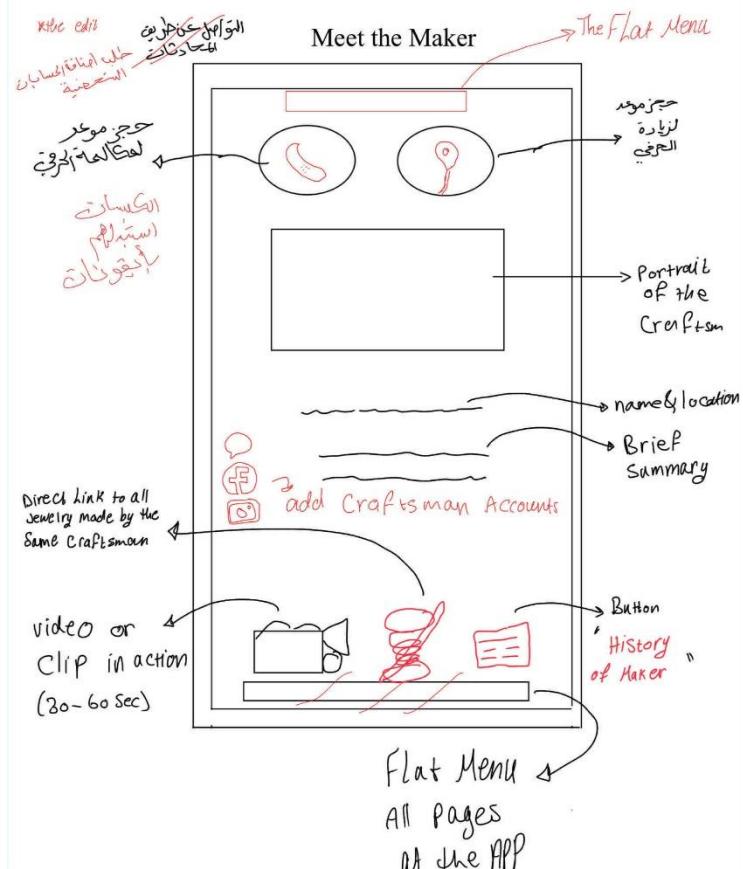
in the cart is displayed with an image, product name, material details, and a clearly marked price, ensuring transparency and easy review. The total price is shown prominently at the bottom, alongside a “Ship Now” button for checkout. Importantly, we added a meaningful confirmation message “Your ethical jewelry shines with kindness for the Earth and its children...” which only appears after the user confirms the purchase. This message reinforces the brand’s ethical values and creates a rewarding emotional moment for the user, turning a simple transaction into a purpose-driven experience. The HCI goal achieved here is User Experience, enhancing satisfaction and emotional connection, while also supporting Usability through an intuitive and transparent layout that simplifies the purchasing process.

## 5.8 Meet the maker page

-First low-fidelity prototype



-Second low-fidelity prototype



-High fidelity prototype



For the Meet the Maker page, we first made a simple sketch of the screen. It had ways to contact the craftsman like calling, messaging, or visiting, and we also added a picture of the maker with a short bio. We included a video showing how the jewelry is made, a small story about the piece, and buttons to view the products they created.

After showing it, we got feedback from the client who asked us to remove the direct contact options and just add the designer's social media instead. We also added an icon to show a short history. Later, we made the final high-fidelity version and moved the

contact icons to the bottom of the screen so the page would look better and be easier to use.

This page supports some important **HCI goals**:

**Usability:** It's easy to understand and use, with clear buttons and layout.

**Appeal:** The final design looks simple, clean, and pleasant to use.

**Safety:** Replacing direct contact with social media links helped avoid anything uncomfortable or risky.

In the end, we felt the page matched the idea of the app and gave users a better connection with the artisan.

## Experimental Design

To enhance the Ethical Jewelry Marketplace's user experience, we designed two experiments to test interface elements that influence trust and engagement. These experiments use a Completely Randomized Design, ensuring unbiased participant assignment, and are grounded in user research insights highlighting the importance of transparency and social proof.

### 1. Experiment 1: Sourcing Information Placement

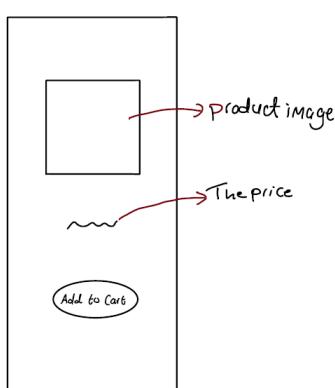
#### 1.1 Define Hypothesis

- **Alternative Hypothesis ( $H_1$ ):** Displaying the product's sourcing information directly below the jewelry image will increase user trust and engagement.
- **Null Hypothesis ( $H_0$ ):** Showing sourcing information below the jewelry image will have no significant effect on user trust or engagement.
- **Independent Variable (IV):** Presence of sourcing information (visible below the product image vs. absent).
- **Dependent Variables (DV):** User trust (measured via survey ratings) and engagement (measured by time spent on the product page and click-through rates).

#### 1.2 Design Experiment

We designed two versions of the product page to test the hypothesis:

- **Low-Fidelity Interface (Control Group, n=15):** Does not include any sourcing information under the product image.
- **High-Fidelity Interface (Experimental Group, n=15):** Includes a clearly visible, concise sourcing statement (e.g., "Ethically sourced from fair-trade mines in Botswana") directly below the product image.



### Procedure:

1. Thirty university students interested in ethical jewelry are randomly assigned to either the control or experimental group.
2. Participants interact with their assigned product page for 5 minutes, exploring a sample jewelry item.
3. Engagement metrics (time on page, clicks to product details) are recorded using analytics tools.
4. Participants complete a post-interaction survey rating trust on a 5-point Likert scale (1 = Low Trust, 5 = High Trust).
5. A t-test ( $p < 0.05$ ) compares results between groups to assess statistical significance.

### Data Collection:

- **Survey:** Likert-scale questions on trust (e.g., “I trust the authenticity of this product”).
- **Analytics:** Time spent on the product page and click-through rates to additional details.

### Expected Outcome:

The hypothesis is supported if users engage less (e.g., shorter time on page, fewer clicks) or express lower trust when using the Low-Fidelity Interface. This suggests that clearly displaying sourcing information is a key factor in building user trust and enhancing the experience on ethical jewellery platforms.

## 2.Experiment 2: Customer Photos and Testimonials

### 2.1 Define Hypothesis

- **Alternative Hypothesis ( $H_1$ ):** Displaying real customer photos wearing the jewelry below the product image will increase user trust and likelihood of purchase.
- **Null Hypothesis ( $H_0$ ):** Showing real customer photos will have no significant effect on user trust or purchase intent.
- **Independent Variable (IV):** Presence of customer photos and testimonials (authentic customer images vs. standard studio images only).
- **Dependent Variables (DV):** User trust (measured via survey ratings) and purchase intent (measured by add-to-cart actions and survey responses).

### 2.2 Design Experiment

We designed two versions of the product page to test the hypothesis:

- **Low-Fidelity Interface (Control Group, n=15):** Displays the product with standard studio images only, without customer photos or social proof.
- **High-Fidelity Interface (Experimental Group, n=15):** Shows the same product with three real customer-submitted photos (showing the jewelry worn) and brief testimonials (e.g., “Love how it shines!”) below the product image.

#### Procedure:

1. Thirty university students are randomly assigned to either the control or experimental group.
2. Participants explore their assigned product page for 5 minutes.
3. Engagement metrics (add-to-cart actions, time on page) are tracked via analytics.
4. Participants complete a survey rating trust and purchase intent on 5-point Likert scales (1 = Low, 5 = High).
5. A t-test ( $p < 0.05$ ) compares results between groups.

### **Data Collection:**

- **Survey:** Likert-scale questions on trust (e.g., “I feel confident purchasing this product”) and purchase intent (e.g., “I am likely to buy this item”).
- **Analytics:** Number of add-to-cart actions and time spent on the page.

### **Expected Outcome:**

The hypothesis is supported if users interacting with the Low-Fidelity Interface show lower engagement (e.g., fewer add-to-cart actions), hesitate more before purchasing, or report lower trust scores in surveys. This indicates that authentic customer photos foster emotional connection, reduce uncertainty, and enhance the brand’s credibility, driving purchase behavior on ethical jewelry platforms.

### **3. Consideration of Gender**

Given user research suggesting gender may influence trust in ethical jewelry (e.g., female participants emphasized authenticity), we balanced participants by gender (15 males, 15 females) across both experiments. Gender will be analyzed as a covariate to explore its impact, aligning with the Randomized Block Design principles for controlling confounding variables.

### **4. Error Control**

To minimize Type I errors (false positives), we adopt a significance level of  $p < 0.05$ , as recommended in experimental research. A sample size of 30 ensures sufficient statistical power ( $1 - \beta \approx 0.8$ ) to detect meaningful differences, reducing Type II errors (false negatives).

## 6. Conclusion

From the beginning of this project, we wanted to create something meaningful, not just a regular shopping app. Our main idea was to build an ethical jewelry platform that connects users with the real stories behind the pieces. To do that, we first did a lot of research not just about the app idea itself, but also about other jewelry platforms to see what features they had, what users liked, and what was missing. We spent time visiting different websites and analyzing their designs, their content, and the way they communicate with users. In the end, we compared our idea with those platforms and made sure our app offered something more personal, emotional, and focused on ethics and transparency.

We also searched for real artisans and tried to understand how we could represent their work in a respectful and honest way. Before starting the designs, we created questions and conducted interviews with users to learn more about what makes them trust a store, what kind of features they need, and how they feel about things like handmade or ethical jewelry. We also did focus groups with different age groups to get more insights, especially on features like AR try-on and the "Meet the Maker" page. Their opinions helped us shape the idea and focus on what really matters to users.

After that, we started sketching low-fidelity prototypes for each page and showed them to users who already had some idea about the project. Based on their feedback, we made changes and improved the screens. If there were many suggestions, we repeated the low-fidelity version. But if the feedback was simple, we moved on to the high-fidelity designs. This step-by-step method helped us make sure the app wasn't just nice to look at, but also easy to use and understand.

Some challenges we faced during the project were related to the target users. For example, some younger users liked the concept and even understood the meaning of ethical jewelry after we explained it, but they still didn't have the financial ability to buy these kinds of products. This was hard to fix, because even if they liked the idea

emotionally, price was still a big obstacle. Also, some users didn't have access to strong internet or advanced phones to use features like AR or livestream. So we tried to keep the experience as simple and light as possible, while still keeping the emotional side through stories, photos, and videos.

In the end, we're proud of what we created. The app reflects values like trust, honesty, and simplicity. We learned that good design is not only about looks — it's about listening to users, solving real problems, and creating something that people can actually feel connected to.

## 7. References

- Brilliant Earth. (2025). *Official Website*. Retrieved from <https://www.brilliantearth.com/>
- Kimberley Process. (2025). *Certification Scheme*. Retrieved from <https://www.kimberleyprocess.com/>
- Responsible Jewellery Council. (2025). *Standards and Certification*. Retrieved from <https://www.responsiblejewellery.com/>