UTM
UNIVERSITI TEKNOLOGI MALAYSIA

Technology & Information Systems
SECP 1513

Campus Second-Hand Trading Platform

Group 3

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Catalogue

Introduction

Currently, many students rely on social media to buy
and sell used items such as textbooks, electronic devices, and daily necessities. However, these platforms often cause problems such as unclear seller identity, transaction risks, poor item categorization, and lack of trust between users.

To solve this problem, our team followed the five phases of design thinking: Empathy, Define, Ideate, Prototype, and Test. Through interviews, surveys, brainstorming sessions, and prototype testing, we developed a solution that focuses on user safety, trust, and ease of use.

Empathy

Through face-to-face interviews and online questionnaire surveys, we directly engaged with 15 UTM students and faculty members and collected over 150 valid responses.
Key findings include: high user concerns about transaction risks (especiallyfinancial losses), distrust in seller identity authenticity,difficulties in searching due to disorganized product categories, and a lack of reliable evaluation mechanisms.

Questions and Findings

Sample questions:

What problems do you face when buying or selling second-hand items?

Do you trust sellers on social media platforms?

What features do you expect from a campus trading platform?

Key findings:

Users worry about scams and financial loss.

Seller identity is not trusted.

Item searching is inefficient.

No reliable review system exists.

Campus Second-Hand Trading

This questionnaire is designed to understand common student experiences and challenges related to campus second-hand trading.

1. Have you ever bought or sold second-hand items on campus? *

○ Yes

○ No

2. What problems have you faced when using social media for second-hand trading? *

○ Scam or financial loss

○ Unclear seller identity

○ Difficult to find items

○ No trust or review system

3. Do you trust sellers or buyers on social media platforms? *

○ Yes

○ No

User persona

Name: M i k e

Age: 20

Background: UTM undergraduate, lives on campus, limited budget

Needs:

Safe transaction environment

Verified seller identity

Clear product categories

Reliable feedback system

Define

Problem Statement

·   Unclear User Identity

Many second-hand transactions rely on social media, where user identity cannot be verified.

.   High Transaction Risk

There is no payment protection mechanism, which may lead to scams or financial loss.

·   Low Trust Between Buyers and Sellers

Users have no reliable way to evaluate sellers before a transaction

·   Inefficient Item Searching

Items are poorly categorized on social media platforms, making searching time-consuming.

Ideate

Ideation Overview

The team explored a wide range of possible platform functions through brainstorming.After evaluating feasibility and user value, we focused on features that directly improve transaction safety, trust, and usability.

Key Ideas Selected

1.Campus Identity Verification

Restricting access to verified campus members helps reduce fraud and increase trust.

3.User Feedback & Reputation System

To build trust between buyers and sellers through transparent reviews and ratings.

2.Transaction Protection Feature

Users need protection when problems occur during transactions, such as item mismatch or disputes.

4.Temporary Payment Holding

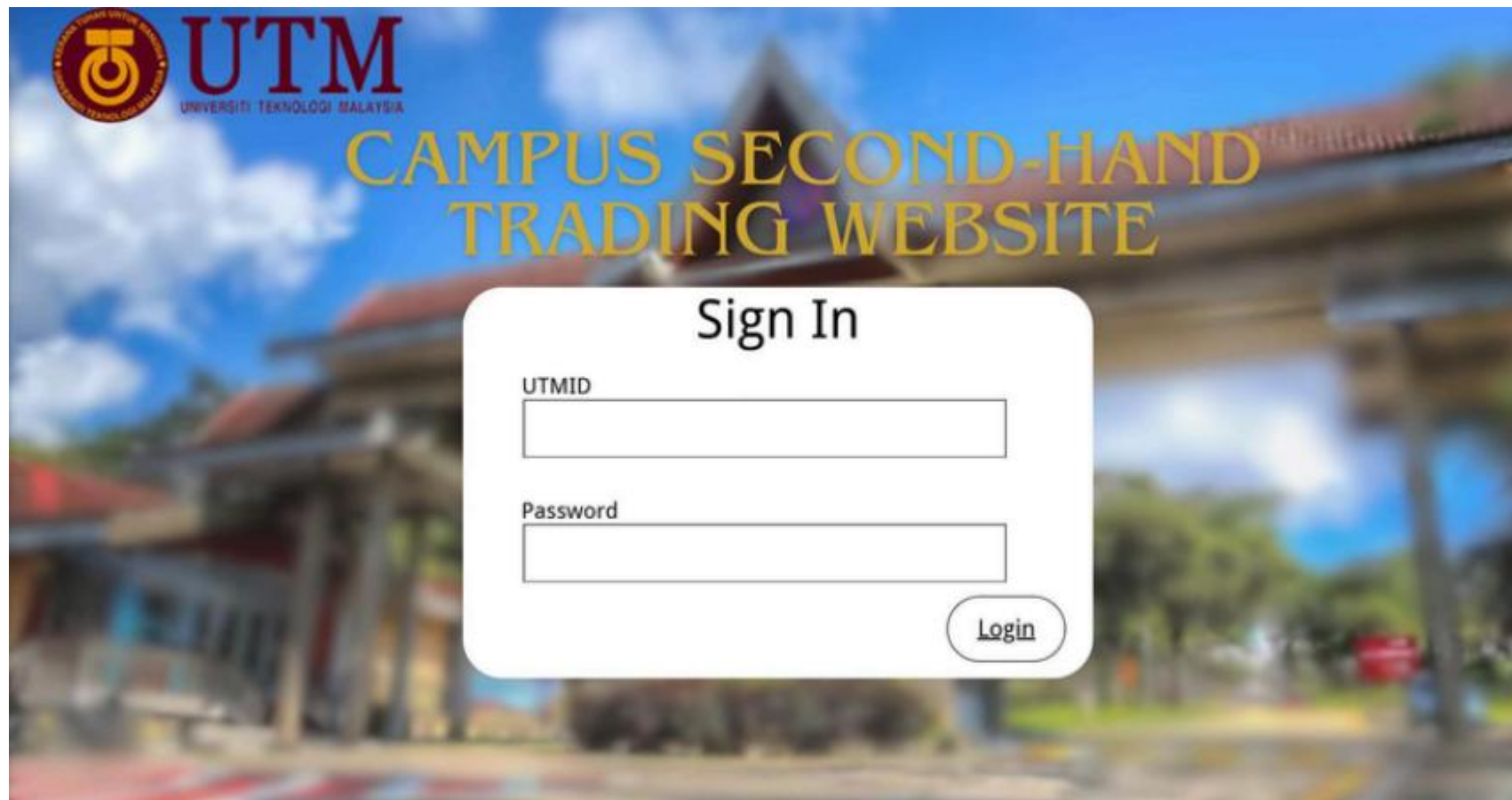Holding payment until the transaction is confirmed helps prevent financial loss.

5.Smart Product Categorization

Clear categories allow users to find items more quickly and reduce information overload.
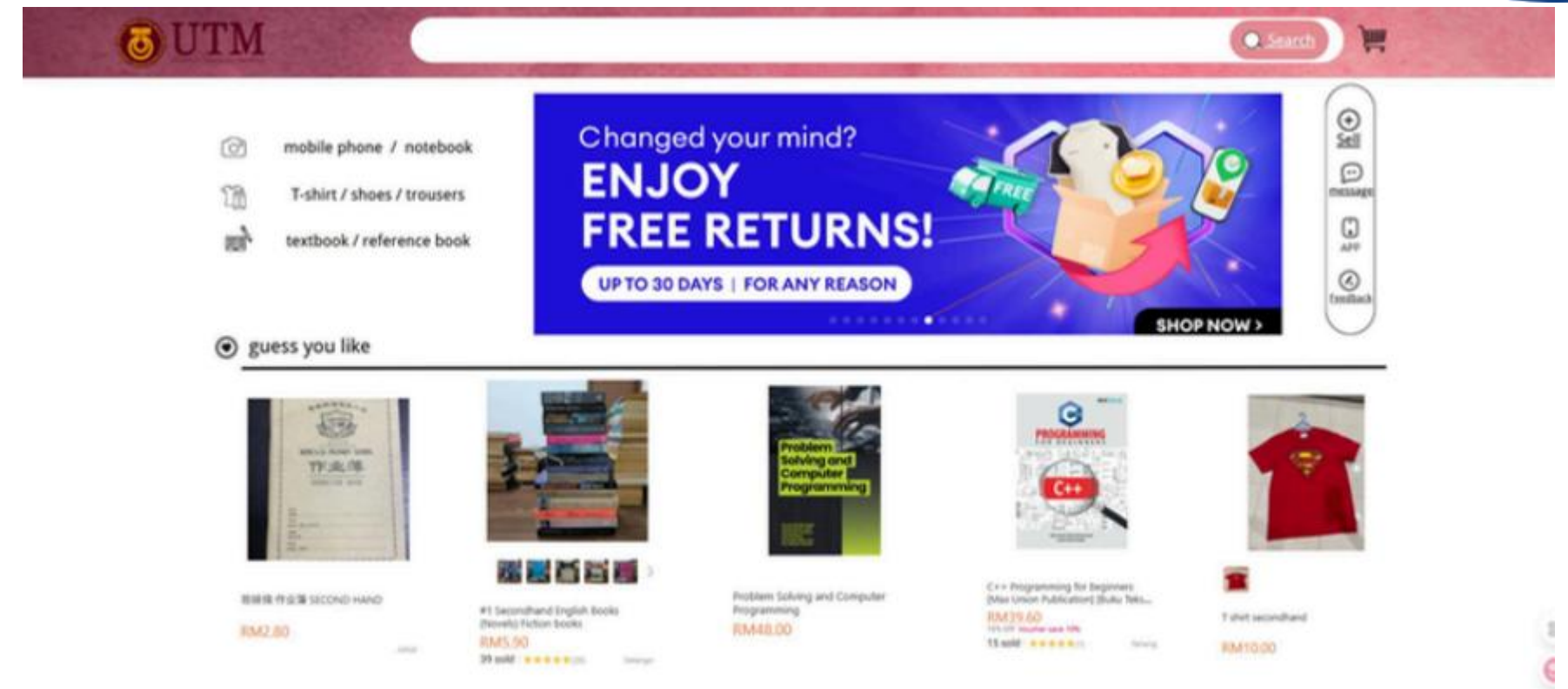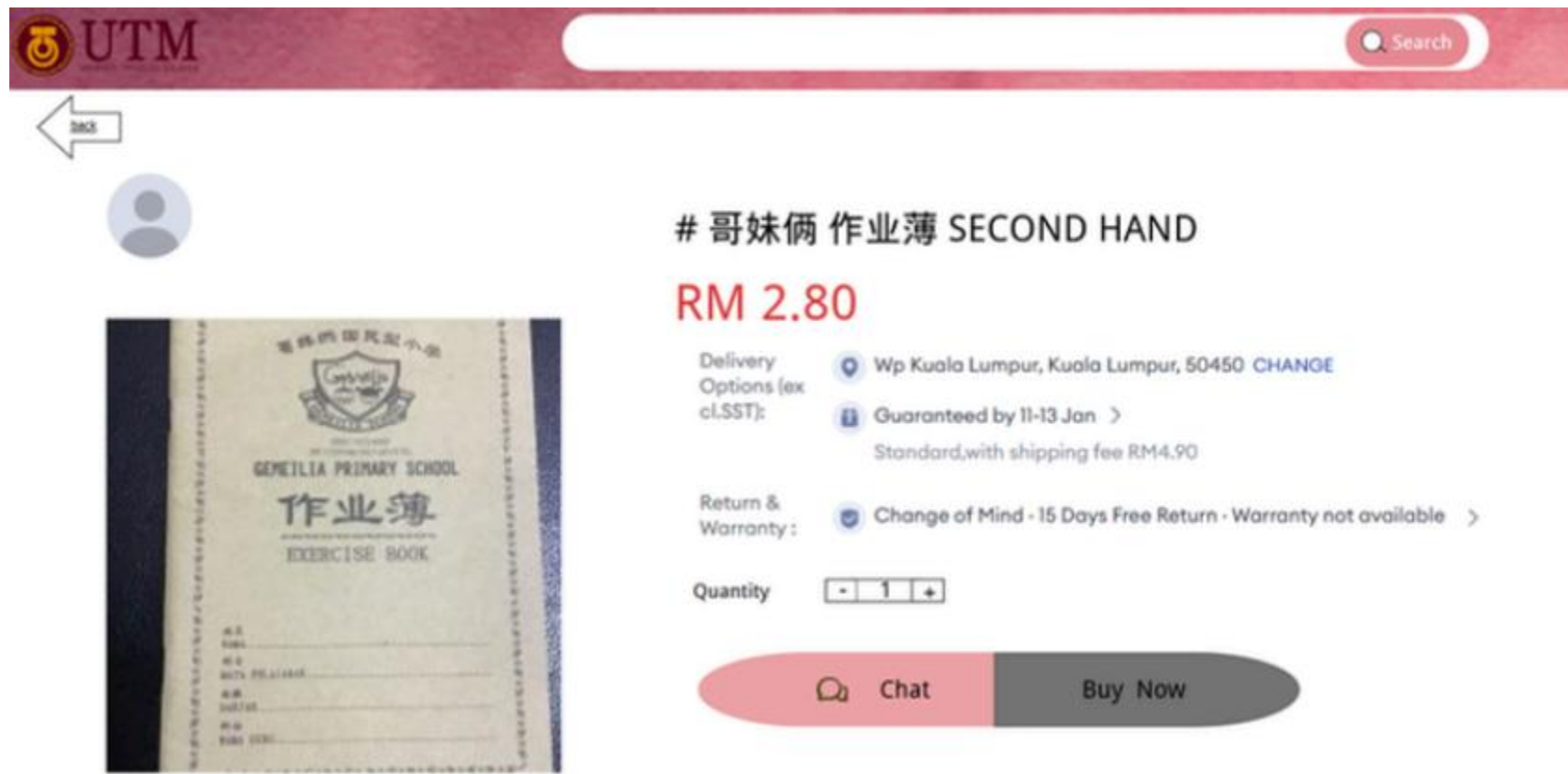
璺 Phototype

Homepage design of the campus second-hand trading platform prototype.
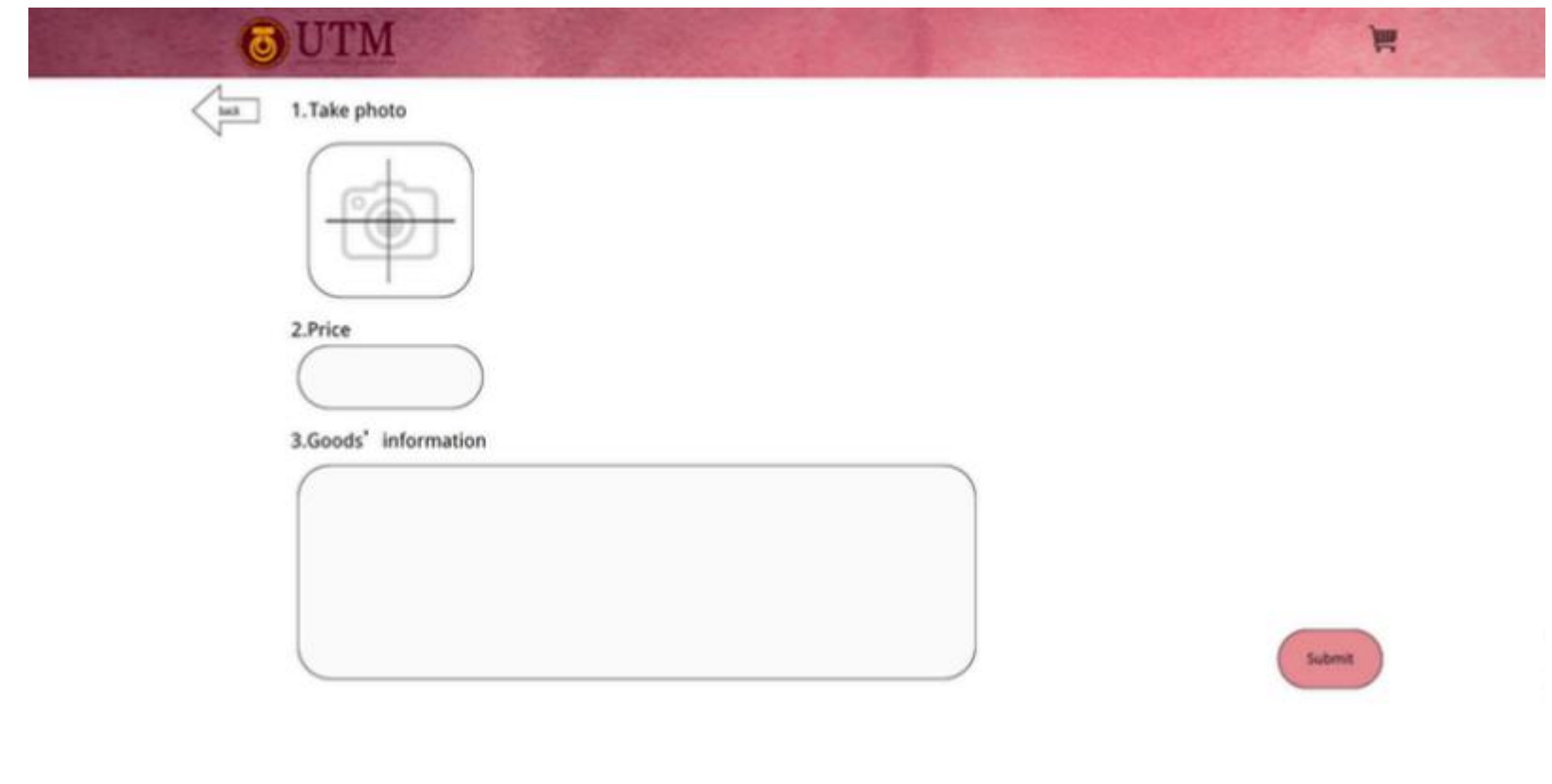
UTM ID Verification

Product category and browsing interface in the website prototype

View product information and communicate with the sellert

Item posting page showing how users upload second-hand products.

https://http–second–hand–website.my.canva.site/

Test

In this phase, we tested our prototype with UTM students.
The purpose was to check whether the website is easy to use
and suitable for campus second-hand trading.

Users were asked to browse items, check product categories,
and understand the basic transaction flow.

Testing Process：

- Tested with 8 UTM students
- Users tried the Canva website prototype
- Users browsed items and categories
- Feedback was collected after testing
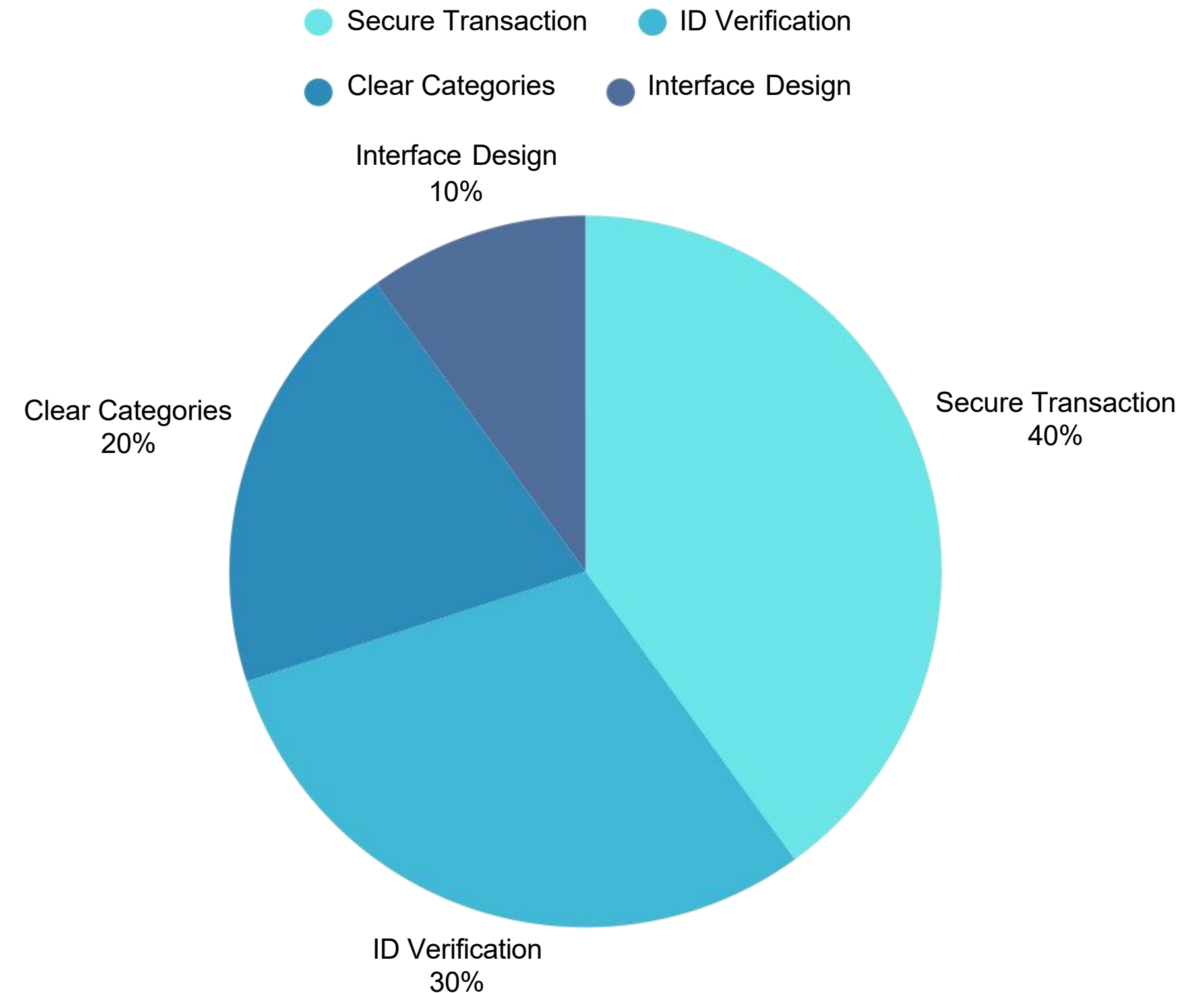
Testing Summary

We conducted user testing with 8 UTM students
to see how they use the prototype.
Participants explored the platform and focused on
features such as transaction safety, user identity
verification, and product categorization.
After the testing session, feedback was collected
based on their experience using the website.

User Preference Summary

- Secure Transaction – 40%
- ID Verification – 30%
- Clear Categories – 20%
- Interface Design – 10%

Features Users Liked Most

Secure Transaction   ID Verification
Clear Categories   Interface Design

Interface Design
10%

Clear Categories
20%

Secure Transaction
40%

ID Verification
30%

Thank You!