

SECV 2113

HUMAN COMPUTER INTERACTION

(Session 2025/2026 Semester 1)

Faculty of Computing
Universiti Teknologi Malaysia

PROJECT 3 – CONCEPTUAL & PHYSICAL DESIGN

[Project Title: AI Assisted Mini Visual Projector]

LECTURER

NOR ANITA FAIROS BINTI ISMAIL

(Section 01)



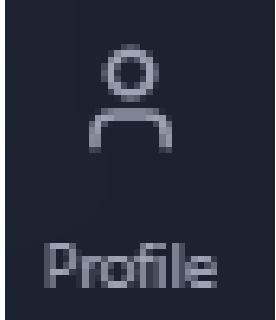
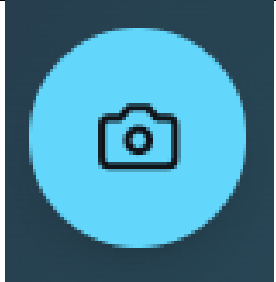

PR05 - AiPro


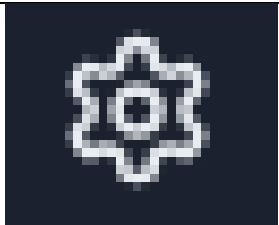
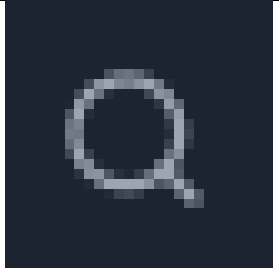

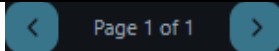

Prepared by

Siong Wei Loong
Lee Ru Xiu
Siti Noor Hidayah Binti Mad Akhir
Saeed Bin Abdulrahman Saeed Basalama
Muhammad Arshad Bin Muhammad Omar

SX230277ECJHS04
SX230523ECJHS04
SX230266ECJHS04
SX230800ECJHS04
SX230796ECJHS04

Interface Metaphor

No.	Interface Metaphor	Description and Justification
1.		<p>"Home" icon</p> <p>Click this button to go back to the main Home Page.</p> <p>The home icon is a universally understood symbol to return to the main page.</p>
2.		<p>"Trolley" icon</p> <p>"Trolley" icon to view items added into the cart ready for purchase.</p> <p>Trolley is a conventional carrier for shopping to put in products buyer wish to checkout and is widely used in the digital space for shopping cart.</p>
3.		<p>"Human" icon</p> <p>This is a button to view the user profile for account settings and logout.</p> <p>The human icon is widely used for user profile.</p>
4.		<p>"Camera" icon</p> <p>Clicking the button to start scanning with camera phone.</p> <p>The camera icon directly represent the camera of the phone which clearly means to use the camera.</p>
5.		<p>"X" icon</p> <p>The "x" button to close or exit any window.</p> <p>The "x" icon has been used since the widespread of personal computer to exit or close the program window.</p>

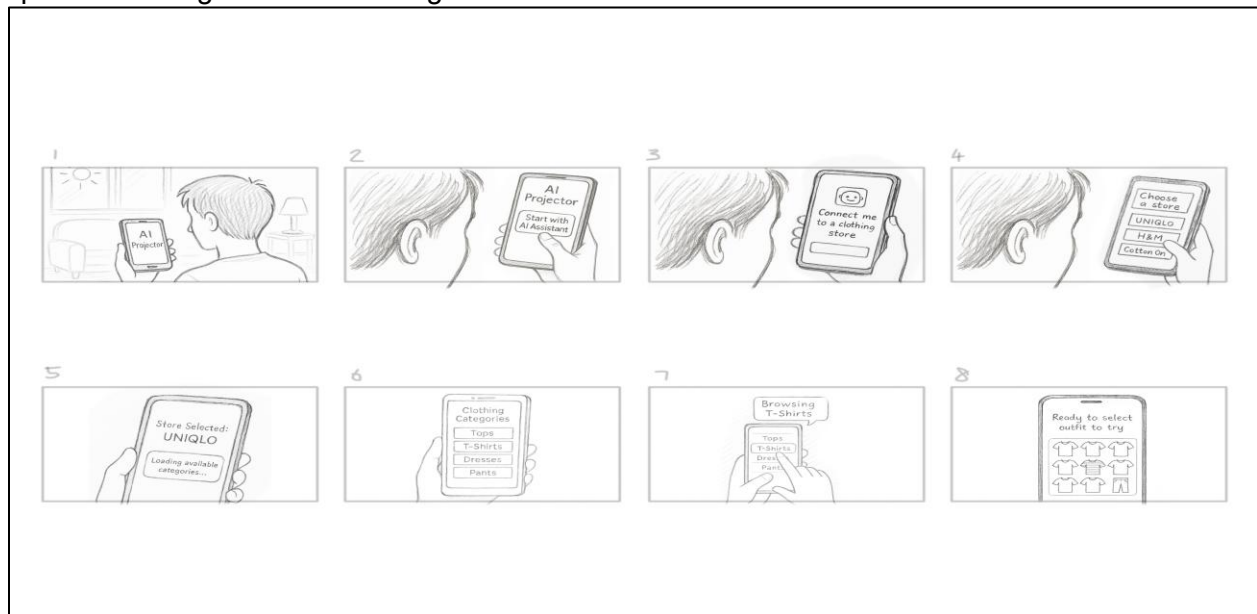
6.		<p>“Left arrow” icon</p> <p>This button return back to 1 previous interface.</p> <p>Left arrow button are commonly used for back button to return to previous interface.</p>
7.		<p>“Gear” icon</p> <p>This button allows for setting set up.</p> <p>Gear are for fine tuning and in the digital world it represent customizing settings to suit personal interest.</p>
8.		<p>“Magnifier glass” icon</p> <p>Clicking this button for search function by keywords.</p> <p>The real magnifying glass is used to look for something which synonymous to searching for something.</p>
9.		<p>“Sliders” icon</p> <p>This button allow user to filter the design available in the shop.</p> <p>The sliders icon is commonly used for filtering item categories, example based on color, size and so on for easier viewing.</p>
10.		<p>“Left and right arrow” icon with pagination</p> <p>Arrows to browse through pagination.</p> <p>It is common to use arrows to navigate left and right through pages.</p>
11.		<p>“Minus and plus” icon</p> <p>These are buttons to reduce/add item quantity.</p> <p>It is easily understood that plus and minus based on mathematical function.</p>

12.		<p>"Trash bin" icon</p> <p>A button to delete/remove item added to cart.</p> <p>Trash bin is understood for throwing unwanted items.</p>
13.		<p>"Bubble chat" icon</p> <p>This button allow user to link to whatsapp to direct message the seller.</p> <p>The bubble chat icon is used in comics and drawings to represent dialogue which means chats.</p>
14.		<p>"Envelope" icon</p> <p>This button allow user to email to the seller.</p> <p>Envelope is traditional tool to be use for sending letter and important message or official communication in the old world, in the digital era this represent the email which replace the letter function in the old world.</p>
15.		<p>"Door Exit" icon</p> <p>This button allow user to logout of the application.</p> <p>This icon are widely used in building to show the exit route which in the application case represent to leave the application or logout.</p>

Storyboard hand sketching

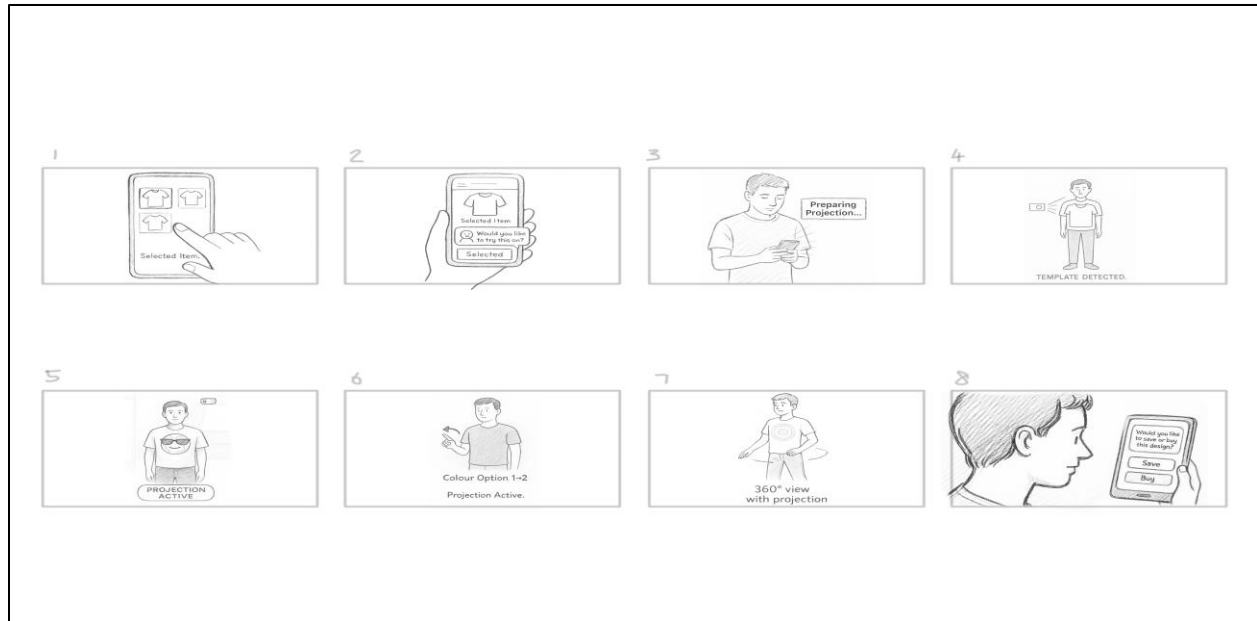
Task 1: Choose Design

The first storyboard illustrates the initial interaction between the user and the AiPro application. The user begins by launching the AiPro app and starting the AI assistant. The application then connects the user to a partnered clothing store, allowing the user to choose a preferred brand before browsing. Once the store is selected, AiPro loads the available clothing categories such as tops, T-shirts, dresses, and pants. The user navigates through the categories and browses specific items, eventually selecting outfits of interest. This storyboard emphasizes how AiPro simplifies the clothing discovery process by allowing users to browse and shortlist items conveniently from home, eliminating the need to travel to physical stores and reducing the time spent searching for suitable designs.



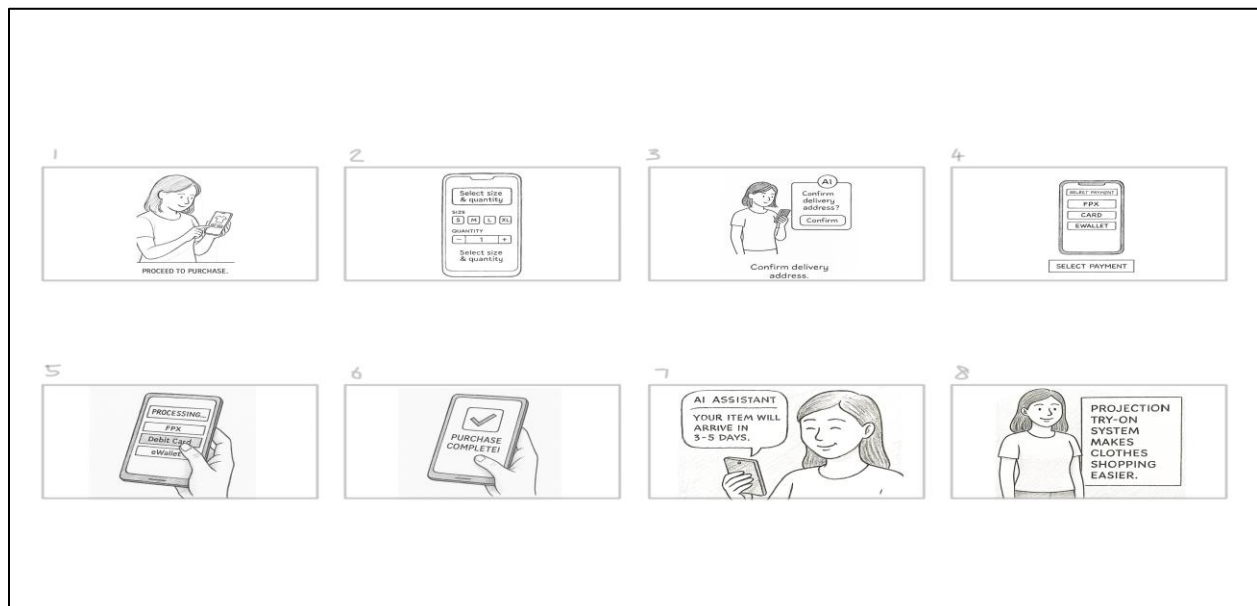
Task 2: Try on Design

The second storyboard focuses on AiPro's projection-based try-on feature, which addresses the difficulty of visualizing how clothes will look when worn. After selecting an item, the user initiates the projection mode. The system prepares the projection, detects the user's body template, and overlays the selected clothing onto the user in real time. The projection becomes active, allowing the user to view the outfit directly on themselves. The user can switch between different colour options and rotate to view the outfit from multiple angles using a 360-degree view. This immersive experience enables the user to better understand fit, style, and appearance before making a decision. At the end of the try-on session, the system prompts the user to decide whether to save the item or proceed with purchasing.



Task 3: Purchase Design

The third storyboard illustrates the final purchasing stage within the AiPro application. After deciding to buy the selected clothing, the user proceeds to the purchase screen, where they choose the appropriate size, quantity, and confirm their selection. The system then requests confirmation of the delivery address and guides the user to select a preferred payment method. Once payment is processed, the application confirms that the purchase is complete. The AI assistant informs the user of the expected delivery time, providing reassurance and transparency. The storyboard concludes by highlighting how the projection try-on system enhances the overall shopping experience by making online clothing purchases easier, more confident, and more efficient.

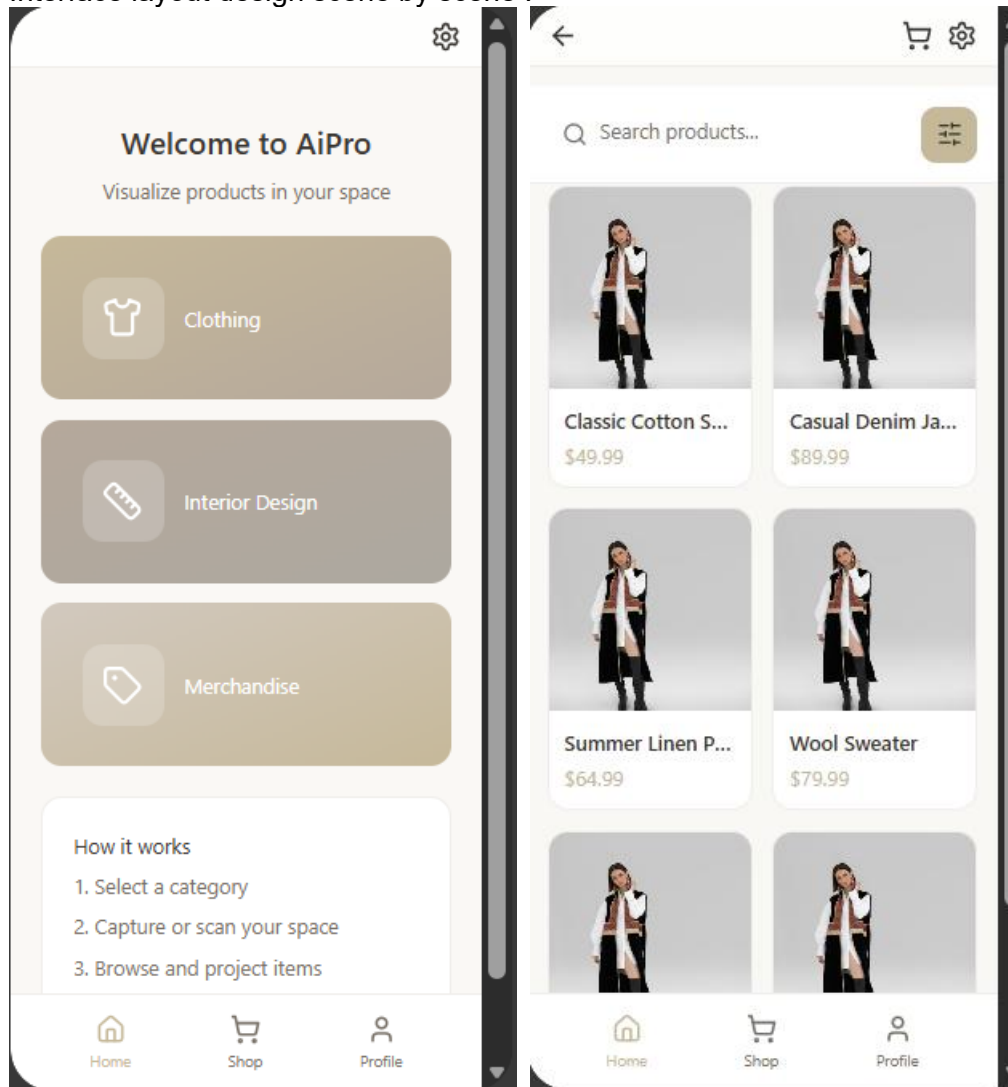


Layout Screen Design-LFP

Task 1 Name : Choosing product design

Description of Task 1 : Connect to store and display available design

Interface layout design scene by scene :



1. Select product category

2. Select product design

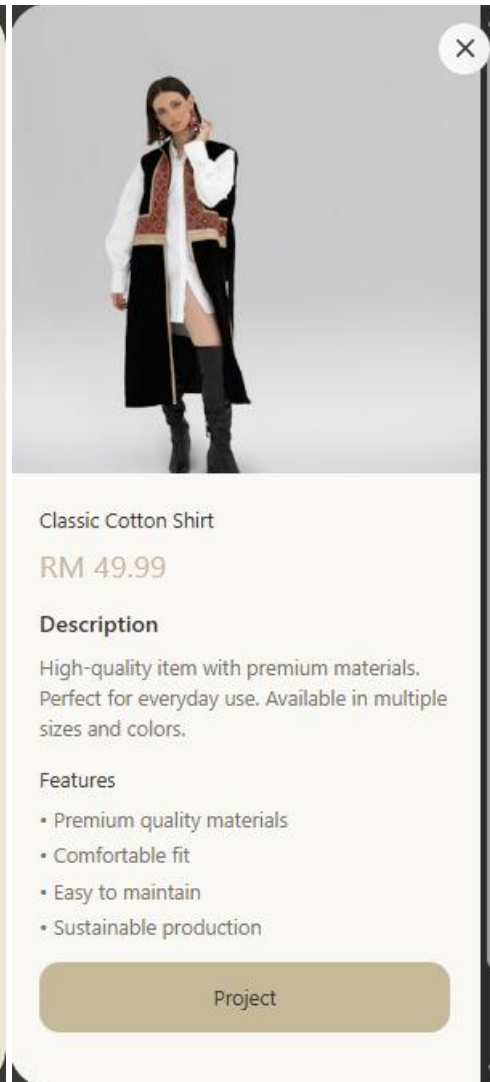
Task 2 Name : Scanning and projecting design

Description of Task 2 : Scan the template product and display the selected design via projector in real time

Interface layout design scene by scene :



1. Scanning template

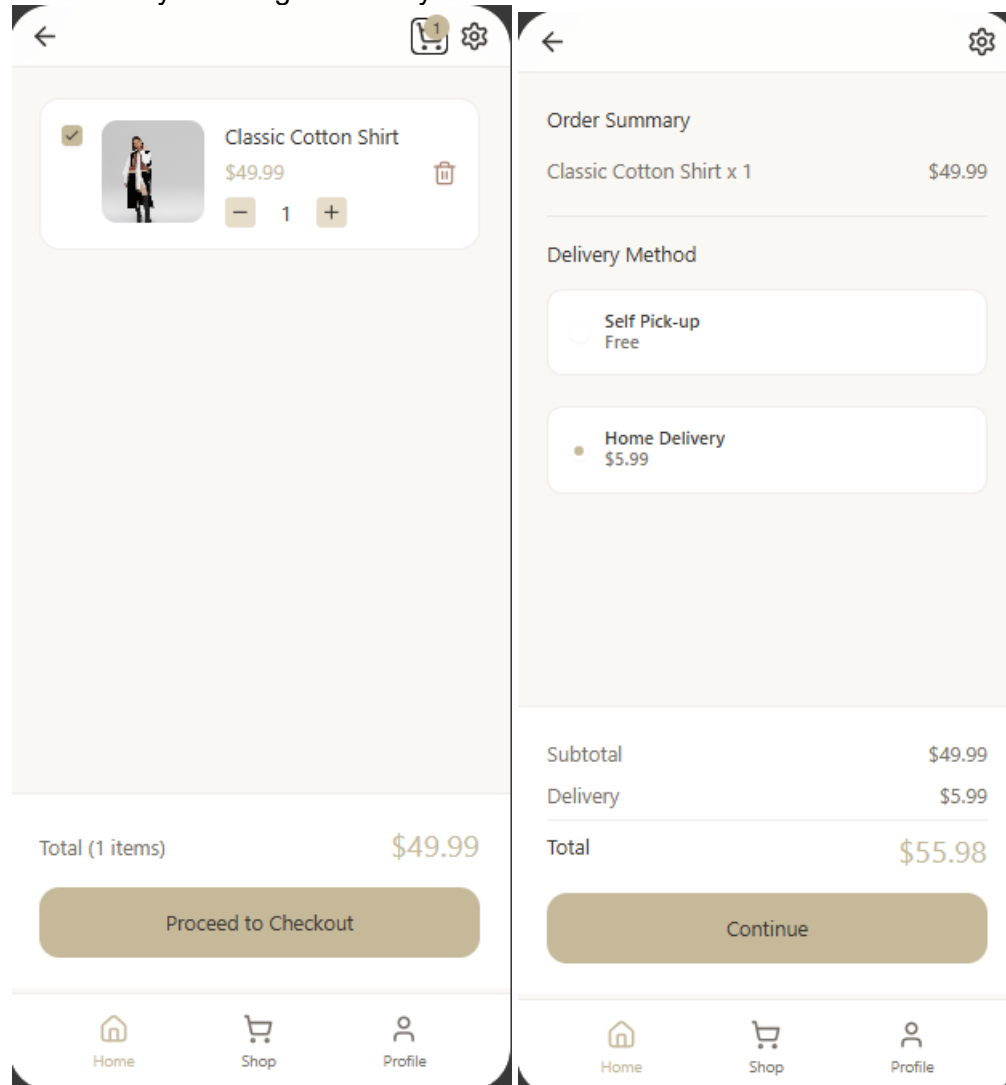


2. Project selected design

Task 3 Name : Proceed checkout payment

Description of Task 3 : Delivery option and input payment method for purchase confirmation

Interface layout design scene by scene :



1. Display design purchase and total price

2. Select delivery option

←

⚙️

←

⚙️

Delivery Information

Full Name

Enter your name

Phone Number

Enter your phone

Email

Enter your email

Delivery Address

Enter your full address

Additional Notes (Optional)

Any special instructions?

Proceed to Payment

Select Payment Method

Choose how you'd like to pay

Credit/Debit Card

Mobile Payment

Digital Wallet

Card Number

MM/YY

CVV

Total Amount

\$55.98

Complete Purchase

Home

Shop

Profile

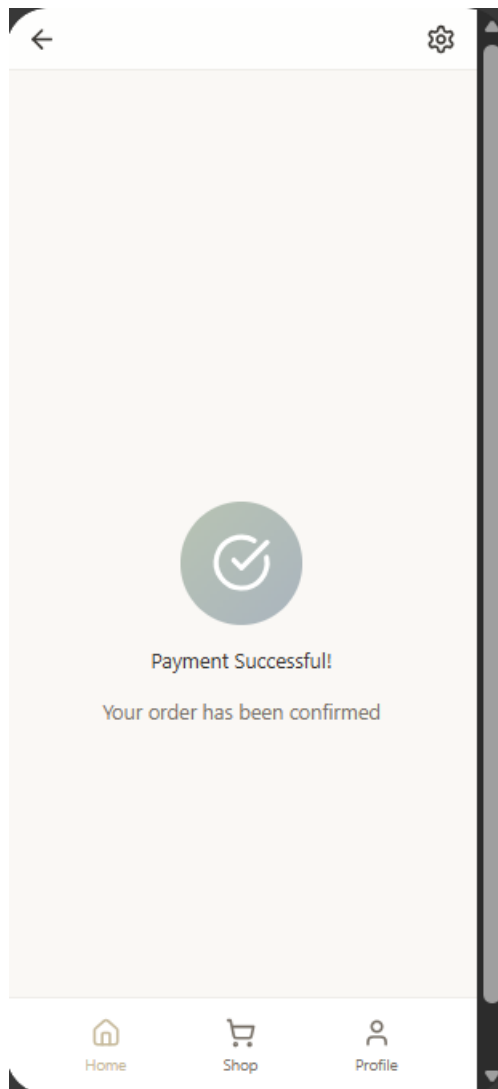
Home

Shop

Profile

3. Input personal information

4. Input payment method



5. Display success payment

Storyboard Video Recording

Project 2 scenario videos are combined with updated prototype user manual video in Project 4 final video.