



Group 8 - Sprint Plan



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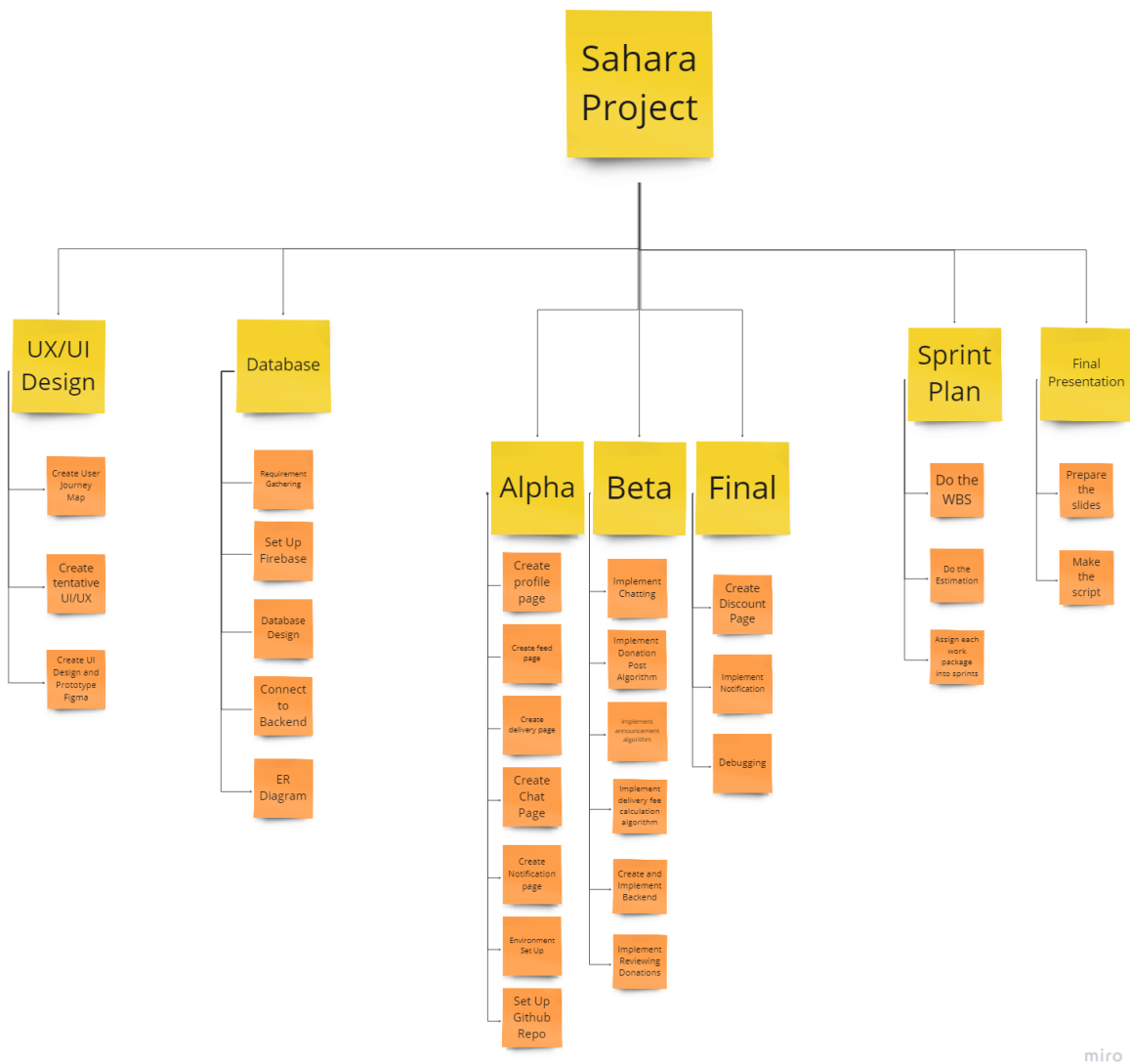
Present

Asst. Prof. Dr. Chonlameth Arpnikanondt
Course CSC291 Integrated Project II
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WBS



miro

Our top level deliverables are UX/UI design, database, Application (Alpha,Beta and Final version), sprint plan and final presentation.

[illegible]

1.3 Create completed final UI design and prototype

Responsible Person: Phongsaphak

Goal: The final design will be used as a plan for coding, it is what our application is going to be. The prototype is used to visualize how users interact with the application before we implement the code.

Deliverable: Completed UI design and Prototype

Acceptance Criteria:

- Full-feature pages design
- Description
- Functional prototype

Round\Hours	0.5	1	2	3	4	5	6	7	8
1						xx	xxx	x	
2						xx	xxxx		
3							xxxxx x		
4									

2.Database

2.1 Requirement Gathering

Responsible Person: Kyaw Swar Hein

Goal: Understand what data needs to be stored

Deliverable: Requirement Document

Acceptance Criteria:

- Category of all data within application
- Detailed description of all needed data

Round\Hours	0.5	1	2	3	4	5	6	7	8
1		xxx	xxx						
2		xxxxx x							
3									
4									

2.2 Set Up Firebase

Responsible Person: Khush

Goal: Initialization of firebase for data storage.

Deliverable: Authorized Firebase

Acceptance Criteria:

- Accessible Database Link for all team members

- Database added to Flutter project

Round\Hours	0.5	1	2	3	4	5	6	7	8
1	xxx xxx								
2									
3									
4									

2.3 Database Design

Responsible Person: Sukanya

Goal: Plan the database structure based on the gathered requirements, considering data flow within the app.

Deliverable: Data storage diagram

Acceptance Criteria:

- Precise flow of the data within the app
- Create the collections for the database in firebase
- All information the app needed

Round\Hours	0.5	1	2	3	4	5	6	7	8
1		xxxx	xx						
2		x	xxxxx						
3			xxxxx x						
4									

2.4 Connect to Backend

Responsible Person: Khush

Goal: To enable the utilization of data in the application.

Deliverable: Backend with CRUD calls to database

Acceptance Criteria:

- Backend has CRUD implemented
- API calls have error handling
- Extreme state managed
- Reviewed by other team members

Round\Hours	0.5	1	2	3	4	5	6	7	8
1						x	xx	x	xx

3.3 Create Profile Page

Responsible Person: Kantitat

Goal: Creating the UI for the Profile Page with some functional components

Deliverable: Profile page

Acceptance Criteria:

- Show user picture
- Show user detail like name, contact information, etc.
- Match with the UI design.

Round\Hours	0.5	1	2	3	4	5	6	7	8
1					x	xxxx	x		
2							xxxxx x		
3									
4									

3.4 Create Feed Page

Responsible Person: Kantitat

Goal: Creating the UI for the Feed Page with some functional components

Deliverable: Feed page

Acceptance Criteria:

- Show user posts.
- Using Listview
- Match with the UI design.

Round\Hours	0.5	1	2	3	4	5	6	7	8
1						xxxx	xx		
2							xxxxx x		
3									
4									

3.5 Create Delivery Page

Responsible Person: Supasek

Goal: Creating the UI for the Delivery Page with some functional components

Deliverable: Delivery Page

Acceptance Criteria:

- Show delivery instructions, information to the user
- Match with the UI design.

Round\Hours	0.5	1	2	3	4	5	6	7	8
1			x			xxxxx x			
2									
3									
4									

3.6 Create Chat Page

Responsible Person: Phongsaphak

Goal: Creating the UI for the Chat Page with some functional components

Deliverable: Chat Page

Acceptance Criteria:

- Chat Room UI + Chat Page UI complete
- Match with the UI design.

Round\Hours	0.5	1	2	3	4	5	6	7	8
1				x	x	xxx	x		
2						xx	xxxx		
3							xxxxx x		
4									

3.7 Create Notification Page

Responsible Person: Phongsaphak

Goal: Creating the UI for the Notification Page with some functional components

Deliverable: Notification Page

Acceptance Criteria:

- Show all notified events
- Match with the UI design.

Round\Hours	0.5	1	2	3	4	5	6	7	8
1								xxxxx x	
2									
3									
4									

4. Beta Version

4.1 Implement Chatting

Responsible Person: Phongsaphak

Goal: To create a functional and usable version, which can be tested and evaluated by the selected group of users

Deliverable: Chatting Features

Acceptance Criteria:

- Sending and receiving messages in real-time
- Messages can be displayed with timestamps and users who send the message
- Updating when messages sent/received

Round\Hours	0.5	1	2	3	4	5	6	7	8
1							x	xx	xxx
2									xxxxx x
3									
4									

4.2 Implement Donation Post Algorithm

Responsible Person: Kantitat

Goal: To allow users to post new donations

Deliverable: Donation Post Module

Acceptance Criteria:

- Be able to create new posts
- Be able to view or access post

Round\Hours	0.5	1	2	3	4	5	6	7	8
1				xx	x	x		xx	
2				xx	x	xxx			
3				xxxxx x					
4									

4.3 Implement Reviewing Donation

Responsible Person: Kantitat

Goal: To allow users to review any items they receive

Deliverable: General Post Module

Acceptance Criteria:

- Be able to review items
- Only allow review when delivery complete

Round\Hours	0.5	1	2	3	4	5	6	7	8
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1					XXXX	XX			
2				XXXX	XX				
3				XXXXX X					
4									

4.4 Implement delivery fee calculation algorithm

Responsible Person: Sukanya

Goal: To allow users to have an idea of the estimated delivery fee for the item based on item information

Deliverable: Fee Calculation Module

Acceptance Criteria:

- Demonstrate accurate calculation adhering to the defined business formulas

Round\Hours	0.5	1	2	3	4	5	6	7	8
1		xxx	xx	x					
2			xxxxx x						
3									
4									

4.5 Create and Implement Backend

Responsible Person: Khush

Goal: Create a backend which can be accessed through API from flutter

Deliverable: Backend Codebase

Acceptance Criteria:

- Correctly handle requests, process data, return the expected responses, and integrations with other systems or services.

Round\Hours	0.5	1	2	3	4	5	6	7	8
1						xx	x	xx	x
2								xxxx	xx
3									xxxxx x
4									

4.6 Implement Announcement Function

Responsible Person: Khush

Goal: To create posts whenever there is a successful donation

Deliverable: Announcement Module

Acceptance Criteria:

- New announcement made when user completes donations
- Shows up for all users

Round\Hours	0.5	1	2	3	4	5	6	7	8
1				xx	xx			xx	
2						xxxxx x			
3									
4									

5. Final Version

5.1 Create Discounts Page

Responsible Person: Kantitat

Goal: To create a Discounts page along with the functionality

Deliverable: Discounts Page

Acceptance Criteria:

- Discounts Page UI complete
- Creating discounts whenever there is a successful donation

Round\Hours	0.5	1	2	3	4	5	6	7	8
1						xxxxx	x		
2						xxxxx x			
3									
4									

5.2 Implement Notification

Responsible Person: Phongsaphak

Goal: To deliver a fully functional product that meets the requirements

Deliverable: Development of backend logic and processing to handle the notifications

Acceptance Criteria:

- Users are alerted to unread notifications
- Allow to access a history or log of notification
- Notification are sent to the intended recipients according to some conditions (i.e., roles)

Round\Hours	0.5	1	2	3	4	5	6	7	8
1					xx		x		xxx

2								XXXXX X	
3									
4									

5.3 Debugging

Responsible Person: Khush

Goal: To deliver a fully functional product that meets the requirements

Deliverable: Bug Fixes

Acceptance Criteria:

- Software operates without any unexpected errors, crashes, or malfunctions during usage

Round\Hours	0.5	1	2	3	4	5	6	7	8
1						XXXX		XX	
2							XXXXX X		
3									
4									

6. Sprint Plan

6.1 Do the WBS

Responsible Person: Supasek

Goal: To define the project scope, support effective project planning, execution, and control. Providing a structured overview of the work that needs to be accomplished

Deliverable: WBS

Acceptance Criteria:

- Encompass all the major deliverables and work packages required to complete the project

Actual Duration filled instead of estimate

Round\Hours	0.5	1	2	3	4	5	6	7	8
1						X			
2									
3									
4									

6.2 Do the Estimation

Responsible Person: Supasek

Goal: To approximate duration time assisting to design project timeline and project schedule

Deliverable: Gantt Chart

Acceptance Criteria:

- Clear duration work time for each task

Actual Duration filled instead of estimate

Round\Hours	0.5	1	2	3	4	5	6	7	8
1				X					
2									
3									
4									

6.3 Assign each work package into sprints

Responsible Person: Supasek

Goal: To define the work planning, assign right job to right person that in appropriate time and duration

Deliverable: Sprint Goals, Sprint Deliverable, Sprint Schedules, Assignments

Acceptance Criteria:

- Each work has clear goals, deliverable, duration, start and end dates
- Concluding the team members properly assigned to each sprint

Round\Hours	0.5	1	2	3	4	5	6	7	8
1		xxxx	xx						
2		xxxxx x							
3									
4									

7. Final Presentation

7.1 Prepare the Slides

Responsible Person: Sukanya

Goal: To prepare the slides for the final presentation

Deliverable: Presentation Slides

Acceptance Criteria:

- Slides covers all necessary topics for pitching (i.e., problem, solution, value, related-SDGs, business model, market validation, market sharing)

Round\Hours	0.5	1	2	3	4	5	6	7	8
1					xx	x	xxx		
2						xxxxx			

Non-Trivial User Journey Diagram

Persona: Joseph

Background:

- Joseph is a dormitory student who is about to graduate in the next 2 months. Over time, he has accumulated a lot of items in his dormitory, some of which are still usable but no longer necessary for him. Before moving out, Joseph wants to dispose of these disused items to ensure that the room is returned to its original state.






Goal:

- Joseph's goal is to find a way to efficiently dispose of the items he no longer needs.

Frustration:









- Joseph is unsure about who or where might need the items he wants to dispose of.
- It is inconvenient for him to send the items to distant recipients.
- Joseph feels that it's not worth wasting the usable items he has but doesn't know how to find someone who can benefit from them.

User Journey Before using Sahara Application

Journey Steps	Joseph separates usable items from the rest	Joseph contacts a person to receive his items	Joseph confirms the receiver is genuine and is ready to receive the items.	Joseph sends the items to the receiver	Receiver gets the items and delivery is complete
Actions	Sorting items, Considering options to find recipients	Contacting potential recipients	Verifying the authenticity and readiness of the receiver	Arranging for item delivery and sharing information with receiver	<ul style="list-style-type: none"> - Confirming successful item delivery - Communicating with receiver to know how much useful the item is to them
Touch Point	<ul style="list-style-type: none"> - Asking friends - Exploring social media platforms 	<ul style="list-style-type: none"> - Social Media 	<ul style="list-style-type: none"> - Communication through Social Media 	<ul style="list-style-type: none"> - Delivery logistics - Social Media 	Communication with Delivery Service and Receiver
Needs and Pains	Uncertainty about finding someone who needs the items	<ul style="list-style-type: none"> - Hard to get contact of receiver 	<ul style="list-style-type: none"> - Hard to confirm if the receiver really needs the items - Hard to check if receiver is not a scammer - Worried about complaints from receiver about usability of items 	<ul style="list-style-type: none"> - Need Convenient and reliable delivery service to send the items to the recipient - High delivery costs, maybe more than item's value 	<ul style="list-style-type: none"> - No incentive to donate (Do not get anything in return for donating) - Stress about whether the item will be useful to receiver or not - Frustration if there is an issue with delivery
Customer Feeling					
Opportunities	Provide a platform to easily connect with individuals or organizations in need of donated items	Implement a chatting system where the sender and receivers can talk to each other	Implement a chatting system and allow User to add details about the estimated usability of items	Offer a convenient delivery service to eliminate the inconvenience of sending items to distant recipients	Implement features to show delivery status, provide discounts on successful delivery and allow receivers

					to review the item delivered.
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User Journey After using Sahara Application

Journey Steps	Joseph separates usable items from the rest	Joseph gets chat from a potential Receiver	Joseph confirms the receiver is ready to receive the items.	Receiver gets the items and delivery is complete	Joseph use the discount coupon on the product he likes
Actions	<ul style="list-style-type: none"> - Sorting items - Uploading the items on Sahara 	<ul style="list-style-type: none"> - Chatting with receiver and confirming donation 	<ul style="list-style-type: none"> - Preparing item for delivery and handling the item to the delivery service - Payment for delivery (donor or receiver or both) 	<ul style="list-style-type: none"> - Confirming successful item delivery - Seeing receiver Review - Getting a Discount coupon 	Buy items with discount coupon for his new accommodation
Touch Point	Sahara Application				Website/Application for buying items (Sponsor's)
Needs and Pains	-	<ul style="list-style-type: none"> - Need to wait for a receiver to chat 			
Customer Feeling   					
Opportunities	-	-	-	-	-

User Journey Description

The user journey before using the Sahara Application begins with Joseph, who wants to declutter his living space and find a new owner for his unused items. The journey consists of several steps and actions that Joseph takes to ensure a smooth donation process.

First, Joseph separates the usable items from the rest, contemplating his options for finding recipients. He is unsure about finding someone who truly needs the items. Joseph then decides to reach out to potential recipients, contacting them through various channels, including asking friends and exploring social media platforms.

One of the major challenges Joseph faces is verifying the authenticity and readiness of the receiver. He worries about the possibility of contacting scammers or receivers who might not genuinely need the items. Another concern is the usability of the items and the potential for complaints from the receiver.

In terms of logistics, Joseph needs a convenient and reliable delivery service to send the items to the recipient. He also considers the high delivery costs, which might outweigh the value of the items. Additionally, there is no immediate incentive for Joseph to donate as he doesn't receive anything in return.

Throughout the journey, Joseph experiences a mix of emotions.

- Initially, he feels uncertain about finding someone in need.
- As he connects with potential recipients and arranges for item delivery, his mood becomes worse as he needs to be constantly worried about many things.
- Finally he feels relieved when he successfully donates the item.

To address the needs and pains of users like Joseph, several opportunities for improvement emerge. These include:

- providing a dedicated platform to easily connect with individuals or organizations in need of donated items,
- implementing a chatting system for sender-receiver communication, and allowing users to add details about the estimated usability of items.
- offering a convenient delivery service, showcasing delivery status
- providing discounts on successful delivery
- allowing receivers to review the delivered items can further enhance the user experience

The user journey diagram after using Shara explains how the process gets simplified for Joseph providing him with more incentives. His mood is much better throughout the journey.

Joseph does not need to actively look for people who need his items. He does not need to worry about getting a good delivery service as Sahara provides a great delivery service with the lowest price. Joseph is also presented with the option to let the receiver pay the delivery or both him and the receiver pays for the delivery. In addition, it is convenient to communicate with the receiver through Sahara Application itself reduces the touchpoints for Joseph. Lastly, Joseph receives discount coupons which he can use to buy new items for his

new accommodation. Also, he can easily look at the reviews posted by receivers to see how useful the item was to the receiver. In addition, there is an announcement posted when the donation is successfully completed, improving the prestige of Joseph which in turn encourages Joseph to do more donations.

SAHARA application UI

1. Boarding page

- The page that will show up when a user enters the application.

UI photos related to Boarding page

Boarding page



2. Login page

- Features

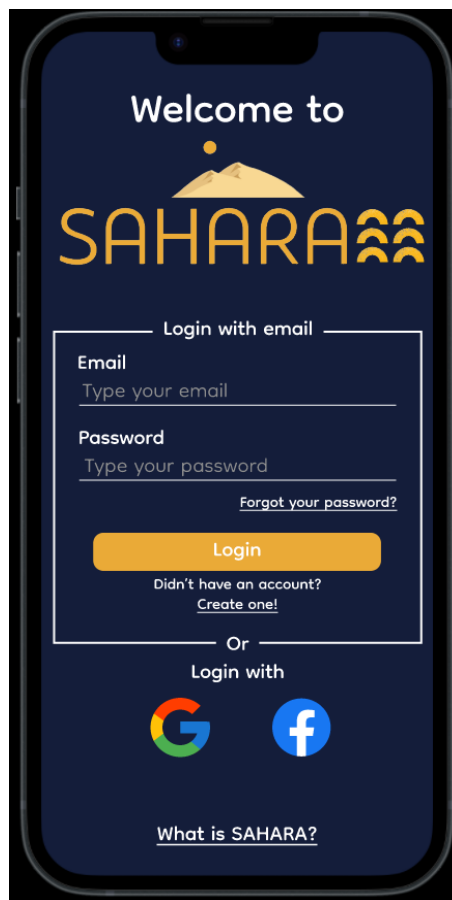
1. Users can login to the application with their application's account email and password.
2. Users have an alternative choice to login with other platform's accounts, which are Google accounts or Facebook accounts.

- Sub-Pages

1. Register page: Register new application's account for users.
2. What is page: Provide the basic information about SAHARA.

UI photos related to Login page

Login page



Register page(This page appears when user clicks “create one!” textbutton)



The register page features a dark blue background with the SAHARA logo at the top, which includes a stylized orange mountain and the word "SAHARA" in orange. Below the logo is a white-bordered box titled "Create Account". Inside this box are four input fields: "Username" with the placeholder "Type username", "Email" with "Type email", "Password" with "Type password", and "Confirm password" with "Confirm your password". Below the input fields is an orange "Register" button and a link that says "Go back to login page".

What is pages(This page appears when user clicks “What is SAHARA” textbutton)



3. Home Page

- Features

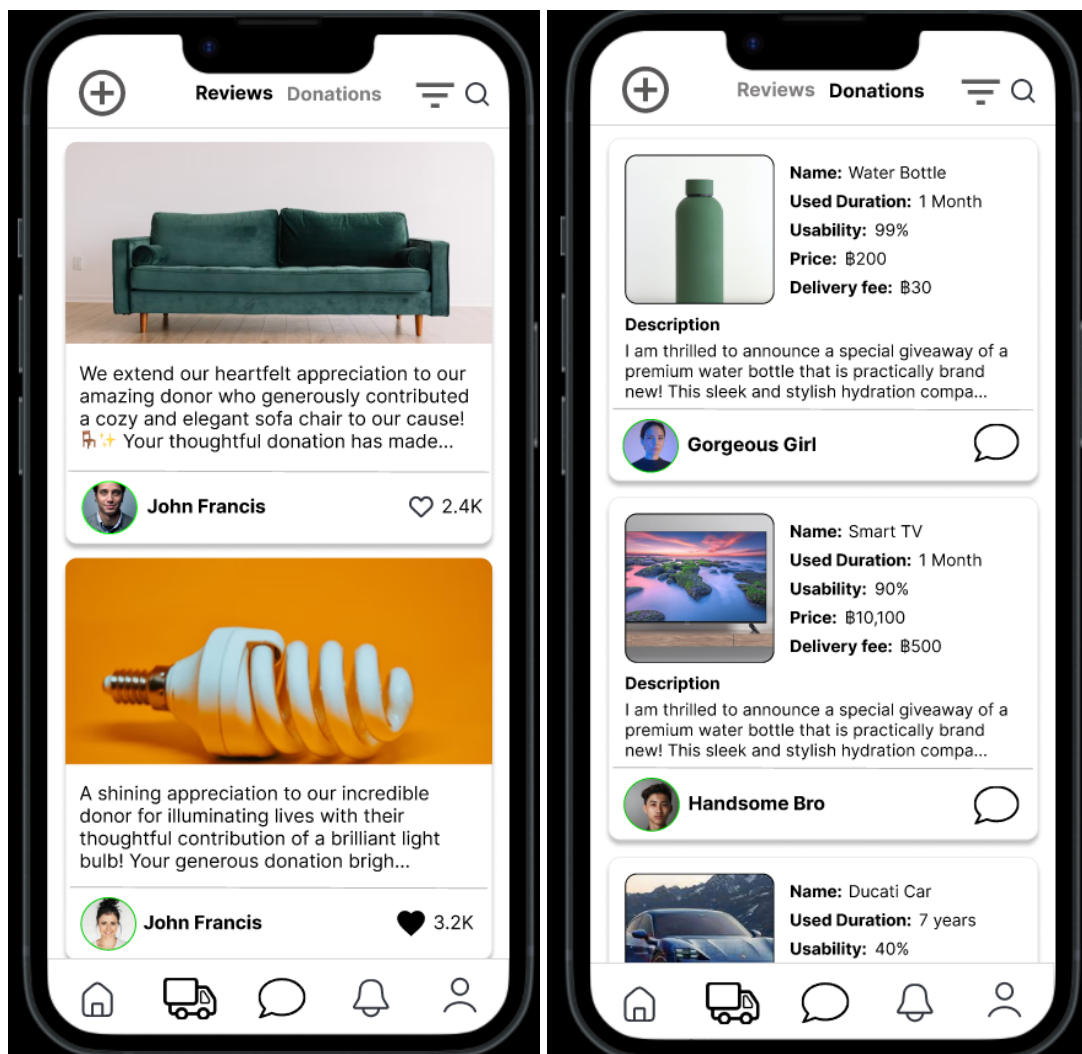
1. Searching: Users can search donated items.
2. Filtering: Users can filter donation posts by item category.
3. Browsing donation: Under the Donations tab, users can browse many donation items.
4. Browsing reviews: Under Reviews tab, users can see reviews for donated items.

- Sub-Page

- Create Post: Users can create donation post by clicking plus sign on top left

UI photos related to home page

Browse Reviews and Browse Donations



Create Post for donation

Create Donation Post

Insert a item image

Item Name

Item name

Item Category

▼

Used Duration

1

▼

Week

▼

Usability

50%

Price

B

Enter the price you bought

Estimated current price

B --

Item size

Width

Inch

Length

Inch

Height

Inch

Item weight

Weight

Kg

Delivery fee

B --

Create Donation Post

Usability

Price

B

Enter the price you bought

Estimated current price

B --

Item size

Width

Inch

Length

Inch

Height

Inch

Item weight

Weight

Kg

Delivery fee

B --

Delivery Fee Paid By

Donor (you)

▼

Description

Item description

Add tags

+

POST

4. Shipping Page

- Features

1. **In-Transit:** This tab shows the items that are en-route but not delivered yet
2. **To deliver:** This tab shows items if you donated something and have to deliver that item
3. **To receive:** This tab shows items that you have to receive
4. **Delivered:** This tab shows items that are delivered and allows you to write reviews. But we are not allowed to write reviews of bought items. We only allow you to write review of donated items.

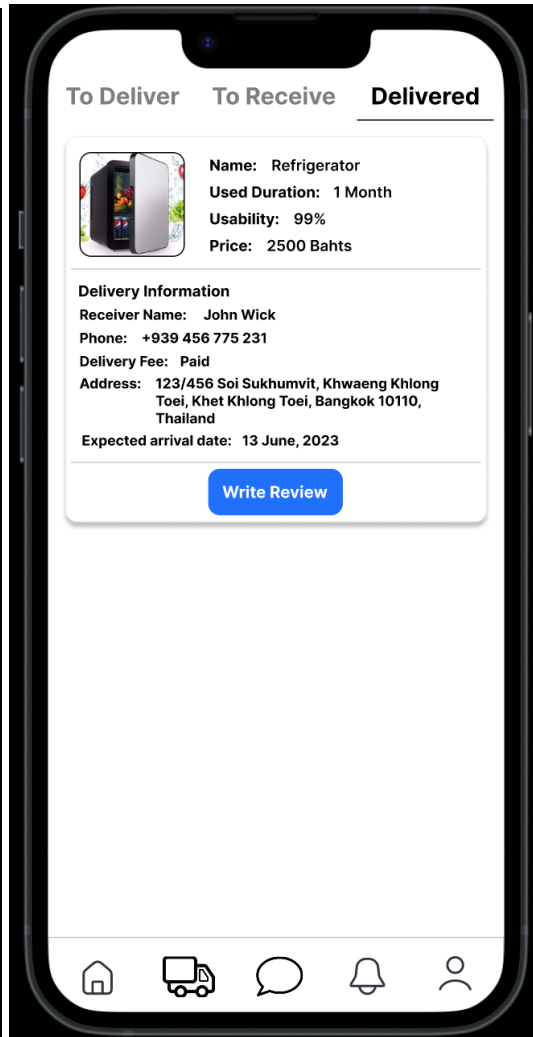
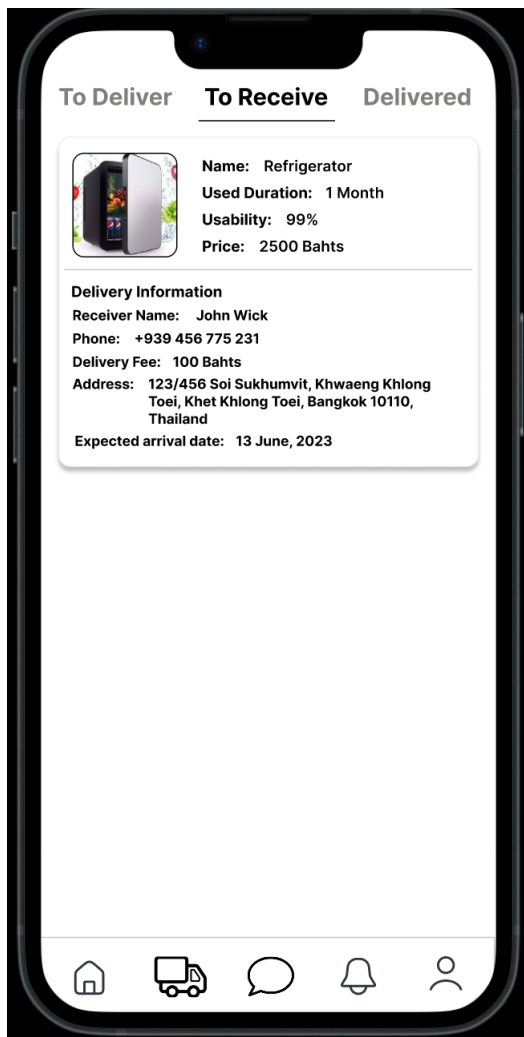
- Sub-Pages

1. **Writing Review:** This page allows users to write reviews of the donated items for the donors. Users can give points which are calculated based on the value of the item.

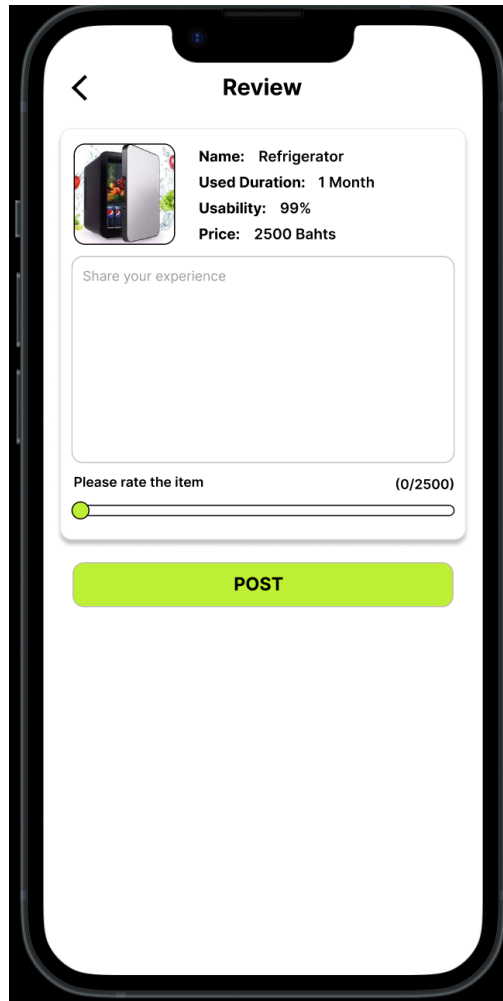
UI photos related to shipping page

Shipping page






Review Writing Page (This page appears when user click “Write Review” button)

A mobile app interface for writing a review. At the top, there is a back arrow and the title "Review". Below this is a card containing a small image of a refrigerator on the left and text on the right: "Name: Refrigerator", "Used Duration: 1 Month", "Usability: 99%", and "Price: 2500 Bahts". Under the card is a large text area with the placeholder "Share your experience". Below the text area is a rating section with the text "Please rate the item" and a progress bar that is currently at 0, with "(0/2500)" to its right. At the bottom of the card is a green button labeled "POST".

< Review

 Name: Refrigerator
Used Duration: 1 Month
Usability: 99%
Price: 2500 Bahts

Share your experience

Please rate the item (0/2500)

POST

5. Chat Page

- Features

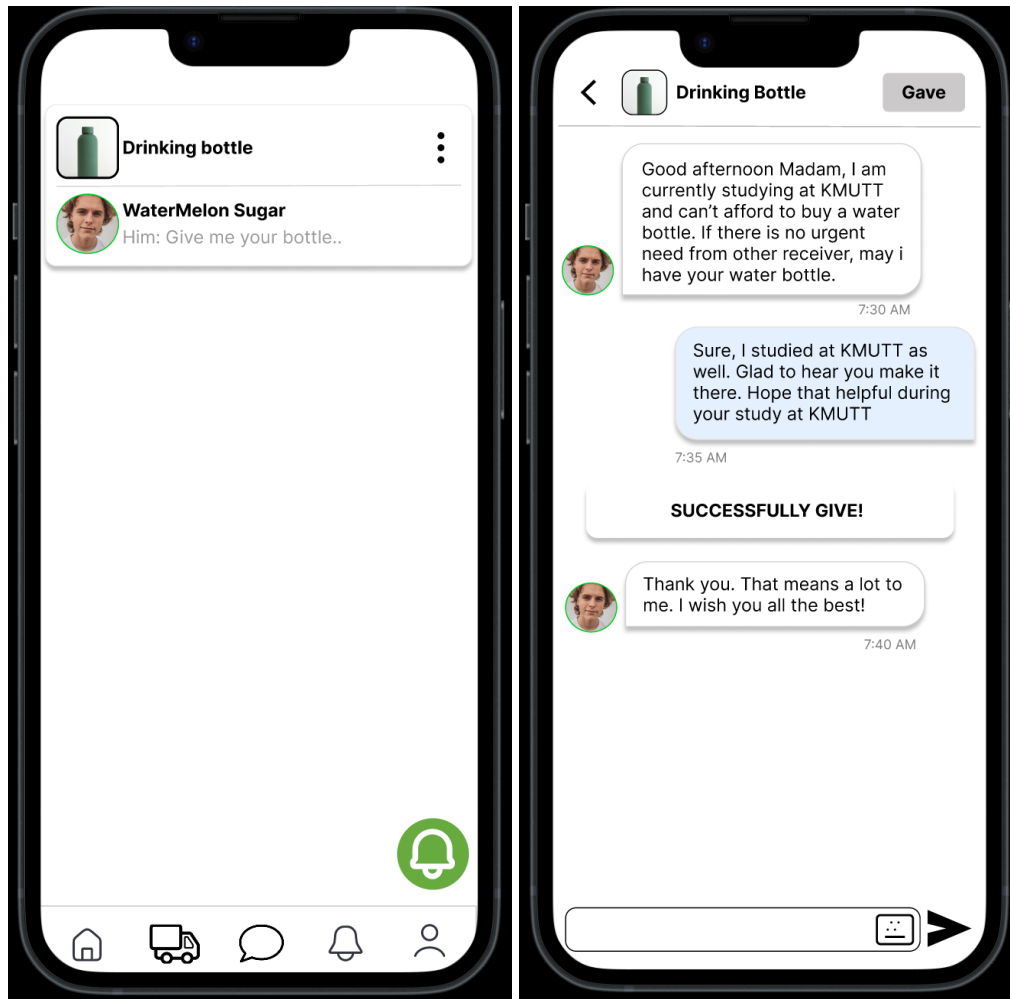
1. Blocking: Users can block other users by clicking three dot

- Sub-Pages

1. Chat Room: Users can chat and also there is a “Give” button, which will appear on the donor side and donors can click “Give” if they want to donate the item to the receiver that they are chatting with.

UI photos related to Chat Page

Chat Page and Chat Room



6. Notification

- Features

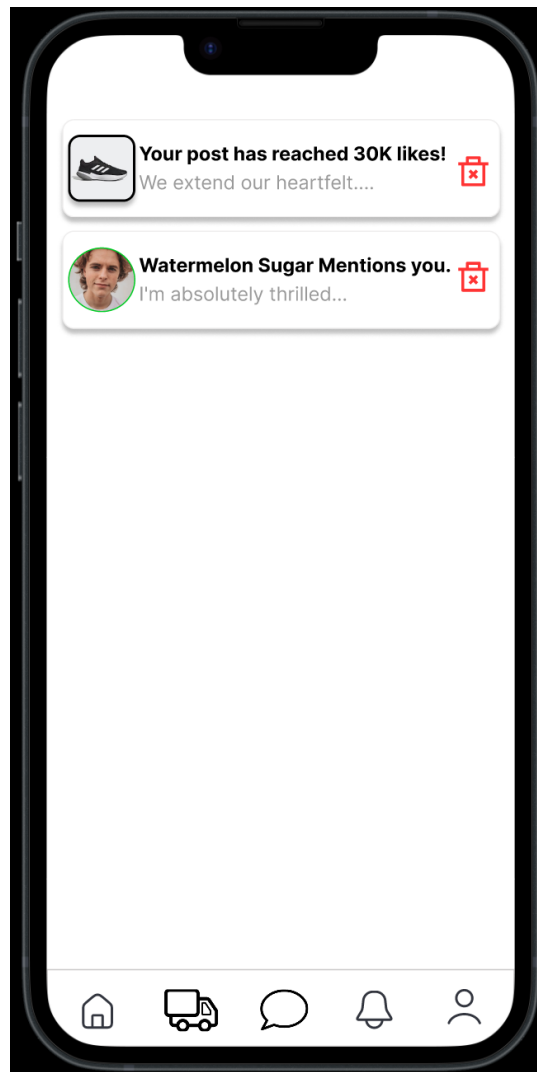
1. Reading: Users can read notifications from this page
2. Deleting: Users can delete notifications from this page

- Sub-Pages

There is no sub-page in notification

UI Photos related to Notification Page

Notification Page



7. Profile Page

- Features

1. Seeing donated and received items: Users can see donated and received item in the profile page

2. Accessing social media: Users can link their account with other social media platforms.

3. Log out: Users can log out of our application.

- Sub-Pages

1. Setting: Users can adjust settings on this page.

2. Blocks: Users can see blocked users on this page.

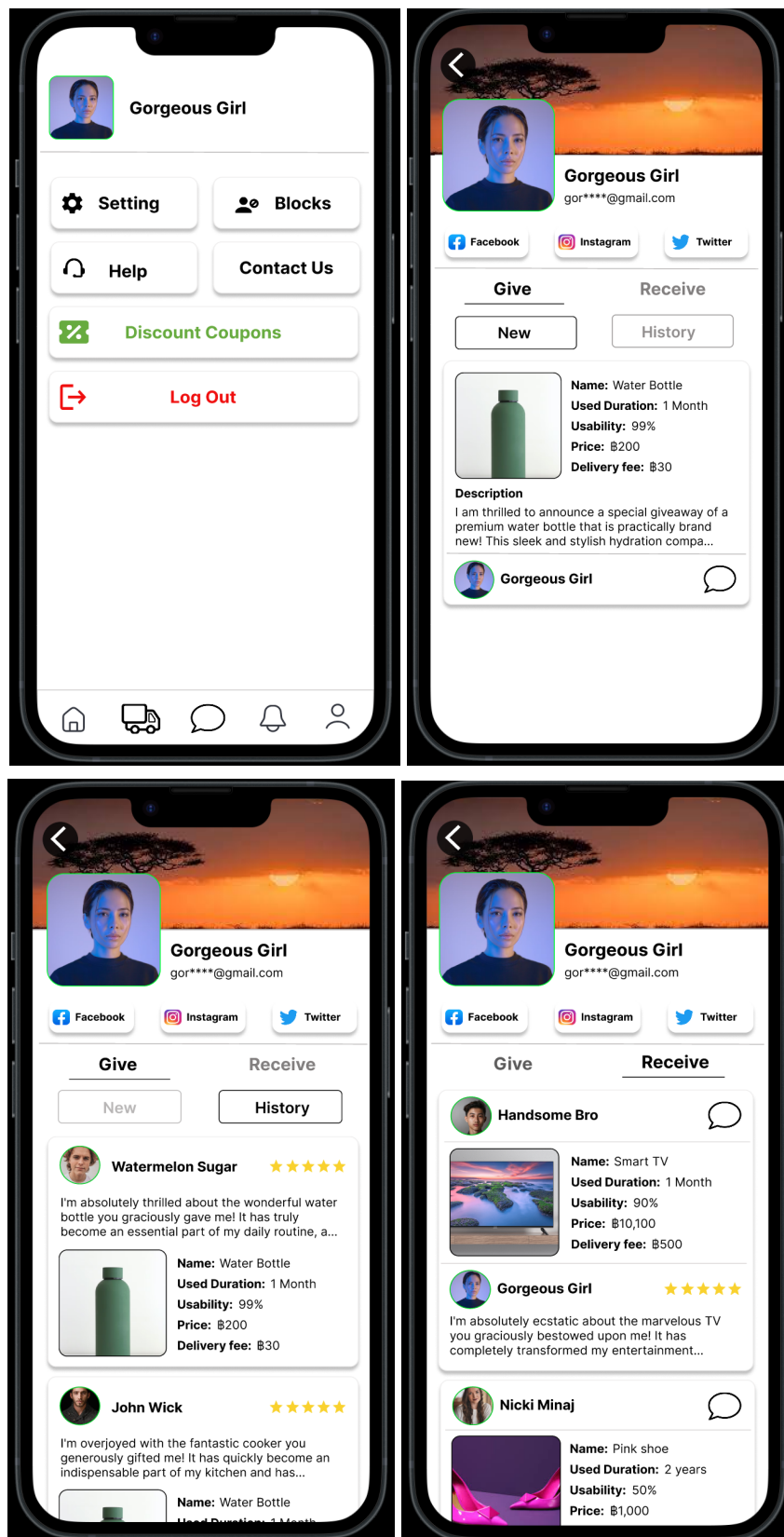
3. Help: Users can read and get information about how to use our application.

4. Contact Us: Users can see contact information to contact us for queries.

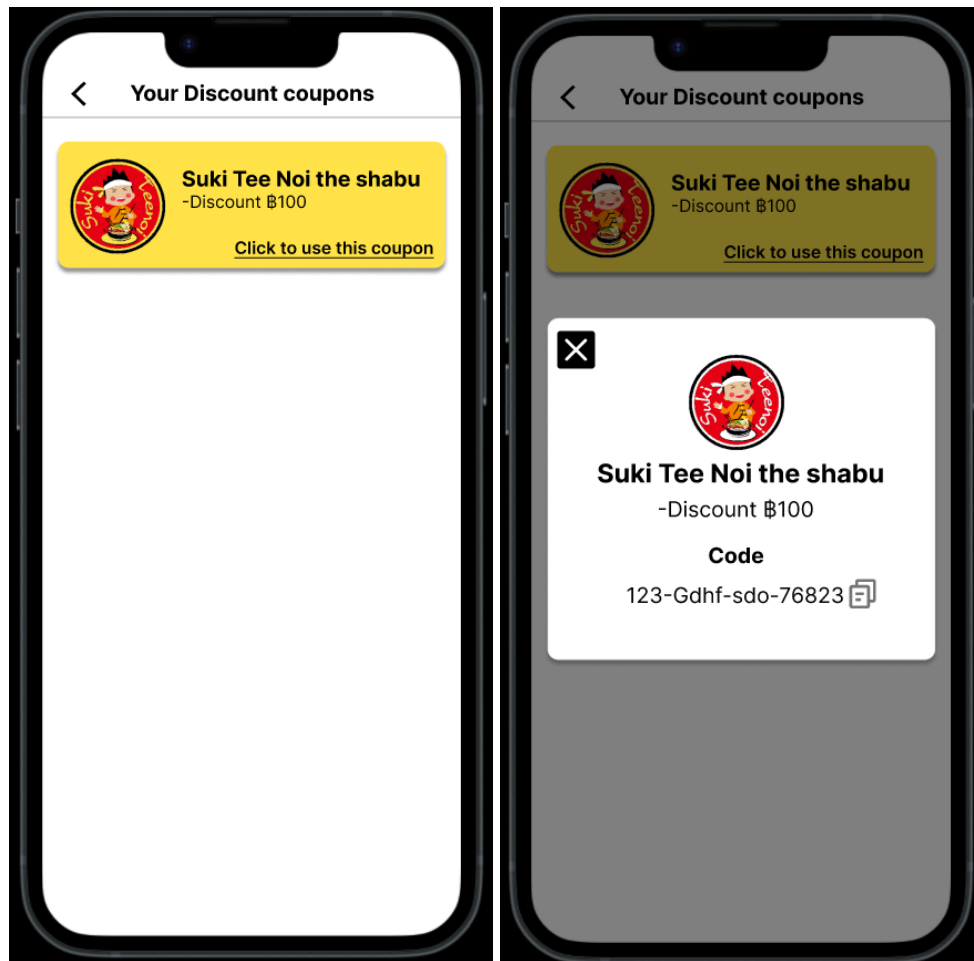
5. Discount coupon: See and use your discount coupon.

UI photos related to Profile Page

Profile Pages



Discount Page(User can clicks the coupon card for showing the discount code)



More UI:

<https://www.figma.com/file/Pl3tcrp4QLNoCCUZLHxa/Sahara?type=design&node-id=0-1&t=Gqo7ac9L5c27Ouu0-0>