REPUBLIQUE DU CAMEROUN
PAIX – TRAVAIL – PATRIE

MINISTERE DE L'ENSEIGNEMENT SUPERIEUR

FACULTE D'INGENIERIE ET DE TECHNOLOGIE

REPUBLIC OF CAMEROON
PEACE – WORK – FATHERLAND

MINISTRY OF HIGHER EDUCATION

FACULTY OF ENGINEERING AND TECHNOLOGY

********** UNIVERSITY OF BUEA **********

DEPARTMENT OF COMPUTER ENGINEERING

COURSE TITLE: INTERNET PROGRAMMING AND MOBILE PROGRAMING

COURSE CODE: CEF440

TASK

PRACTICAL DESIGN OF A FOOD WASTE MANAGEMENT SYSTEM

COURSE INSTRUCTOR: Dr KAMENI VALERY

Group 12 Members:

S\N	NAMES	MATRICULE
I.	AYAMBA BLESS BISSONG	FE20A018
II	NGONG MARINUS NGONG	FE20A077
III	NDIBONG ENOW EBAI-TABOT	FE20A072
IV	MBI ENOW LEONARD APELGRYN	FE20A063
V	AMINJA SIMPLICE AJONG	FE20A009

Table of content

3. Information Architecture and Navigation Design

- Site map
- Navigation design
- Content organization

4. Visual Design

- Branding and style guide
- UI design elements
- Color scheme
- Typography

5. Interaction Design

- User flows
- Wireframes
- Prototyping
- Usability testing

6. Accessibility

- Accessibility requirements
- Accessibility testing

7. Technical Specifications

- Front-end and back-end technologies
- Third-party integrations
- Security considerations

8. Conclusion

Introduction:

The purpose of this report is to provide an overview of the user interface design project for a food waste management software. The software is designed to help households and businesses manage their food waste more effectively, with the goal of reducing the amount of food waste that also cause pollution to our environment. The report will cover the user research and analysis conducted to inform the design of the software.

User Research and Analysis:

The user research and analysis for the food waste management software included the following:

User personas:

The team created three user personas to represent the target audience for the software. These included a busy working parent, a small business owner, and a sustainability-minded college student.

User needs and goals:

Through interviews and surveys with potential users, the team identified several key needs and goals related to food waste management. These included the desire to reduce food waste, save money on groceries, and track food consumption and waste over time.

User task analysis:

The team conducted a task analysis to identify the key tasks that users would need to complete in order to effectively manage their food waste using the software. These included tracking food purchases, setting reminders to use food before it spoils, and creating shopping lists based on meal planning.

-Tools use for design:

-FIGMA

3. Information Architecture and Navigation Design

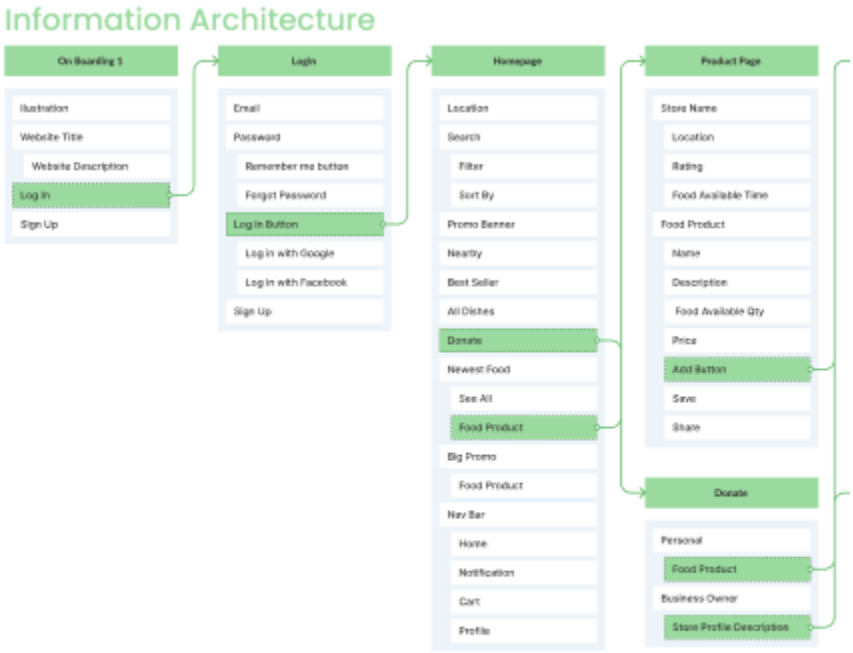
Sure, here's an explanation of site map, navigation design, and content organization in the context of a food waste management system software:

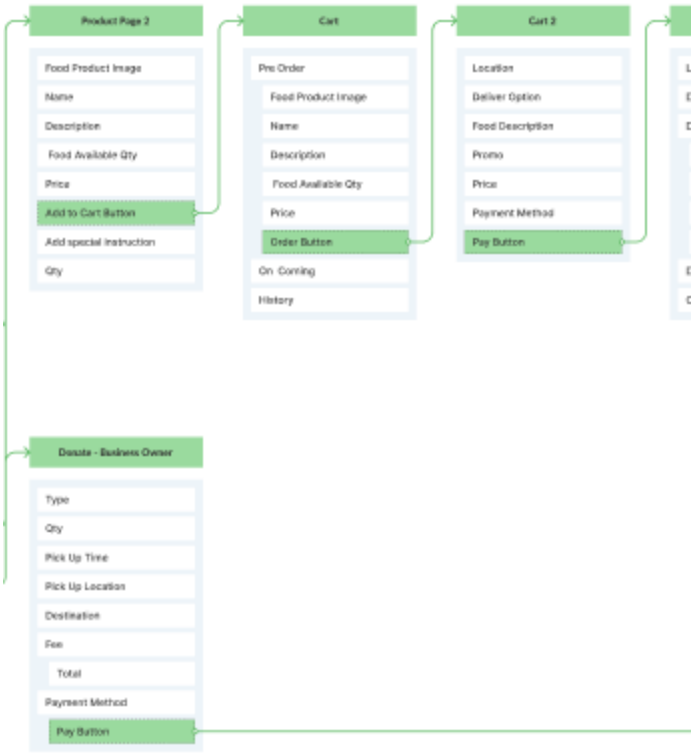
1. Site map:

A site map is a visual representation of the structure of a website or software application.

2. Navigation design:

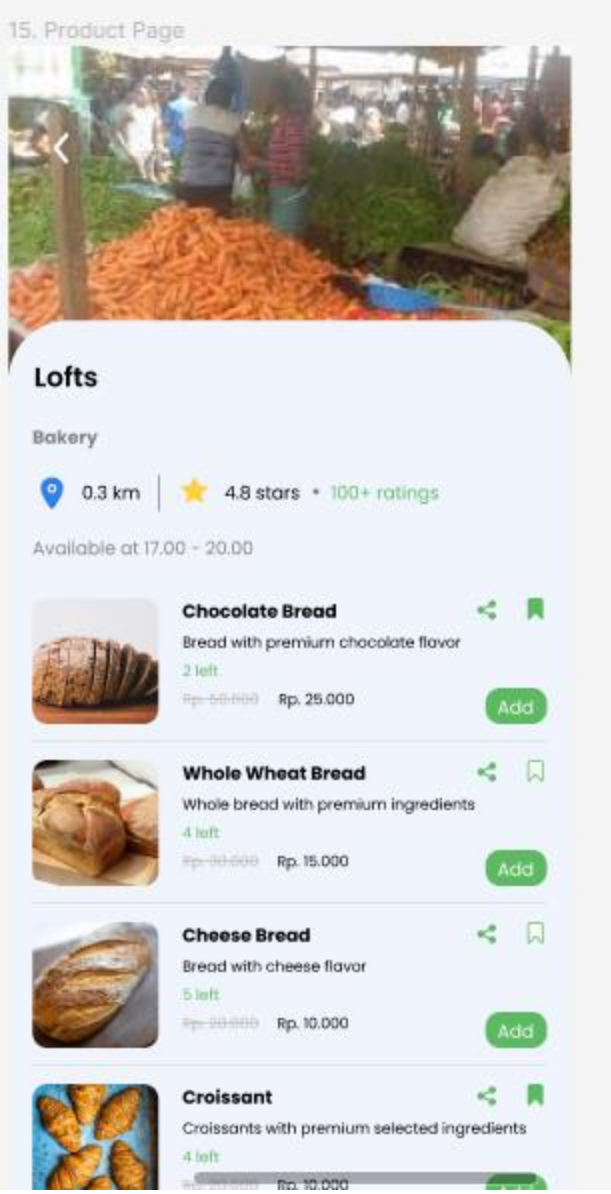
Navigation design refers to the way in which users move through the software and find the information they need.





3. Content organization:

In a food waste management system software, content organization refers to how information is structured and presented to users. This includes the way in which food items are listed, the categories and tags used to group them, and the organization of shopping lists and meal plans.



4. Visual Design

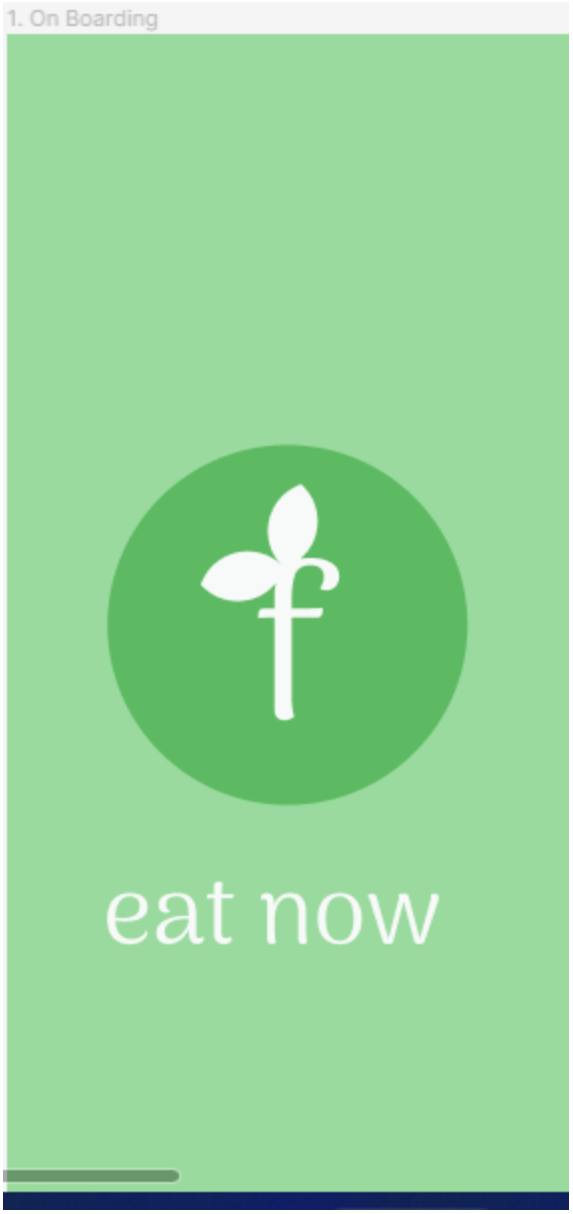
1. Branding and style guide:

Branding and style guide refer to the visual identity of the software, including the logo, color palette, typography, and overall look and feel. It is important for a food waste management system software to have a

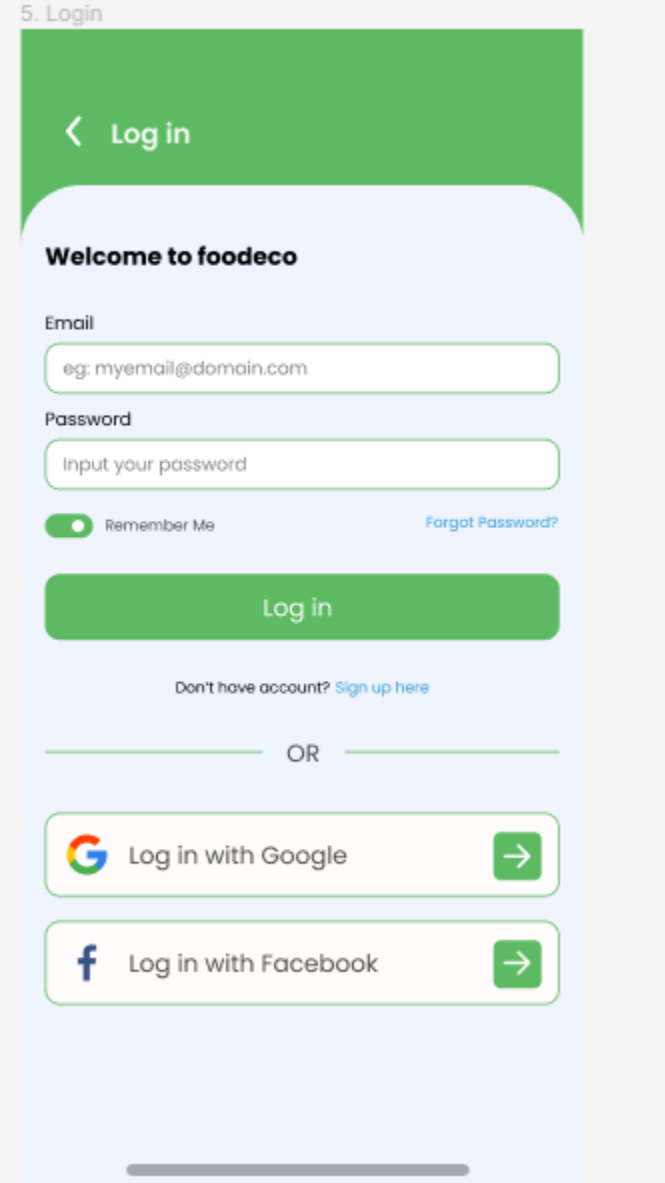
clear and consistent branding and style guide to ensure that users can easily identify and recognize the software.

2. UI design elements:

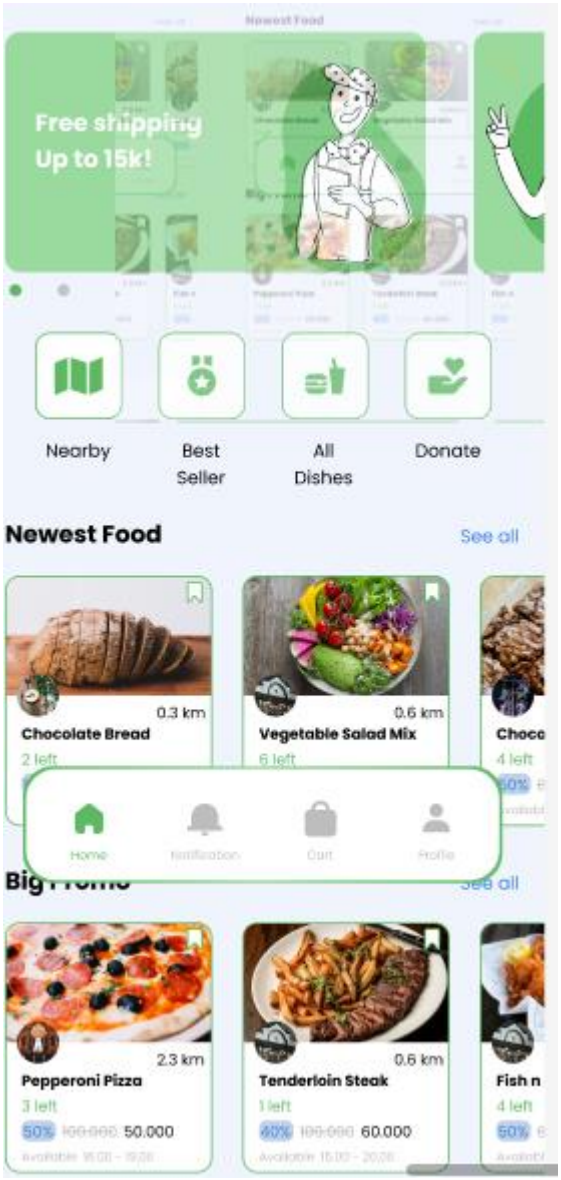
UI design elements refer to the individual components that make up the user interface, including buttons, icons, forms, and other interactive elements. In a food waste management system software, UI design elements should be clear, intuitive, and easy to use.


1. On Boarding
eat now

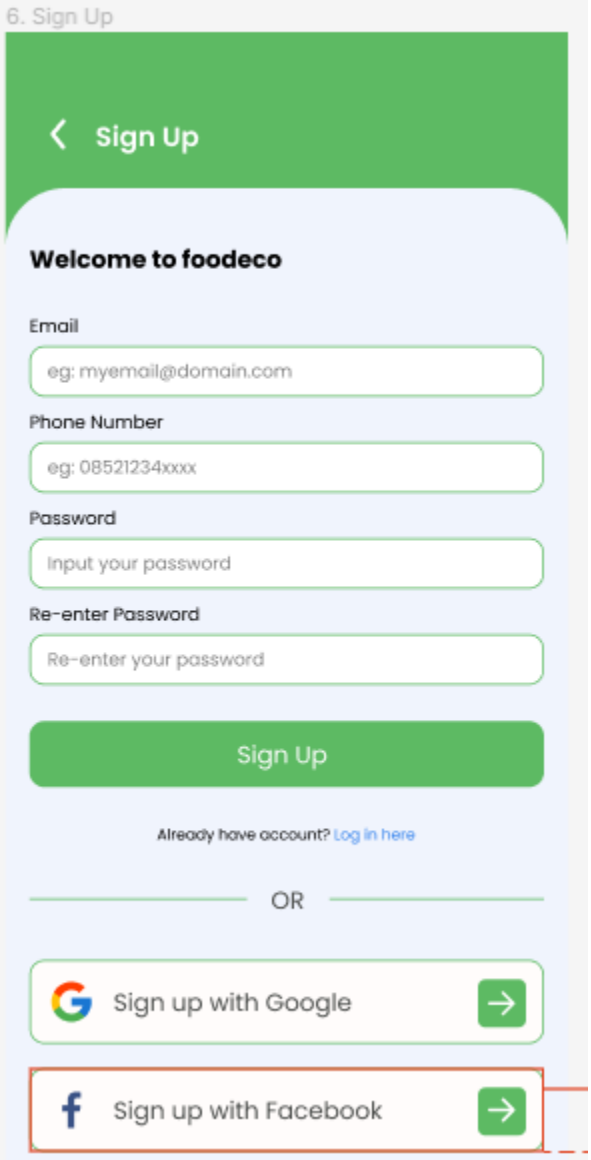
Application coming on



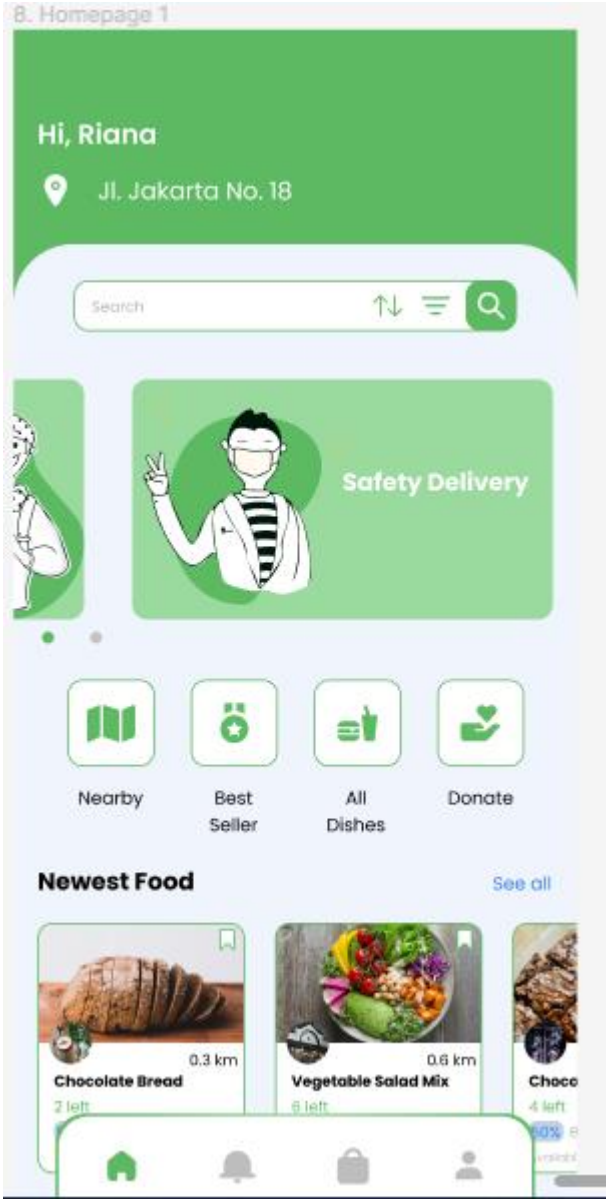
login or create account



Sign up page



Home page



3. Color scheme:

The color scheme refers to the colors used throughout the software. In a food waste management system software, the color scheme should be chosen carefully to reflect the values of the software and appeal to the target audience.

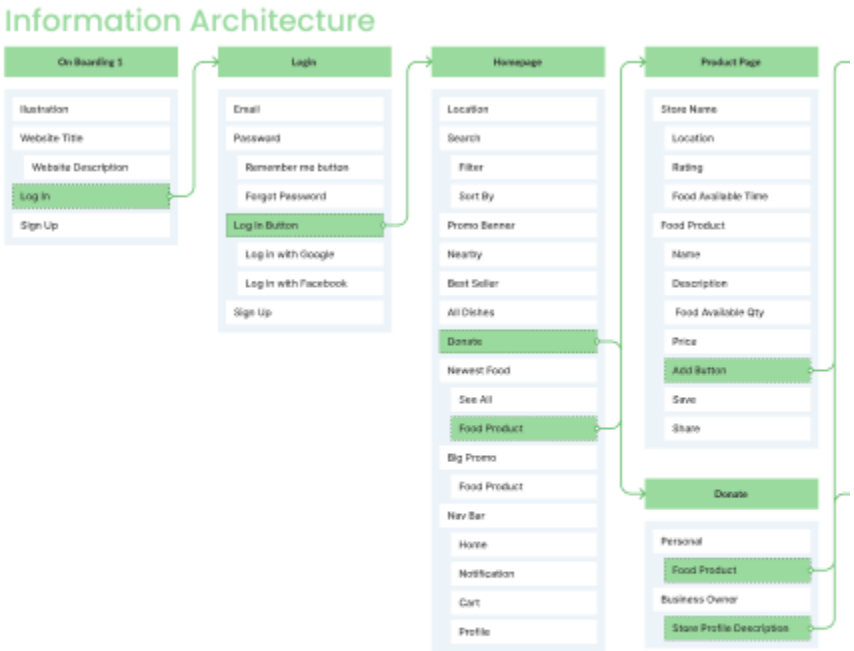
Colors: green, white, black.

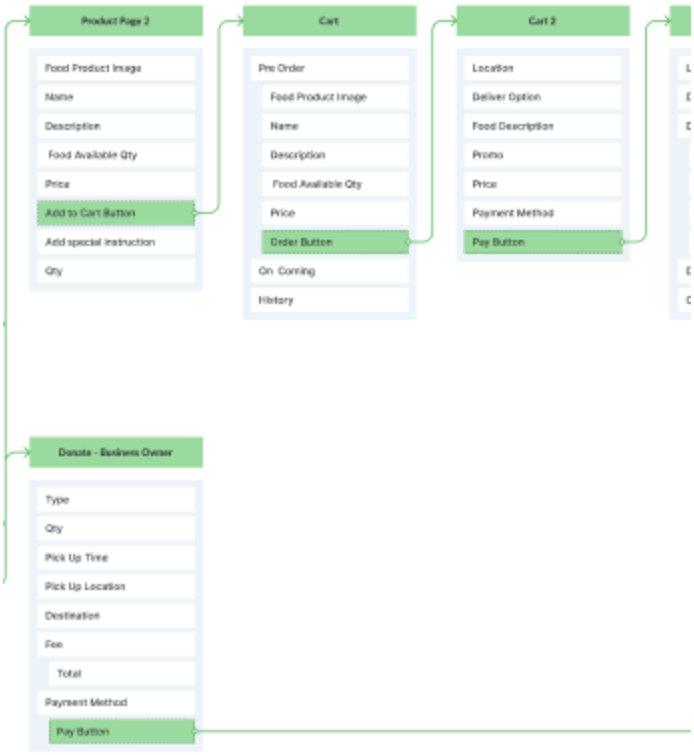
4. Typography:

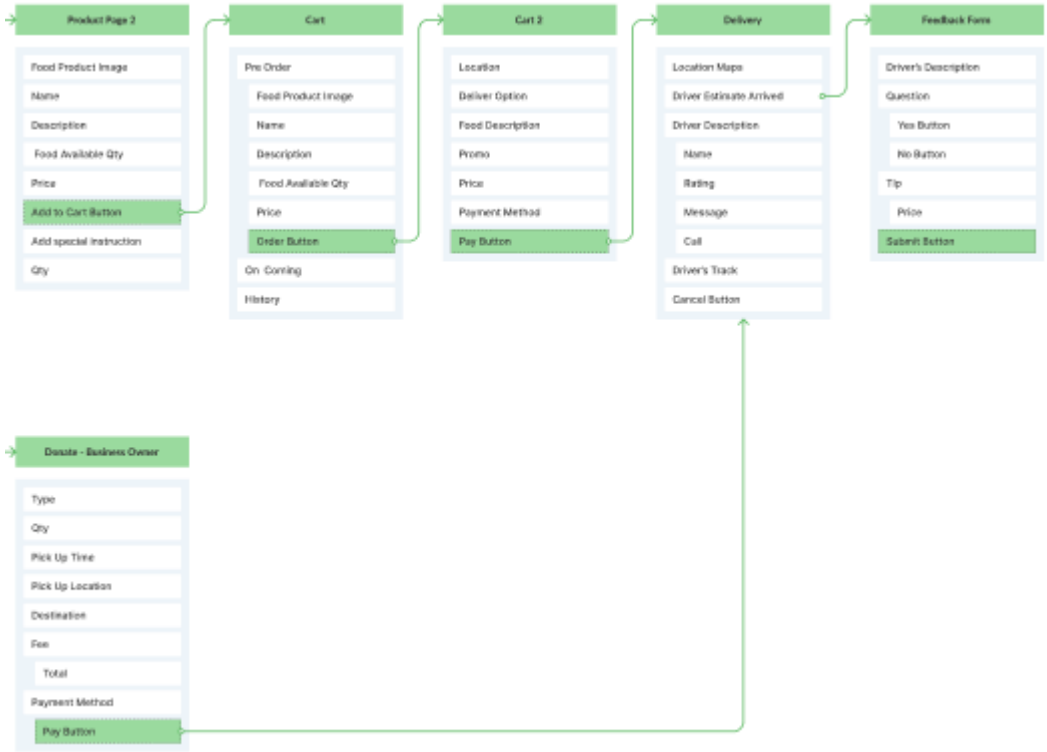
Typography refers to the fonts and typefaces used throughout the software. In a food waste management system software, typography should be chosen carefully to ensure readability and legibility. The fonts used should be easy to read on both desktop and mobile devices, and the size and spacing of the text should be optimized for readability

Fonts: sans serif

5. Interaction Design




Product Page 2
Food Product Image
Name
Description
Food Available Qty
Price
Add to Cart Button
Add special instruction
Qty
Cart
Pre Order
Food Product Image
Name
Description
Food Available Qty
Price
Order Button
On Coming
History
Cart 2
Location
Deliver Option
Food Description
Promo
Price
Payment Method
Pay Button
Donate - Business Owner
Type
Qty
Pick Up Time
Pick Up Location
Destination
Fee
Total
Payment Method
Pay Button

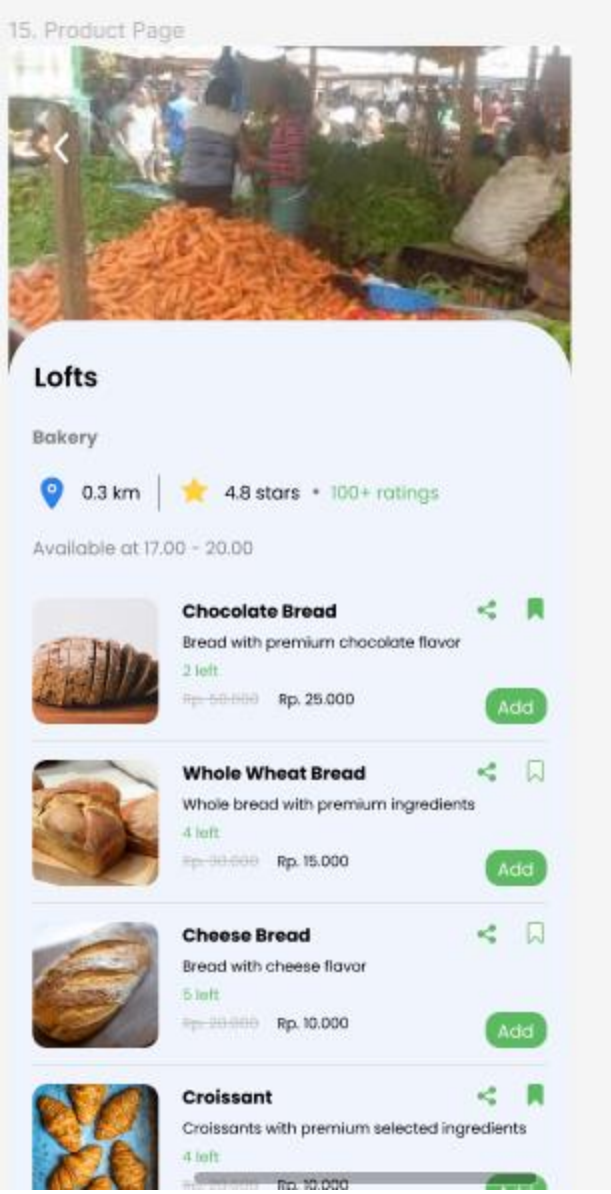

Product Page 2
Food Product Image
Name
Description
Food Available Qty
Price
Add to Cart Button
Add special instruction
Qty
Cart
Pre Order
Food Product Image
Name
Description
Food Available Qty
Price
Order Button
On Coming
History
Cart 2
Location
Deliver Option
Food Description
Promo
Price
Payment Method
Pay Button
Delivery
Location Maps
Driver Estimate Arrived
Driver Description
Name
Rating
Message
Call
Driver's Track
Cancel Button
FeedBack Form
Driver's Description
Question
Yes Button
No Button
Tip
Price
Submit Button
Donate - Business Owner
Type
Qty
Pick Up Time
Pick Up Location
Destination
Fee
Total
Payment Method
Pay Button

1. User flows:

User flows refer to the path that a user takes through the software to accomplish a specific goal or task. In a food waste management system software, user flows are important to ensure that users can easily navigate the software and complete the tasks they need to manage their food waste effectively. By mapping out the user flows, designers can identify potential roadblocks or areas where the user experience could be improved, and make adjustments to create a more intuitive and user-friendly interface.

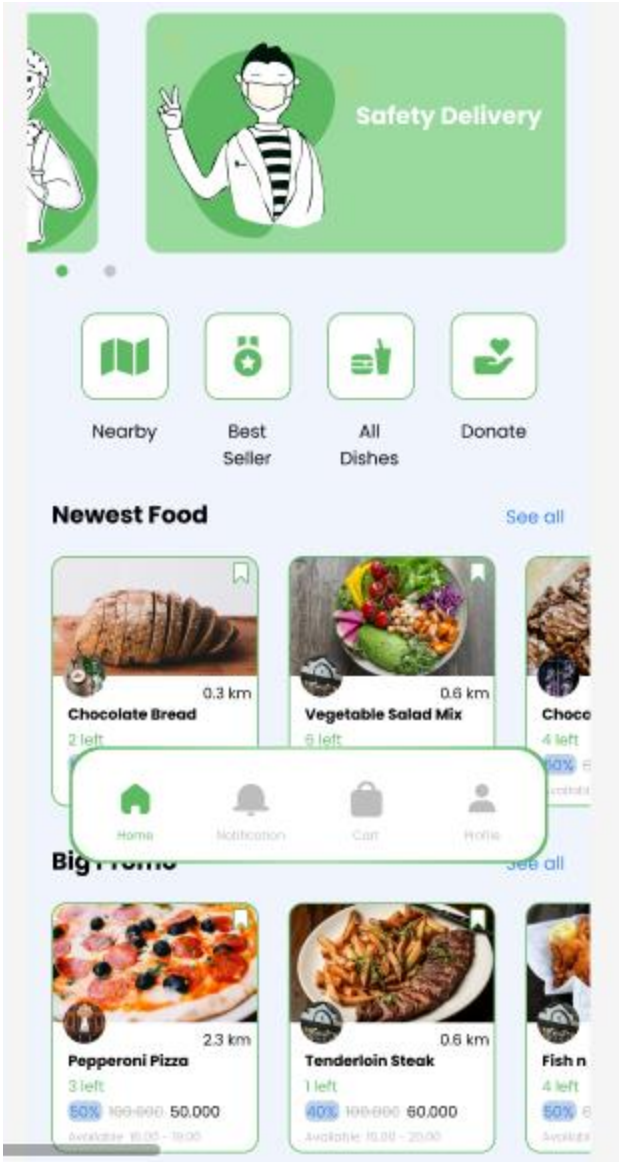
2. Wireframes:

Wireframes are mockups that show the basic layout and structure of the software interface. In a food waste management system software, wireframes are important to help designers and stakeholders visualize the overall structure of the software before investing significant time and resources into the design.

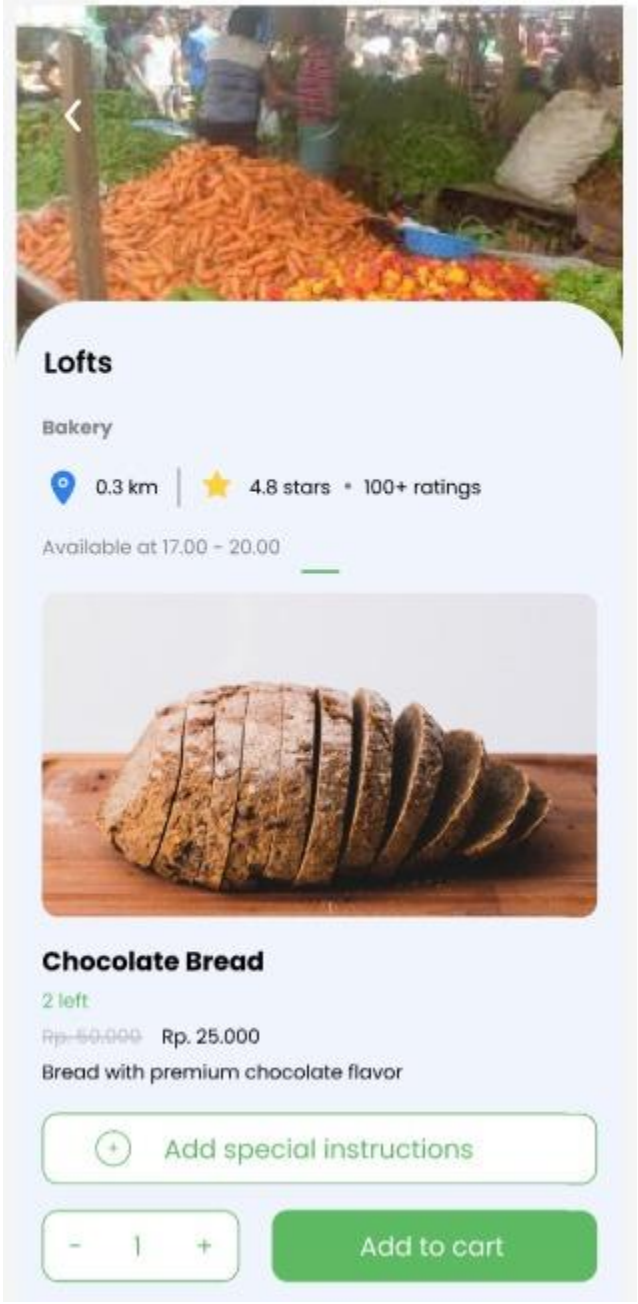


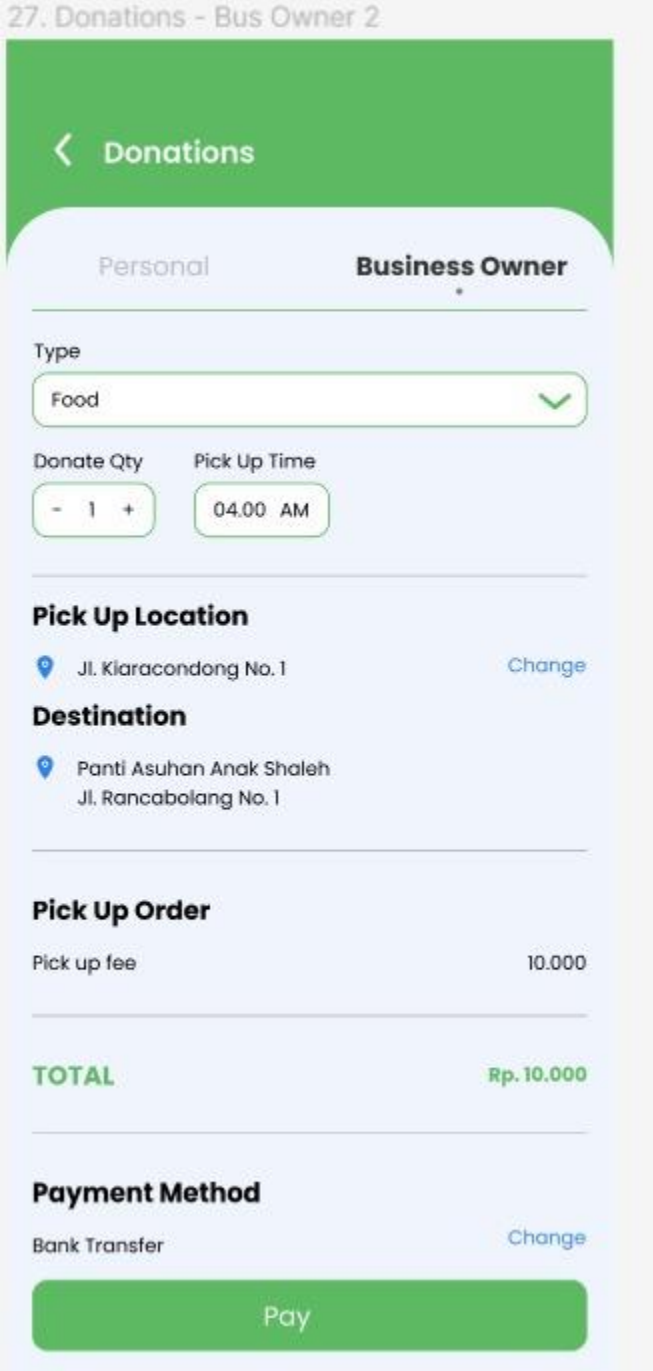
3. Prototyping:

Prototyping involves creating a working model of the software that can be tested and evaluated by users. In a food waste management system software, prototyping is important for identifying any usability issues or areas where the user experience could be improved.


Safety Delivery
Nearby
Best Seller
All Dishes
Donate
Newest Food
See all
0.3 km
Chocolate Bread
0.6 km
Vegetable Salad Mix
Home
Notification
Cart
Profile
See all
2.3 km
Pepperoni Pizza
3 left
50% 50.000
0.6 km
Tenderloin Steak
1 left
40% 60.000
Fish n
4 left
50%

17. Category Page





4. Usability testing:

Usability testing involves testing the software with real users to evaluate its effectiveness, efficiency, and user satisfaction. In a

food waste management system software, usability testing is important to ensure that the software is easy to use, effective in helping users manage their food waste, and meets their needs and expectations.

6. Accessibility

1. Accessibility requirements:

Accessibility requirements refer to the design standards and guidelines that are used to ensure that the software is accessible to users with disabilities.

-screen reader compatibility,

-keyboard navigation,

-color contrast,

-alternative text for images

2. Accessibility testing:

Accessibility testing involves testing the software to ensure that it meets the accessibility requirements and guidelines. In a food waste management system software, accessibility testing is important to ensure that the software is usable by as many users as possible. This may include;

- testing the software with screen readers,

-evaluating the color contrast

- and font size for readability

-testing keyboard navigation,

-ensuring that all images reflecting the product.

7. Technical Specifications

Sure, here's an explanation of front-end and back-end technologies, third-party integrations, and security considerations in the context of a food waste management system software:

1. Front-end and back-end technologies:

Front-end technologies refer to the technologies used to create the user interface of the software that users interact with directly. In a food waste management system software, front-end technologies may include;

HTML, CSS, and JavaScript.

Back-end technologies, on the other hand, refer to the technologies used to create the server-side functionality of the software, such as database management and server-side scripting. In a food

waste management system software, back-end technologies may include;

PHP, Python, or Ruby on Rails.

2. Third-party integrations:

Third-party integrations refer to the integration of external software or services into the food waste management system software. This may include integrations with grocery delivery services, recipe databases, or social media platforms.

3. Security considerations:

Security considerations refer to the measures taken to ensure that the food waste management system software is secure and protected from external threats.

This system's aims to reduce food waste and help feed undernourished communities by allowing market sellers, restaurant owners, charity organizations and orphanages to register and upload their food stocks at a cheaper price. Users would be able to register and purchase food from these parties at all times through the system. The system would be designed with a user-friendly interface

and would use secure and reliable hardware, software and communication interfaces. By bringing together these different parties and providing a platform for them to sell their surplus food, the system has the potential to make a positive impact on both the environment and the community.