

GRO-SENSE

Reducing Food Wastage through Smart Expiry Tracking

Role

UX/UI Designer

Overview

The Gro-sense mobile application aims to address the issue of food wastage, particularly among students receiving free meals in Canada. The app allows users to track the expiry dates of food items in their households and sends timely reminders, encouraging effective use or donation of food. This user-friendly application also provides information on local food banks for those willing to contribute.

The challenge

The primary challenge was the high amount of food wastage among students due to the difficulty of keeping track of expiry dates. Users needed a solution that seamlessly integrated into their daily routines, considering the diverse types of food items and user preferences for notifications. Technical constraints included ensuring data security and accessibility across devices. The key users were individuals, especially students, who receive free meals and need assistance in managing their pantry effectively.

Solution

- Add a food item:
 - Implemented a user-friendly form for entering food item details, including name, expiry date, and category.
 - Provided an option to toggle reminders on/off for each food item.
- Notification about upcoming expiry:
 - Integrated push notifications to alert users about approaching expiry dates based on their set reminders.
- Login/Sign-Up:
 - Developed a secure login system allowing users to create accounts and access their profiles from any device with the Gro-sense app installed.
- Local Food Bank Details:
 - Incorporated a feature providing users with a list of local food banks for easy donation if they choose not to utilize certain food items.

User Persona



Sarah Thompson

BIO

Sarah recently moved to Canada from home country to pursue her master's degree. Being a graduate student, she receives free meals provided by the Canadian government. However, she noticed a significant increase in the amount of food wastage compared to her experience in India. Concerned about sustainability and wanting to make a positive impact, Sarah is actively seeking ways to manage her food inventory more efficiently.

TECH PROFICIENCY

Sarah is tech-savvy and regularly uses her smartphone for various tasks, including academic research, communication, and entertainment.

CHALLENGES

- 1. Limited Time: Sarah's academic commitments leave her with limited time to manually track and manage food expiration dates.
- 2. New Environment: Adapting to a new country, Sarah is still getting used to the local practices, including handling food provided by the government.
- 3. Need for Sustainability: Sarah is conscious of her environmental impact and is actively looking for ways to contribute to a more sustainable lifestyle.

AGE : 24 years
GENDER : Female
EDUCATION : Master's
MAJOR : COMPUTER

FRUSTRATIONS

- Feeling guilty about wasting food and not being able to keep track of expiration dates effectively.
- Lack of a user-friendly tool specifically tailored to her needs.

NEEDS AND GOALS

- 1. Minimize Food Wastage: Sarah is passionate about reducing food wastage and wants a solution that helps her keep track of food expiration dates to avoid unnecessary waste.
- 2. Contribute to Local Community: She is open to donating excess food to local food banks and non-profit organizations to support the community.
- 3. Stay Organized: As a busy graduate student, Sarah wants a tool that seamlessly integrates into her routine, making it easy to manage and organize her pantry.

Wireframe

LOGIN SCREEN

Login

Username

Password

Login

OR

Login with Google

Do not have account? [Create new account](#)

GroSense

Email

Password

[Forgot Password?](#)

Login

Don't have an account? [SignUp](#)

SIGN UP SCREEN

Sign Up

Enter Full Name

E-mail

Password

Confirm Password

Submit

GroSense

First Name

Second Name

Email

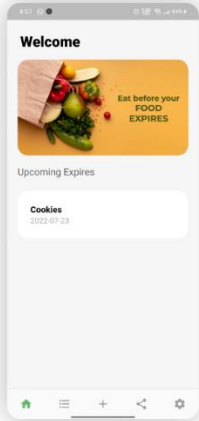
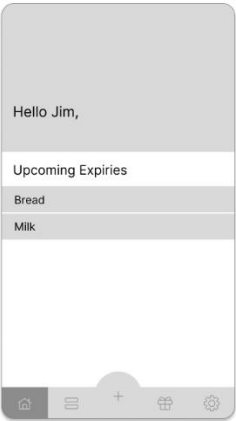
Password

Confirm Password

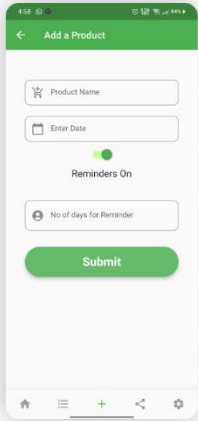
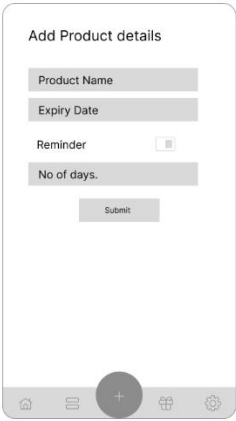
SignUp

Already have an account? [Login](#)

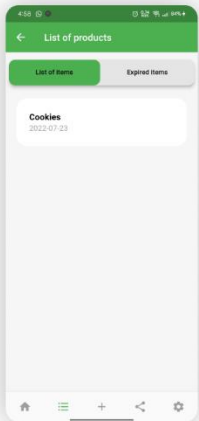
DASHBOARD



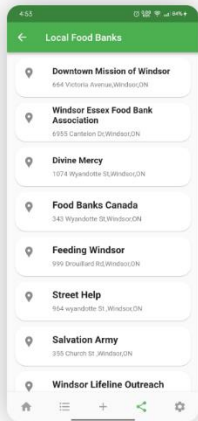
ADD PRODUCT



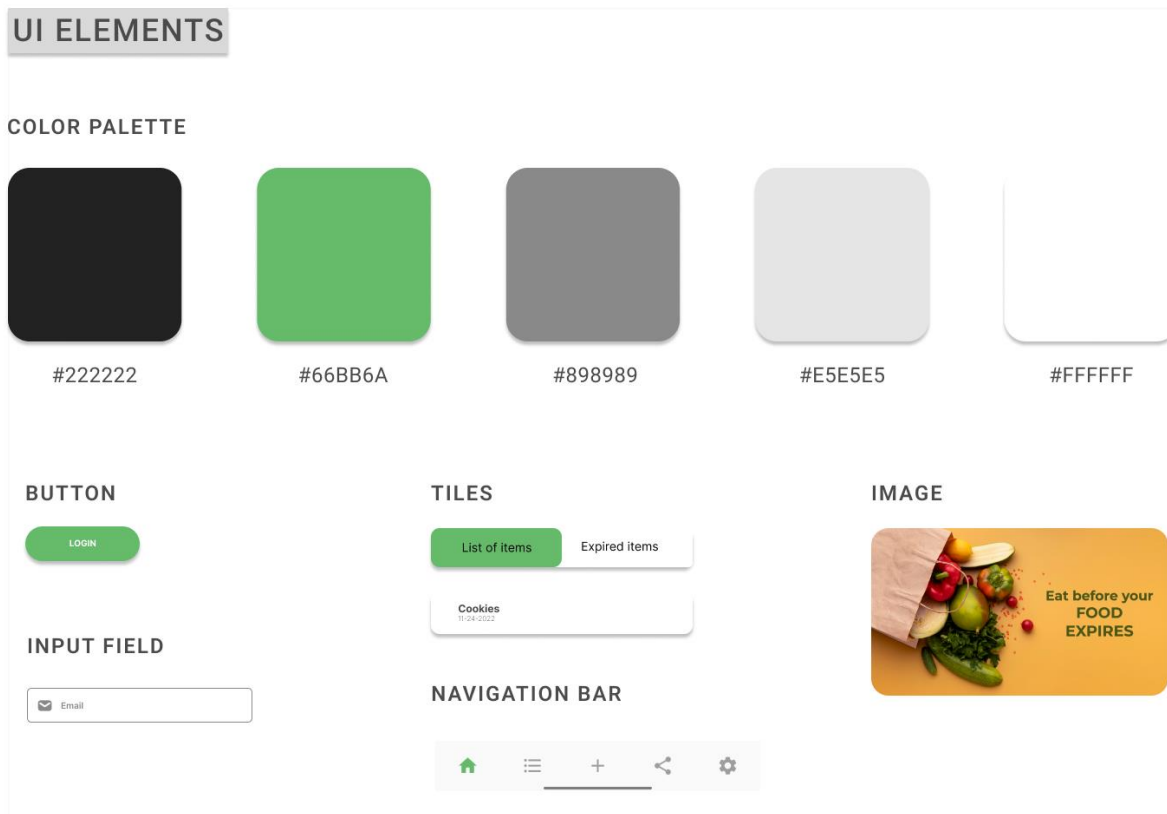
LIST OF ALL PRODUCTS OR EXPIRING



LOCAL FOOD BANKS



Style Guide



Results

- **Reduced Food Wastage:** Users reported a significant decrease in food wastage as the app effectively reminded them of upcoming expirations.
- **Positive User Feedback:** The application received positive reviews for its user-friendly design and contribution to a meaningful cause.
- **Increased Donations:** Users appreciated the option to donate to local food banks, contributing to community support.

Reflections and Next Steps

The project successfully addressed the initial challenge of reducing food wastage among students. Continuous improvements may involve refining the notification system based on user feedback, expanding the app's features, and collaborating with local organizations for a broader impact.

Lessons Learned

Understanding the cultural and social context of users, especially in a new country, is crucial for designing solutions that resonate with their needs and challenges. Flexibility and user customization are key when dealing with diverse user preferences and behaviors.