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Discover discounted groceries near you

Abstract

Purpose and Key Objectives:

LastCall aims to reduce food waste in grocery stores by making discounted, near-expiration items easier for shoppers to find. The mobile app lets stores log discounted inventory in real time, giving users access to nearby deals that are often not advertised online or clearly marked in-store. The goal is to support budget-conscious and eco-friendly shoppers while helping stores reduce waste and losses. Unlike existing apps limited to specific retailers, our solution works across major grocery chains. By connecting surplus food with willing buyers, we promote sustainability, save money, and improve access to affordable groceries.

Methods

- Started off using Figma for wireframes
- Implemented in Android Studio
- -Used past slides and assignments as references
- Work Flow:
- Use wireframes as basis for design implementation
- -Start with opening page with buttons to log in/register
- -Create log in/register pages
- Then the home page and product details page.

Discussion

Challenges & Limitations:

- Original group of 3 down to 1
- Left implementation, slides, and poster design all up to me
- With 1 person force, I was not able to reach all the goals my group had originally intended

Due to these limitations I was not able to fully implement all the features of LastCall than I originally expected. I was, however, able to complete enough screens in order to fulfill the project requirements and even add some additional bonus screens.

Introduction

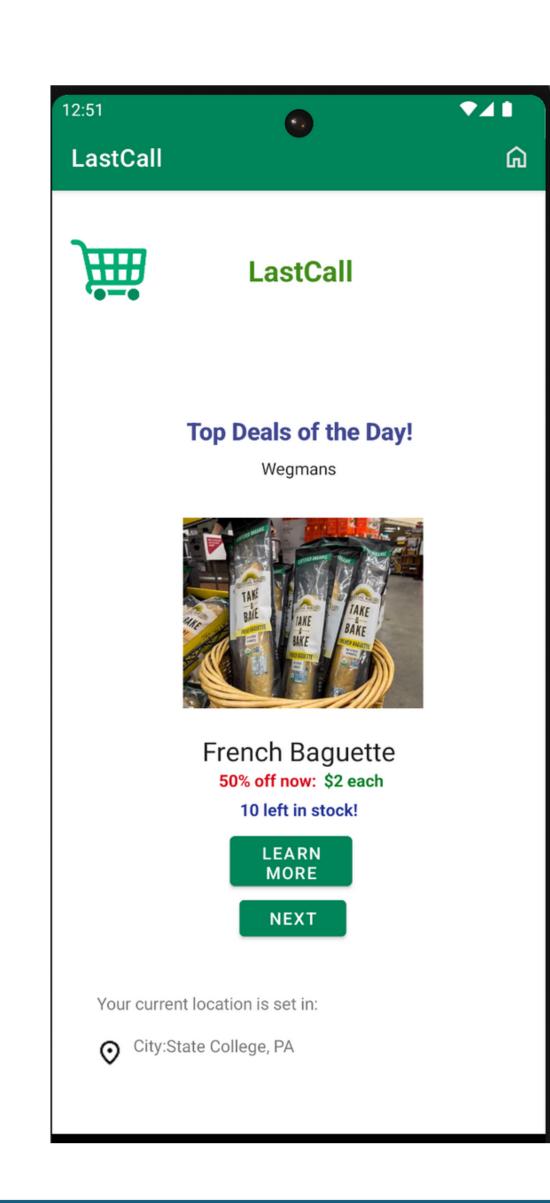
Problem Statement:

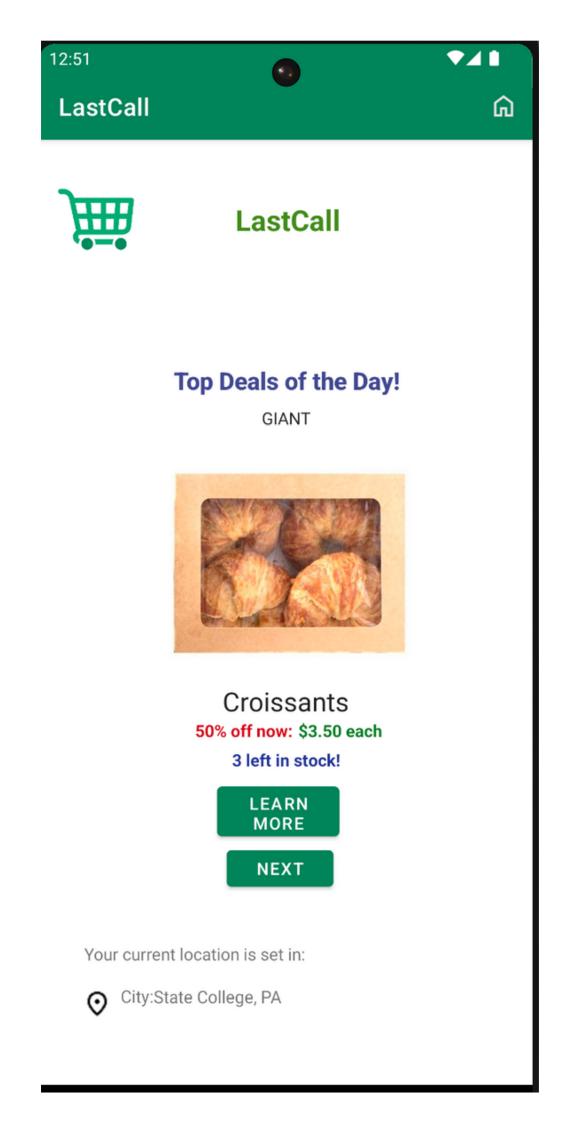
Excessive food waste is a significant challenge faced by grocery stores nationwide. Large amounts of perishable goods are thrown away once they pass their sell-by dates. To reduce waste, many stores offer discounts on these items, but they are poorly advertised to encourage shoppers to buy items at full price.

Significance:

This project addresses the gap between discounted food availability and customer awareness. Reducing this gap can significantly cut food waste, lower store losses, help shoppers save money, and promote more sustainable food consumption.

Evaluation & Results





Future Work

Next steps include:

- Making Grocery Stores Searchable
- Showing full product inventories for each store
- Making inventory sortable by category (e.g. A-Z, Z-A, Discounted Inventory Only, Full Inventory)
- Implementing the checkout process
- Add Profile Settings

Conclusion

I am overall happy with the outcome of this final project based on the circumstances of being cut down to a 1-person team. Although I wish that I was able to get this prototype fully implemented or at least closer to what my group had envisioned at the start, I feel that I made reasonable progress towards the end goal:

Related Work

Similar apps such as Flashfood exist. Our goal is to build off of their limitations:

- Apps like Flashfood are limited to select grocery partners, restricts availability by region
- Flashfood focuses mostly on pre-packaged items, not the full range of perishables nearing expiration.

Key Accomplishments

- 5 screens
- Registration page includes spinner
- Both log in and registration pages handle user text input and persist data
- Menu icons on title bar
- Home page displays changeable deals of the day

References

https://foodrevolution.org/blog/grocery-store-food-waste-secrets/