Lab 1 - Introduction

Spoiler Alert

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CS 410

14 November 2025

1. Introduction

Food recalls occur more often than most people realize. Foodborne illnesses like Listeria and Salmonella, allergen contamination, and foreign materials can affect millions of pounds of food. While the FDA and CDC do put out reports, a lot of the general public won't see these reports. Only 13% of Americans take the time to access government websites for food recall information, and even fewer at 3% receive emails or texts about food recalls. Recall incidents continue to happen posing risks to consumers.

1.1 Problem Statement

Food recalls are a continuing problem and without a reliable reporting system consumers will continue to be at risk. Despite official government sources offering email notifications, it's outdated for the modern era of smartphone use. Other apps try to offer a means of reporting recalls, but they just aren't customizable to individual concerns like specific allergies.

1.2 Problem Characteristics

There is currently a gap in awareness, engagement, customization, and urgency. Reports from government sites just aren't widespread enough, meaning consumers just aren't becoming aware of unsafe food conditions. With recall information being hard to come by, consumers don't view recalls as urgent. While other apps allow users to be notified in ways other than just email, there's no way to filter recalls by what directly impacts individual users. Notifications that aren't relevant to a user, like a product they've never owned or an allergen that doesn't affect them, leads to the user disregarding recalls altogether. Without a direct, reliable source of recall information, consumers are at risk of missing important recalls.

1.3 Solution Characteristics

We address these gaps by having a centralized location for all recall information with personalization and immediate, reliable alerts to keep consumers motivated to stay informed. With a single platform with all recall information in one place, consumers will have easy and convenient access to important product recalls. Notifications will be personalized to the user so they get the information that directly affects them fast. Immediately sending alerts to the user makes sure they can react to recalls right away. By identifying recalls in a swift and serious manner, users become motivated to stay vigilant for recalls that could affect them.

1.4   Solution Statement

Spoiler Alert is an app that consumers can rely on to make sure they're getting the best experience with recall information. Spoiler Alert will allow the user to keep a list of items they've purchased and have a profile that identifies important allergy information so they can get notified about recalls that directly affect them. The user will be able to search for recalls as well to be sure they're making smart decisions while making purchases or checking food items in their pantry. Spoiler Alert will be able to notify users of recalls the moment a new recall is reported. Spoiler Alert is the solution to the issues we currently face with recall reporting.

2. References

Recall Modernization Initiatives with the Consumer in Mind. 2025 Food Safety Summit, Dr.

    William Hallman.

    https://www.food-safety.com/ext/resources/FSS_Event/Presentations/2025/S7---

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