

Product Backlog

1. **Problem Statement:**

Keeping track of food in one's kitchen is always important: by knowing what is currently in stock one can keep food from spoiling as well as reduce occurrences of over purchasing food when shopping. While there are currently mobile shopping list and food spoilage applications, there are no mobile applications for monitoring both together, nor do any of the current applications allow for automated look up via bar code.

2. **Background Information:**

The target audience for this application consists of individuals using mobile phones (Android), households, and even small businesses that conduct their own shopping (primarily for groceries and basic goods) and need a good way to create and manage shopping lists and inventories. This application would allow for quick creation and tracking of items on a given shopping list or inventory by allowing the user to scan the UPC code to enter the product rather than manually typing it into a cell phone.

Currently on the Google play store there are applications that allow users to enter the inventory in their fridge to track expiration, as well as applications designed to help create grocery lists. However at this time neither application is driven by UPC/barcode lookup and none of the applications provide features for both grocery lists and home kitchen inventory at the same time. Along with this, none of the applications are built around household support, such as allowing multiple users to work off the same list and collaborate in shopping and creating lists simultaneously.

3. **Requirements**

Functional

Basic Functionality

1. As a user I would like to be able to create a personal login/account.

2. As a user I would like to be able to access my account and household information from any device (mobile or computer).
3. As a mobile user I would like to be able to lookup item information by scanning UPC codes with my phone camera.
4. As a user I would like to be able to create my own item description for an item with a UPC code.
5. As a user I would like to be able to create an item entry for a product that does not have an associated UPC code.

Households / Inventory Sharing

6. As a user I would like to be able to create a household (a shared home inventory).
7. As a user I would like to be able to initialize a household inventory with currently owned products.
8. As a user I would like to be able to keep track of what food I currently have in stock for a particular household.
9. As a user I would like to delete items from a household's inventory.
10. As the head of a household, I would like to be able to invite users to my household.
11. As a user I would like to be able to accept or decline invitations to other households.
12. As the head of a household, I would like to change read and write permissions to the household inventory and shopping lists for users in my household.
13. As a user I would like to see which users made changes to items in the household inventory.
14. As a user I would like to see which users made changes to items on shopping lists.
15. As a user I would like to track spending patterns for other users in a household.
(Time permitting)
16. As a user I would like to track household food waste. (Time permitting)
17. As a user I would like to sort household inventory items based on the date they were updated.
18. As a user I would like to be notified of items in a household inventory nearing expiration.

Shopping Lists

19. As a user I would like to be able to create and delete household shopping lists.
20. As a user I would like to see shopping responsibilities for all my households on one list.
21. As a user I would like to be able to add items to a shopping list from items in a household inventory.
22. As a user I would like to be able to add items to a shopping list by scanning them at a grocery store.
23. As a user I would like to be able to quickly add frequently purchased items to a shopping list. (Time permitting)
24. As a user, I would like to be notified when an item is depleted from a household so that I can quickly add it to a shopping list.
25. As a user I would like to be able to change quantities of items on shopping lists.
26. As a user I would like to be able to check off items from a shopping list, with or without scanning the item.
27. As a user I would like to be able to add price information for each item on a shopping list. (Time permitting)
28. As a user I would like to see the total cost of my shopping trip. (Time permitting)
29. As a user I would like to be able to use a checkout button to update household inventory quantities based off of my shopping lists.

Recipes

30. As a user I would like to be able to create recipes.
31. As a user I would like to be able to add quantities of items to recipes.
32. As a user I would like to generate shopping list items based on which foods I need to buy to complete a recipe.

Administration

33. As an administrator I would like to be able to create, edit, and delete default product suggestions based on UPC.
34. As an administrator I would like to be able to manage user information.

Non-Functional

1. As a user I would expect my username and password to remain secure.
2. As a user I would expect to be able to access my information in a timely fashion.
3. As the Admin I would expect that the system would remain functional regardless of number of users (Remain Scalable).
4. As a user I would like to be able to navigate the website and application with ease.