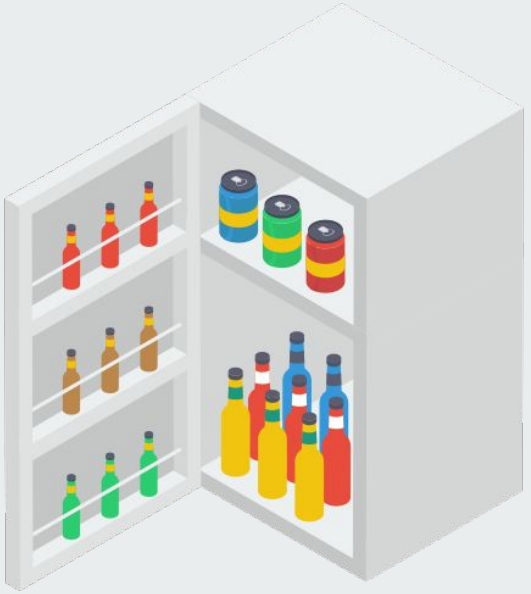
Fridge Stalker



The Stockers:
Tanner, Umar, Yun, and Zeb

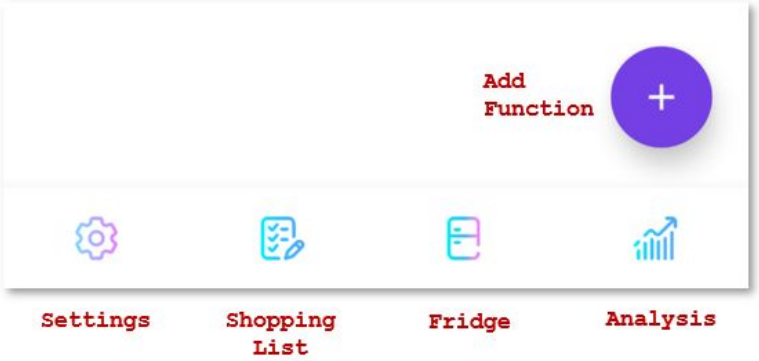
Why?

- Who doesn’t need to keep track of their food inventory
- Plan ahead - know when you need more groceries
- Be more organized, never lose track of food

Yes. We’re not the first to come up with this idea, but ours is different.

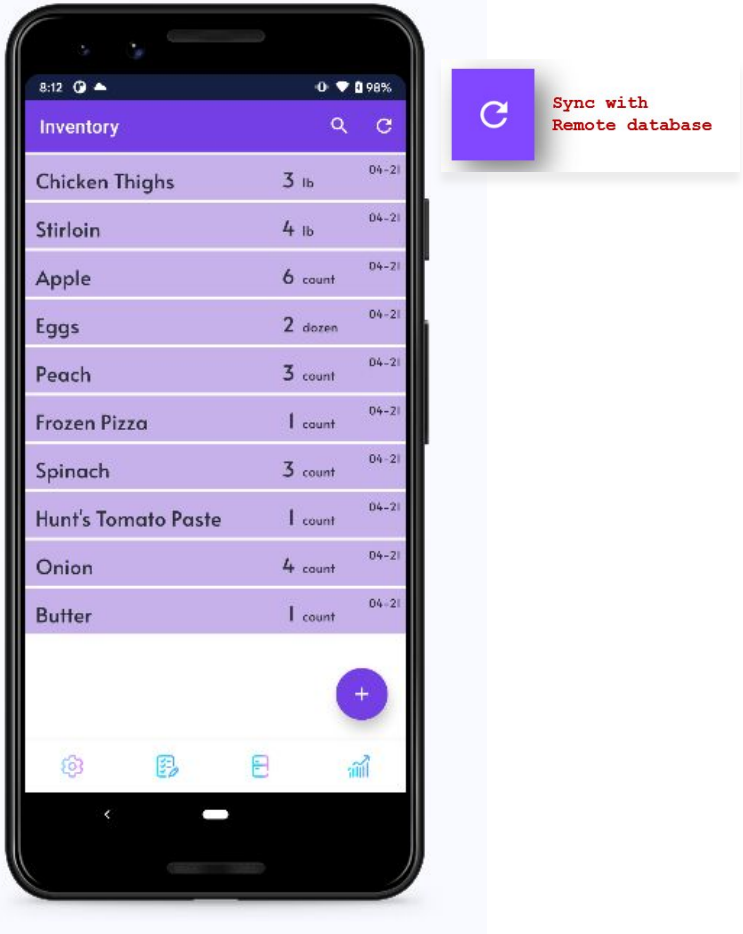
MultiUser-Friendly

- Easy Navigation
- Add other users to your fridge
- Local & Remote Databases
    - Real Life Scenarios



The Fridge

- Track age of items
- Add, update & delete
- Sync with remote database
- Search for items



Item Addition

Where our app stands out from the rest.

- Receipt
- Barcode
- Manual

Receipt Scanning

Receipt

Scan a receipt

Asprise/receipt-ocr

Send image to API and parse return values

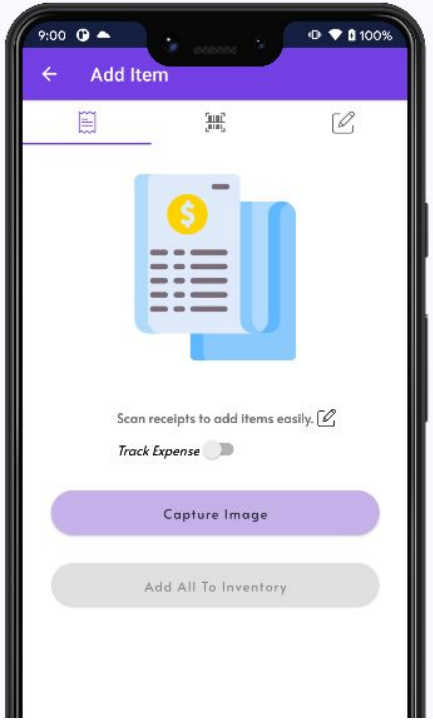
Edit Entries

Change detected items before storing (optional)

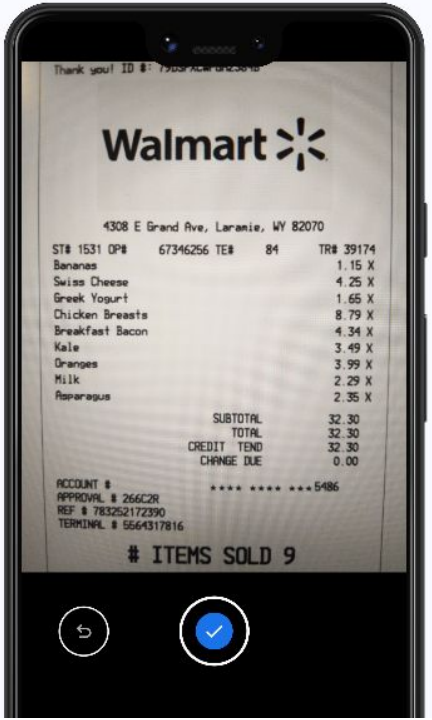
Database

Items are added into database.

Scan receipts to add items easily

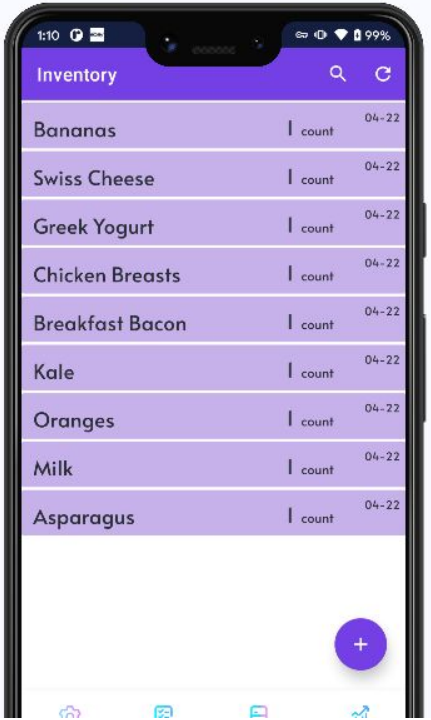


Text recognition camera

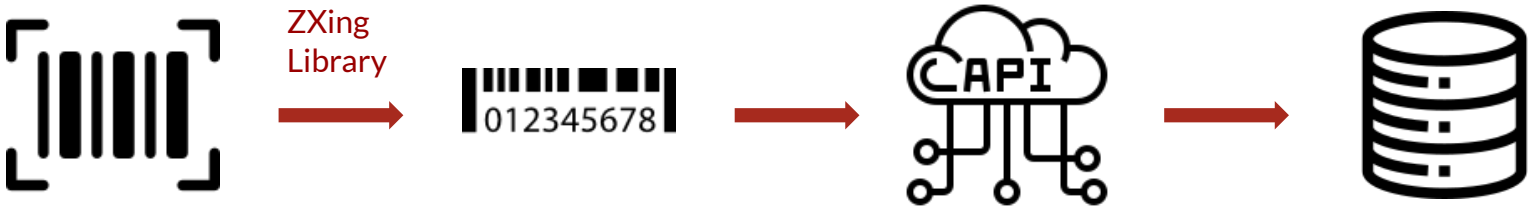


Accurate results

Add all to inventory at once



Barcode Scanning



Barcode

Scan an item's barcode

UPC Code

Retrieve Item UPC code

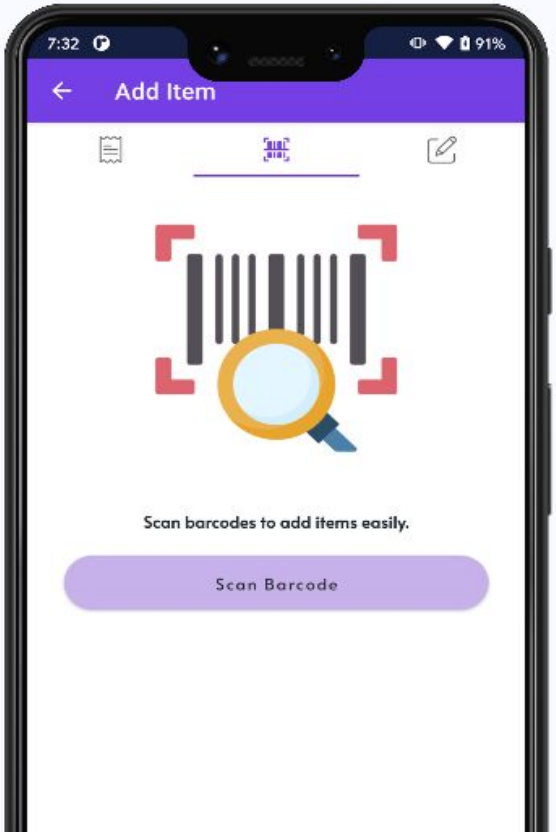
API

Calls API with UPC code and retrieve item information

Database

Item's detail is returned and put in the database

Scan barcode to add an item



Barcode recognition camera

Item is added to inventory

Manual Addition

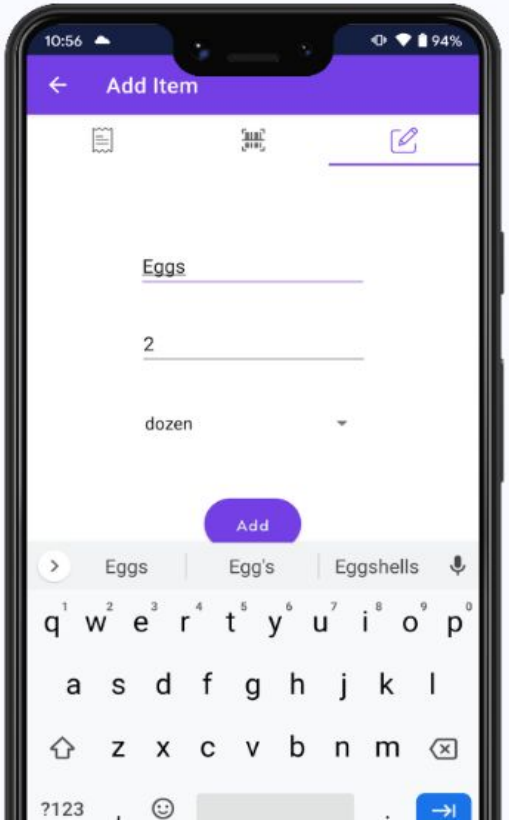
Manual Entry

Enter Item Details

Database

Item is added into database.

Add items manually

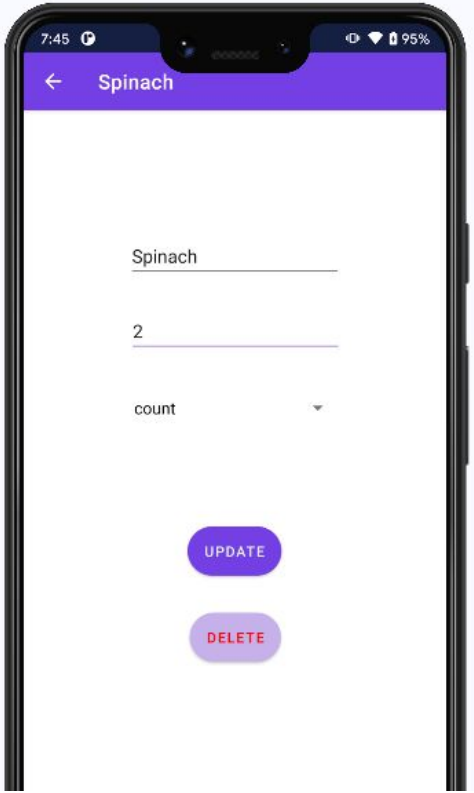


Item Modification

Delete wasted item

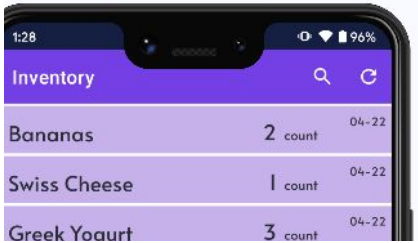
Delete consumed item

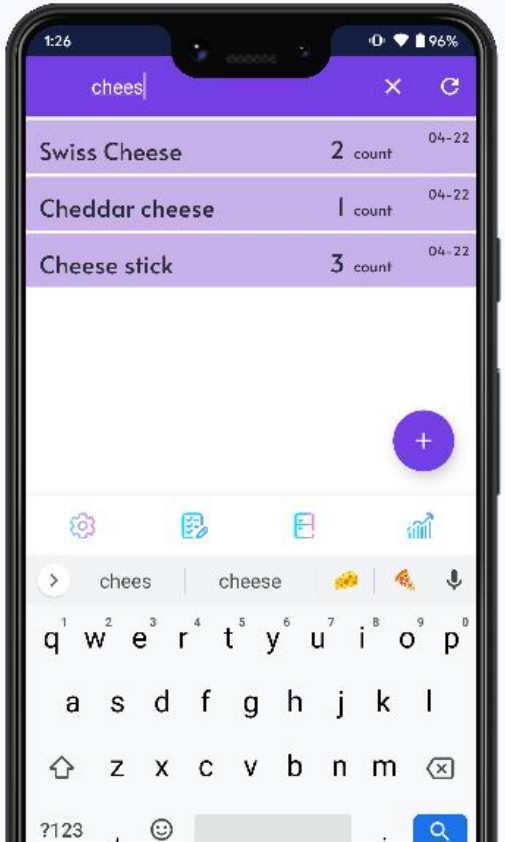
Delete/Update item



Search Items

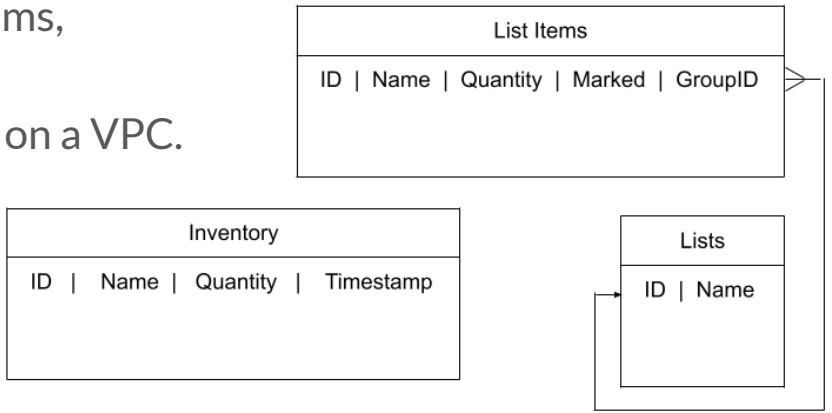
- Search items by name
- Filter results in real-time as user types





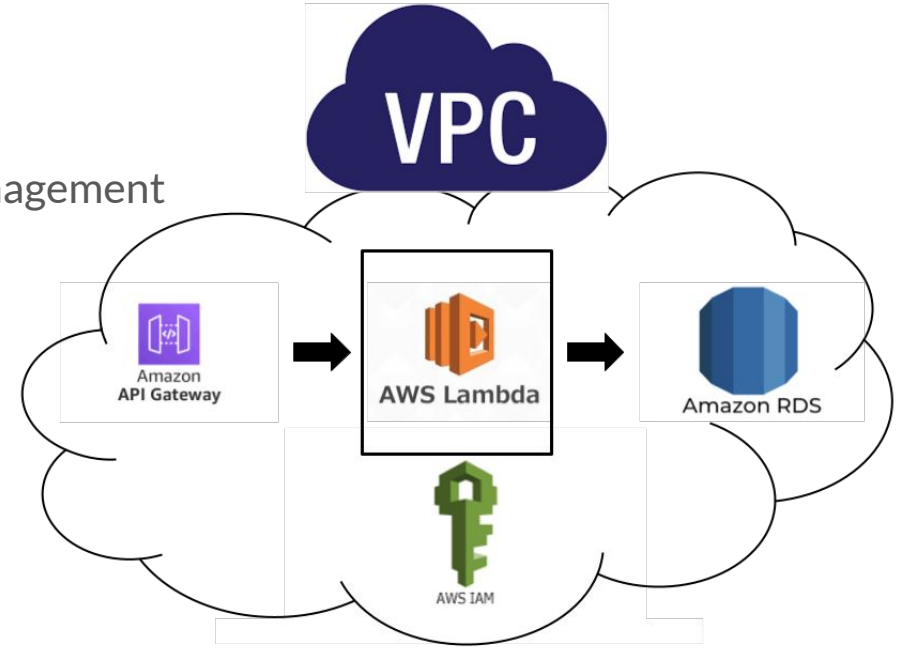
Database

- Started with local database and then added a remote one for development and offline purposes.
- Local database runs SQLite and remote runs Postgres.
- Stores inventory items, shopping list items, and shopping lists.
- Remote database runs on Amazon RDS on a VPC.



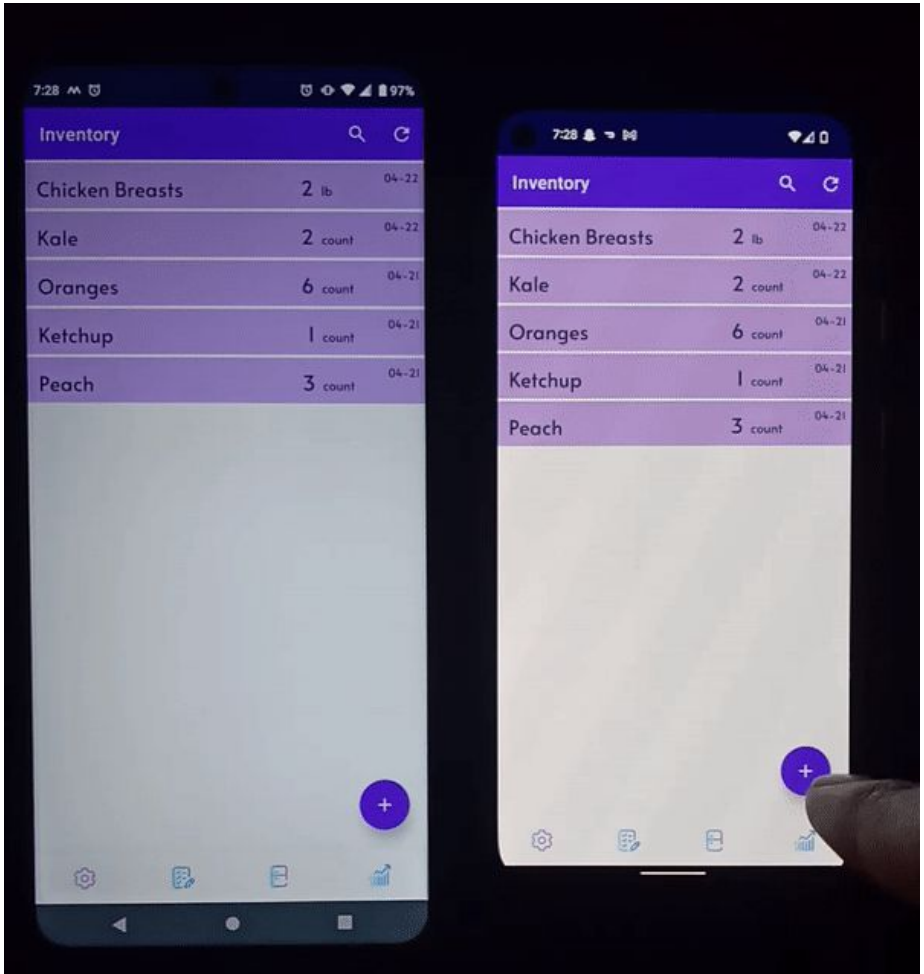
Database API

- Uses AWS Lambda for computing
- Uses AWS API-Gateway for the call management
- Uses IAM Roles for permissions
- Lambda sends SQL queries over VPC
- Lambda is triggered by API-Gateway



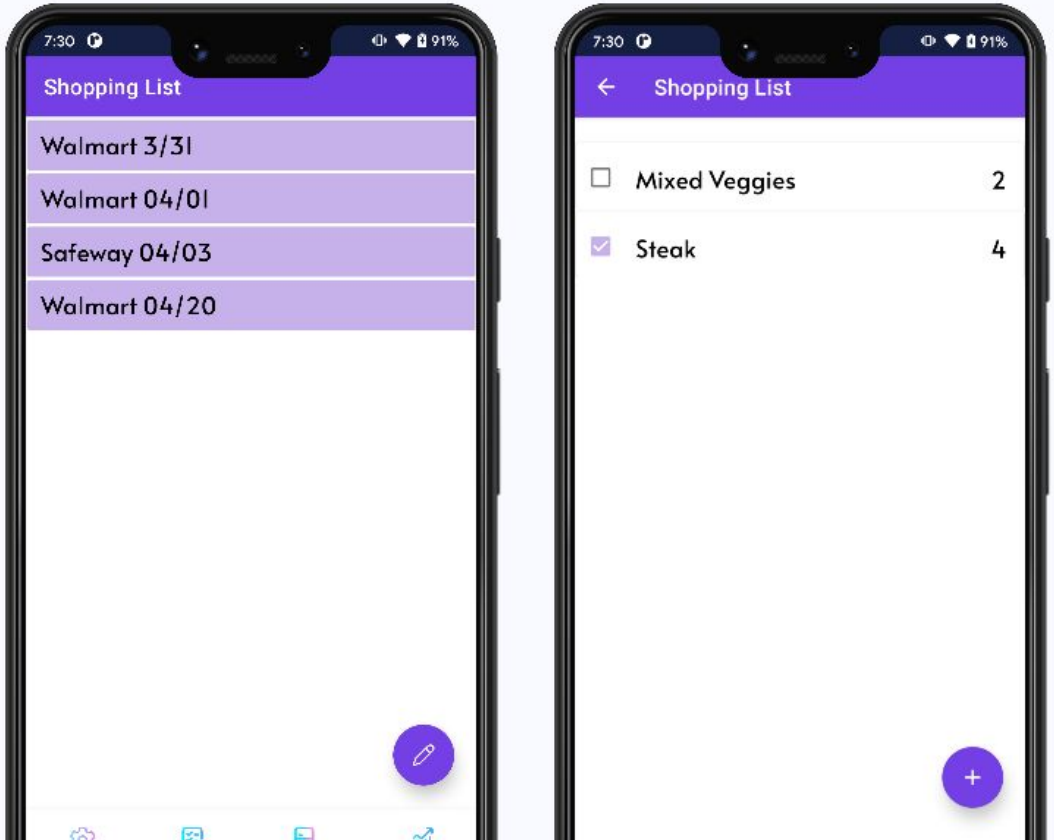
Database API (cont.)

- Query the API over http with different routes and tested with postman
- Written with SQL-injection prevention in Python
- Max row limit
- Used okhttp library to query in java


7:28
97%
Inventory
Chicken Breasts 2 lb 04-22
Kale 2 count 04-22
Oranges 6 count 04-21
Ketchup 1 count 04-21
Peach 3 count 04-21
7:28
Inventory
Chicken Breasts 2 lb 04-22
Kale 2 count 04-22
Oranges 6 count 04-21
Ketchup 1 count 04-21
Peach 3 count 04-21

Shopping Lists

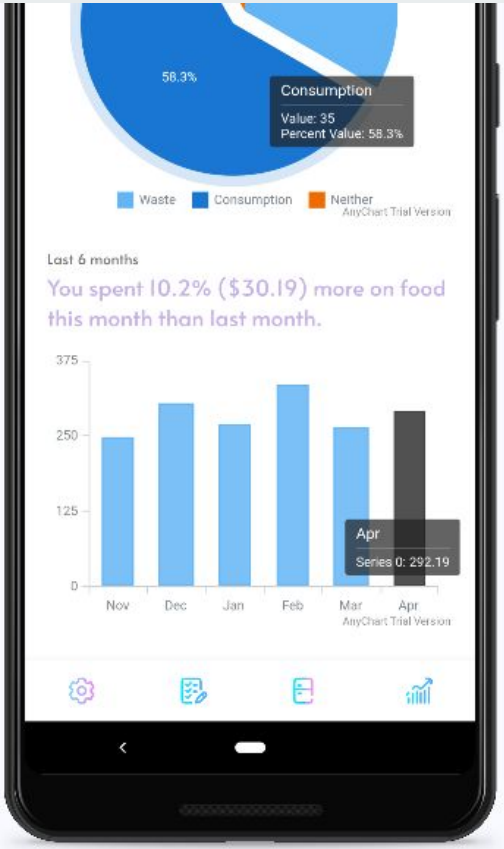
- Create several lists
- Items and quantities
- Check off items



Analysis

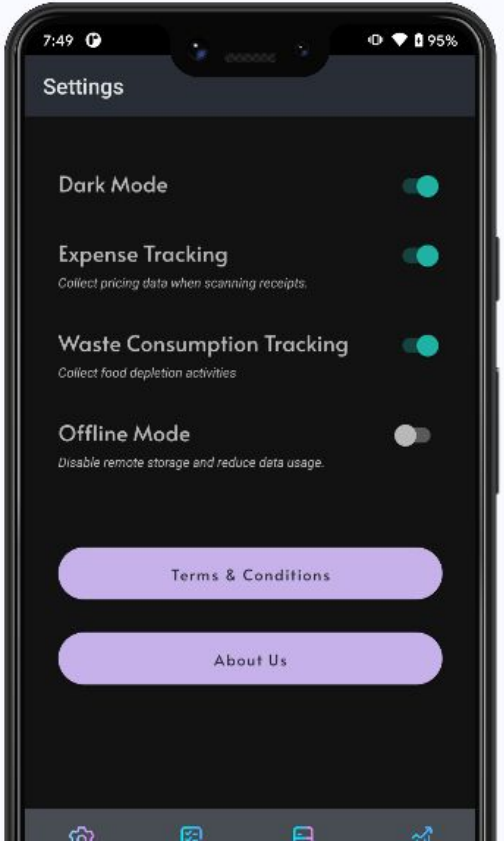
Interpret data in graphs and charts:

- Consumption vs. Waste
- Expenditures



Settings

- **UI preference**
  - Dark Mode Theme
- **Privacy/Data settings**
  - Expenditures Tracking
  - Waste Tracking
  - Offline mode
- **Terms & Conditions**
- **About Us**



Future Iterations

- Duplicate proof inventory
- Add aliases to receipt items
- Differentiate between food, and non-food items on receipts
- Add recipes
- More detailed analytics

Q
A