Fresh Tracker! – A Grocery and Expiry Date Management Tool

Authors / Contributors
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Problem Statement
In many households, food and household products are often forgotten in storage until they expire, leading to waste and unnecessary expenses. Likewise, grocery shopping can be unorganized, resulting in overspending, buying duplicates, or forgetting essential items. Additionally, calculating expenses with discounts, vouchers, and coupons can be confusing and time-consuming.

This project addresses the problem of **product waste, poor grocery organization, and budgeting challenges** by creating a tool that helps users track expiry dates, manage grocery lists, and compute costs effectively.

Project Objectives
1. To provide a reminder system for expiry dates, reducing wasted food and money.
2. To organize grocery shopping through an interactive list where users can add, remove, and check items.
3. To calculate total expenses including discounts, vouchers, and coupons for better budgeting.
4. To implement Python programming concepts (lists, conditional statements, functions, input/output).
5. To encourage responsible consumption and effective household management.

Planned Features
1. Expiry Tracker – Allows users to input expiry dates manually. If no date is entered, the program estimates based on a product's typical lifespan (e.g., banana = 3 weeks).
2. Grocery List Manager – Add, remove, and check products as bought.
3. Cost Calculator – Computes expenses and applies discounts/coupons.
4. Alerts/Reminders – Notifies users about soon-to-expire products.
5. Coupons & Vouchers Tab – Stores and applies discount codes.

Planned Inputs and Outputs
Inputs:
- Product name
- Expiry date (manual entry) OR product type (to assign estimated expiry)
- Grocery list items
- Item prices, vouchers, or coupon values
- User choices (menu navigation)

Outputs:
- Alerts for expiring items (manual or estimated expiry)
- Organized grocery list (add/remove/check items)
- Total cost calculation (with applied discounts)
- Confirmation messages (e.g., "Removed Soy Sauce!")
- Closing message: "Thank you for using Fresh Tracker! May all your food BE FRESH!"

Logic Plan (Pseudocode)

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START PROGRAM
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DISPLAY main menu
    1 - Expiry Date Tracker
    2 - Grocery List
    3 - Calculator

IF user chooses 1:
    ASK for product name
    ASK if expiry date is provided
        IF yes:
            STORE entered date
        IF no:
            LOOK UP estimated shelf life (e.g., banana = 21 days)
            CALCULATE expiry = today + shelf life
            STORE estimated date
    CHECK if product is near expiry
        IF true, DISPLAY alert

IF user chooses 2:
    DISPLAY grocery list options:
        1 - Add Product
        2 - Remove Product
    UPDATE grocery list accordingly
    DISPLAY updated list

IF user chooses 3:
    ASK for item prices
    ASK for vouchers/coupons
    CALCULATE total cost
    DISPLAY final cost

ASK user if they want to return to home
    IF yes → GO BACK to main menu
    IF no → DISPLAY exit message

END PROGRAM
```

GitHub Repository Link
https://github.com/rvincews/Gatela-Soledad-Project