Revision #3
Revision Date: 10/21/2024

Overview - BudgetByte

This project is designed to help health and wealth conscious individuals track their grocery spending and compare their food consumption against USDA's MyPlate nutrition guidelines. The main feature is a web application where users can log in, upload or scan grocery receipts, and have the items automatically categorized into major food groups: Fruits, Vegetables, Grains, Protein, and Dairy/Alternatives. Users can monitor their overall monthly expenses and see how much they spend on each category, making it easier to balance dietary needs within their budget.

This project aims to simplify grocery tracking and dietary analysis for users, making the process straightforward while delivering valuable insights.

Background

Given the rising costs of healthy foods in this sluggish economy, people are finding it difficult to maintain their health without spending out of their budget. This was how the idea for BudgetByte was born!

Target Audience

1. Folks who are both health and wealth conscious

Blockers

- Processing vague descriptions of items on the receipt and accurately classifying them into the correct group.
- What to do if an item is in multiple food groups
    - Ex: Tomato sauce (chat gpt wrapper)
        - Dairy, vegetables, and grains

High level goals

- Parse Grocery Receipt for Item + Price
- Categorize Items by Food group
    - dairy, protein, fruits, etc
- Display data in pie chart
- Track expenses (total/category) month to month
- Save history to user profile

Objective

2. Health & Wealth

3. KISS (Keep It Simple Stupid)

Features

- Website
  - User login
  - React, Firebase
- Scan & Parse Receipt
  - Scrape the item name & price
  - Filter for Food (FFF)
- Categorize Food
  - Major food groups:1
    - Fruits
    - Vegetables
    - Grains
    - Protein
    - Dairy/Alternatives
  - Ability to categorize food yourself/correct mistakes
- Visualize data
  - On a month-to-month basis (Cumulative over the month)
  - Comparing your month pantry to MyPlate
    - Aka, each category of food will be compared to the nutritional version on MyPlate
  - How much did you spend on groceries overall each month?
    - Also how much you spend on each category

User Stories

("As a {user role}, I want {goal} [so that {reason}]")
Specify about the user, why they would use the product
Story points - est how hard you think the story will be

- Sprint 1
  - As a health-conscious user looking to save money, I want to explore BudgetByte so that I can track and manage my grocery spending more efficiently.
  - As a BudgetByte user, I want to create and access my profile, so my personal data is saved and I don't have to re-enter it every time I use the platform.
  - As a health-conscious money saver, I want to be able to upload saved receipts, so I can easily track my groceries and costs.
- Sprint 2
  - As a BudgetByte user, I want the website design to be clean and easy to navigate, so I can find the features I need without confusion
  - As a BudgetByte user, after I upload my receipt, I want the system to automatically extract each item name along with price so I don't have to type each in manually

- ○ As a money-conscious user, I want to view how much I spend on groceries each month, so I can make informed budgeting decisions
- ● Sprint 3
  - ○ As a health-conscious money saver, I want to see a pie chart representation of my grocery spending by category, so that I can:
    - ■ understand how much I spend on different food groups
    - ■ see if I am eating a balanced diet
  - ○ As a BudgetByte user, after the system extracts my groceries and price, I want to be able to edit the data, so that I can correct any mistakes in name/price
  - ○ As a BudgetByte user, I want the system to categorize each item from my receipt into specific food groups, so I can see what types of food I am buying
- ● Sprint 4
  - ○ As a health-conscious user, I want to compare my monthly pantry to MyPlate, so that I can see if I am eating a balanced diet
  - ○ As a BudgetByte user, after the system categorizes each item, I want to be able to edit the data, so that I can correct any mistakes in categorization
  - ○ As a health-conscious money saver, I want to see expense insights, so I can see my monthly grocery patterns (more/less per category)

Relevant Links

- ● [MyPlate | U.S. Department of Agriculture](#)
- ● [Back to Basics: All About MyPlate Food Groups | USDA](#)
  - ○ Based on this Relevant Percentages are for an Average 2000 calorie Diet:
    - ■ Fruits: 15%
    - ■ Veggies: 18%
    - ■ Grains: 5%
    - ■ Proteins: 40%
    - ■ Dairy: 22%

Sprints

Implementations/designs