Froogal, the Personal Finance App: Project Overview & Requirements

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Today's Agenda

1. Budgets: The Iconic Tool of Personal Finance
2. Budgets, Good But Not Great
3. The Birth of Froogal
4. High-Level App Overview
5. Onboarding & Login
   a. Introduce login & onboarding components
   b. Discuss component roles
   c. Brief overview of requirements
6. The Dashboard
   a. Introduce all dashboard components
   b. Discuss component roles
   c. Brief overview of requirements

Budgets: The Iconic Tool of Personal Finance

"A plan for every dollar you spend" - Nerdwallet

Budgeting Methods

- Envelope System

- 50/30/20 Method

The Need For Budgets

- Teach financial responsibility

- Increased savings, if done right

- Understand one's relationship w/ money

- Relieved stress due to planned decisions of money

Budgets, Good But Not Great

"*Most people fail to realize that in life, it's not how much money you make, it's how much money you keep.*" - Robert T. Kiyosaki

The Solution

Simply, Froogal.

The Issue with Budgets:
- Many different methods to pick from, can be overwhelming

- Does not highlight spending habits, only shows suggested spending target

- Can be difficult to organize & track all data needed for a budget:
  - Bills, receipts, subscriptions, etc.

The Birth of Froogal

The Inspiration:

Froogal emerged from the idea that personal finance should be made simple. Streamlining the tedious parts and highlighting a user's spending habits.

Issues Addressed:

- One location for all your financial tracking

- Visualize spending patterns, not just reading numbers.

- Friendly reminders, to help you never miss a due date again.

- Providing deeper insight to personal spending habits.

High-Level App Overview

<u>Onboarding & Login</u>

- Signin Form
- SignUp Form

<u>Dashboard</u>

- Receipt HUB
- Recent Receipt List
- Over/Under Signaler
- Expense Watcher List
- Budget Watcher
- Total Spending Tracker
- Category Breakdown Chart
- Budget Comparer Chart
- Navbar

OB&L: The Signin Form

Purpose: Enable users to login into the dashboard.

Comments & Concerns

- Standard Signin Form

- Will aim to make form accessible

Requirements

- Prompt for user email & password

- "Sign In" button - query database for valid account

- If no valid account, display message to create new account via Dialog Box or renter data

- If valid account, take user through auth process then to Dashboard

- Google and Facebook Sign-In buttons, handled by Firebase

OB&L: The SignUp Form

Purpose: Enable users to create new profiles & add user data to the database.

Comments & Concerns

- Standard Register Form

- Will aim to make form accessible

- Passwords must match pattern, if not user is notified

Requirements

- Collect user data (name, email, password)

- Check database for existing emails & notify user if so

- Password is hidden with * characters

- Confirmation password box

- Validation for email & password

- Create Profile button, sends user data to backend to be added to database.

Dashboard: Receipt HUB

Purpose: Allow user to create & manage their receipts. Affects all other components.

Comments & Concerns

- **Difficult** to implement - lot of moving parts & rest of User Interface relies on accurate receipt information being passed

Requirements

- Display the most recent receipt or user selected receipt

- Buttons for CRUD operations for receipts, which are stored in user's receipt collection

- Opens a Modal with varying behavior depending on button pressed

- Searching functionality:
    - Transaction date
    - A company name
    - Receipt Total price

Dashboard: Over / Under Signaler

Purpose: To alert user about current spending for the period. Visualize spending habits.

Comments & Concerns

- Will need an API for quote generation.
- Potentially have to hard code these in, if we don't find one.

Requirements

- Display "Over" or "Under" based on current user budget & total spending amounts.

- Randomly display an inspirational quote each time Dashboard is rendered

Dashboard: Expense Watcher List

Purpose: To track all "recurring" expenses. Help user not miss payments via notifications.

Comments & Concerns

- If time permits, we wish to add email notifications about upcoming due dates

Requirements

- Contain ExpenseBlock components, showing:
  - Expense Due Date
  - Expense Name
  - Expense Amount
  - Expense Category (bill or subscription)

- Expenses removed if passed due date

- Notify user in dashboard about due dates that are close.

- Sorted by due dates (ascending)

Dashboard: Recent Receipts List

Purpose: Provide streamlined overview of last 5 recents. Highlights spending habits.

Comments & Concerns

- **Slightly difficult** to implement - figuring out a solution to show 5+ receipts

Requirements
- Display 5 most recent ReceiptSummaryCards, showing:
    - Transaction date
    - Total price
    - # items on recent

- Click a card opens a ReceiptDetailsModal, showing the Receipt's full details:
    - Item list
    - Item total prices
    - Item names
    - Company name, if any

Dashboard: Budget Watcher

Purpose: Provide high-level view of allotted budget for the period. Visualize spending limits.

Comments & Concerns

- Simple component to help highlight budget tracking.

- **Slightly difficult** due to reflecting changes across Dashboard

Requirements

- Display the user's current budget amount for the time period

- Display the current time period

- Button to open a Modal, giving options to adjust the budget amount.
  - Changes reflected across dashboard

Dashboard: Total Spending Tracker

Purpose: Provide high-level view of spending for the period. Visualize spending

Comments & Concerns

- Simple component to help highlight spending tracking.

Requirements

- Display the user's current total spending for the time period

- Display the current time period

Dashboard: Category Breakdown Chart

Purpose: Provide atomic spending analysis for different categories.

Comments & Concerns

- **Interesting** to develop, due to use of Recharts. Many fun options to choose for charts.

Requirements

- Display spending percentages and total dollar amount for each category user has

- Ability to create and remove custom categories

- A button to "Add Categories"
  - Categories added through a CategoryModal

Dashboard: Budget Comparer Chart

Purpose: Provide side-by-side comparison of budgeted amount to total spending for a period.

Comments & Concerns

- **Interesting** to develop, due to use of Recharts. Many fun options to choose for charts.

Requirements

- Display data points for total spending in a period
- Display data points for budget amount in a period
- Should be a line graph

Dashboard: Navbar

Purpose: Provide the user access to User Profile Settings and Finance Settings.

Comments & Concerns

- **Very complex** to implement, because of slide-out-menu & the need to update data across dashboard based on user changes

Requirements
- Display user avatar
    - Default icon used if no avatar set

- Contain link to Finance Settings
    - On click, opens FinanceSettings slide-out-menu in dashboard

- Contain link to User Profile
    - On click, opens UserProfileSettings slide-out-menu in dashboard

Final Remarks & Thoughts

Potential Risks

- Firebase may not fit our data model for users
  - Will switch to SQL database

- Managing State could be an issue; would affect how each component receives & renders data

If Time

- Would love to implement features such as:
  - Dark mode & Light Mode

  - Look into better User Experience for components

Thank you for your time!

Sources

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