Semester Project CSE 321: Internet & Web Programming

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This project is based around providing financial statistical analysis, because most banking websites are difficult to use, and don't give you the tools to do a post-observation of your budget.

1 Five Websites That are Relevant to the Theme:

1.1 PocketGuard

Pocket Guard has the following features:

- List savings, checking and credit accounts
- Offers free in-app savings account
- percentage of spending breakdown by month as
- Spending by month as a line, compare months
- create own hashtags for analysis
- spending percentages by merchant by month
- automatically finds regular bills and pays checks
- sent budget goals category, and total
- shows net cash after budget goals
- saving goals (ie save for purchase)
- calculates net worth
- displays transaction
- displays opportunity for savings, (ie better phone plan)

1.2 Mint

- Automatic transaction tagging
- Budgeting
- Set spending goals
- Aggregation of multiple accounts

- Net worth tracking

- Advanced Analytics

  - Monthly Income to spending ratio
  - Spending Habits

1.3   You Need a Budget (YNAB)

You Need a Budget (YNAB) has the following features:

- Focuses on living off of last months paycheck.

- set budgets

- create own hashtags for analysis

- shows net cash after budget goals

- Larger categories with smaller subdivisions

1.4   EveryDollar

- Budgeting

- Debt Tracking

- Premium membership allows users to automatically tack transactions from their bank

- Percentage Breakdown of Budget (not actual amount spent)

- Requires an every dollar budget

1.5   Goodbudget

- Budgeting

- Debt Tracking

- Manually add Transactions (Not automatic)

- Shows Advanced Analytics

  - Percentage Breakdown of Amount Spent

– Spending vs Budget

– Income vs Spending

2 Functionality descriptions

2.1 Tagging

The ability to mark certain transactions as belonging to one or more categories.

2.2 Budgeting

The ability to set a limit to the amount of money to be spent in a category.

2.3 Percentage Breakdown

The ability to review spending and determine what percent of spending was spent in a particular category.

2.4 Spending Habits

The ability to track previous purchases to provide heuristical data about spending. (You've spent 10$ on coffee this month, less than your average of 15$)

2.5 Automatic Tracking

The ability to add new transactions to the account without user input.

2.6 Account Aggregation

The ability to access multiple accounts and view combined analytics.

2.7 Our Website VS Existing Websites:

	FinTool	Mint	PocketGuard	YNAB	EveryDollar	Goodbudget
Tagging	V	O	V	O	V	V
Budgeting	V	O	V	V	V	V
Percentage Breakdown	V	V	X	X	V	V
Spending Habits	V	V	X	X	V	V
Automatic Tracking	X	V	V	V	V	X
Account Aggregation	V	V	V	V	X	V

3 Storyboard:

3.1 Target Audience:

Our typical customers can be divided into two groups, personal users, and business users. In order to better shape the user stories, we are going to make some broad generalizations about these groups. Additionally, certain tags will automatically be generated or applied differently.

3.1.1 Personal Users

Personal users, for the most part have one or two credit/debit accounts, and usually only have to deal with their own expenses.

3.1.2 Business Users
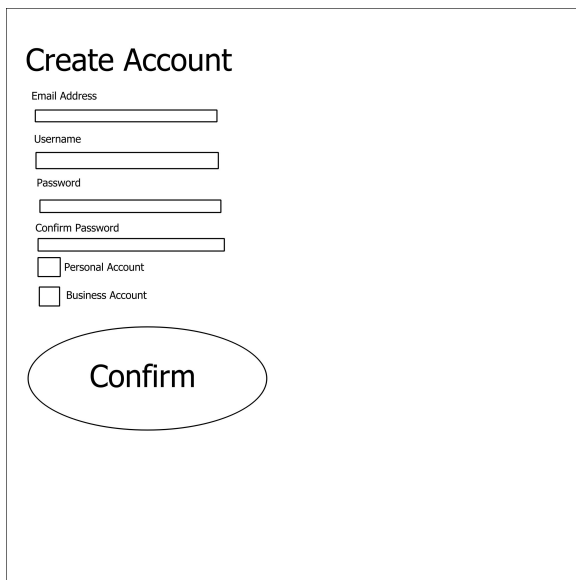
By contrast, business users tend to have several credit/debit accounts, 3 or more, and are likely to want to make use of the more complex features, such as account aggregation.

3.2   Design Prototype:

This is the page users will land on when thy search for our site. If you already have an account you simply need to sign in, if you don't you need to register.

New users add their email address to create an account, choose whether is a personal or business account. This changes the default budgets and tags when the account is first created.

Add Accounts

Add checking/saving accounts
⊕

Add credit accounts
⊕

The second step of account creation is adding the users financial accounts.

Your Accounts

Debit
Wells Fargo Checking Account XXXX-XXXX-XXXX-1234 - $123.45
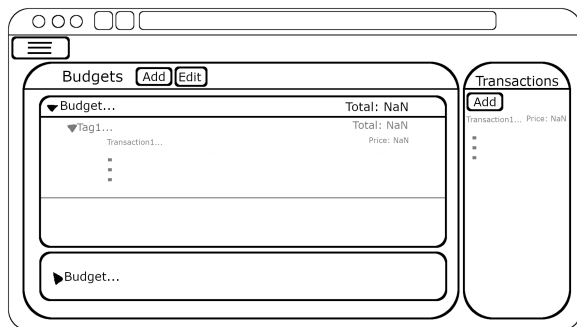Wells Fargo Savings Account XXXX-XXXX-XXXX-9876 - $543.21

Add new debit account

Credit
American Express XXXX-XXXX-XXXX-4321 - $1234.56
Master Card XXXX-XXXX-XXXX-6789 - $987.65

Add new credit account

The users can view their accounts in aggregate and also add new accounts if they are created.

This is the page users will land on when they get done with registering or when they sign in. Here they can add and edit their budgets and add transactions.
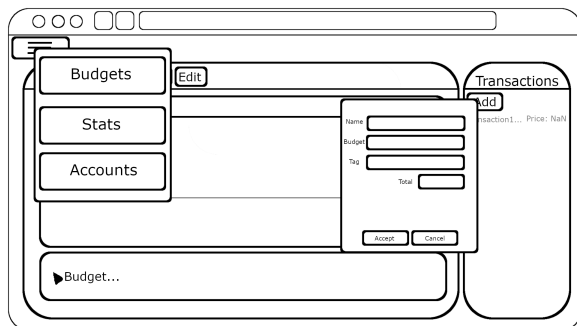
This shows the various popups that the page will have. Pushing the add transaction button will prompt the user to add in a transaction. Pushing the menu in the top left will show the user different pages they can go to.
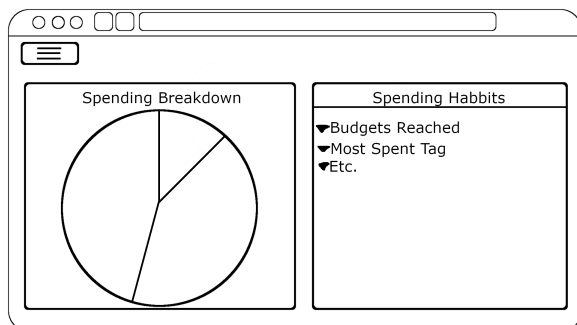
This page shows a breakdown of how much the user has been spending and shows the spending habits of the user.