

Student Expense Tracker: Money n Go

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Why This Topic?

I chose this because I am a student myself and struggle heavily with managing the many things that late teens and mid-early 20 year olds may face. Money being something that is so important in our world is something that can't be wasted. Also time management is very important with balancing social life and education. I thought that diving into creating a software to help manage those issues would not only benefit me but others.

A Few Current software solutions...

MINT: allows users to track expenses, create budgets, and receive financial insights.

- **Pros:** This software offers amazing features specifically tracking how your money grows, refining spending for things such as saving and investing, and credit card recommendations.
- **Cons:** Not catered to a younger audience. Can be confusing and overwhelming for newer users to money management.

GoodBudget: uses the envelope budgeting system to help users allocate their income into various categories (envelopes) and track their spending

- **Pros:** envelope is a long time used system, debt managing, set aside money options.
- **Cons:** manually entering can cause people to forget or simply not want to (inconvenient), not a good app for those who already struggle because we want something simple and easy but yet efficient

Real World scenarios

- Using the application i want to implement it will allow the intended audience to be more engaged with managing something as important as money.
- This application can be used at any time . Whether they are at the mall and wondering if buying that \$50 shirt for example is best for their pockets at that moment or maybe they should wait for allowance, paycheck, etc. Or if they need to sort money for their bills and things as such, with an according calendar.

Planning Process

1. **Researching / Problem Identification**

- Looked at the list of problems and this one stood out (relatable)
- Found multiple softwares that lacked what i wanted the software to entail (finding pros and cons)
- Look at it from 17-25 year old perspective

2. **What do i want in this platform**

- Budget tracking
- Monthly reports
- Auto expense tracking and manual entry options
- Secure protections
- Ai features to make it easier for new and non tech savvy users.
- How would i want it to look

3. **Putting it to work**

- Make it available online and mobile (andriod and IOS)
- Using Python to integrate all the methods
- Allow feedback for continuous improvement

Pseudocode-like statements

1. **Security:**

- registerUser: Registers only new users with a new number or email .
- loginUser: Logs in an existing user by ensuring this account exist

2. **Adding an Expense:**

- addExpense: Adds an expense entry to the application

3. **Setting a Budget:**

- setBudget: Sets a monthly budget for whatever category this user wants and saving it

4. **Generating a Monthly Report:**

- generateMonthlyReport: Generates a report of total and categorized expenses for a given month and and if needed that year.

5. **Splitting a Shared Expense:**

- splitExpense: Divides an expense amount among multiple users and notifies them of their share.

Elements:

- **Security**
 - Authenticating who is using the app
- **Expense tracking**
 - The main goal of the app and allows the user to track what they are spending
- **Custom categories**
 - Categorize however the user wants and titling whatever that expense is for
- **Budgeting**
 - Learning how to spend and what to spend it on
- **Shared expenses**
 - Can be shared with a trusted adult or partner
- **Financial Reports**
 - Gives an overall summary of what was spent that year or month(s)

Open Questions:

Something that surprised me was that there aren't many adolescent friendly apps for things such as money budgeting. Being young and irresponsible with money is how a lot of adults start on the more difficult end early on and find themselves having to start from ground 0 at 25 years old when they really should already have a foundation.

I think further researching I can learn more about how limited resources such as apps like the one i planned aren't wide spread. We are always on our phones so these things need to become more and more common.

Citations

1. *Some mint features are moving to credit karma*. Intuit Credit Karma. (2024, April 10). <https://www.creditkarma.com/lp/mint-to-credit-karma-net-worth-signup>
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Code example i designed for shared expenses

```
Welcome  finalp1.py 9+ X
Users > z > Downloads > finalp1.py > ...
1  # Function for split expenses
2  function splitExpense(expense, sharedWith):
3      totalAmount = expense['amount']
4      numberOfPeople = len(sharedWith) + 1 # including the user
5      shareAmount = totalAmount / numberOfPeople
6
7      for person in sharedWith:
8          notify(person, f"You owe {shareAmount} for {expense['description']}")
9
10     return "Shared expense split successfully"
11
```