



Team 16 – Product Backlog

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Problem Statement

People often use many applications to manage their finances, or often ignore managing at all because of the cumbersome nature of using multiple apps. Our app reaches to consolidate all the functionality seen across different services into a single app that offers a simple and intuitive way of tracking past expenses, storing receipts, and offering budgeting advice for the future.

Background Information

Intent/Audience

Our objective is to create an app that is specifically designed for the everyday consumer, capable of managing all expenses, not just larger expenses or those recurring monthly. This mobile app will be able to give a much more accurate estimate of future costs, considering scanned receipts, side expenses, and small splurges, offering an efficient, realistic method of budgeting for more than just large-scale spenders.

Similar Applications

There are many financial managers/eWallets on the mobile platform already available, such as Google Wallet and Zoho Expense. These apps offer additional functionality in the form of integrated payment of bills or investing advice.

Limitations of these Applications

Where these apps often fail for the audience of the average consumer is on the subject of scope. Many apps seem designed for business owners or large-scale budding investors, as opposed to the single mom or busy student. There is a degree of inaccessibility to these apps, as not only do they not offer the same tools average consumers might need, they also seem to require some prior financial knowledge. Alternatively, small scale apps tend to lack the big picture budgeting capabilities some might desire to really understand their financial situation. Our app is, contrastingly, designed to be very easy to understand, and aimed at combining a

long-term budgeting system with small expenses, minding not only relatively static monthly expenses, but also regular purchases such as groceries or gas.

Functional Requirements

- 1) As a User, I would like to be able to create an account on the app.
- 2) As a User, I would like to be able to login with my Google account.
- 3) As a prospective User, I would like the ability to use the app anonymously and later transfer my data to an account.
- 4) As a User, I would like to be able to login and access my information.
- 5) As a User, I would like to be able to access my personalized app every time I log in.
- 6) As a User, I would like to be able to manage my account (changing information, deleting).
- 7) As a User, I would like to be able to manage my account password.
- 8) As a User, I would like to be able to recover my password if I forget it.
- 9) As a User, I would like to manually input new expenses and information about them.
- 10) As a User, I would like to store history for expenses so that change over time is measurable.
- 11) As a User, I would like to upload photos so that receipts can be stored for future access.
- 12) As a User, I would like to be able to view my uploaded photos.
- 13) As a User, I would like to be able to delete my uploaded photos when I do not want them to be on the app anymore.
- 14) As a User, I would like my receipt photos to add total expenses automatically through OCR so that I don't have to type in everything manually.

- 15) As a User, I would like to be able to see my data in graphical form so that I can easily monitor my spending.
- 16) As a User, I would like to be able to switch between viewing my information in multiple graph designs so that I may use whichever suits my preferences.
- 17) As a User, I would like to save my graphical preference so that the app remembers my choices when I log in. (If time allows)
- 18) As a User, I would like to be able to add scheduled additional splurges to my budget plan so that I can plan for vacations or events.
- 19) As a User, I would like to see quick statistics on my daily, weekly, and monthly spending so that I can track my spending history quickly and accurately.
- 20) As a User, I would like to be able to modify my data so that I can fix mistakes and update values.
- 21) As a User, I would like to be able to rate budget plans so that I can provide feedback to the community.
- 22) As a User, I would like to set alerts so that I can get notifications of specific payments.
- 23) As a User, I would like to set alerts so that I can get notifications when I am over budget for the month.
- 24) As a User, I would like to download template budget plans so that I may track my own expenses alongside them.
- 25) As a User, I would like to have access to data/budget plans specific to me so that I know they are accurate for my situation.
- 26) As a User, I would like to be able to store my salary range so that I can get a good estimate of my financial situation in mind of how much I make.
- 27) As a User, I would like to place items into categories so that I can customize my graphs.
- 28) As a User, I would like to create custom categories so that all my purchases may be classified regardless of size.
- 29) As a User, I would like to be able to have efficient customer support so that when technical difficulties arise, I know who to contact.
- 30) As a financially savvy user, I would like to upload my budget templates online so that others may benefit from them. (If time allows)
- 31) As a User, I would like to be able to customize notification frequency.
- 32) As a User, I would like to have the option to enable email notifications.
- 33) As a User, I would like to be able to receive SMS notifications.
- 34) As a User, I would like to have the option to receive monthly account statements.
- 35) As a User, I would like to be able to sort my historical data
- 36) As a User, I would like to search my historical data.
- 37) As a User, I would like to add tags to my uploaded photos.
- 38) As a User, I would like to be able to set the amount of on-board storage allotted for imagery.
- 39) As a User, I would like upload and download progress bar on my images.
- 40) As a User, I would like to be able to use the app at all times, even when I'm uploading or downloading something from the server (aka background processes).

Non-Functional Requirements

Performance

Our aim for this project is to produce a functioning, responsive app first and foremost, that is then scalable in terms of storage space. Our app should first display no noticeable difference between 1 user and 10 concurrent users and should have enough space to hold all their data.

At no point in our app, even for large operations, should a user have to spend time waiting for more than 12 seconds.

We will compress images before uploading them from the user's device to our server. We will put a limit on upload size and quantity of uploads to prevent a user from hogging bandwidth and abusing our service.

Usability

The UI should be intuitive and easy to use. The user should be able to access all functions using a reasonable number of taps. We will be supporting this app in English to start, but we may add more language options if we have time. We will make this app for the earliest version of Android OS that fulfills our needs for this project to provide access for more users, since Android OS versions are backwards compatible.

Security

The app is to be encrypted and safe to use without any compromises and all user information is protected. Users are expected to set up a strong and secure password to log in. Maintaining user privacy is our number one priority.

Hosting

We intend to make use of the strong inter-functionality between Android Studio and Google Cloud to serve as our back/front end connection. We will be using Firebase for a real time database and authentication system working in tandem with our android app.