

Release Summary

Detective Dollar

12/05/2023

Key User Stories and Acceptance Criteria:

As a user, I want to open the app to a home page to view today's expenses and my total daily spending.

- Acceptance Criteria: The home page should display today's date, a list of individual daily expenses, and the total daily spending.

As a user, I want to view and manage details of each expense on the home page. I should be able to edit or delete any expense.

- Acceptance Criteria: Each expense entry on the home page should be clickable to show detailed information. Options to edit or delete an expense should be easily accessible.

As a user, I want to navigate to the history page using the "More" button to view past expenses categorized by weekly, monthly, and yearly time frames.

- Acceptance Criteria: The history page should have filters for weekly, monthly, and yearly views, providing an overview of past expenses.

As a user, I want to view past daily expenses using a calendar to select the desired date.

- Acceptance Criteria: The calendar page should allow me to select a specific date and display daily expenses. Additionally, there should be a "More" button for additional details.

As a user, I want to use a navigator to switch between the main screens: home, add expense, and statistics.

- Acceptance Criteria: The navigator should provide transitions between the home page, expense addition page, and statistics page.

As a user, I want to navigate to a page using a navigator where I can add an expense, and my expense will be updated on the home screen.

- Acceptance Criteria: The expense addition page should have input fields for name, amount, date, category, frequency, image, and description. After adding the expenses, the user should be able to see their new expense, and their total spending should reflect the new expense addition.

As a user, I want to access the graph page using a navigator to visualize all past and present expenses. The page should include a pie chart categorizing expenses and a line chart depicting spending trends.

- Acceptance Criteria: The graph page should display a clear and interactive visualization of expenses. The user will have options to visualize their spending in weekly, monthly, and yearly time frames.

As a user, I want to use a drawer navigator to navigate to the category page, allowing me to add and edit category names and associated colors.

- Acceptance Criteria: The category page should provide options to add and edit new categories, including setting associated colors from 12 default colors.

Known Problems:

Major Bugs:

- Another bug is that if the user is on the statistics page on the line graph page and then tries to scroll through the line chart displaying the data for each x input, the swiping component of the slider will override the swiping of the line chart, thus initiating the swiper to start changing the page to the pie chart. We were unable to find a solution before the end of the project.
- Additionally, on the statistics page, there is a line graph component that displays the total spending for the selected time period as well as the average daily/ monthly expenses. When running the app on Expo Go, the position of the line graph component is located correctly; however, in the app build, the position is moved upward so that the element covers the graph—preventing the user from seeing the x-axis on the graph.
- Another issue we encountered was on the category page; we have a color picker component that allows the user to pick a color for their category. On IOS devices, the color picker's usability is inconsistent. There are three parts to the color picker: a row of default colors, a color picker circle, and a color picker slider. The default color picker works on IOS; however, the color picker circle and slider often do not work.

Omissions:

In our original release plan, we had the following user stories for Sprint 4:

- As a user, I can set a cap on how much money I want to spend for specific categories and will receive a notification when I max out
- As a user, I will receive a notification when a bill is due, like a credit card bill or rent
- As a user, I can use the what-if features to see how an expense will affect my spending goals
- As a user, I will be able to log into the app with a username and password

However, during the planning of Sprint 4, we realized that these user stories were beyond our scope and would have to be removed from our project. When we first added these user stories, they were stretch goals that we would implement if we had enough time; thus, since other features came up in our development, these user stories could not be executed. If we continued this project, these user stories would be implemented in a future release.

We planned to have the edit expense feature edit all expense variables; however, we realized that we needed more time to determine how to get the edit expense to work for our more complicated variables, such as the recurring expense frequency and the expense date. This would also be implemented in future releases.

Design Shortcuts:

One issue we found was that it was hard to test and demonstrate the functionality of our spending tracker with little data. Thus, we created an add expense button on the home page solely to demonstrate the app's functionality. If this button is pressed, the system will add random

expenses from the beginning of the year until the current day. In the actual deployment of the app, this feature would be removed as the user doesn't need to add random expenses.

Product Backlog:

High-Priority User Stories:

1. As a user, I would like to delete categories rather than only being able to edit categories.
2. As a user, I would like to access a page where I can see all recurring expenses and directly edit the frequency of these expenses.
3. As a user, I will be notified when a recurring expense is about to be added to my total expenses.
4. As a user, I will be able to log into the app with a username and password
5. As a user, I can set a cap on how much money I want to spend for specific categories for a specific time period and will receive a notification when I max out
6. As a user, I can visualize the line chart for a particular category to see the expense trends for my chosen category.

Bug Fixes:

Any issues or bugs in the Know Problems section of this document will be addressed in a future release.

Follow-up Project Guide:

If we continue working on this app after class, we want to add more features to improve user experience as well as improve on current features. We weren't sure how we would like to handle deleting a category, as all expenses within that category wouldn't have a category. In a future release, we will address this issue.

We want to add more features to recurring expenses so the user can see all recurring expenses and when their next expense will be added to their total expense. We also want to notify users when recurring expenses will be added to the total expense so they can choose to accept, decline, or edit their expenses before they are added.

Additionally, we want the user to log into the app using a username and password for more privacy and security. To improve user spending habits, we would like the user to be able to cap how much money they would want to spend for a specific category. The user could set the cap for a particular start and end date and receive a notification when they have gone over their cap or are close to going over.

Lastly, we would like to add more features to the line graph so that the user can see expense trends for specific categories. All of these additional features would improve user experience and allow the user to gain a better understanding of their spending habits.