



Sprint 3 Planning Document

Team 7: Haris Sohail, Mayur Patil, Jack Crawford, Jacob Riggs

Sprint Overview:

During sprint 3, we plan to implement features that encompass more detailed analytics for expenses and further customization on the user-end including the ability to modify budgets and change color of certain aspects of BudgetWise.

Scrum Master: Jack Crawford

Team Meeting: Monday @ 11:30 / Tuesday @ 2:30

Risks and Challenges:

This sprint will include challenges to implement certain features such as the textbox feature needed for the reviews and the messages feature. No one in the group has had any experience with working with implementing features like this, so this may pose a steep learning curve for the project. Additionally, this sprint will make use of other API's that no one in the group has had exposure to (such as the music playing feature), which may also pose as a learning curve for the project.

User Stories to implement this sprint

1. I would like to be able to change the color of different spending categories to my choosing.

Task	Estimated Time	Owner
Add a dropdown menu with different color themes and a button to update the budget page view with the selected color theme.	3 hrs	Mayur
Update get function in userend.js to accept the new color theme input and update the page to reflect the change.	4 hrs	Mayur
Create unit test cases to test functionality of change color functions	2 hr	Mayur

Acceptance Criteria:

- Given that the change color functions drop down is implemented correctly, when a user selects a color from the dropdown, the color will be shown in the dropdown and the userend.js function will be able to access the new color.
- Given that the change color button is implemented correctly, when a user presses the button, the id for the color them will be passed to the get function through the url.
- Given that the get function in the userend.js works correctly, when a user presses the update color button, the graph colors will be changed to reflect the new theme.

2. I would like to be able to track what day of the week I buy certain items most often.

Task	Estimated Time	Owner
Implement queries to select items with the same names and/or purchase time within the same time period.	3 hrs	Jacob
Create a page and/or graph(s) to visualize the queried data.	4 hrs	Jacob
Create unit tests to ensure that data visualizations function correctly.	1 hr	Jacob

Acceptance Criteria:

- Given that the queries are implemented correctly, items that share the same name (upper or lower case) will be grouped by an aggregate function.
- Given that the the data visualization is implemented correctly, when a user opens the appropriate page, they will be given statistics on the items that are purchased most often and the items that cost the most.
- Given that the graphs are implemented correctly, when a user adds, deletes, or edits purchases, the graphs will update as appropriate.

3. I would like to be able to remove or edit expenses.

Task	Estimated Time	Owner
Implement functionality for user to remove expenses	2 hrs	Mayur
Implement functionality for user to edit expense category, price, and name.	3 hrs	Mayur
Create Unit Test cases for testing remove/edit features	1 hr	Jacob

Acceptance Criteria:

- Given that the remove expense functionality works correctly, when a user opts to remove an expense, the expense is removed from the expense table.
- Given that the edit expense functionality works correctly , when a user opts to edit an expense, the expense is updated to reflect the new details about the expense.
- Given that the website's graphs, statistics, and other functions are implemented correctly, when a user edits or removes an expense, these will all reflect the changes made.

4. I would like to be able to view detailed analytics on the expenses that cost me the most.

Task	Estimated Time	Owner
Implement a page/and or add to an existing page allowing users to view their top five expenses	5 hrs	Jack
Implement a function that will enable the user to view how many times they bought a specific expense	4 hrs	Jacob
Implement a function that will enable the user to filter expenses based on a price limit	4 hrs	Jack
Create Unit Test cases for testing analytics features	1 hr	Jacob

Acceptance Criteria:

- Given that the detailed analytics queries work correctly, when a user selects to see their most expensive purchases, they are presented with a list of their top five expenses.
- Given that the detailed analytics queries work correctly, when a user inputs an expense into the search query, they are presented with all of their past expenses that match their input string.
- Given that the detailed analytics queries , when a user inputs a price limit, they are presented with expenses that are under their specified limit.

5. I would like to be able to set reviews for bought items for future reference.

Task	Estimated Time	Owner
Implement a function that allows the user to type in a review for each expense they had in the expense table	4 hrs	Haris
Implement a function that allows the user to remove reviews for each expense they had in the expense table	2 hrs	Haris
Create Unit Test cases that tests the users ability to add/remove reviews for expenses	1 hr	Haris

Acceptance Criteria:

- Given that the review functionality is implemented correctly , when a user clicks to add a review to a certain expense, they can input their review for the expense, and be able to access the review later on.
- Given that the review functionality is implemented correctly , when a user clicks to remove a review from a certain expense, the review will be removed from the specific expense.
- Given that the review functionality is implemented correctly, when a user enters a review, it will be added to the database for future usage.

6. I would like to be able to delete my account.

Task	Estimated Time	Owner
Implement a button on the settings page allowing users to delete their account, along with prompts requiring they enter their password to ensure that they actually mean to delete their account.	3 hrs	Jacob
Implement SQL updates which remove all user budgets, expenses, categories, and other information from the database.	2 hrs	Jacob
End any notification settings for user so that they do not receive emails after their account has been deleted.	1 hr	Haris
Create unit test cases to test the deleting account function	1 hr	Haris

Acceptance Criteria:

- Given that the delete account function is implemented correctly , when a user clicks to delete their account, they will be prompted with their password, and will be able to delete their account if the password is typed correctly.
- Given that the delete account function is implemented correctly, when a user successfully deletes their account, they will no longer receive notifications for their budgets
- Given that the delete account feature is implemented correctly, when a user deletes their account, none of their information will be saved in the database.

7. I would like to receive inspirational quotes on homepage.

Task	Estimated Time	Owner
Research quotes to use	1 hrs	Jack
Add these quotes to a database	2 hrs	Jack
Implement a function that will present the user with a quote on their homepage that will change when they log in	3 hrs	Haris
Implement a function that will present the user with a quote on their homepage that will change when they refresh their page	2 hrs	Jack
Create unit test cases to test functionality of the daily quotes	1 hr	Haris

Acceptance Criteria:

- Given that the inspirational quotes function is implemented correctly , when a user logs into their account, they will be presented with an inspirational quote.
- Given that the inspirational quotes function is implemented correctly , when a user logs out and logs back into their account, they will be presented with a different inspirational quote.
- Given that the inspirational quotes function is implemented correctly , when a user refreshes their page, they will be presented with a different inspirational quote.

8. I would like to be able to modify my kids' budget and receive notifications for their budgets.

Task	Estimated Time	Owner
Allow the parent to lock the kid's account so they can no longer edit their budget	3 hrs	Mayur
Allow the parent to increase/decrease their child's budget	1 hr	Mayur
Implement notifications to be sent to parents about the kid's account	2 hrs	Mayur
Create Unit Test Cases that test the parental lock features	1 hr	Jacob

Acceptance Criteria:

- Given that the parent account is able to lock the child's account, when a child tries to edit their budget, the child account will be unable to.
- Given that notifications are implemented correctly , when a parent opts into receiving a notification about the kid's account, the parent will receive a notification.
- Given that the parent changes their child's budget, when a child logs into his account afterwards, the child's budget should be changed to what the parent set.

9. I would like to be able to send messages through the application to my kids.

Task	Estimated Time	Owner
Design how messages will be sent through the app and how they will appear to the user	3 hrs	Haris
Change the database to allow user messages	1 hr	Haris
Implement sending messages on the backend	2 hr	Haris
Create Unit Test cases for testing the messages feature	1 hr	Haris

Acceptance Criteria:

- Given that the messages feature is implemented correctly, when a user types a note into the textbox, the textbox will hold that information to be viewed later and can be accessed through a parent account
- Given that the messages feature is implemented correctly, when a user edits something in the textbox, the changes made are saved.
- Given that the messages feature is implemented correctly, when a user deletes something in the textbox, the changes made are saved.

10. I would like to be able to set spending preferences.

Task	Estimated Time	Owner
Implement a calculation of what percentage the user wants to allocate to each category.	2 hrs	Jack
Implement analysis on the back end for when the user spends more than the desired amount.	3 hrs	Jack
Implement unit tests for category spending preference notifications.	1 hr	Jack

Acceptance Criteria:

- Given that category spending preferences are implemented well, when the user sets spending percentages for each category, they will be required to enter percentages adding up to one hundred.
- Given that database queries are defined correctly, when the app checks for overspending, if the total amount spent in a category exceeds the portion of the allowance set for that category, the category will be displayed as overspending.
- Given that database queries are defined correctly, when the app checks for underspending, if the total amount spent in a category is under the portion of the allowance set for that category, the category will be displayed as underspending.

Remaining Product Backlog User Stories

Functional User Stories

~~Sprint 1 User Stories~~

~~Sprint 2 User Stories~~

~~Sprint 3 User Stories~~

1. User Account
 - a. As a user,
 - ~~i. I would like to be able to register an account~~
 - ~~ii. I would like to be able to login to my account with a selected username and password~~
 - ~~iii. I would like to be able to reset my password~~
 - ~~iv. I would like to be able to change my email~~
 - v. I would like to be able to change the theme of the application to my liking
 - ~~vi. I would like to be able to change my currency of choice~~
 - ~~vii. I would like to be able to change the color of different spending categories to my choosing~~
 - ~~viii. As a user, I would like to be able to delete my account.~~
2. User Event Posting
 - a. As a user,
 - ~~i. I would like to be able to manually enter purchases~~
 - ~~ii. I would like to be able to create new spending categories~~
 - ~~iii. I would like to be able to categorize my purchases~~
 - ~~iv. I would like to be able to enter recurring spending amounts~~
 - ~~v. I would like to be able to track what day of the week I buy certain items most often.~~
 - ~~vi. I would like to be able to create a budget for next month~~
 - ~~vii. I would like to be able to plan savings for retirement~~
 - ~~viii. I would like to be able to view detailed analytics on the expenses that cost me the most~~
 - ~~ix. I would like to be able to set reviews for bought items for future reference~~
 - ~~x. I would like to be able to plan budgets for months in the future~~
 - xi. I would like to be able to make a budget for a trip/vacation

~~xii. I would like to be able to make a budget for Christmas/Birthdays~~

~~xiii. As a user, I would like to be able to remove or edit expenses.~~

xiv. I would like to listen to music while editing my budget.

b. As a parent,

~~i. I would like to be able to monitor my kids' spending~~

ii. I would like to be able to have an interface for the budget of my entire family

iii. I would like to be able to create a budget for my kids and share it with them

~~iv. I would like to be able to modify my kids' budget and receive notifications for their budgets.~~

~~v. I would like to be able to send messages through the application to my kids (if time allows)~~

3. User Event Viewing

a. As a user,

~~i. I would like to be able to view graphs that show my daily, biweekly, and monthly spending.~~

~~ii. I would like to be able to view graphs that show my spending for specific categories.~~

iii. I would like to be able to receive spending suggestions

~~iv. I would like to receive inspirational quotes.~~

4. User Notifications

a. As a user,

~~i. I would like to enable notifications for my daily, biweekly, and monthly spending trends~~

ii. I would like to enable notifications for spending on specific items

~~iii. I would like to enable notifications for spending in specific categories~~

iv. I would like to be able to enable notifications on Google Chrome

v. I would like to be able to set reminders for buying certain items at specific times

~~vi. I would like to be able to set spending preferences and receive notifications on what categories to cut back on.~~

5. User Sharing

a. As a user,

- ~~i. I would like to be able to share my monthly savings on Facebook~~
- ~~ii. I would like to be able to share my monthly savings on Twitter~~
- iii. I would like to be able to share my budget with other users

Non-Functional User Stories

1. Architecture

- a. As a developer,
 - ~~i. I would like to have a functional back-end built on Node.js and MySQL.~~
 - ~~ii. I would like a functional front-end written in Angular.~~
- iii. I would like requests between the front-end and back-end to be efficient and easily manageable. (ongoing)

2. Security

- a. As a developer,
 - ~~i. I would like user data to be anonymous and login information to be kept secure.~~
- ii. I would like prevent our database from becoming vulnerable or corrupted. (ongoing)

3. Usability

- a. As a developer,
 - i. I would like the interface to be intuitive and the functionality to be easily grasped. (ongoing)
 - ~~ii. I would like the application to be able to run on most standard web browsers.~~

4. Performance

- a. As a developer,
 - i. I would like the database to be able to sustain 10,000 users worth of data. (ongoing)
 - ii. I would like query responses to take no more than 400 ms. (ongoing)

5. Appearance

- a. As a developer,
 - i. I would like the interface to be clean and free of clutter. (ongoing)