



Sprint 1 Planning Document

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

Sprint Overview:

During sprint 1, we plan to create our base user-interface of our application. We plan on developing the database structure for the whole application, login/register system, forgot-password system, and many charting features.

Scrum Master: Haris Sohail

Team Meeting: Tuesday / Wednesday @ 2:00

Risks and Challenges:

This sprint will primarily consist setting up all of the elements of our application including our database in MySQL including creating the correct tables, utilizing node.js to send requests to our database, and setting up our front-end environment. Only a few people in the group have experience working with databases and database languages, so a good duration of our time for this sprint will be dedicated to learning the tools and languages needed to work in this environment. Similarly, only a few people in the group have exposure to working of front-end development, and there will be learning curve while trying to implement Angular and using the front-end to communicate with the back-end environment.

User Stories to implement this sprint

1. As a user, I would like to be able to create an account

Task	Estimated Time	Owner
Create Registration page backend	4 hrs	Mayur
Create Registration page UI	4 hrs	Jacob
Implement Reset Password page and Change Email page backend	3 hrs	Mayur
Implement Reset Password page and Change Email page backend	3 hrs	Jacob
Setup Database & Create User Table	5 hrs each	Haris & Jacob
Create unit tests to verify that authentication works properly	3 hrs	Haris

Acceptance Criteria:

- Given that the homepage is implemented correctly, when the user registers for an account, they will be sent a verification email to confirm their registration.
- Given that the database is setup correctly, when user registers for an account, their data will be inserted into a user table properly hashed.
- Given that the unit tests are implemented correctly, when these unit tests are ran by our team, authentication will be verified to work properly and securely.

2. As a user, I would like to be able to view graphs that show my spending across different time intervals and spending categories.

Task	Estimated Time	Owner
Create a homepage (dashboard)	4 hrs	Mayur
Implement graphs that show spending across different time intervals	3 hrs	Mayur
Implement graphs that show spending across different categories	3 hrs	Mayur

Add unit tests to verify the graphs are showing the proper data	3 hrs	Haris
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Acceptance Criteria:

- Given that the dashboard is implemented correctly, when a user logs in to BudgetWise, they will be presented with a page storing different graphs and data on their expenses.
- Given that the time interval graphs are implemented correctly, when a user opens their dashboard, they will be able to select a weekly, monthly, yearly, or other graph to see how their spending was divided up during that time period
- Given that the categories graphs are implemented correctly, when a user opens their dashboard, they will be able to select different categories to see during what time periods they spend the most on those expenses

3. **As a user, I would like to be able to create new spending categories.**

Task	Estimated Time	Owner
Create Categories Table	1 hr each	Haris & Jacob
Add predefined categories	2 hrs each	Haris & Jacob
Implement “Add Category” page	2 hrs	Jacob
Implement “Add Category” method in backend to send category details to database	2 hrs	Haris
Implement unit tests to make sure categories are added successfully	1 hr	Haris

Acceptance Criteria:

- Given the categories table is implemented correctly, when a request is sent to the database, the category is successfully saved and everytime the user visits the dashboard, the new category will always appear.
- Given the database is able to store predefined categories, when a new user is created, they will already have these categories available to them.
- Given the “Add Category” page is implemented correctly, when a request is sent to add a category, it will then show as an option when entering purchases.

4. As a user, I would like to be able to manually enter purchases.

Task	Estimated Time	Owner
Create a UI allowing users to enter in new purchases	2 hrs	Haris
Create tables in database that stores purchase details	1 hr	Haris
Create function in backend used to interpret new purchase details and send details to database	3 hrs	Mayur

Acceptance Criteria:

- Given that the UI is implemented correctly, when a user enters a purchase, the database will be updated to include that expense along with the user ID that created it.
- Given that the tables in database are created correctly, when we inspect the data in the database, the purchase details will be stored in a proper, logical manner.
- Given that the function works correctly, when purchase details are entered into BudgetWise, the correct data will be sent to the database.

5. As a user, I would like to be able to enter recurring spending amounts.

Task	Estimated Time	Owner
Add an option in the UI to define an expense as recurring when creating it, along with the time interval over which it recurs.	3 hrs	Jacob
Implement a method to check whether or not recurring expenses in the database have existed for the specified time interval and add them as an expense if they have	2 hrs	Haris
Allow the option for the user to toggle if the item is recurring or not	2 hrs	Jack

Acceptance Criteria:

- Given that the interface is updated correctly, when the user marks an expense as recurring, they will be prompted to enter the time interval over which the expense recurs.

- Given that the method to check if there is a recurring expense is implemented correctly, when the next time period comes along in which an item is recurrent, that item's expense will be added to the correct budget.
- Given that the user toggles for an item to not be recurring anymore, when the next time period comes along, that user will not be charged with the recurring expense.

6. As a user, I would like to be able to view detailed analytics on the expenses that cost me the most.

Task	Estimated Time	Owner
Add an analytics page (UI) to display more detailed spending data (including top five items spent per category)	4 hrs	Jack
Implement functions in the backend that will query the database and return the analytics requested	3 hrs	Jack
Allow the user to select the number of items to be displayed for each category	2 hrs	Jack

Acceptance Criteria:

- Given that the analytics page is implemented correctly, when the user goes to the analytics page, they will gain insight on how they are spending money.
- Given that the UI is implemented correctly, when the user goes to the analytics page, they will be presented with analytics corresponding to their top spending habits.
- Given that the analytics are implemented with variable item quantity selection, when the user chooses to display a different number of items, the UI will update accordingly.

7. As a user, I would like to be able to customize my BudgetWise dashboard to my liking

Task	Estimated Time	Owner
Create a setting page	3 hrs	Jack

Add buttons for different functionalities (themes,color of categories, change email, change password)	2 hrs	Jack
Add functionality of dark/light themes	2 hrs	Jack
Add ability to change the color of different spending categories	2 hrs	Jack

Acceptance Criteria:

- Given that the settings page is implemented correctly, when the user clicks the “settings” button, they will be directed to the page for settings.
- Given that the functionality for dark/light themes is implemented correctly, when the user opts to change their theme, the user’s web page will display a different theme.
- Given that the ability to change the color of different spending categories is implemented correctly, when the user chooses a new color for a spending category, this change will be reflected whenever that category is displayed to the user.

Remaining Product Backlog User Stories

Functional User Stories

1. User Account

a. As a user,

- ~~I would like to be able to register an account~~
- ~~I would like to be able to login to my account with a selected username and password~~
- ~~I would like to be able to reset my password~~
- ~~I would like to be able to change my email~~
- ~~I would like to be able to change the theme of the application to my liking~~
- I would like to be able to change my currency of choice
- ~~I would like to be able to change the color of different spending categories to my choosing~~

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
 - 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
- 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 to reward/punish them
 - 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

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 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)