Sprint 2 Planning Document

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Sprint Overview:
During sprint 2, we plan to implement features encompassing user notifications, parental controls, and specialized budgets.

Scrum Master: Jacob Riggs

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

Risks and Challenges:
This sprint will include enabling features that will use modules through node.js that most of the members of the group are not familiar with. Also for features such as the parental controls will require us to reformat the database tables to include new parts, which may be difficult to add.

User Stories to implement this sprint

1. **As a user, I would like to be able to change my email**

Task	Estimated Time	Owner
Research how to implement nodemailer	2 hrs	Jacob
Create the frontend functionality for changing email	2 hrs	Jacob
Create the backend functionality for changing email	2 hrs	Jacob
Create unit test cases for changing email functionality	1 hr	Jacob

Acceptance Criteria:
- Given that the changing email function is implemented correctly, when a user attempts to enter a new email, theirs, and only theirs, will be changed.
- Given that the UI is implemented correctly, when a user opens the settings page they will see a field to enter their new email and a button to submit a change.
- Given that the email backend functionality is correctly implemented, when a user changes their email, the database will reflect the change made.

2. **As a user, I would like to be able to create a budget for next month.**

Task	Estimated Time	Owner
Create a button on the dashboard which automatically creates the next month budget with previous preferences	2 hrs	Mayur
Implement the backend for the next month budget functionality	2 hrs	Mayur
Create unit test cases for the next month budget functionality	1 hr	Mayur

Acceptance Criteria:
- Given that the UI is implemented correctly, when the user opens their dashboard, they will see an option to automatically create monthly budgets.

- Given that the automatic monthly budget works, when the user selects that they would like to activate this option, the database will be updated once a month with a new budget for the next month.
- Given that this feature is implemented well, when the user logs in, the interface will enable the user to intuitively understand how to create automatic monthly budgets.

3. **As a user, I would like to be able to plan savings for retirement.**

Task	Estimated Time	Owner
Implement predefined category called 'Retirement' that exists when user is registered	1 hr	Jacob
Implement in the front end the ability for the user to find their retirement funds	3 hrs	Jacob
Reformat the database to include features for retirement	1 hr	Jacob
Create unit test cases for the retirement budget	1 hr	Jacob

Acceptance Criteria:
- Given that the retirement category is implemented correctly, when a user creates an account, the retirement category will be added to each monthly budget.
- Given that the updates to the categories table are implemented correctly, when a user creates a new budget that is not a monthly budget, expenses added to the retirement category will not be added to that budget.
- Given that the database queries are implemented correctly, when a user wants to see how much they have saved for retirement, they will be shown the total for all the expenses in the retirement category within any budget.

4. **As a user, I would like to be able to share my monthly savings on Facebook**

Task	Estimated Time	Owner
Research Facebook Documentation for share to Facebook button	3 hrs	Jacob
Implement the frontend for the button, and the sharing of the savings information	2 hrs	Haris

Implement the backend for the button	2 hrs	Jacob
Implement unit test cases for the ability to send notifications	1 hr	Haris

Acceptance Criteria:
- ● Given that the sharing feature is implemented correctly, when a user shares a budget, their sensitive data will be protected.
- ● Given that the UI is implemented well, when a user wants to share their budget, they will clearly be able to find the appropriate buttons and fields to share details on their budgets.
- ● Given that the sharing option is functional, when a user shares their budget, friends and followers will be able to see a link to the budgets page.

5. **As a user, I would like to be able to share my monthly savings on Twitter**

Task	Estimated Time	Owner
Review Twitter Documentation for share to Twitter button	3 hrs	Haris
Implement the frontend for the button	2 hrs	Haris
Implement the backend for the button	2 hrs	Haris
Implement unit test cases for this button, and the ability to successfully share the information of twitter	1 hr	Haris

Acceptance Criteria:
- ● Given that the sharing feature is implemented correctly, when a user shares a budget, their sensitive data will be protected.
- ● Given that the UI is implemented well, when a user wants to share their budget, they will clearly be able to find the appropriate buttons and fields to share details on their budgets.
- ● Given that the sharing option is functional, when a user shares their budget, friends and followers will be able to see a link to the budgets page.

6. **As a user, I would like to be able to monitor my kids' spending.**

Task	Estimated Time	Owner
Implement UI page to allow user to add parental account	3 hrs	Haris
Implement backend login via parental account	2hrs	Mayur
Allow parent account to see all spending and change any details within child account	3 hrs	Mayur
Implement unit tests to test whether parental accounts work as described	1 hr	Haris

Acceptance Criteria:
- Given that parental accounts are activated correctly, when a user logs in to their account, they will only be able to see their own budgets and budgets of accounts that they have explicitly created as child accounts.
- Given that this feature works properly, when parent users access child budgets, they will be shown the same information as the child user would see.
- Given that the parental feature is implemented well, when a user logs into a parent account, they will be able to adjust child budgets as they see fit.

7. **As a user, I would like to enable notifications for my daily, biweekly, and monthly spending trends**

Task	Estimated Time	Owner
Create a field in settings page to choose increment of notifications	2 Hours	Mayur
Implement backend for notifications	2 Hours	Mayur
Format graphs for trends to send to user	2 Hours	Mayur
Create unit test cases for the functionality of the notifications and graphs	1 Hour	Jack

Acceptance Criteria:
- Given that the field to choose increment of notification works, when the user chooses an increment in the field, their choice will be saved in the backend.

- Given that backend for notification works, when the user expects a notification, the user will receive one on time.

8. **As a user, I would like to enable notifications for spending in specific categories**

Task	Estimated Time	Owner
Create a button in Category Analytics for notifications for each category	2 Hours	Mayur
Change the color of the button from green/red depending on notification setting	1 Hour	Mayur
Add notification to categories in database	1 Hour	Mayur
Implement email functionality of notification	4 hr	Haris
Create unit test cases to test whether notifications get sent properly for the proper category	1 hr	Haris

Acceptance Criteria:
- Given that the button for notifications work correctly, when the user clicks on the button, the color will change from green to red or vice versa.
- Given that notifications are added to the database, when the user enables notifications for a category, then the category's notification field will be set to "true" in the database.
- Given that the email functionality works correctly, when the user expects to receive an email, an email will successfully be sent to them.

9. **As a user, I would like to be able to change my currency of choice**

Task	Estimated Time	Owner
Add field in database to store user's preference of currency	1 hr	Jacob
Research an API that allows currency conversions	3 hrs	Jack

Implement the API on the backend and successfully receive data back	4 hrs	Jack
Replace pre-existing values with values in the new currency	2 hrs	Jack
Create unit test cases for the currency feature	1 hr	Jack

Acceptance Criteria:
- Given that the API is used correctly, when currency values change, updating the value of each type will be simple for the developer.
- Given that the currency changing UI is implemented correctly, when a user accesses the settings page, they will be given a drop-down menu with different currencies to choose from.
- Given that the the change currency feature is implemented correctly, when a user selects a new currency, all spending detail occurrences on the front end will reflect the change.

10. **As a user, I would like to be able to make a budget for Christmas/Birthdays**

Task	Estimated Time	Owner
Modify database for special budgets	1 hr	Jacob
Create special graph to compare spending on different individuals	5 hrs	Jack
Add Christmas theme to UI	3 hrs	Jack
Create unit test cases for functionality of special budgets	1 hr	Jack

Acceptance Criteria:
- Given that the database is updated to allow for these types of budgets, when a category is created for it, that category will belong to a specific budget.
- Given that the Christmas budget functionality is implemented correctly, when the budget page is opened, pie graphs will be shown for each category, which will be designed to represent the different people that gifts are being purchased for.

- Given that this feature is implemented correctly, when a user creates a new Christmas budget, the allowance of each category will be equal to the total allowance of the budget divided by the total number of categories.

Remaining Product Backlog User Stories

Functional User Stories
~~Sprint 1 User Stories~~
~~Sprint 2 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

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)