**Criterion E: Evaluation**

***Product Evaluation***

An interview was held with the client on 14/11/2023 for gathering his feedback regarding the application. The interview transcript has been included in Appendix E1. Please refer to Appendix E1 for further details.

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| **Success Criteria** | **Met/Not Met** | **Evaluation (based on Client Interview in Appendix E1)** |
| The client must be able to switch between his personal and work Gmail accounts without losing any of his financial data. Each account’s data should be isolated, ensuring that only the transactions and categories related to the signed-in account are accessible. | Met | The client talked about and praised the ease of use of signing in and using his different Gmail accounts in the product and had no complaints regarding his financial data being mixed between his two accounts. |
| The application must ensure that sensitive financial data is only accessible when the client is logged in using one of their Gmail accounts. Attempts to access the application without logging in must redirect the user to the sign in page. | Met | The client said he was reassured about the security of the application as it redirected him to the sign-in page when he had forgotten to sign in. |
| The client should be able to add new incomes and expenses on the Home page. The transactions must also be validated – transaction amounts cannot exceed 100,000 and transaction names cannot be longer than 20 characters long. | Met | The client mentioned and commended the simplicity of adding incomes and expenses in the Home page. |
| The client must be able to view five of his recently made transactions in the Home page. | Met | The client was said he was contended with the ability to view five of his recent transactions in the home page. |
| The client must have the ability to edit or delete existing transactions. Editing transactions will carry the same validation limitations (maximum amount being 100,000 and maximum transaction name length being 20 characters). | Met | The client had stated his satisfaction with the transactions editing and deleting features. |
| In order to segregate transactions, the solution should have the functionality to create, edit, and delete transaction categories, and they should be less than or equal to 25 characters in length. | Met | The client said he was pleased with the transaction categories feature and found it to be time-saving compared to his previous setup. |
| The client must be able to filter transactions by their type (income/expense), category, date added and the magnitude of the amount. | Met | The client said he had positive feedback regarding the filtering of transactions. |
| The implemented solution should display monthly transaction data in graphs (daily incomes/expenses, daily balance, and monthly categorical earnings/spendings). This data must be filtered by month and year. | Met | The client said he found all the graphs and pie-charts to be useful for having a holistic view of his financial health. |
| The application must be fully accessible and functional on both the client’s MacBook and Windows desktops. The interface should maintain consistency across devices, ensuring that there is no loss of functionality between platforms. | Met | The client mentioned and liked the flexibility of how he can use the application in both his Windows and Macbook computer systems. |
| The product should be able to handle data validation errors and provide feedback regarding the completion of database operations with clear success/warning/error messages. | Met | Mr. Hari expressed his appreciation for the status messages used for the alerting him regarding the status of the various functions of the application. |
| All changes (adding, editing, or deleting transactions and categories) must be updated in real-time across the client’s devices and reflected immediately in the application. | Met | The client had said that he appreciated this feature. |

The product has met client expectations (Appendix E1) through solving the problem identified in the initial interview (Appendix A1) by fulfilling the success criteria. However, a feature that could have been implemented differently in my opinion would be being able to create new categories in the home page using a modal, which would’ve increased convenience for the client as he wouldn’t have to go to a new page to do so.

**Recommendations for Further Development**

Mr. Hari found the product satisfactory. However, given below are some recommendations for further development that I have come up with based on his feedback and along with my personal suggestions as well.

1. **Multiple categories:** The client expressed his wish for the ability to assign multiple categories to each transaction (one transaction can be assigned multiple categories instead of just one) to enhance transactions organization (Appendix E1). Implementing this requires adjusting the database schema to support many-to-many relationships between transactions and categories instead of the current one-to-many relationship system. This would lead to a more effective categorization system, allowing for more granular transactions filtering and categorization.
2. **Recurring transactions:** I would like to allow the client to set up recurring incomes/expenses (ex. salary, rent) that are automatically added to the ‘transactions’ collection in the database at the specified time periods. Implementing this would involve creating Firestore Cloud Functions to periodically create these transactions at the specified intervals. I believe this would be beneficial as it reduces the time spent in creating transactions (since Mr. Hari would not have to repeatedly make transactions that are made regularly), hence allowing for more convenient financial management.

**Word count: 291**