

Open-Source Coding

POE PART 1

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Research

Introduction

This document will be explaining the usage of Personal Financing Applications, as over the last decade technology has evolved, not limited to, modern computers software and new mobiles applications. Since we are living in the Fourth Industrial Revolution, namely/known as the Digital Age, the way people used to budget before and after makes a big difference. In this document below, my team and I will be discussing about budgeting apps which are popular, by giving users insight into spending habits and making them disciplined towards income and expenses. The three Budgeting Apps that will be discussed are; [Good Budget App](#), [MoneyManager App](#) & [Simple Budget App](#).

GoodBudget Application – App 1

GoodBudget App Overview

This App is a popular personal budget app suited in finance for planning, tracking of debt and good money management. It allows you to share the budget with a partner (Spouse), or friend. Allowing for multiple device usage, including IOS and Android. It involves methods to make envelopes for budgeting categories, namely; Shopping (Groceries), Rent, Utilities, Eating Out, Date Night, Car Payments and more. A user can set aside money for each account to see what expenses is going where and how to increase or decrease, and track spending altogether.

Pictures' of GoodBudget App

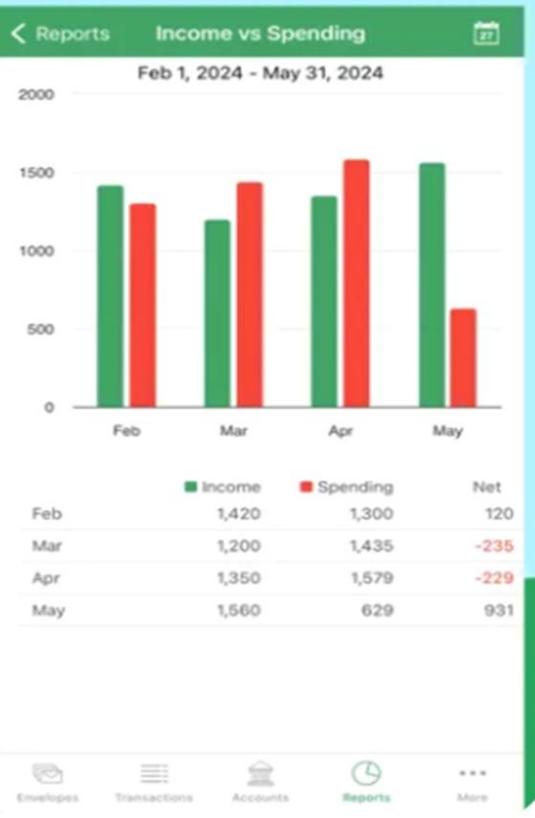




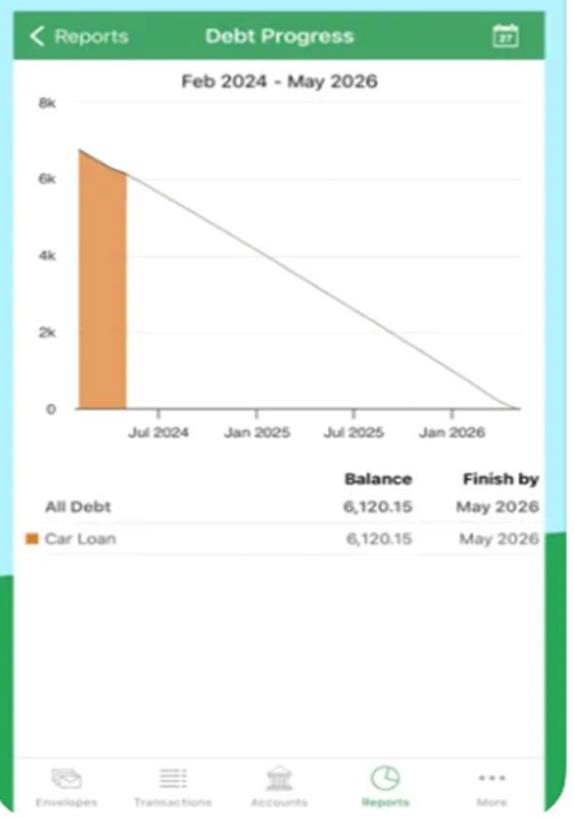
As one can see in the **First Picture**, the budget categories are displayed and amounts next to them are shown based on the account holders expenses. Under each category is a Sub-Category, adding to what falls under each expense and a Green Line is shown to present when a user has almost reached to Maximum amount to spend for this category in his/her Budget Plan for the month/year.

In the **Second Picture**, the budget is displayed in a Pie Chart form, indicated expenses in a report form. The picture displays the date at the top from day-month-year, what amounts is for each category and what total is spent. Lastly the percentages are shown next to each name. Which is creative by use of the different colour representations.

Stay on budget



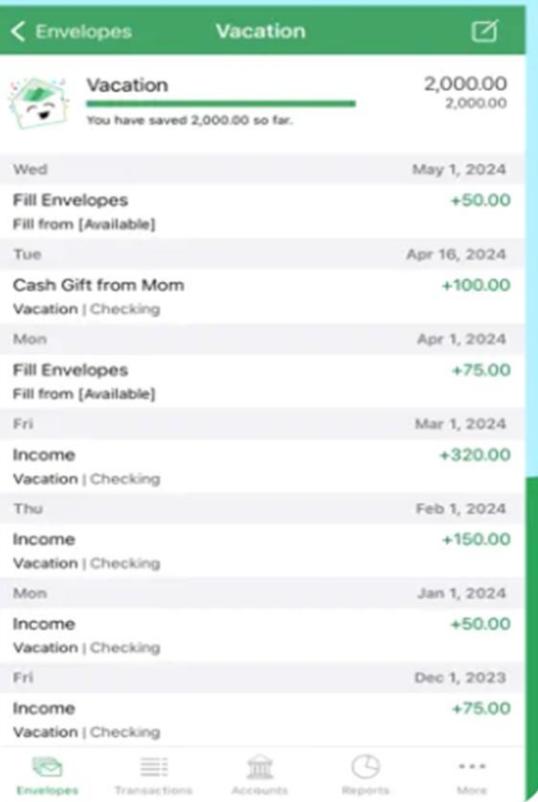
Track your debt progress



In the **First Picture**, two measures of Money are shown namely; the Income (Green Colour) & Spending (Red Colour). From this account we can see everything in a clear and precise manner. Aside from the financial patterns of spending, the dates are also mentioned above. This format is a Bar Graph presentation. Other options are available as well within the Application. With the Money Amounts in the Left-Hand Side, while the Months of the 2024 Year at the Bottom. With shown amounts of Income & Spending calculations; the Net Value being given. This allows for any user to make informed decisions based on factual results provided by the GoodBudget App.

In the **Second Picture**, A debt-tracking progress is shown, as this user is tracking how much money is spent on one particular category. The measurement being in the form of another Line Graph declining as the spending is getting lower. As in the Picture, he/she is paying off a Car Loan, which lowers over time in months & years. The same as the previous picture, having the time – date, amounts presented.

Save for big expenses

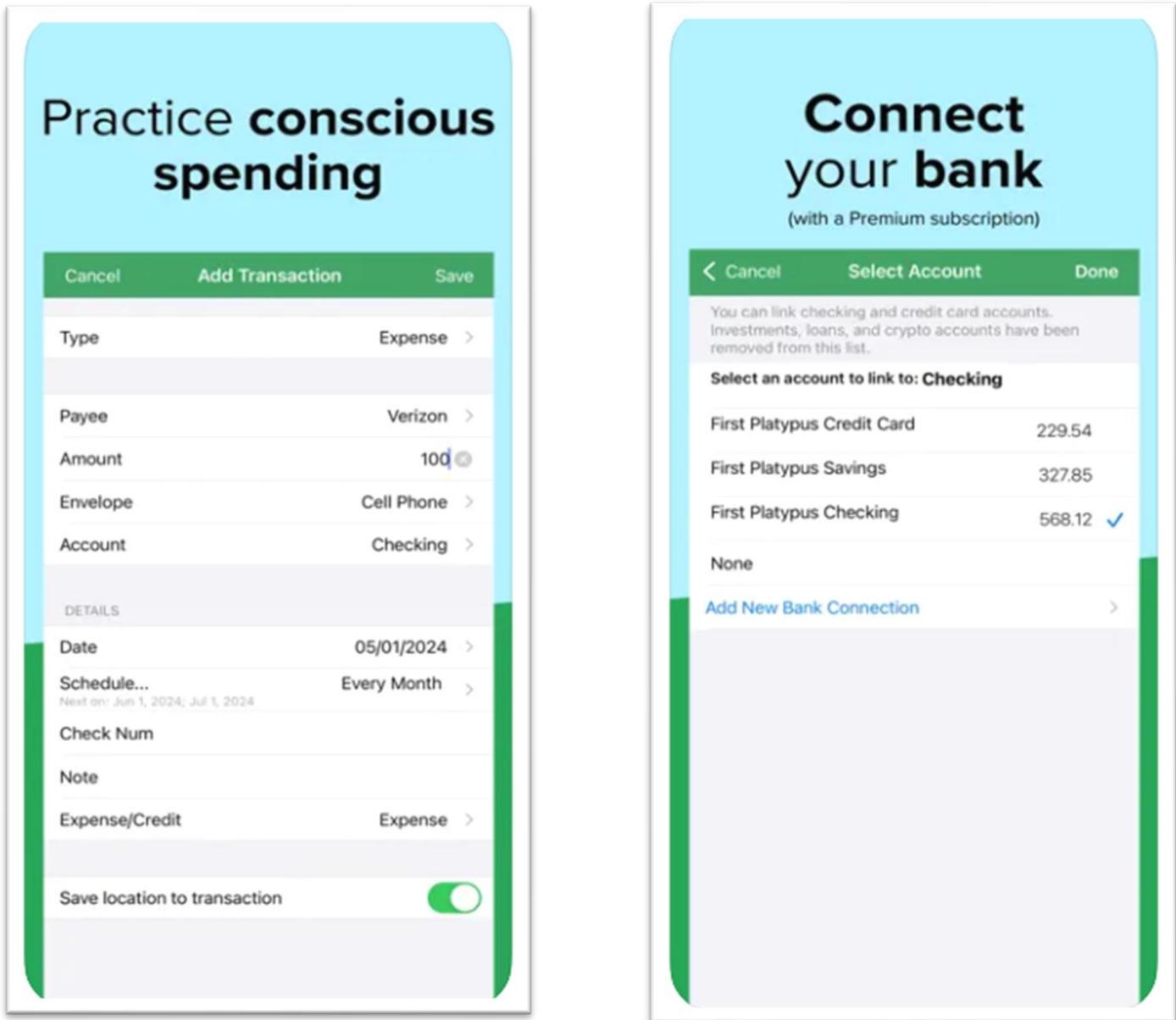


Create a budget that works

	Edit Budget	Done
Food		
Eating Out	50	≡
Groceries	150	≡
Fun		
Discretionary	35	≡
Date Night	75	≡
Bills		
Cell Phone	100	≡
Rent	500	≡
Utilities	75	≡
Car		
Gas	65	≡
Payment	275	≡
Insurance	50	600 Annually
Giving		
Generosity	50	≡
+ Add Envelope		
Monthly >	Total Budgeted 1508	

In the **First Picture**, the user has attempted to make a savings account, in which case he/she created an Envelope by the name of Vacation and has been saving an amount from the income earned. The amounts, months, years and Total has been shown to be R 2,000.00 altogether. A user here can be notified that every month they must save an amount for Travelling. This follows a pattern of good habit to save money every month for something worth-while.

In the **Second Picture**, the user created or shows a budget option settings for the month, under each main category are Sub-Categories containing what the account holder would like to spend on in a month and what he/she spends on. I find this to be a smart budgeting plan for the month, as it tracks the spending habits of people and can tell them, how much they can/should spend and save on. Or even encourage them to earn more money to handle their responsibilities of expenses.



In the **First Picture**, as shown here, a user is adding a person or company for a payment to be made every month of the 5th of January 2024. This is smart as one tracks money in & out of the account. If it's a debt payment, the progress towards repayment is good by adding the paid. This focuses on Debt Management Strategies.

In the **Second Picture**, Mentioned at the top (Only for Premium Subscribers), this shows that one can have an enhanced version of GoodBudget App by choice. Also, mentioned is that the Credit/Debit cards can be linked to one's bank account not limited to crypto (Bitcoin, Stocks, Investments) and load payments which is good too. Which can also indicate to a new user that one can have more than one payment choice which is great, and open for new customers to try than other financial apps.

Strengths & Weaknesses of GoodBudget App

Strengths	Weaknesses
Making use of an Envelope Method, which me example is simple and very effective for all users.	Many might find the Envelopes Ideology very limiting and non-flexible for whom need to spend more & receive more.
Very precise manner and clean interface usage on all pages.	Paid subscription may be a problem for people who need advanced options.
A benefit to have access on both IOS & Android plus all Web devices.	No Platform for Investing tracking or any different finance management feature.
Any account user can track and download statements of spending, to maintain the budget tracking.	The app requires manual entry of transactions every time which can be time consuming to people.
Sharing of Budgets with friends and family is a perk for financial success.	May not connect perfectly with people's own bank account or credit cards.
An enhanced paid version is also available for those who want premium features besides the normal ones.	Better options could be available to others, besides the GoodBudget Application.

Innovative Features of GoodBudget Application

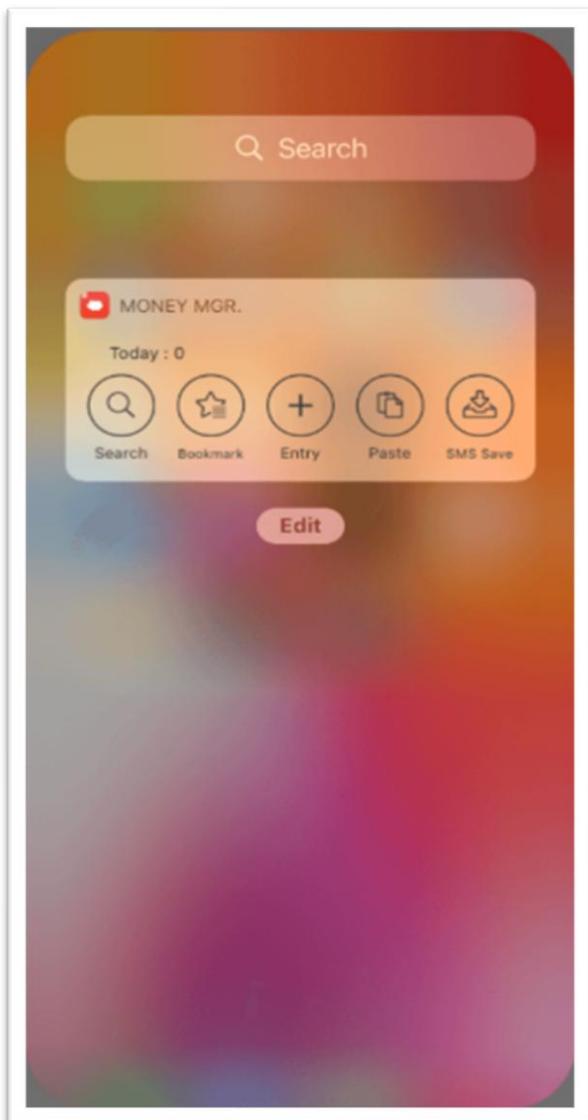
- Allows a user to check previous transactions made anytime.
- Has a feature to calculate tax requirements on every income and provides a SARS Tax report.
- Create patterns based on financial spending to manage the users lifestyle.
- Measurements on the Dashboard for performance included.
- Can budget categories with sub-category allocations.
- Balances Income & Expenses.
- Reminder to pay any outstanding bills or debt orders saved.
- Features include a membership and donation option.
- Keeps track of most important spending.

MoneyManager Application – App 2

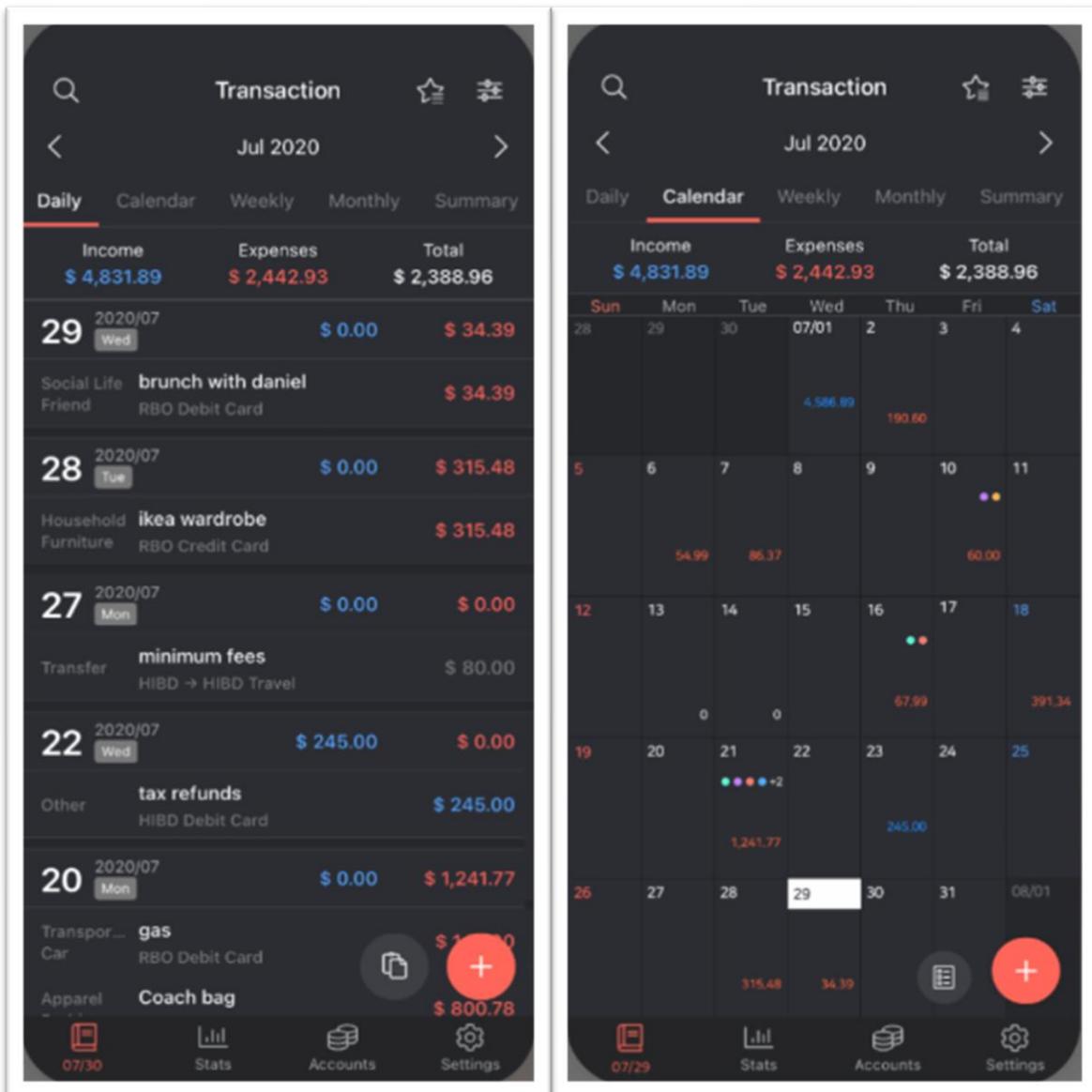
MoneyManager App Overview

This App is very versatile and simple to use, as it is accessible to both IOS and Android Systems. Similar to the GoodBudget Application, this app also has tools in place for management of finances for individuals. This app provides insights to finance, budgeting assistance, spending tracking and control maintenance. Along with calendar functions, viewing statistics, budgeting categories, many different currencies, more than one account and can alter data inserted.

Pictures' of MoneyManager App

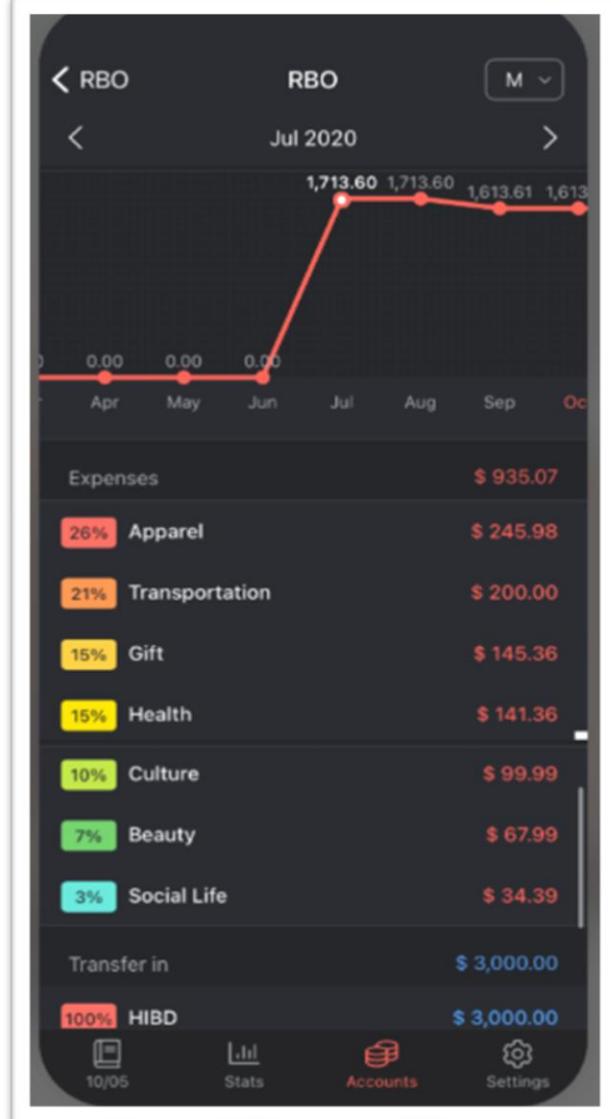
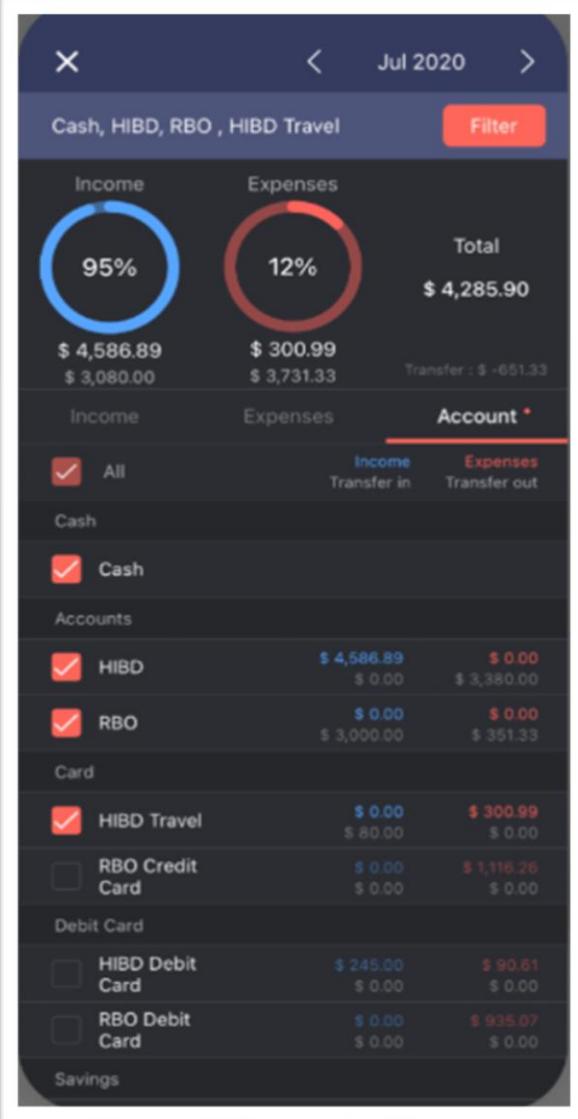


This Picture serves as the Notification tab, giving Realtime updates and helping the account holder stay informed of what's happening in their account. Either about their progress, bills to be paid, debt orders, security or transfers.



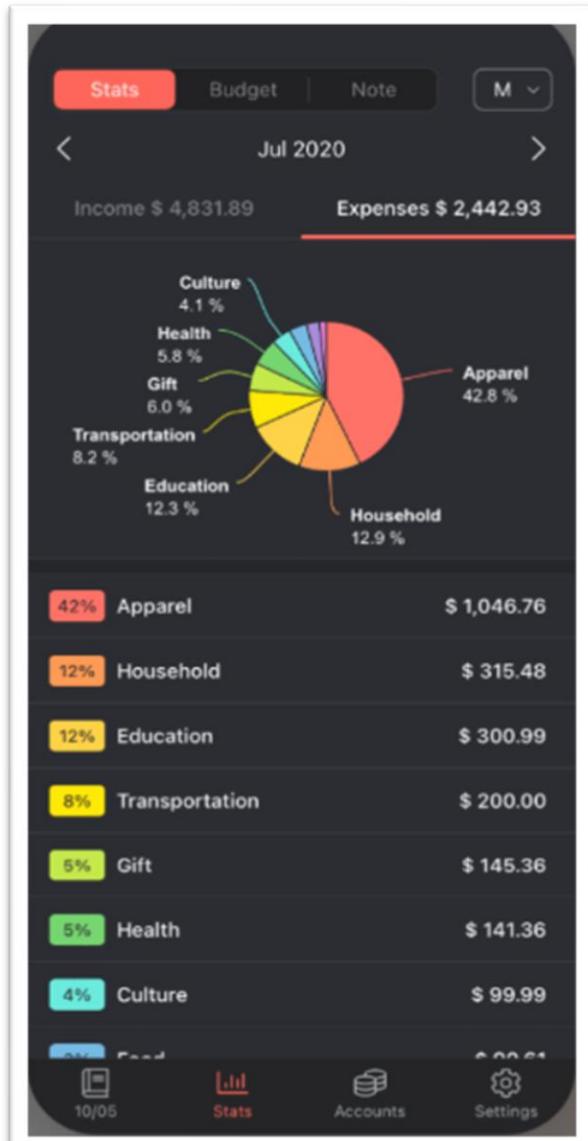
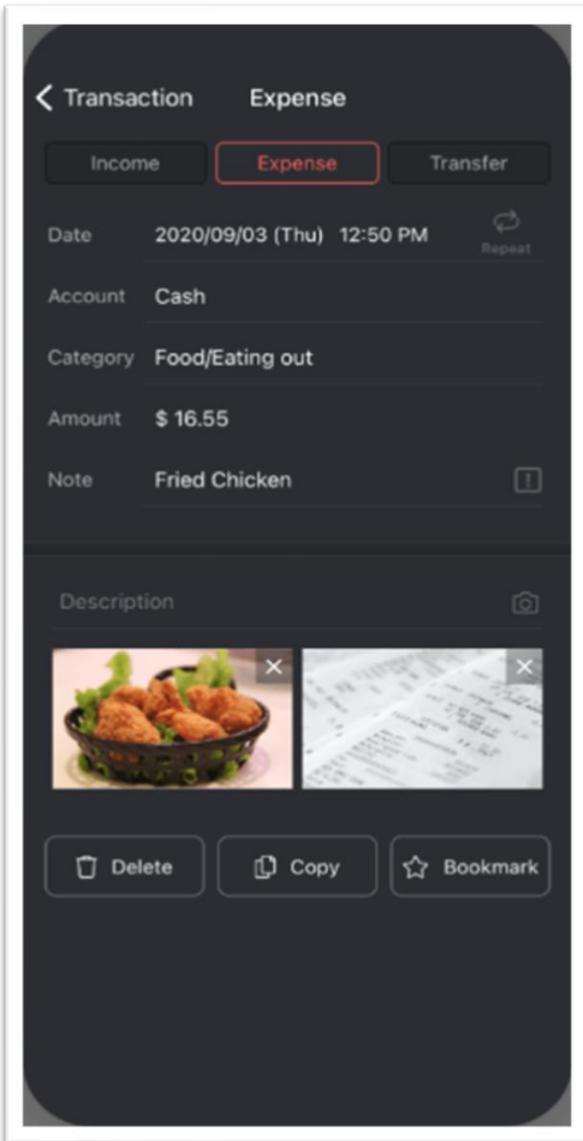
In the **First Picture**, we can see the central hub to view, manage and track any transactions. A detailed record of financial transactions is displayed, which is income, expenses and totals, which makes an account holder feel secure. The accurate dates followed by the category names below makes a big difference, alongside showing what accounts or cards are being used for any transactions. One would want to rely on this application for it being precise and authentic even to request a mini or full statement of bills.

In the **Second Picture**, we can see the data that the user inserted in the previous transaction image on the calendar. This shows all income and expenses made throughout the month in the form of a calendar planner. Notifications can be given as information is placed on the calendar to alert the user upon any day of payment for expecting an income.



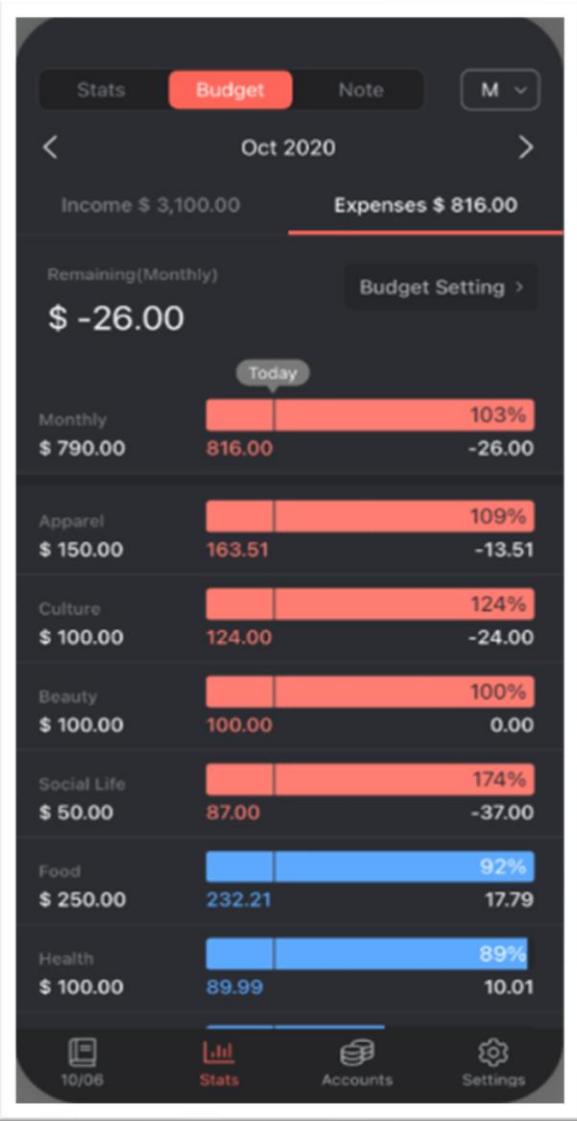
In the **First Picture**, we can see that the display has multiple accounts shown, different debit & credit cards being used, as well as transactions incoming and outgoing. A total is shown at the top right-hand side of the application. This indicates that this app is versatile and flexible with many forms of payments and records it can handle for any user anytime.

In the **Second Picture**, as mentioned before, this app can provide financial patterns in the form of statistics, like someone that buys & sells shares on the stock market. This statistic shows the Dates(Months) below and Amounts on the top used. What's also nice is that the amounts within the categories in red colour is listed as Expenses. This gives the user an authentic and accurate measurement of transactions.



In the **First Picture**, we can see that the user is using a Tab called Expense, which contains a breakdown of information, namely: the dates and times, what accounts are being used, what categories does this fall under, what amount is required for payment and lastly a note to the user.

In the **Second Picture**, we can see a more detailed way of financial information being displayed, by using a Pie Chart. Below are the categories explained including percentages and amount spent as Expenses. All dated for the 20th of July on the App Page. With a total expenditure of \$ 2,442.93 altogether. One can visually understand financial changes over time.



Accounts		
Account	Liabilities	Total
\$ 6,628.12	\$ 208,242.65	\$ -201,614.53
Cash		\$ 68.45
Cash		\$ 68.45
Accounts		\$ 2,768.66
HIBD		\$ 1,155.05
RBO		\$ 1,613.61
Card	Balance Payable \$ 2,192.65	Outst. Balance \$ 0.00
HIBD Travel	\$ 0.00 \$ -1,076.39	\$ 0.00
RBO Credit Card	\$ 0.00 \$ -1,116.26	\$ 0.00
Debit Card		\$ 0.00
HIBD Debit Card		\$ 0.00
RBO Debit Card		\$ 0.00
Savings		\$ 100.00
RBO Saving		\$ 100.00

In the **First Picture**, we can see a stats page on the app, allowing users to track and control their spending, by setting limits for different categories. As shown the progress of discipline and good habits of maintaining expenses by limitations on daily wants and needs. This is a good start to achieve financial literacy, by saving and limiting expenses creating personal growth for account holders.

In the **Second Picture**, we can see a display of the money accumulated in all registered accounts, what are the liabilities due and total of everything added together. Here one sees a structured form of what is going in and out of the bank.

Strengths & Weaknesses of MoneyManager App

Strengths	Weaknesses
One can track their income, expenses, spending habits providing a clear view of the financial situation.	A big privacy concern is that sensitive information must be shared with the app itself.
Offering graphs, statistics and different forms of interpretation, including budgeting trend patterns.	Certain features require a subscription fee, adds unnecessarily to expenses.
Like other apps, goal settings and tracking progress is possible.	Data inaccuracy can result in wrong reports and financial damages to the user account.
Has automatic categorization for transactions, making it unique to other apps.	Since the app is versatile, it can cause complexity to those who can't understand every feature available.
International currencies are supported for investments to simplify management.	Too much relying on any app can hinder financial education and discipline of planning & proper literacy management.

Innovative Features of MoneyManager Application

- This app does evaluate user spending, and foresees potential costs by means of Artificial Intelligence (AI).
- Provides graphical data on user spending, offering special budgeting advice.
- A user can modify the settings to program the app to suggest where money can be saved for something useful.
- Alerts to price increases, renewals and any subscriptions taken out.
- Very ideal for people who are freelancers and non-regular income holders.
- Perfect for shared expenses like rent, utilities and groceries.
- Protection from overdrafts or unexpected shortfalls.
- Lastly has one-click cancellations for non-essential services.

Simple Budget Application – App 3

Simple Budget App Overview

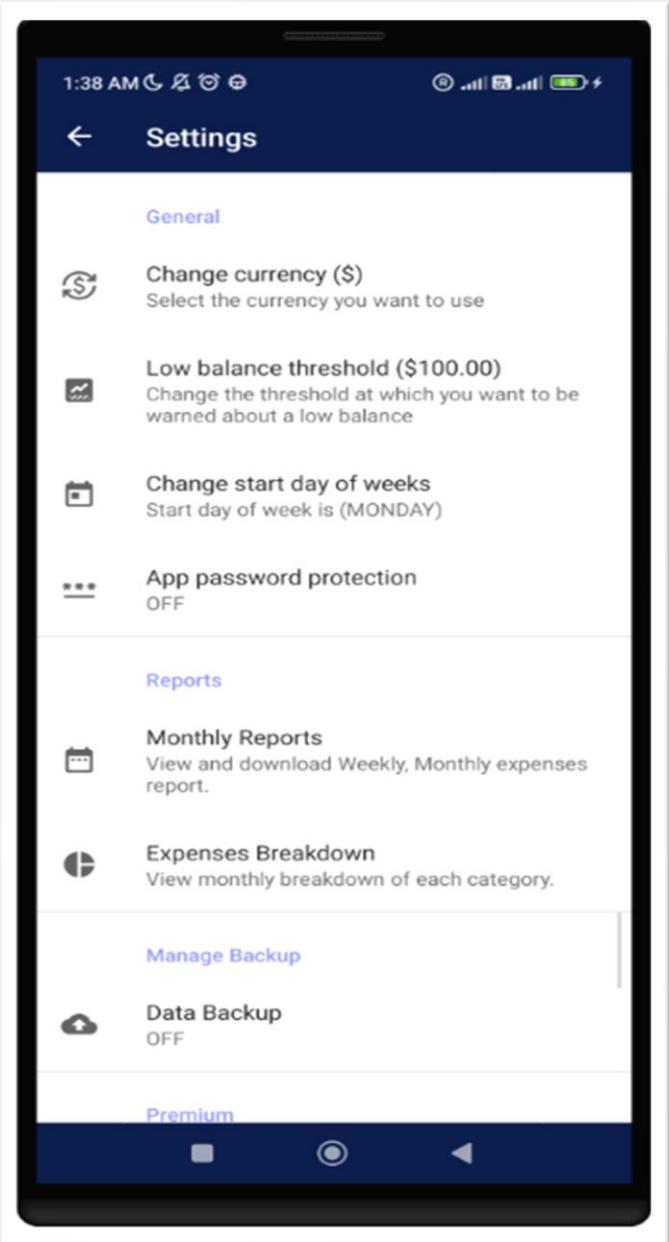
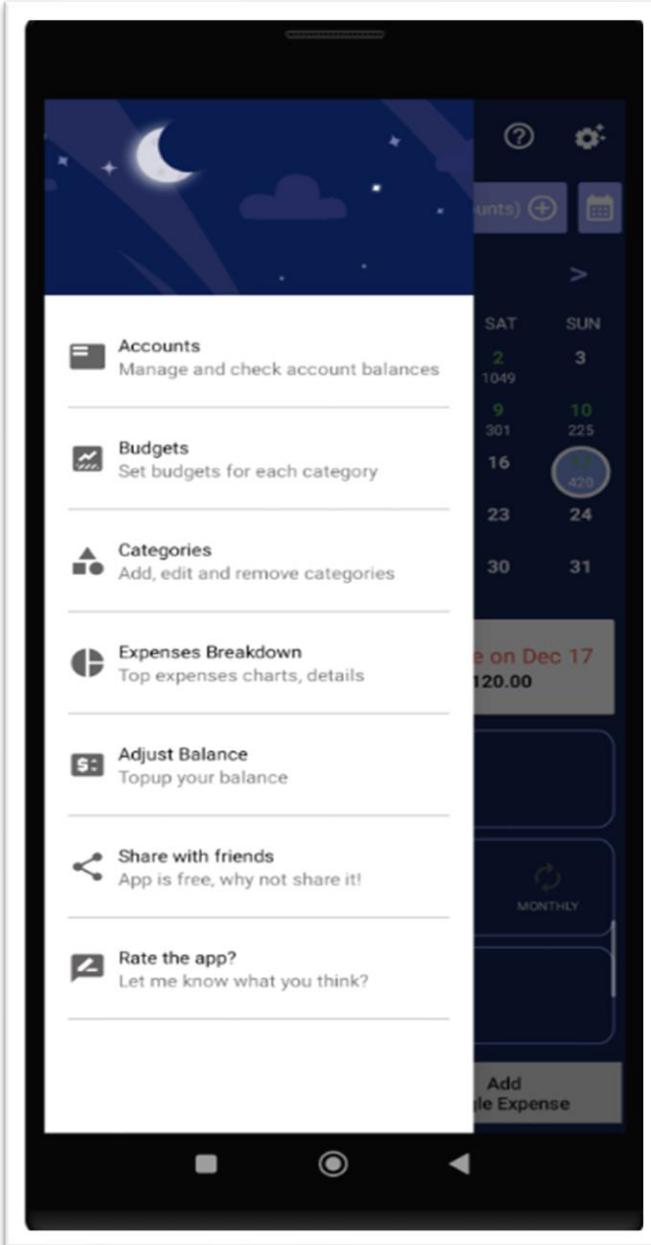
This App is a simple user-friendly tool as per design and functionality. Just like the other apps mentioned before, it also tracks income, expenses and creates a set budget to achieve one's financial goal. It supports both IOS and Android systems, making it versatile and open to users. Very similar to MoneyManager App, including a calendar, weekly reporting, categories for expenses, and control maintenance plus multiple currencies. Lastly this application hosts many accounts and payment options for users.

Pictures' of Simple Budget App



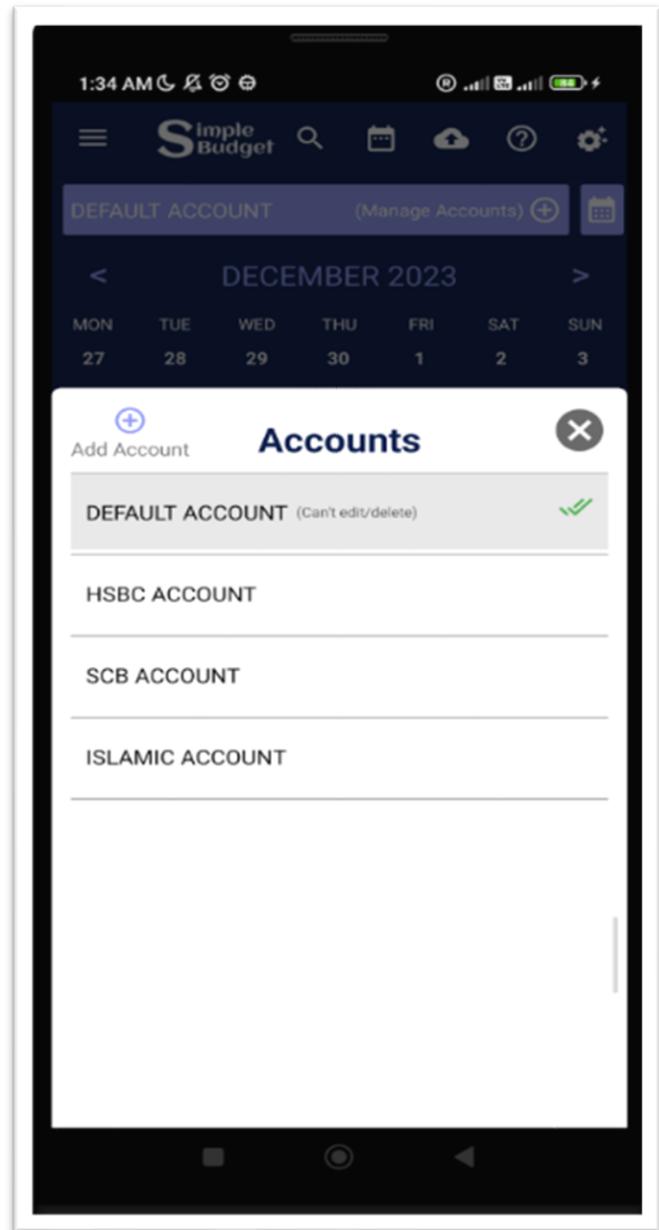
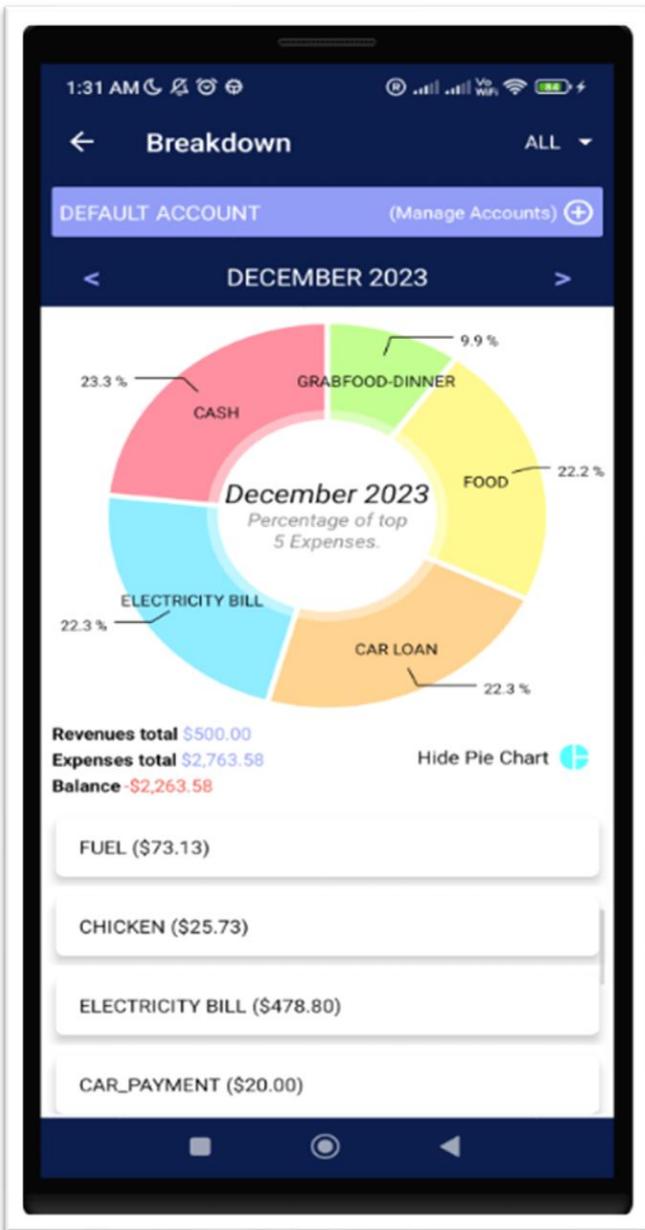
In this **Picture**, we can see that the app has a calendar setting and the user's balance is slowly declining from the start of December 17th, 2023. Here, income and expenses are put in and the display shows what money is due for when and how much total is left available for spending.

The design of this app is simple as per the name and functionality of it, all icons are easy to access and select options for a financial report as well.



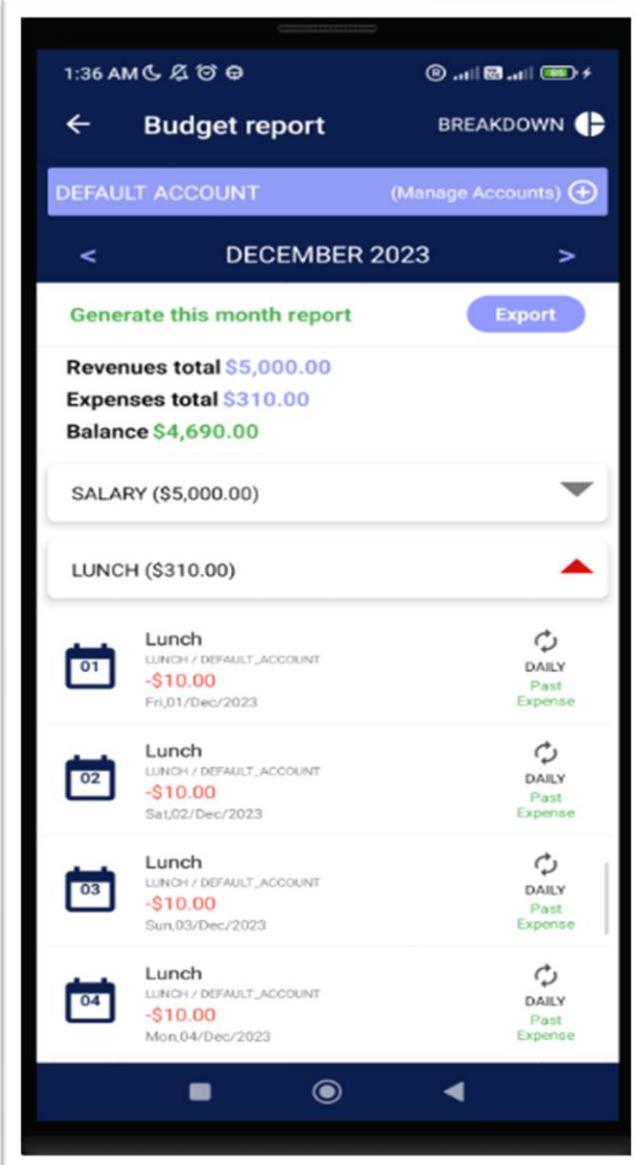
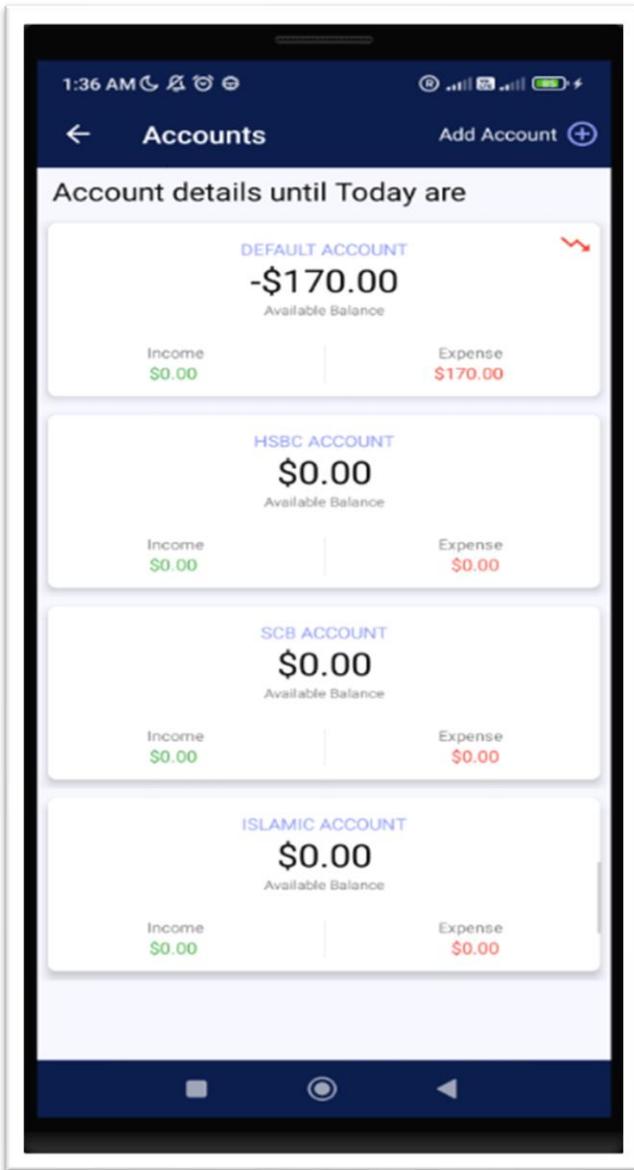
In the **First Picture**, we can see that an account user can view and change Default (Basic) settings to his/her wish, options available include; accounts (balances), budgets (category option), categories (add/remove), expense breakdown (providing a chart view), adjusting balance (changing income set), a sharing option (friends/family) and lastly a setting to rate the application which is the most important of all. All of the above provides unified choices for individuals to enjoy and bring about easy functionality process into personal budgeting.

In the **Second Picture**, we can see more Advanced settings which allows a user to make a choice a currency option payment (Rand R/Dollar \$), select a starting balance option (R1000), time and date settings (31/03/2025 and Time 10 Am), a password protection ability, a monthly report is accessible and lastly a safe cloud storage backup for privacy protection and security of the account holder.



In the **First Picture**, we can see a user is on his/her default account setting, which displays a pie chart of the top five expenses in December 2023, namely; food, electricity, car loan, cash and dinner. We can see the detailed report of everything, which is good for the account holder to financially plan well. The pie chart is clear, showing the percentage of spending, below is the amounts and names.

In the **Second Picture**, we can see that this account holder is selecting which account to work from, either the default account, Islamic account, HSBC account or SCB account. The user can be flexible with many forms of payments and account records at any time. It gives the impression of authenticity and reliability for simple management of daily spending.



In the **First Picture**, we can see the users account details for the day, what income and expenses are incoming and outgoing.

In the **Second Picture**, we can see the account holder generated a report of the account showcasing amounts, namely; Revenue, Expenses, Balance Totals, what salary is being earned and what expenses are present in the account below (Lunch for \$10).



In this Picture, we can see a categorized budget expenditure by the name of Lunch.

Which shows a Limit of \$ 300, Spent \$ 0 and the starting record time for this was from the 1st of December 2023 – 23rd of December.

Strengths & Weaknesses of Simple Budget App

Strengths	Weaknesses
User-friendly design and functionality, making it easy to navigate between managing finances.	Privacy issues, since for the app to function properly one's banking info is needed, that can involve data and security.
Provides tracking for income and expenses, plus monitors the display of reports made to educate users.	Automation of processes can lead to wrong presentation of information, updates are required.
The use of AI makes this application more interesting than other more complicating applications.	Subscriptions needed for better premium features, that not everyone wants to pay.

Innovative Features of Simple Budget Application

- Having a smart automated setting, for each budget category based on the spending pattern for easier tracking and management of work.
- Collaboration is included, sharing expenses and transactions with friends and family.
- Notifications provide a representation of data, creating an easier way for individuals to understand their progress.

Visual Infographic Presentation of Applications

Visual Inforgrapgic Comparison of GoodBudget, MoneyManager, and Simple Budget Apps

	GOODBUDGET APP	MONEYMANAGER APP	SIMPLE BUDGET APP
<u>OVERVIEW</u>	Envelope-based budgeting system designed for manual expense tracking.	Comprehensive personal finance app with expense tracking and financial analysis tools.	Straightforward budgeting tool focusing on simplicity and ease of use.
<u>STRENGTHS</u>	Uses the envelope budgeting method, which helps users allocate funds effectively. Cloud sync allows access from many devices. Family-sharing for group budgeting.	Automatic transaction tracking system with the bank synchronization. Detailed reports with charts and insights for users. Very strong security features, adding password protection.	User-friendly interface, with little to no setup required. Focuses only on what's needed with budgeting features with any complexity. Works both offline and online, without cloud connection synchronization.

	GOODBUDGET APP	MONEYMANAGER APP	SIMPLE BUDGET APP
<u>WEAKNESSES</u>	No automatic transaction imports, the user has to enter manually. Free version has limitations.	Can be difficult for beginners, since it has many features. Advanced settings/features require payment subscription.	Limited features compared to other applications. No advanced automation AI or analysis included.
<u>INNOVATIVE FEATURES</u>	Digital envelope system for budgeting. Supports joint budgeting with family and friends.	AI - powered spending insights for users. Multiple currencies for any international payments/users.	Quick setup and fast tracking. Deals with cash-based budgeting for better customer expense control.
<u>WHAT MAKE EACH APP UNIQUE TO THE OTHERS</u>	This app is ideal for those whom prefer manual budgeting and shared statements with family.	This app is ideal for those whom want detailed financial tracking with AI included.	This app is ideal for those whom prefer easy, no complexity, with budgets at all.

List of Innovative Features for My Personal Finance App

- For each budget category, and sub-budget category, a spending pattern and tracking system will be enabled also allowing a user to revisit previous, transactions done.
- Notifications will be enabled to provide the user with timely updates and any important information regarding financial data or subscriptions made available even reminders for billings.
- Statements will be enabled for account holders to print out mini/full statements of transactions, incomes, expenses, investments and even for SARS Tax purposes as well.
- Provides reports in the form of Pie charts, Line graphs and statistics with percentages, times, dates, amounts, totals and saved amounts included.
- Informs user about performance progress/failure.
- Can calculate amounts (Income, Expenses, Balances, Totals, VAT).

Conclusion

To end off this part of the POE research, a precise explanation of the importance to understanding and utilisation of Personal Financing Applications have been discussed. A presentation of the overview for each application, including the strengths & weaknesses, innovative features has been shown. As part of the POE, innovative features, which we would like to display in our personal application have been noted, which shall be discussed and put into a prototype visualization and virtual application later on in this document.

Planning & Design

Introduction

In the second part of this document, a presentation of a personal application showcasing the planning and design of a prototype will be displayed. A brief overview of the app, which includes the name, icon design and description of the innovative features that will be listed as well. A mock-up for all screens will be shown, including a description of each screen and how account holders can navigate through them. A full project plan in the form of a Gantt chart will be provided and will display tasks completed in smaller parts. Lastly a final conclusion of the results will be given and supported by references of planning, research and design.

Overview of the App

The **name** for the app is Cash Flow X. It is a personal budget app that helps users manage their finances and develop good spending habits. This prototype has been built after the study of three other personal budget applications namely; **Good Budget App**, **MoneyManager App** & **Simple Budget App**.



The icon picture will be shown below.

The **innovative features** that we have added are;

The app will allow the user to revisit previous transaction records.

The app will have notification settings provided for all users, like alerts for mandatory updates, any data regarding finances or if subscriptions have been made. Lastly the user can modify the application to remind them for billings due.

The application will allow for user to print out statements of transactions, income, expenses, any investments and also for SARS Tax purposes when needed.

The app will be able to provide reports to the user in the form of Pie charts, Line graphs, and Statistics with percentages, times, dates, amounts, totals and tax before and after included.

The application dashboard will consistently inform the user about his/her progress/failure to save money and spend wisely.

The app will be able to calculate amounts (Income, Totals, VAT, Balances and Expenses).

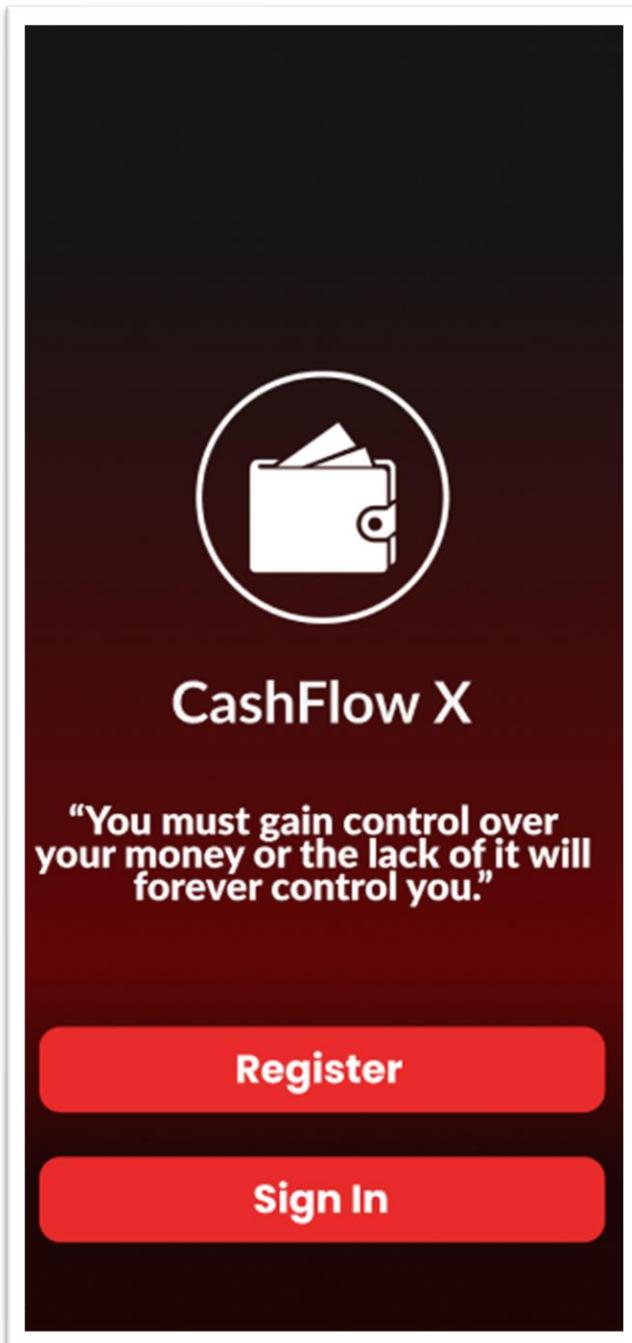
Detailed List of Application Requirements

In this application, the user should be able to:

- Register and authenticate a new account or sign into a pre-existing account.
 - The system must use secure password policies.
 - User must be able to log in using their account password.
 - The system must verify the user password against the database.
 - If the password is incorrectly entered, the user should receive an error message and be asked to try again.
 - If the password is correctly entered, the user should receive an success message and be asked to log in with their newly registered username and password.
- The application must allow the user to Manage their budget
 - The user must be able to set a total monthly budget.
 - Users must be able to create customizable categories for expenses.
 - Users must be able to revisit and track past budgets to analyse spending trends
 - Users must receive alerts and notifications when nearing their budget spending limit
- Users must be able to track their expenses
 - Users must be able to log their expenses with the amount, date, category and note.
 - Users must have the option to attach a photo/receipt as proof of payment in the notes.
 - Users must be able to edit or delete expense entries
 - Users must be able to filter expenses over a date range.
 - Users must be able to print/export statements for SARS tax purposes
- The Users must be able to track their earnings
 - Users must be able to log their earnings sources(eg. Salary or birthday presents)
 - Users must be able to categorise their earnings
 - Users must be able to track previous earnings records for further analysis.
- The app must be able to generate visual reports
 - The user must be able to generate a report in a visual format(eg. A Pie Chart)
 - User must be able to generate a custom report for a selected timeframe

- The application must have a calendar view
 - The calendar must showcase the users earnings and expenses on the date it was inserted on the calendar
 - The application must be able to set a reminder for nearby payments due
- The application must contain Gamification
 - User must receive a type of reward/badge for certain tasks preformed
- The application must contain notifications and alerts
 - The user must be able to receive customizable notifications for app updates, budget list warnings, ect.
 - Users must be able to receive notifications as either push notifications or email
- The user's data to be safely protected
 - User data must be securely stored in a local database
 - Users must be able to backup and restore their data
- The application must have a good design
 - The application must have the ability to change between dark and light mode
 - The application must have easy navigation between its budget, transactions, earnings, expenses, calendar and reports pages.
 - The application must have a layout that works on different screen sizes
- The application must be able localize to the user
 - The user must be able to change the currency to their home currency.
 - The currency change should affect all pages
- The application must allow the user to make changes in the settings page
 - The user must be able to: Change notification options, Change between dark and light mode, convert the app currency, reset their password and rate the application.

User-interface Design & Mock-up Screens

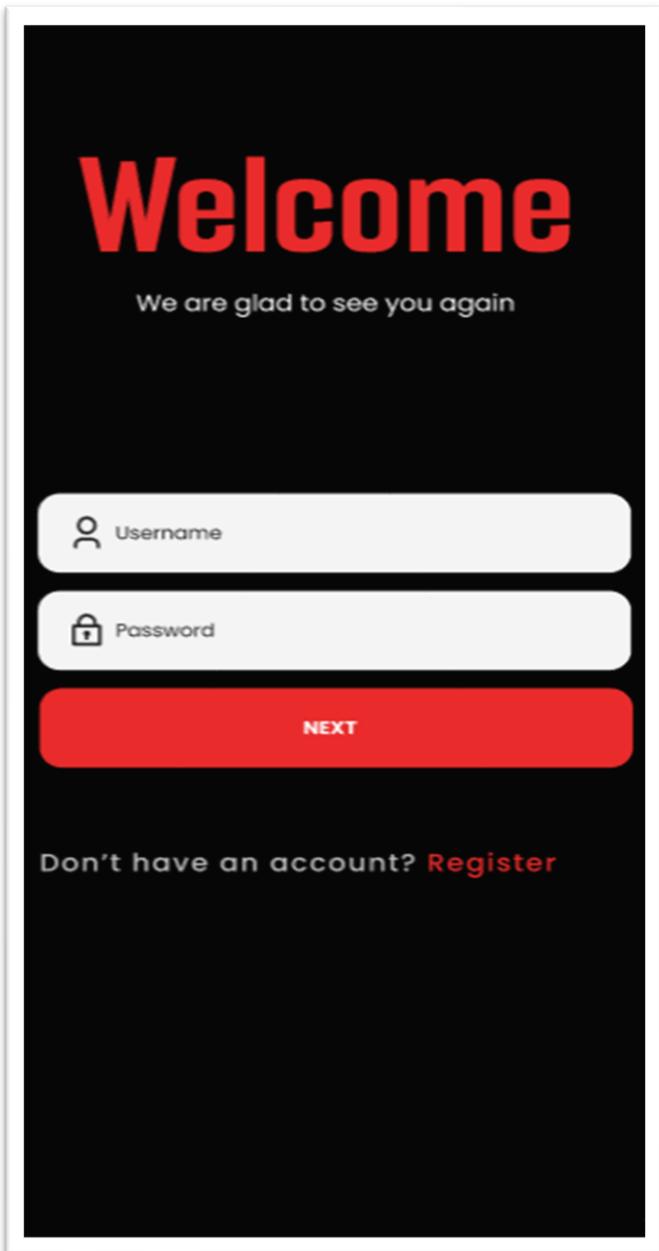
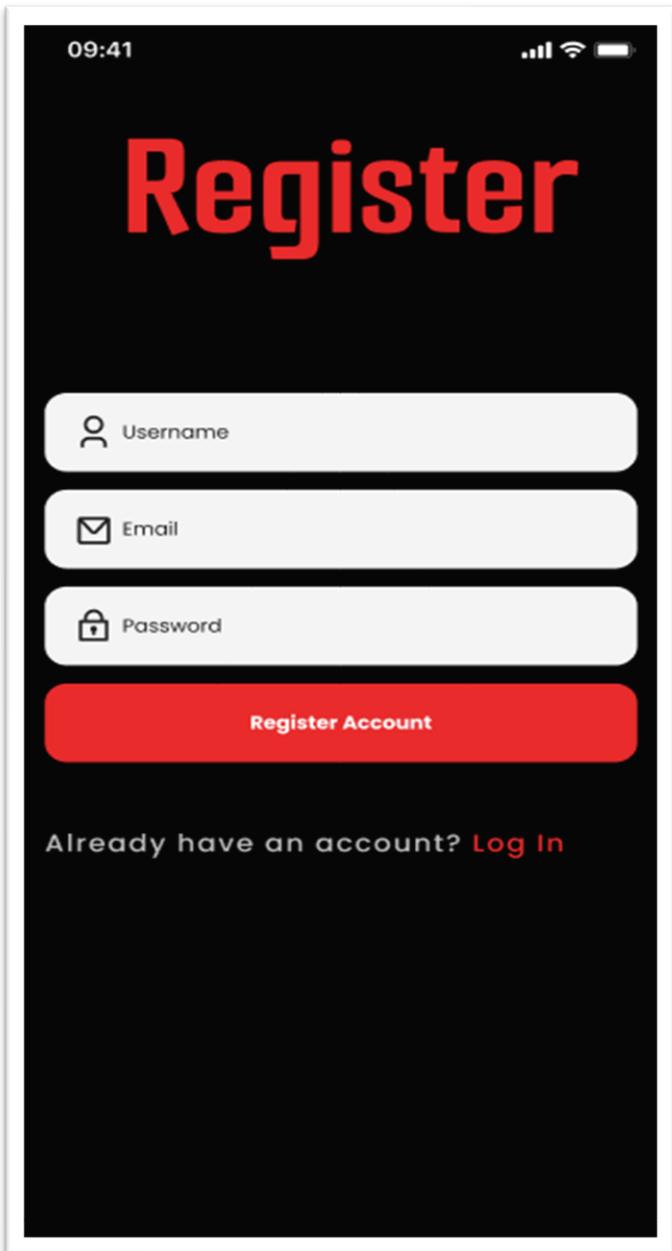


This is the Onboarding Page for our Personal Financial Budgeting Application.

The Name of the application is 'CashFlow X' and the design was created in Figma, which also contains the logo/icon symbol and a finance quote to catch users attention.

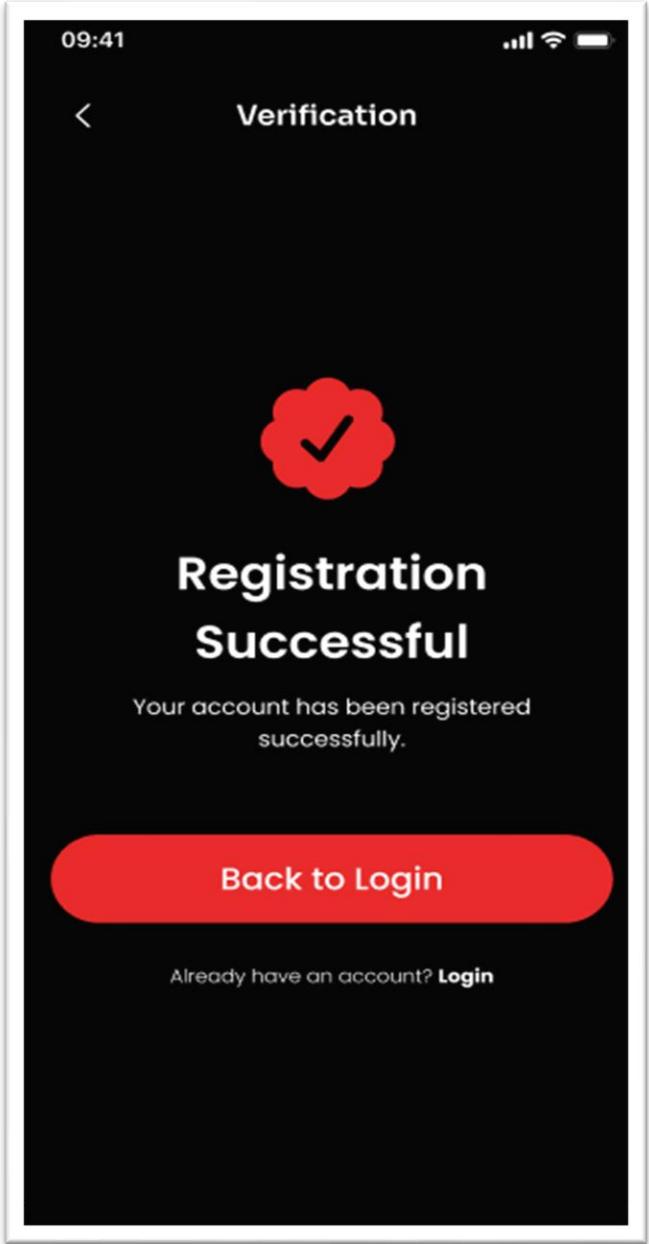
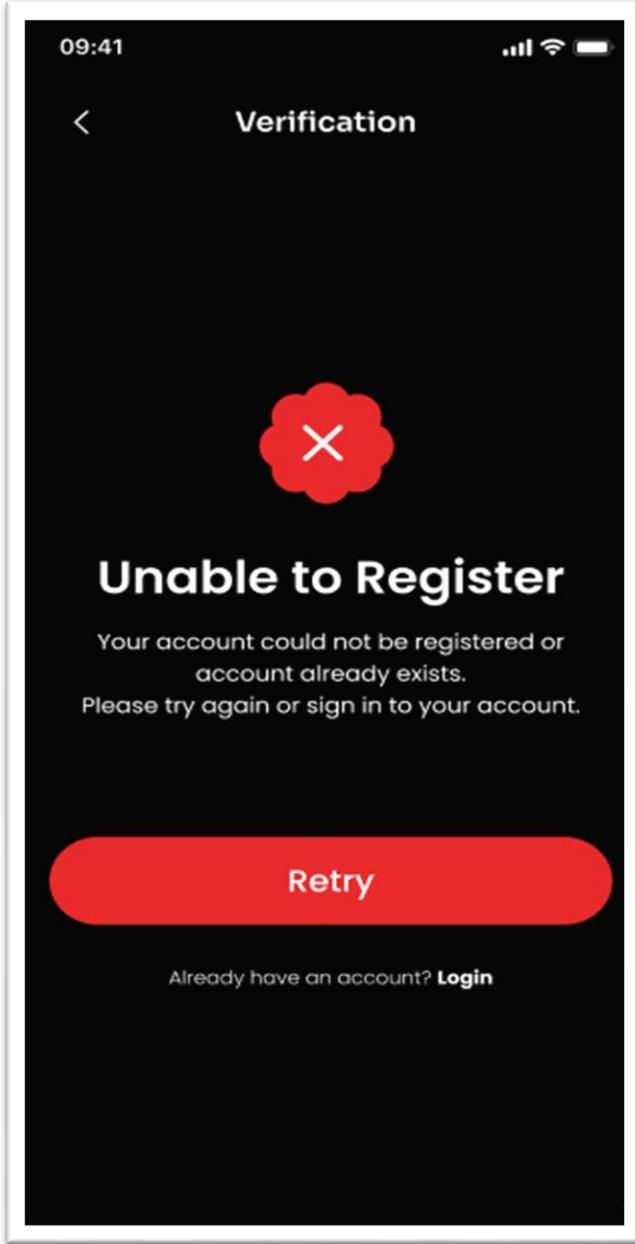
An old/new user here can select/click on either button named Register or Sign In.

Depending on whether he/she has an account or not, after this we move onto the next page/picture below:

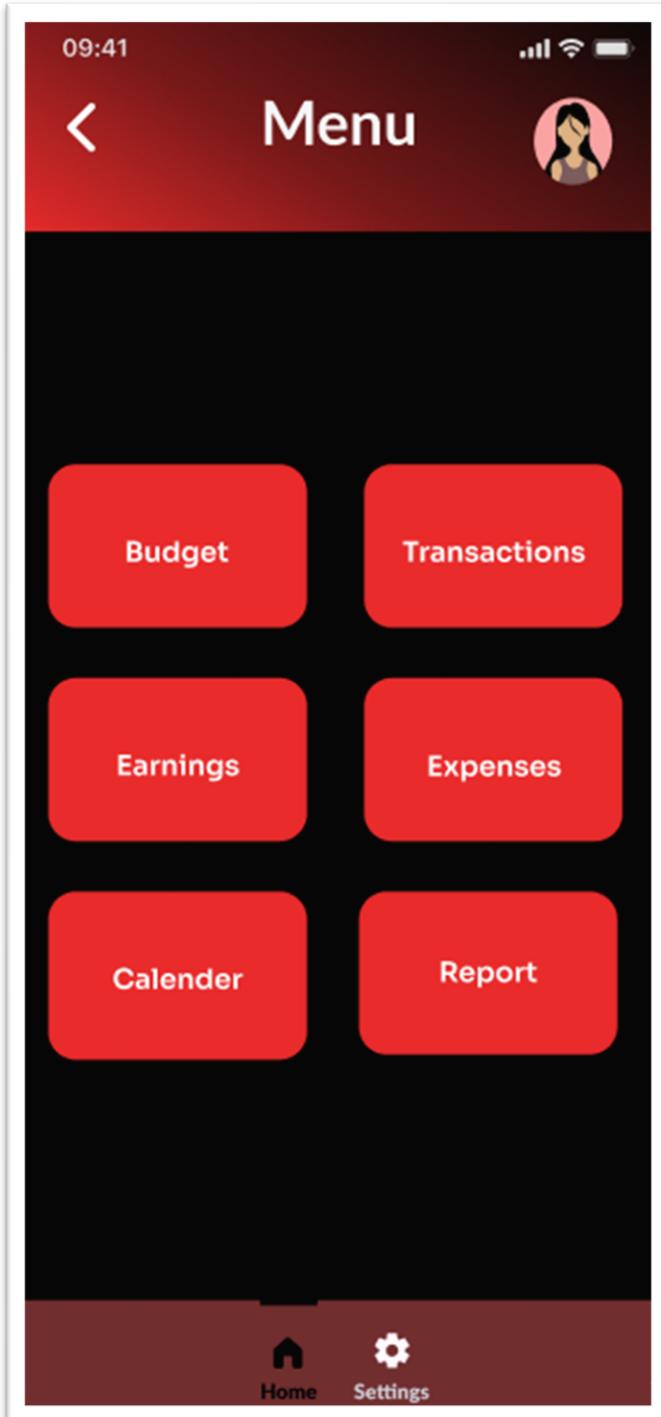


In the **First Picture**, Named **Register**. If a user is new, he/she will arrive at this page where one is required to create a username, email address and password to create and account with CashFlow X App. If by mistake an account holder ended up on this page, he/she can log in as an option by clicking the word **Log In** which is available.

In the **Second Picture**, Named **Welcome**, an account holder can just enter their username and password to enter into the Menu Page, if by mistake a non-user ended up on this page, he/she can register as an option by clicking the word **Register** is available.



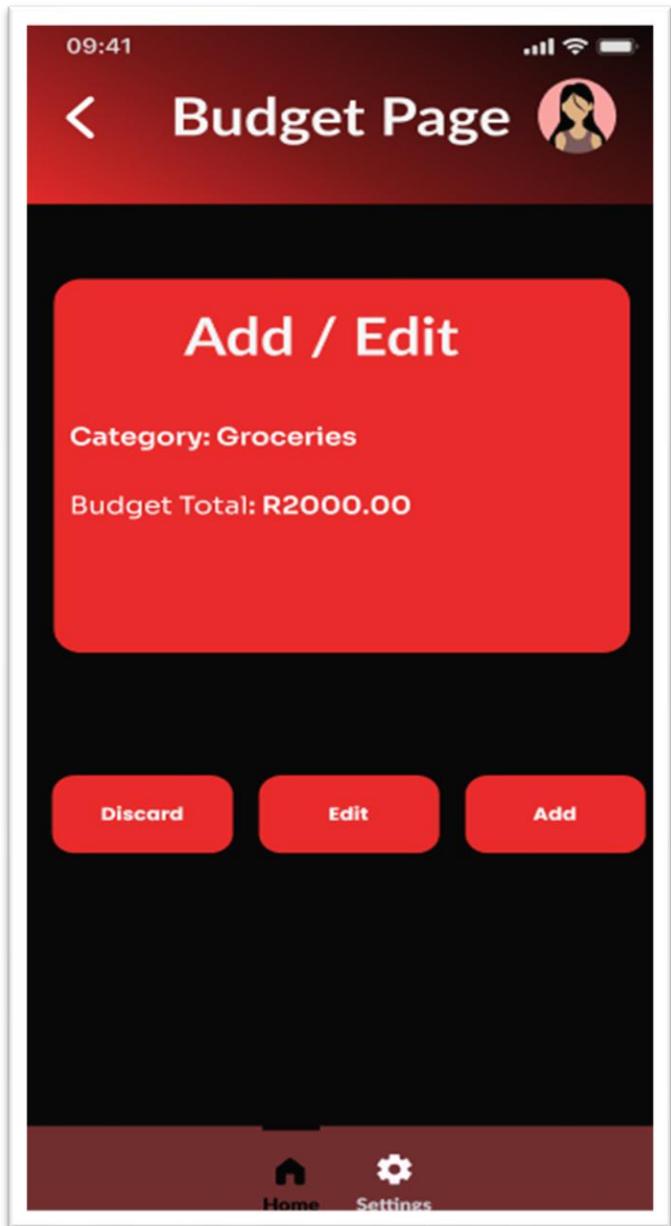
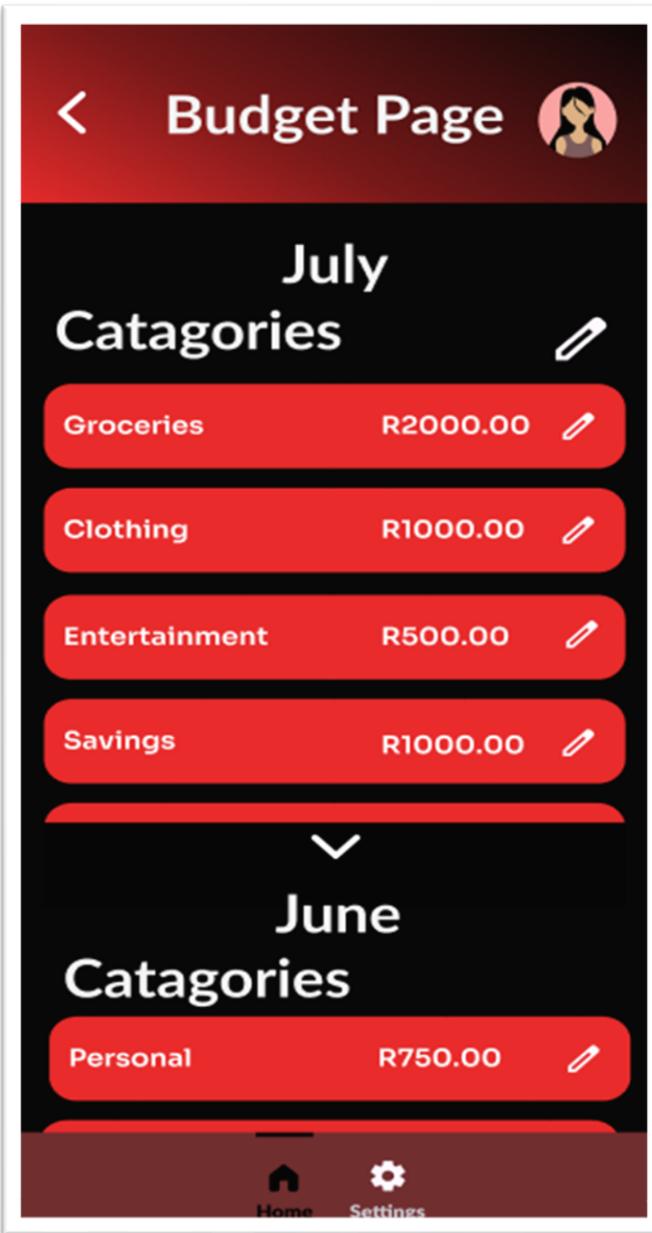
In both pictures above, the user is being verified by the system security database protocol, where if you enter the wrong details, a user won't be able to Register at all, or if a new user registers correctly, his/her registration will be successful.



This page is the Menu/Dashboard page.

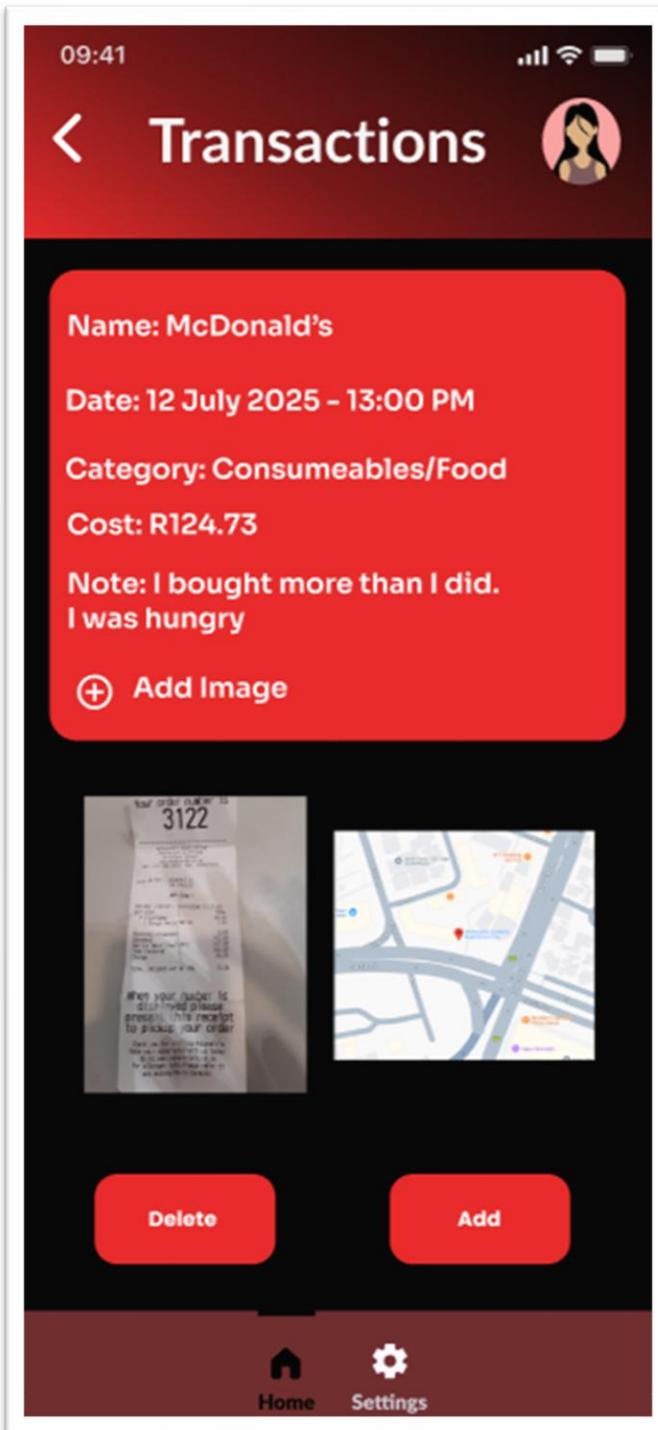
Here users can select any of the following options namely; Budget, Transactions, Earnings, Expenses, Calendar or Report.

Each button will take the user to that page and the user can track or view what they have been up to, should it be a new user, they can manually enter the details they wish to proceed to utilise this application.



In the **First Picture**, the user is in the Budget Page, which shows the different categories for the July Month, which a user can see and click on to modify. In this page a user can visit previous categories and track the spending records and progress maintained.

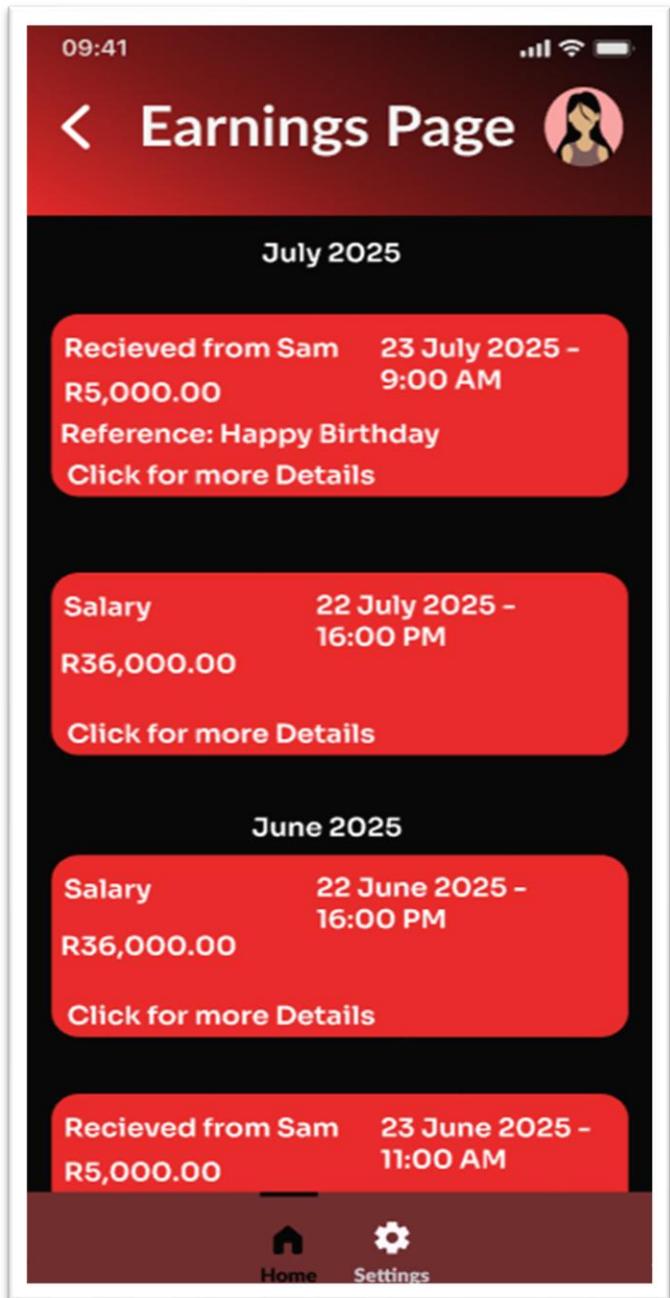
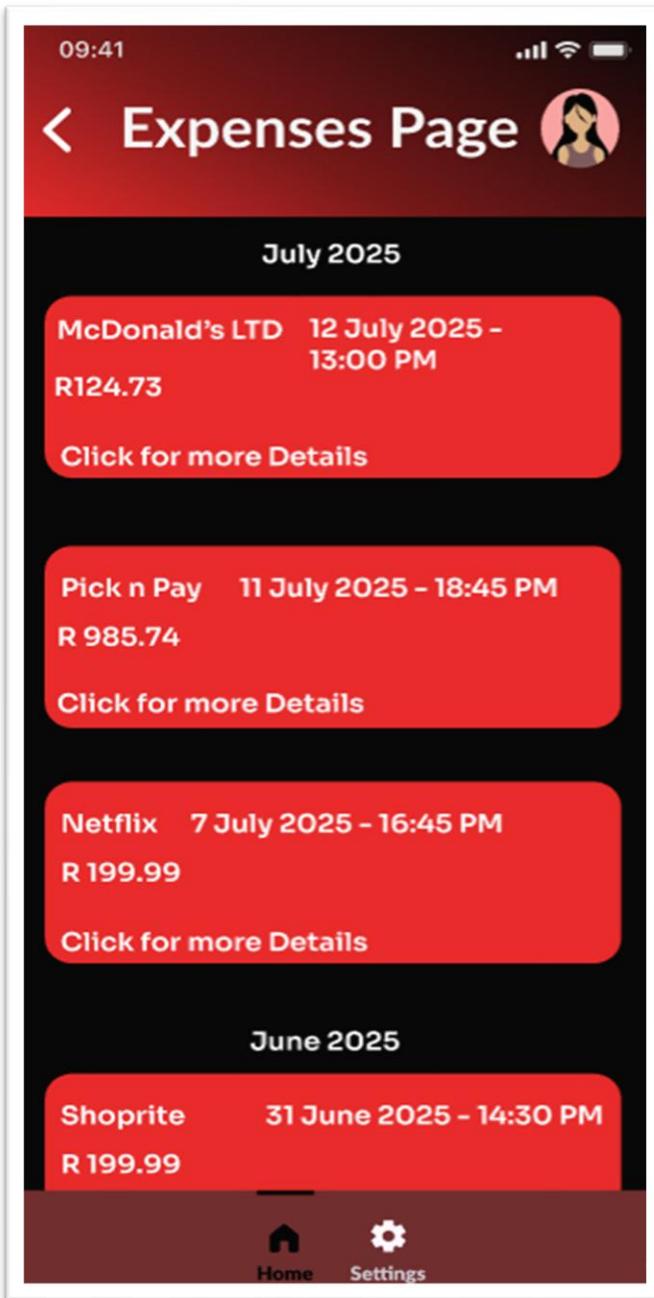
In the **Second Picture**, the user is in the Budget Page (Add/Edit), where one can either discard, edit or add amounts to the selected category which we can see as a total of R 2000, in the category called Groceries.



On this Transaction Page, the user will manually insert data into this page which records and creates a spending pattern for that transaction time, date and year.

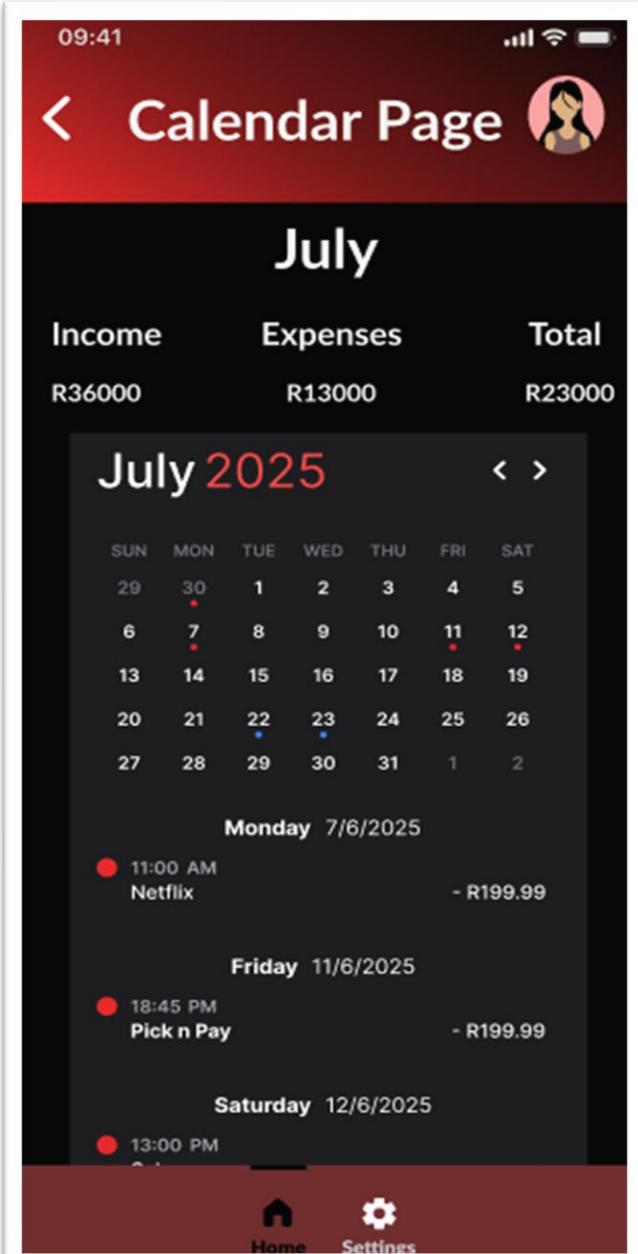
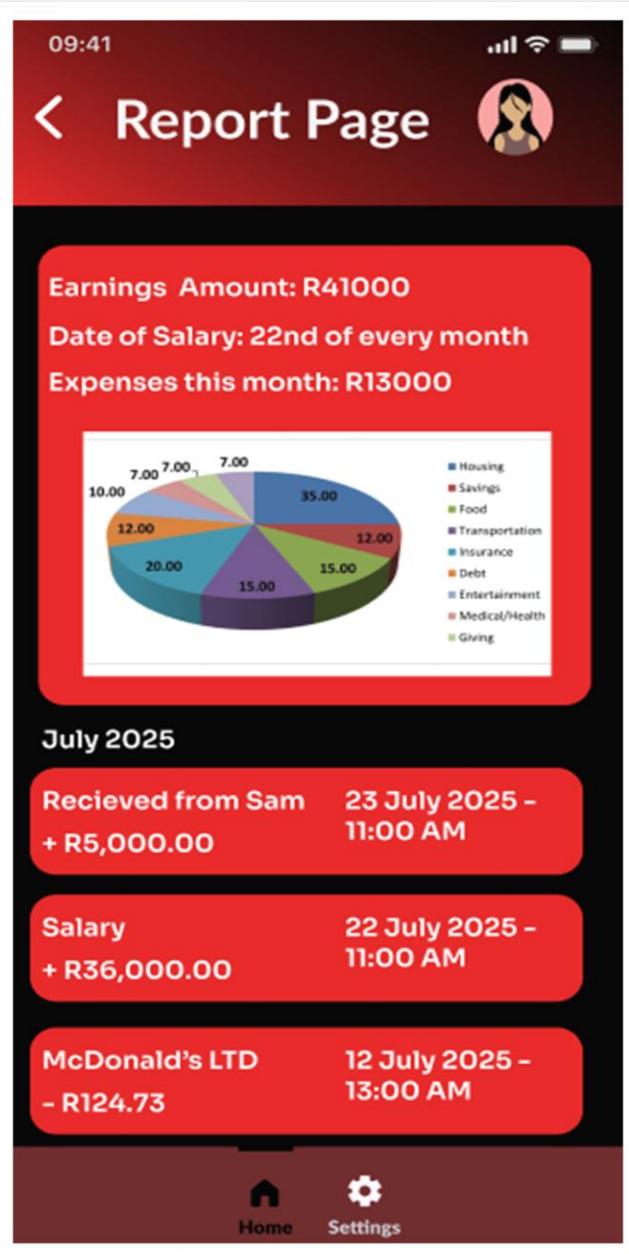
The user is allowed to add a note/image as a proof of payment or a record for himself/herself.

The number of transactions is unlimited, all records are secured in the database of the application with the applicants data.



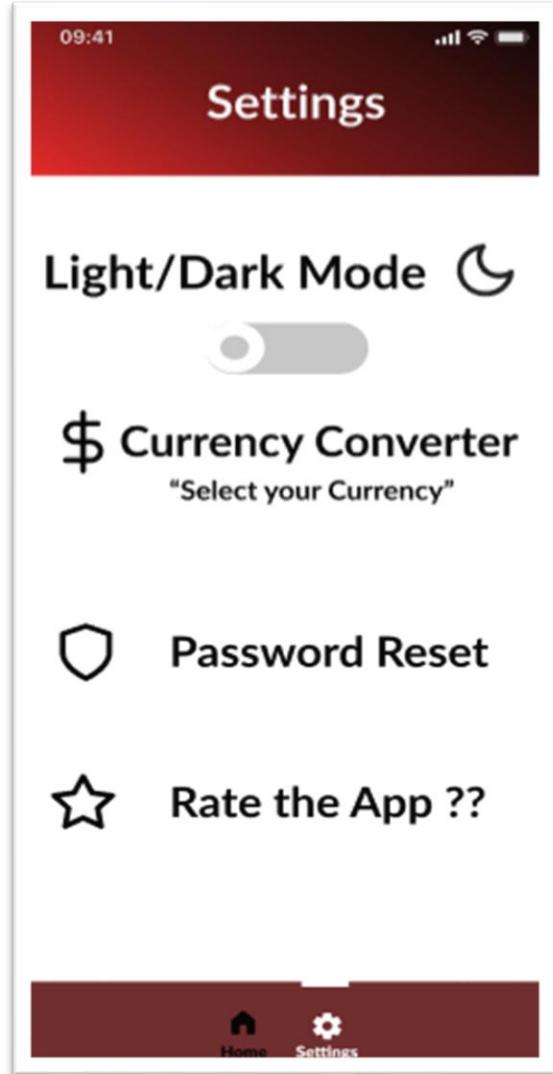
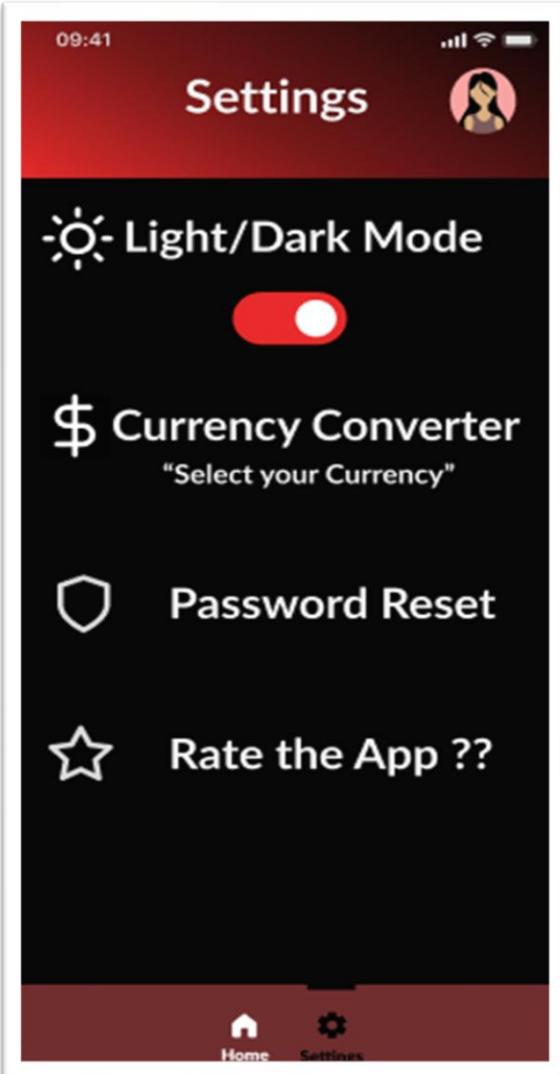
In the First Picture, named the **Expenses Page**. From the transactions page user made the decision of what is an expense or earnings. This page hosts the time, date and expense. When a user clicks the expense, he/she sees a record/note of what they put, and it explains the entire details made by the user account.

In the Second Picture, named **Earnings Page**. From the transactions page user made the decision of what is an expense or earnings. This page hosts the time, date and expense. When a user clicks, the earning he/she sees a record/note of what they put, and it explains the entire details made by the user account.

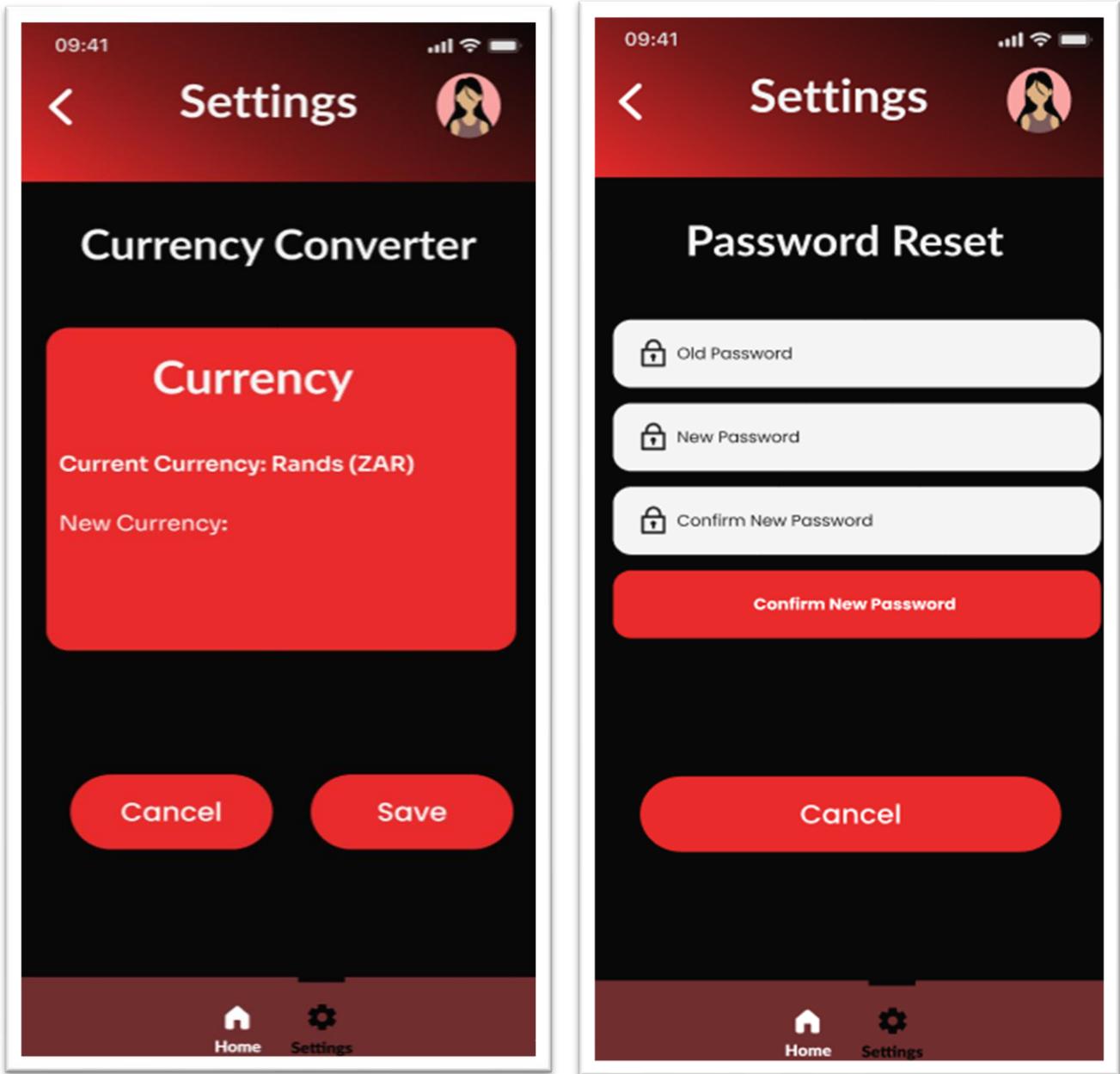


In the **First Picture**, named **Report page**. The user can see his/her total earnings with a frequency of salary income and expenses during the course of the month, shown in a Pie chart to make the user aware of progress and more financially literate of the lifestyle they are leading.

In the **Second Picture**, named **Calendar page**. Users can see on what dates and times income comes in and expenses goes out throughout the month. A total amount is displayed as well not limited to just that, other expenses and previous transactions can be checked.

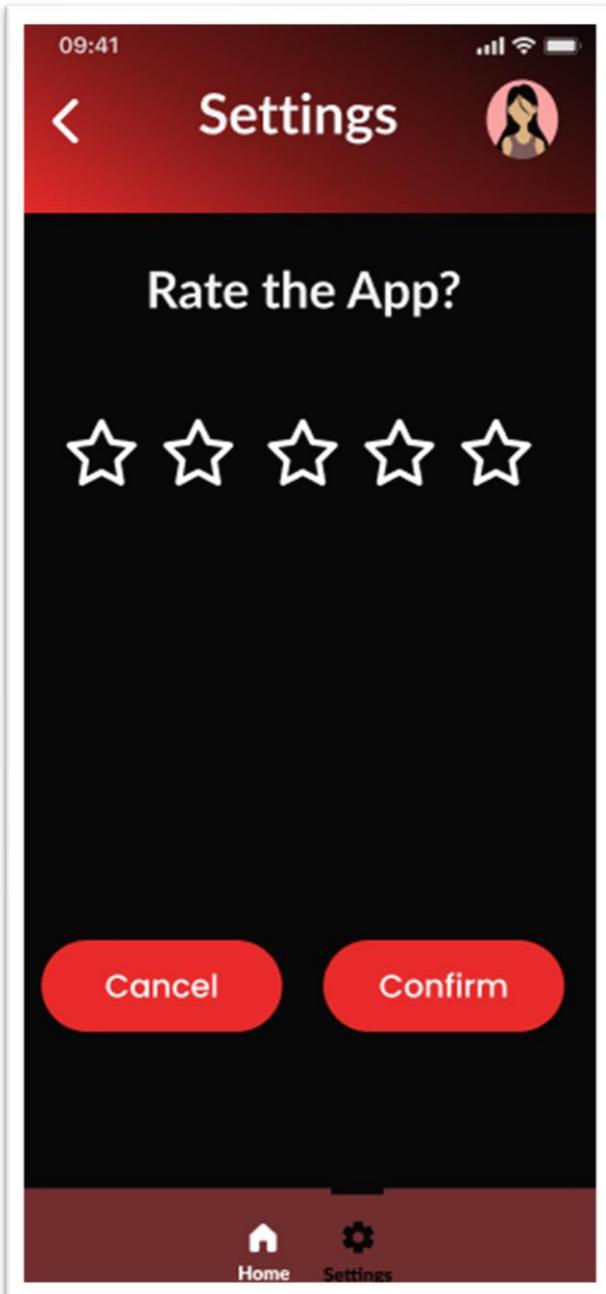


In the two above **pictures**, we can see the **Settings page**, which allows the user to change between dark and light mode as shown with both pictures. Also, other options are the Currency Converter (user can choose any currency choice needed as per payments), and Password Reset (if users forget their passwords) and lastly the users can Rate the app on Google play store.



In the **First Picture**, also part of the Settings page, here as mentioned above, the user is using the Currency Converter Option to change the payment expenses and income received. This allows the user to change the currency to their specific country's currency, which then makes the entire transaction different on all pages.

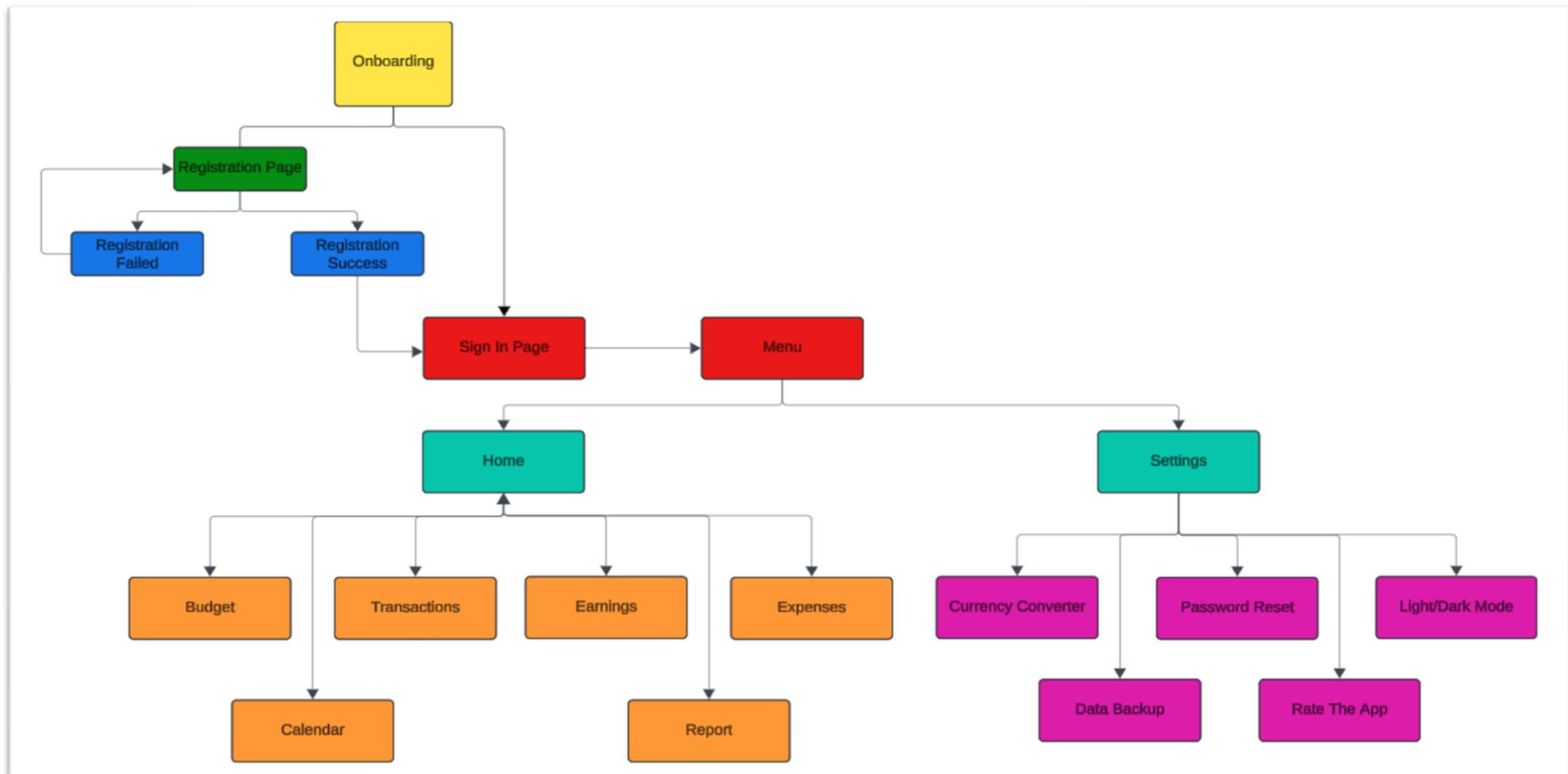
In the **Second Picture**, also part of the Settings page, here as mentioned above, the user is can reset there password by reinserting their old password and creating a new one.



On this page, part of the Settings page, the user can rate the application.

Which then records the answer on Google play store and the application's personal database for user engagement.

Flow Diagram – User Navigation



Project Plan – Gantt Chart

	Name	Duration	Start	Finish	Predecessors
1	CashFlow X	90 days?	2025/02/17 8:00 AM	2025/06/20 5:00 PM	
2	Research	14 days	2025/02/17 8:00 AM	2025/03/06 5:00 PM	
3	Introduction	1 day	2025/02/17 8:00 AM	2025/02/17 5:00 PM	
4	Research on Apps	8 days	2025/02/18 8:00 AM	2025/02/27 5:00 PM	
5	Overview on Apps	3 days	2025/02/18 8:00 AM	2025/02/20 5:00 PM	3
6	Strengths and weaknesses	3 days	2025/02/21 8:00 AM	2025/02/25 5:00 PM	5
7	Innovative features	2 days	2025/02/26 8:00 AM	2025/02/27 5:00 PM	6
8	A Visual Comparison	2 days	2025/02/28 8:00 AM	2025/03/03 5:00 PM	
9	Infographic of 3 Chosen Apps	2 days	2025/02/28 8:00 AM	2025/03/03 5:00 PM	7
10	Best Features	2 days	2025/03/04 8:00 AM	2025/03/05 5:00 PM	
11	List Best Features of chosen apps	2 days	2025/03/04 8:00 AM	2025/03/05 5:00 PM	9
12	Conclusion and References	1 day	2025/03/06 8:00 AM	2025/03/06 5:00 PM	
13	Conclusion and References	1 day	2025/03/06 8:00 AM	2025/03/06 5:00 PM	11
14	Planning and design	19 days?	2025/03/07 8:00 AM	2025/04/02 5:00 PM	
15	Introduction	1 day	2025/03/07 8:00 AM	2025/03/07 5:00 PM	12
16	Brief Overview	2 days	2025/03/10 8:00 AM	2025/03/11 5:00 PM	
17	Includes Name, Initial Icon, Desc...	2 days	2025/03/10 8:00 AM	2025/03/11 5:00 PM	15
18	Requirements List	6 days	2025/03/12 8:00 AM	2025/03/19 5:00 PM	
19	Elaborate on Requirements	2 days	2025/03/12 8:00 AM	2025/03/13 5:00 PM	17
20	Add Own Features	2 days	2025/03/14 8:00 AM	2025/03/17 5:00 PM	19
21	Detailed Explanation	2 days	2025/03/18 8:00 AM	2025/03/19 5:00 PM	20
22	User Interface Design	7 days	2025/03/20 8:00 AM	2025/03/28 5:00 PM	
23	Mockup for Screens	5 days	2025/03/20 8:00 AM	2025/03/26 5:00 PM	21
24	Description of Screens	1 day	2025/03/27 8:00 AM	2025/03/27 5:00 PM	23
25	Navigation Diagram of Screens	1 day	2025/03/28 8:00 AM	2025/03/28 5:00 PM	24
26	Project Plan	2 days	2025/03/31 8:00 AM	2025/04/01 5:00 PM	
27	Gantt Chart	2 days	2025/03/31 8:00 AM	2025/04/01 5:00 PM	25
28	Conclusion and References	1 day?	2025/04/02 8:00 AM	2025/04/02 5:00 PM	
29	Conclusion and References	1 day?	2025/04/02 8:00 AM	2025/04/02 5:00 PM	27
30	App Prototype Development	28 days	2025/04/03 8:00 AM	2025/05/12 5:00 PM	
31	App Development	28 days	2025/04/03 8:00 AM	2025/05/12 5:00 PM	28
32	Software Assurance	10 days	2025/05/13 8:00 AM	2025/05/26 5:00 PM	
33	Testing	5 days	2025/05/13 8:00 AM	2025/05/19 5:00 PM	31
34	Bug Fixing	3 days	2025/05/20 8:00 AM	2025/05/22 5:00 PM	33
35	Testing 2	2 days	2025/05/23 8:00 AM	2025/05/26 5:00 PM	34
36	Final App Development	19 days	2025/05/27 8:00 AM	2025/06/20 5:00 PM	
37	Final Features	7 days	2025/05/27 8:00 AM	2025/06/04 5:00 PM	35
38	Final Deployment	10 days	2025/06/05 8:00 AM	2025/06/18 5:00 PM	37
39	Monitoring	2 days	2025/06/19 8:00 AM	2025/06/20 5:00 PM	38

Conclusion

As this research report reaches its final end discussion of Personal Finance Applications, we have made sure to explain and provide references to support the idea of developing a personal budget app. This app has all the required information and innovations of all previous applications studied in this report. We will soon be able to develop the physical application on Android Studio making use of a coding language called Kotlin. Upon completion, further research and task explanations will be given as this report was only the first of three final portfolio assignments.

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