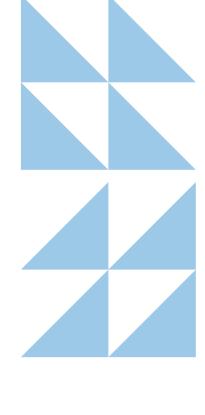




Vertical Institute UX Design Bootcamp (Aug 2024) Capstone Project

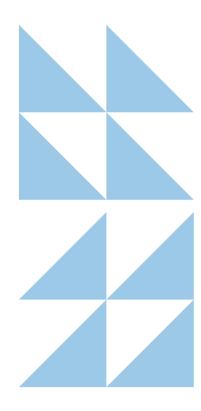




overview

For young adults, the first step towards financial stability is often through income budgeting and expense tracking. It cultivates good financial habits and gets them started on the right foot.

Budgeteer is a holistic financial companion for goal setting, budgeting and expense tracking - allowing young adults to master their finances with confidence.



Role
UI & UX Designer

Skills Research, Ideation, Prototyping

Tools Miro, Notion, Figma

Timeline 4 weeks (Aug 2024)



introduction > empathise > define > ideate > prototype > conclusion

the challenge

With the rising cost of living and inflation, improving one's financial literacy is more crucial than ever. While many take the first step by budgeting their income and tracking their expenses, only **47.6%** of young Singaporeans keep to a monthly budget.

However, despite the majority of young adults responding they would reduce expenses if they realised they were overspending, **6 in 10** surveyed would rather prioritise immediate gratification over longer-term goals.



Source: Li, T. W. (2024, April 17). Younger Singaporeans financially prudent, but some buy things to be happy: IPS poll. The Straits Times.



project goals

Design a digital product that enables users to manage their personal finances and achieve their financial goals.

Allow users to plan and stick to their budgets through consistent expense tracking.





timeline

Week 1

Empathise

- Competitive analysis
- User research
- Insight synthesis

Week 2

Define

- HMW Statements
- User Personas

Ideate

- User stories
- Sitemap
- User flow

Week 3 & 4

Protoype & Test

- Low-fidelity prototype
- Mid-fidelity prototype
- User testing
- High-fidelity prototype

research goals

To kickoff the project, user research was conducted with the following objectives:

Understand user behaviour and attitudes towards personal finance

Understand user motivations for money management

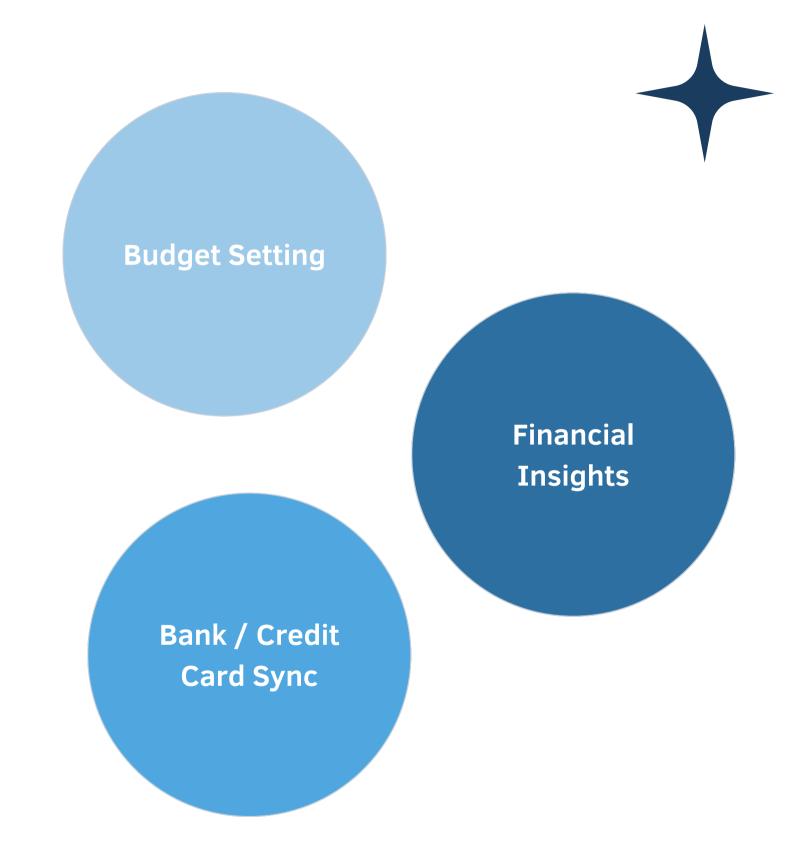
Identify frustrations relating to budgeting and tracking expenditures

Explore how the problem is currently being addressed by other players in the market

competitive analysis

Considering the numerous money management apps in the market, I analysed the existing features and resources offered by competitor apps.

What stood out was that while many of these apps were feature-rich with similar functions, each of them had vastly different approaches and app interfaces.





competitive analysis

	Spendee	Money Manager	Dobin	Wallet: Budget & Money Manager
Strengths	 Quick overview of income and expenses Smart budgeting warns users when they are at risk of going overbudget 	 Allows for double- entry bookkeeping Highly customisable setup process 	 Automatic tracking and categorisation of transactions Helps users to maximise credit card rewards 	 Unlimited budgeting capability AI-driven categorisation and analytics
Weaknesses	 Many issues syncing with banks No credit monitoring or bill payment feature 	 Not intuitive, users reported taking a while to learn Budgets can only be created monthly 	 Does not allow for custom categories Unable to input transactions manually 	 Free version does not include all features Many issues syncing with banks



user interviews

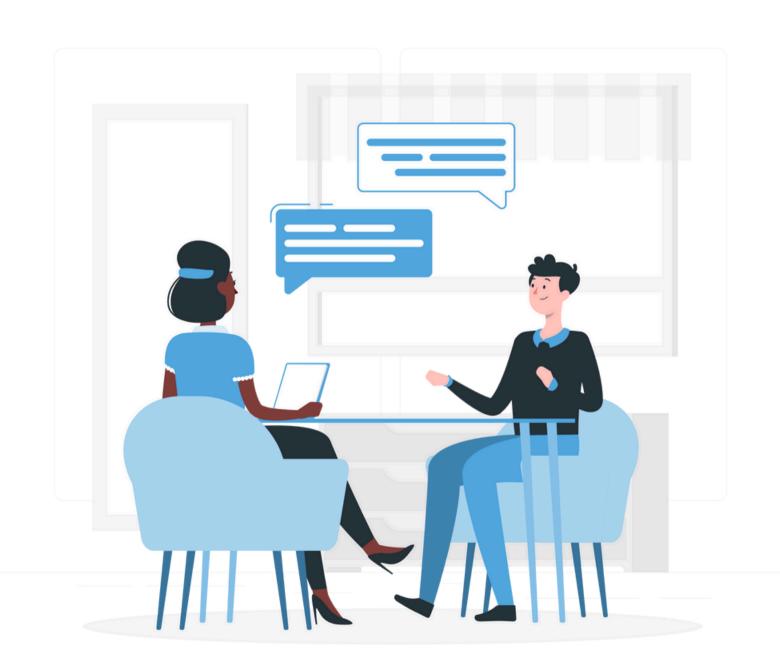
I interviewed 7 potential users to examine assumptions and gain deeper insights on user needs and pain points.

Scope:

- Singapore residents
- Employed
- Age: 21 39 years

Key talking points:

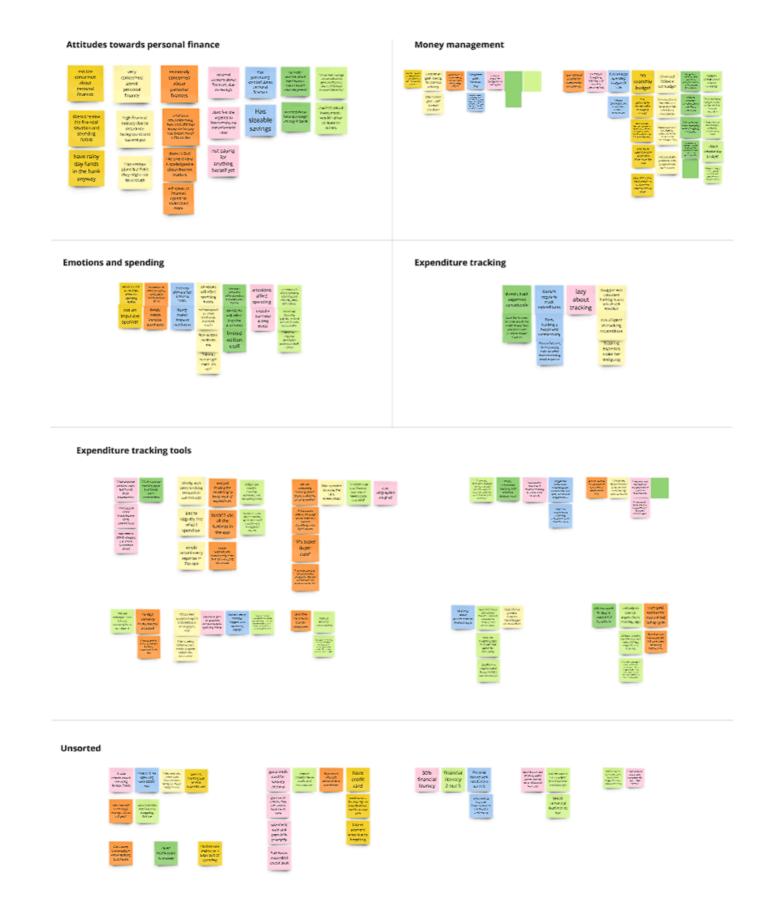
- Thoughts on personal finance and financial literacy
- Money management and spending habits
- Opinions on budgeting and expense tracking
- Experiences with finance-related content and apps



insight synthesis

After conducting the user interviews, I organised my findings using sticky notes on a Miro board.

By grouping the interviewees' responses according to a general theme, I created an affinity map that helped in deriving key user insights for me to work with.





key user insights

Users exhibit a wide range of concerns regarding their personal finances, as well as their level of financial literacy.

Despite most users having financial goals, many users do not follow a formal budget.

There are various reasons why one would not track expenses, ranging from a lack of interest to guilt felt from seeing their own expenses.

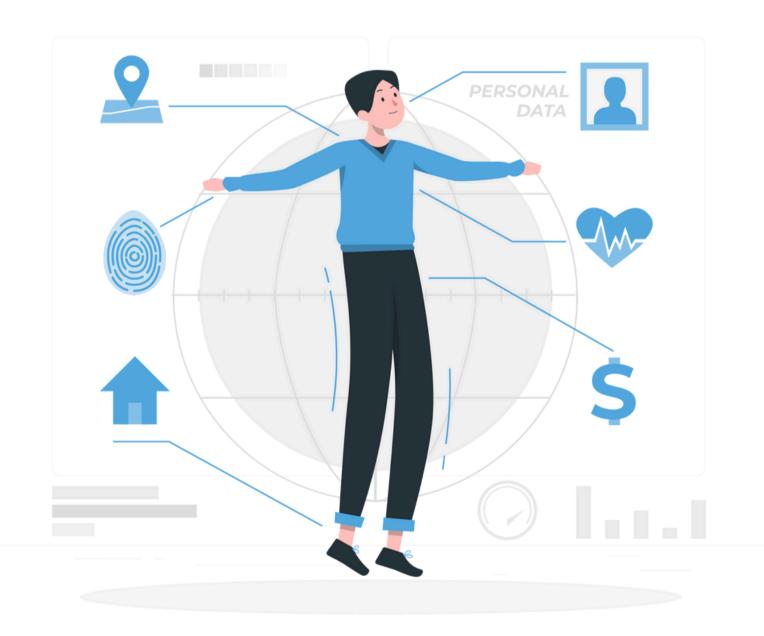
Users prefer financial management tools that are user-friendly and visually appealing.

Many find traditional expense tracking apps cumbersome and overloaded with features.

user personas

The competitive analysis and user interviews provided me with deeper understanding of the users. Based on the insights gleaned, I summarised and transformed my findings into two main user personas to provide direction for the product.







Rosa

Age: 25

Occupation: Designer **Hobby:** Video games

Personality Type: Artisan

BACKGROUND

- Concerned about personal finances due to relatively low level of financial literacy.
- Downloaded an expenditure tracking app on her mobile phone but never developed the habit of using it consistently.
- Not an impulsive spender but regularly treats herself to a snack or sweet drink whenever work gets tough.

GOALS

- To be able to comfortably fund her own overseas vacations.
- To achieve the financial milestone of "100k before 30 years old".

"I like to buy a sweet treat every now and then whenever work gets tough."

"If [the expenditure tracking app] looks too serious, [the burden of tracking would] weigh on me more, so I wanted something more lighthearted."

MOTIVATIONS

- To reduce the time and effort taken doing mundane tasks.
- To achieve her financial goals and ease mental burden on herself.

FRUSTRATIONS

- Feeling guilty for spending money when tracking expenditures.
- Not sticking to her budget and overspending on small purchases that add up.



Xavier

Age: 31

Occupation: Engineer

Hobby: Climbing

Personality Type: Rational

BACKGROUND

- Not too concerned about personal finances due to savings built up over the years.
- Adopts a reactive approach to budgeting based on what he determines to be a reasonable savings to expenditure ratio.
- Current preference is to use his mobile banking app to view expenditures for contactless payments, which forms the bulk of his expenses.

GOALS

- To increase income earned for property ownership and early retirement.
- To achieve financial stability to provide for his family in the future.

"Tracking expenses is kind of a hassle."

"I don't like it when apps give me generic tips like 'save for a better future'. At least tell me something based on my input data, you know?"

MOTIVATIONS

- Optimising his time and efforts to channel them into more productive activities.
- To develop a better understanding of his financial habits and improving on them.

FRUSTRATIONS

- Balancing the convenience of automating transactions and data security of bank and credit card details.
- Limited low-barrier resources to learning how to optimise his finances.





how might we...

Promote healthy budgeting and spending habits so that young adults may achieve their financial goals?

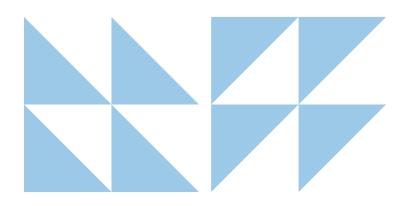
Design an experience for young adults that makes financial management less burdensome?

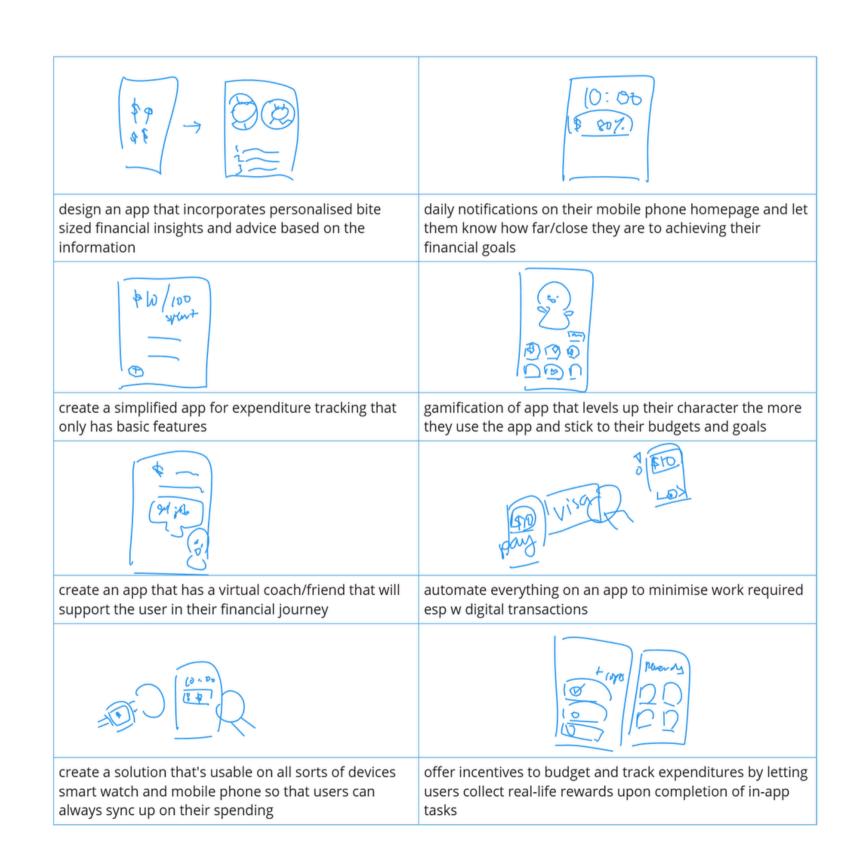
Guide young adults to make better financial decisions?

crazy 8's

To kickstart the ideation process, Crazy 8's was utilised to brainstorm product ideas in response to the "how might we..." statements.

Many ideas centered around the usage of a mobile app, which formed the basis for the solution. Eventually, I settled on designing an app for users to budget and track expenses.

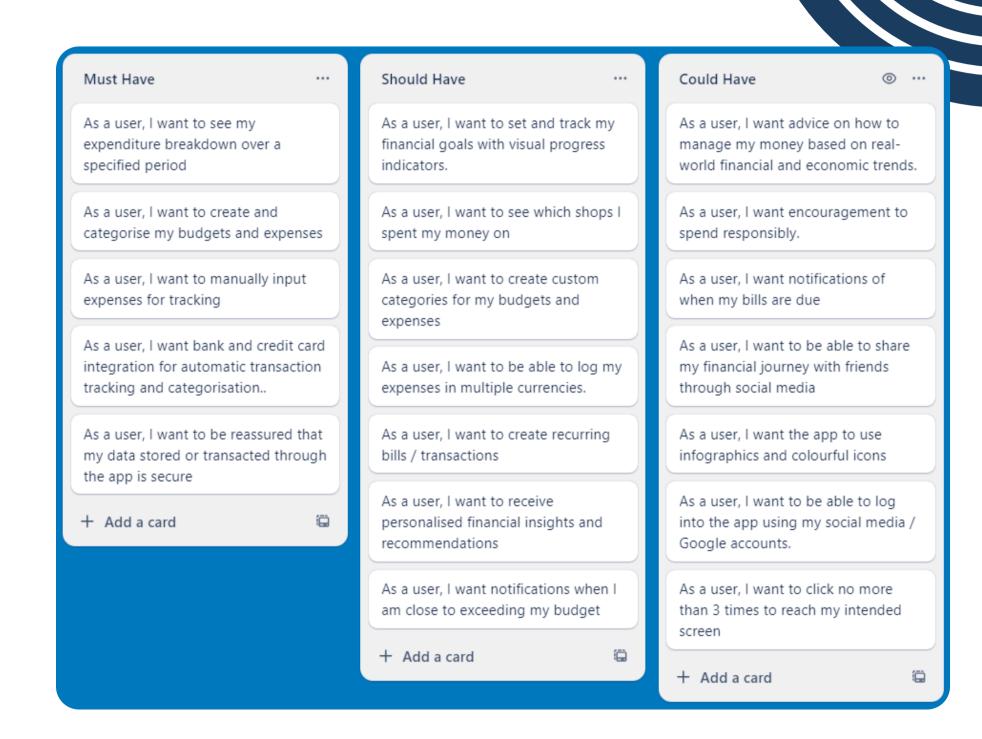




user stories & prioritisation

User stories were crafted to reflect user needs.

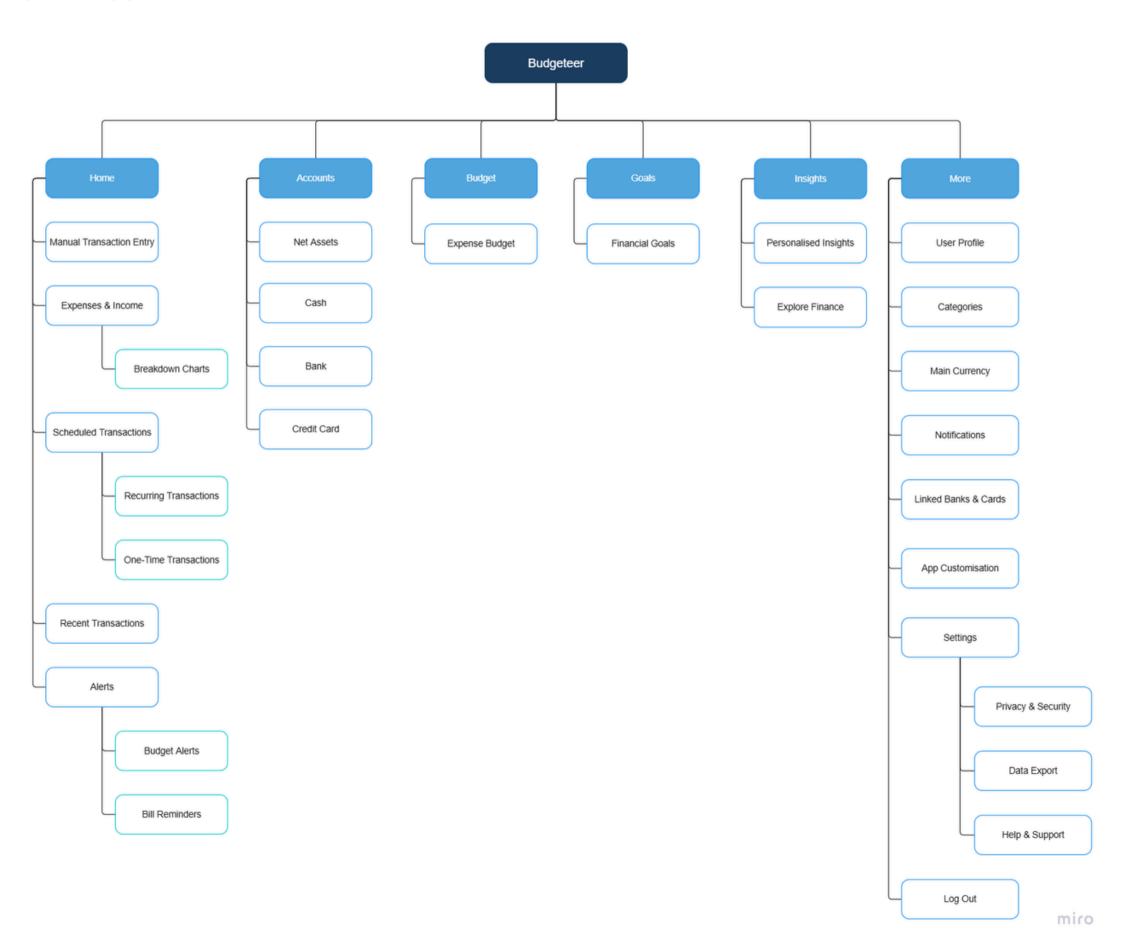
Using the MoSCoW prioritisation method, I sorted the app features based on importance to the users, while ensuring that the prototype developed would meet the requirements of a minimum viable product.



sitemap

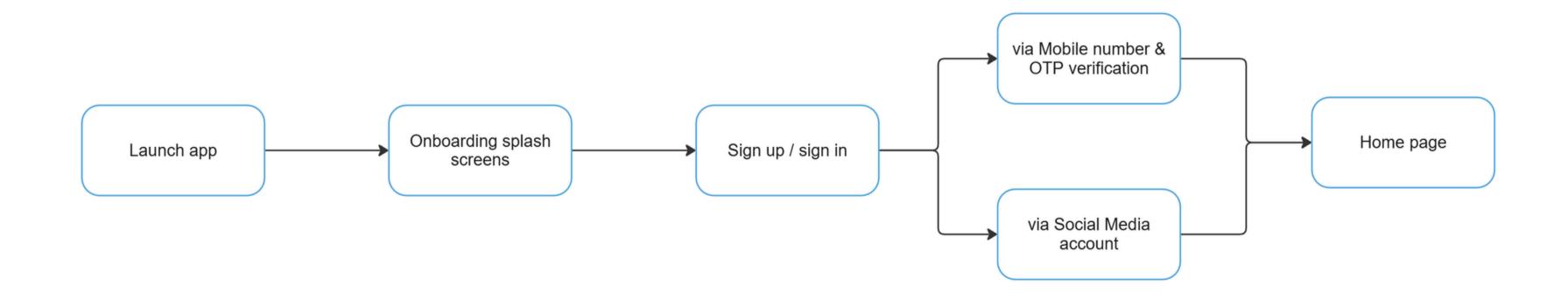
With reference to the user stories crafted, open card sorting was used to group and label the features the app would have.

This facilitated the process of sitemap creation, with the main features forming the navigation toolbar within the app.



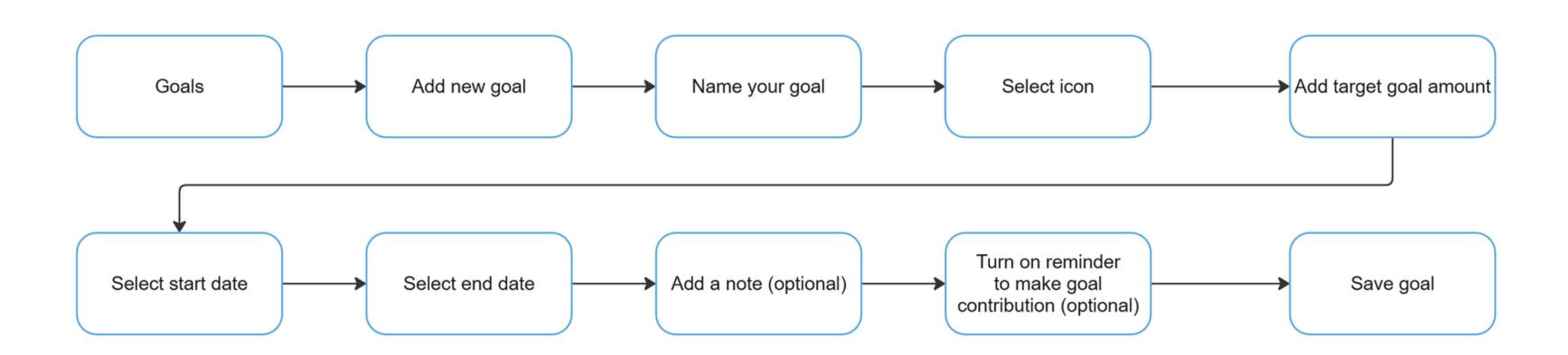


user flow onboarding process



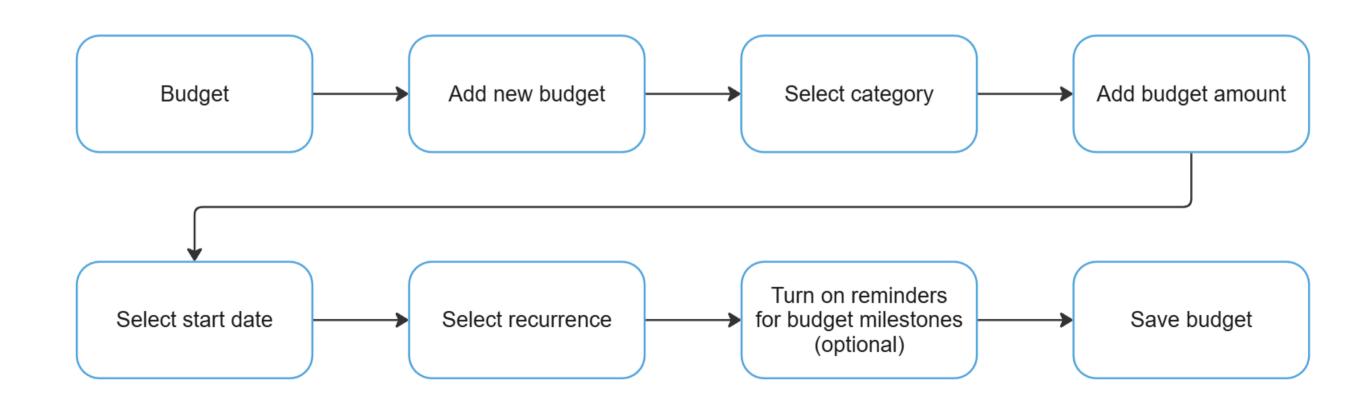


user flow add new goal

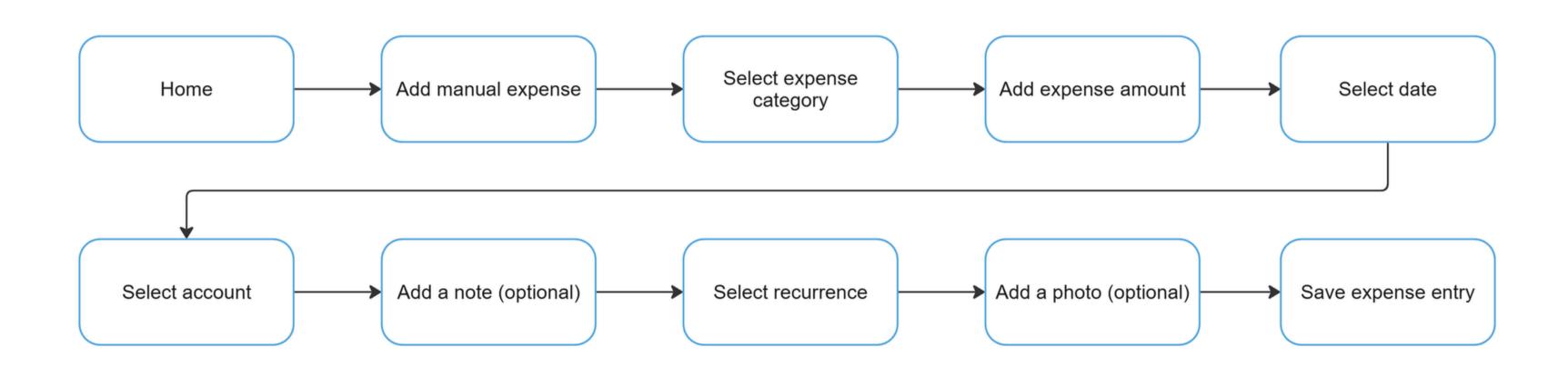




user flow add new budget



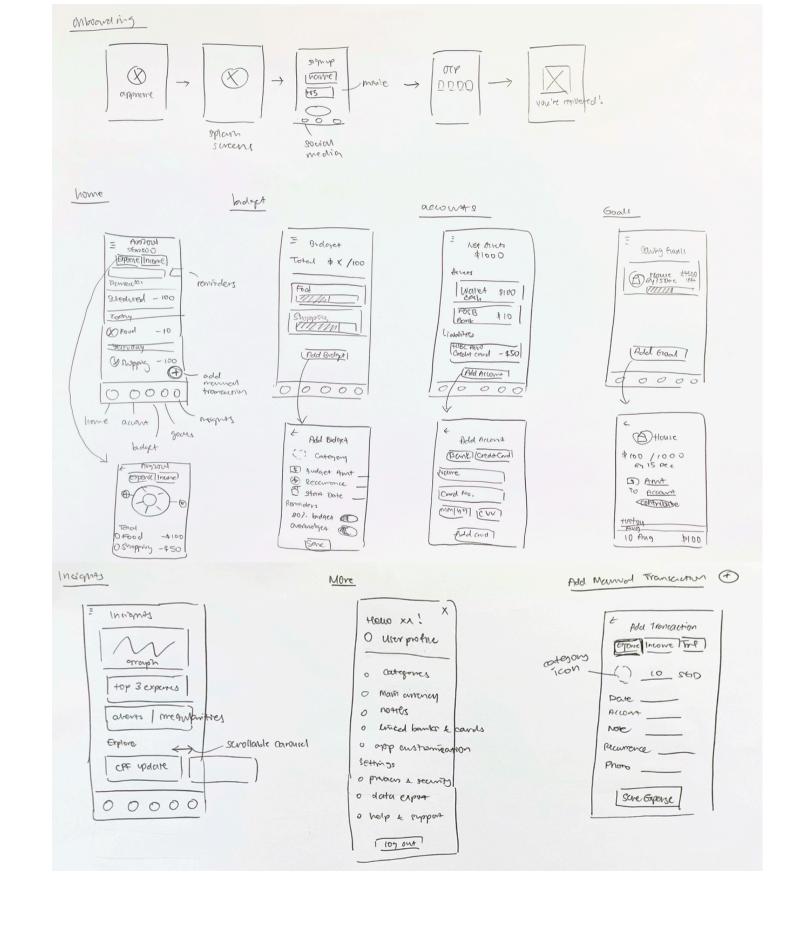
user flow add manual expense



low-fidelity paper prototype

Tools: Pencil and paper

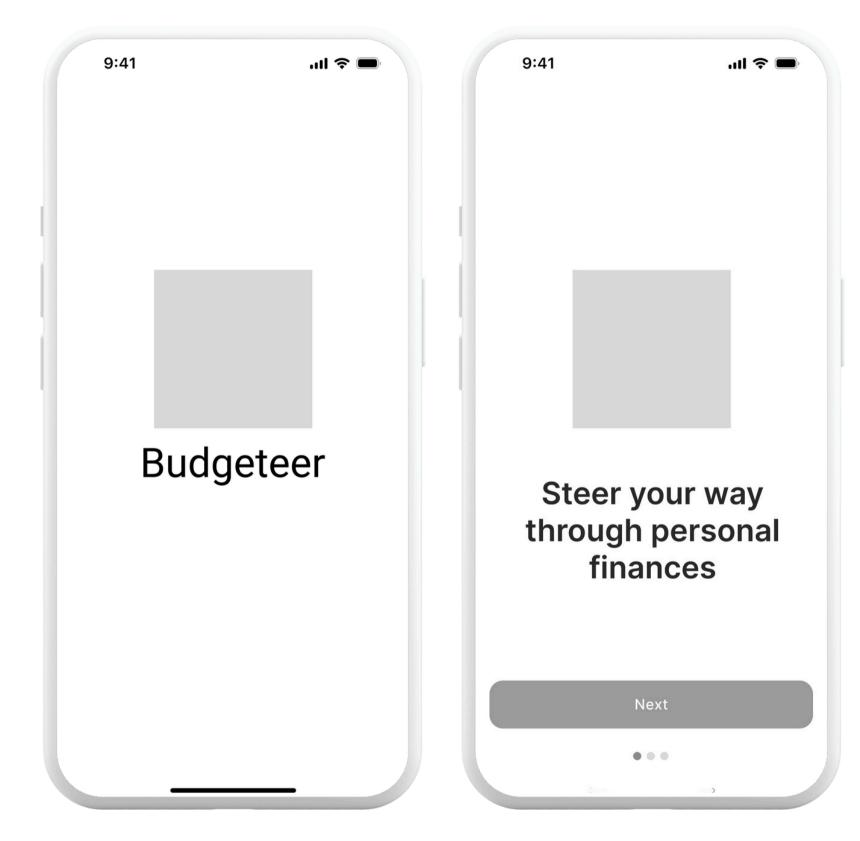
- Used to visualise the elements and feature placement on the screens relative to each other.
- For making quick and easy changes.



mid-fidelity prototype

Tool: Figma

- Translated the low-fidelity paper prototype into a interactive wireframe, with a focus on usability and structure.
- To facilitate user testing on user flow and gathering feedback on the layout of app elements.



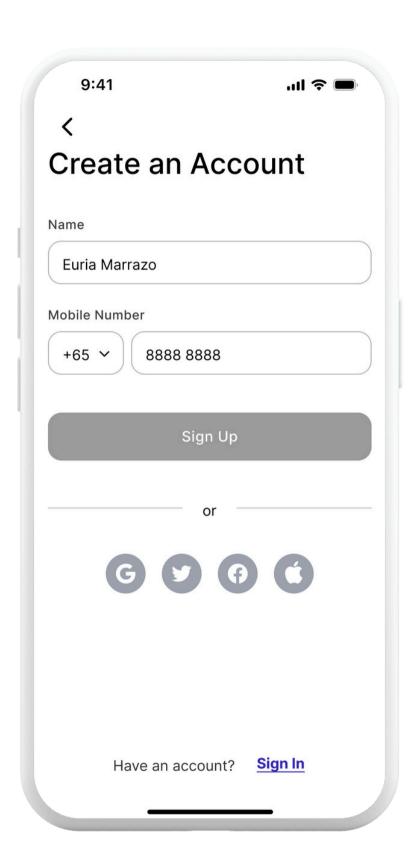


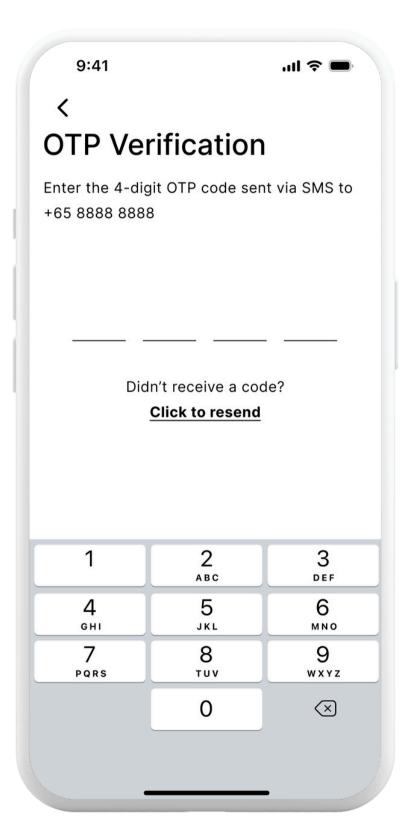
onboarding



passwordless account

In line with efforts to make the app as seamless and fuss-free as possible, I implemented OTP-based passwordless account creation. This eliminates the need for users to create, type and remember long passwords.



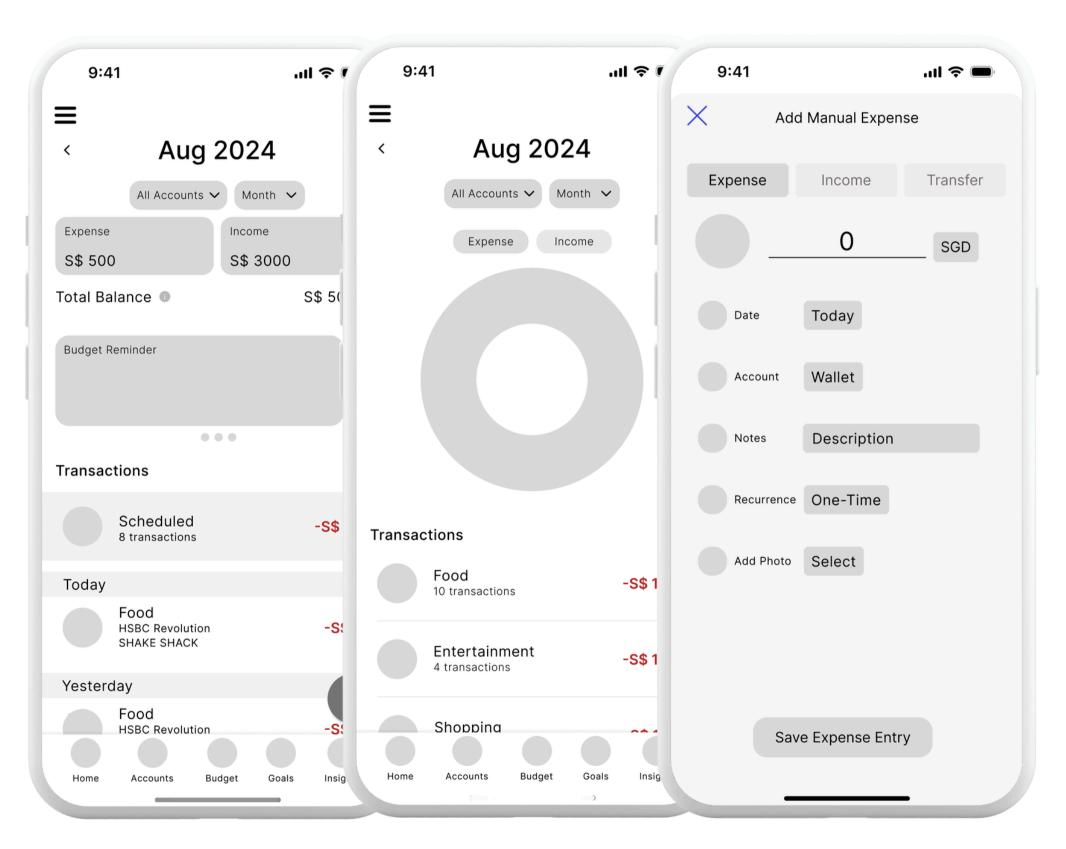


account creation

home-based user flows

The **Home** page acts as a dashboard, addressing user needs to:

- View transactions made
- Manually input expense, income or transfers
- View expense or income breakdown over a specified period
- Be reminded of potentially exceeding their budget(s)

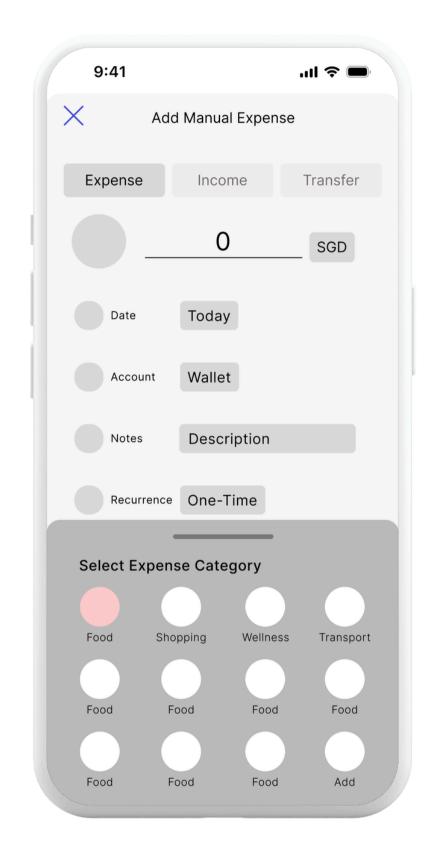


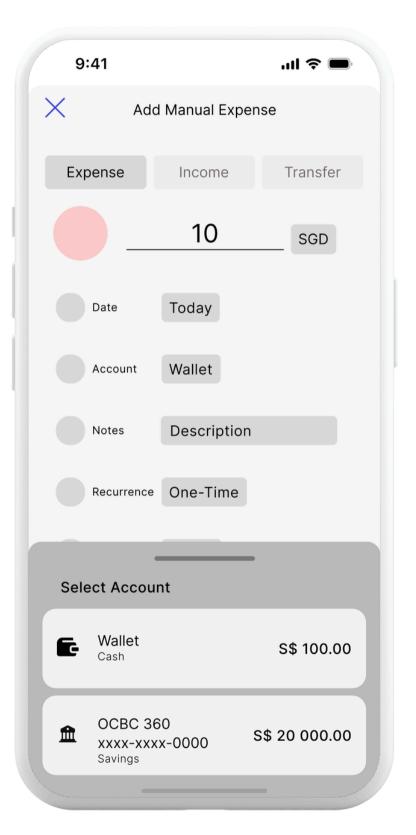
home pages

add manual transaction

The interface is designed for fast input through the following features:

- Upon entering this screen, the categories for selection will automatically pop up
- Compulsory sub-fields (date, account, recurrence) are also pre-selected



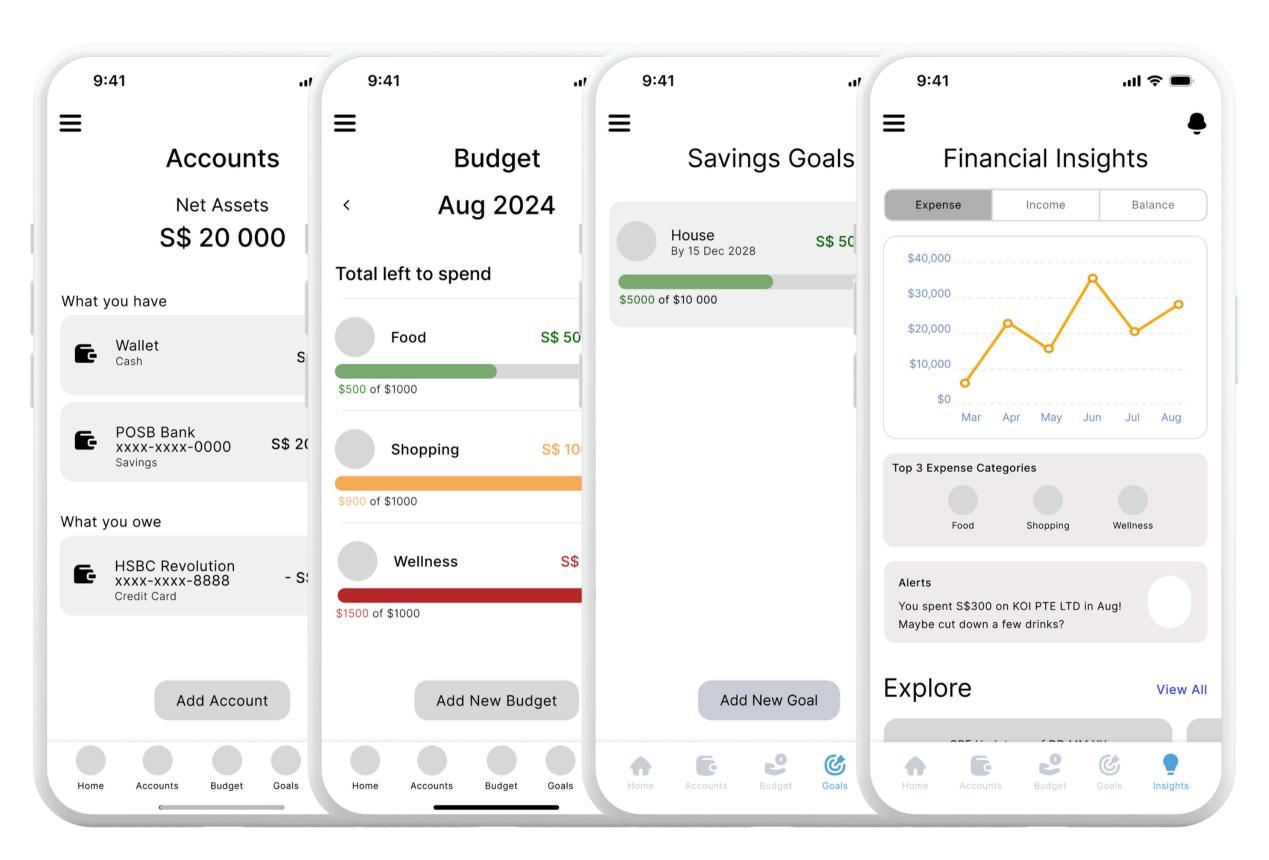




add manual expense

toolbar

The Account, Budget, Goals and Insight pages hosted within the toolbar addresses majority of the remaining user stories, while providing quick navigation to those functions.



toolbar screens



mid-fidelity prototype user testing

Key user flows tested:

- Add a manual expense
- Check monthly expense breakdown by category

Based on the feedback, I refined the prototype with particular attention to details such as interactions (e.g. pop-ups) and UI (e.g. layout of elements, font and element size).

Intuitive

All users were able to complete the identified user flows with little to no problem

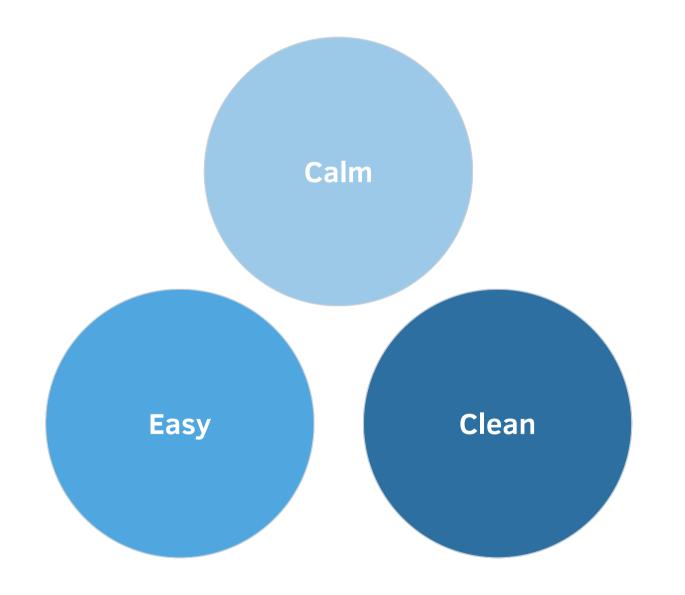
Functional

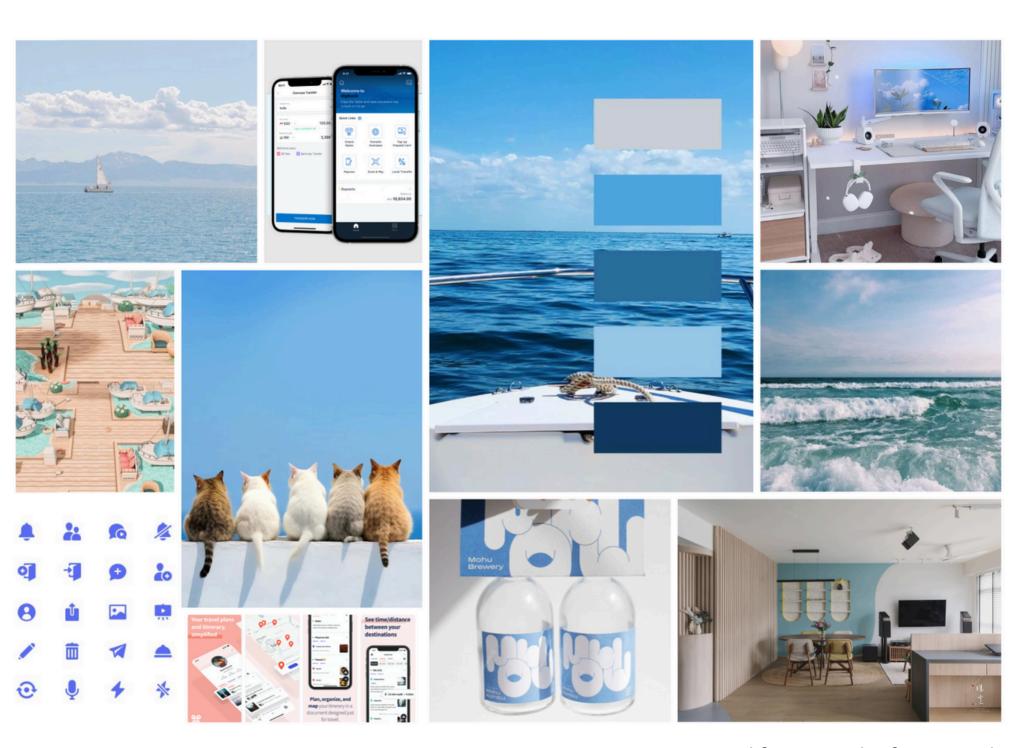
Users mentioned that the app would suit their expense tracking needs, and are appreciative of the statistics displayed

Room for improvement

Users feedback that call to action for clickable features should be made more obvious

moodboard





Images used for internal reference only

style guide

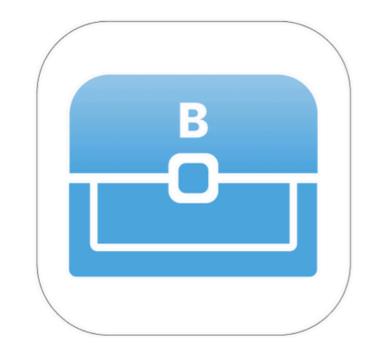
The app name **Budgeteer** rhymes with "musketeer" and intends to invoke a feeling of journey, akin to one setting off on their personal finance journey.

Likewise, the app icon uses a treasure box to represent the user's financial assets within.

Other design notes:

- Cards and content in boxes should always have rounded edges
- Illustrations should have app's primary colours as its base
- Tone of the app should lean towards being friendly

ICON TYPEFACE



Ag

Inter

ABCDEFGHIJKLMNOPQ RSTUVWXYZ

abcdefghijklmnopqrstu wxyz

1234567890

This is a headline

This is some body text with a bit of content just to show how it looks like in combination with the headline.

COLORS



high-fidelity prototype

Tool: Figma

- Added in colours and graphics to the mid-fidelity prototype, while incoporating feedback received thus far.
- To reflect the "final state" of how the developed app should look and feel like.

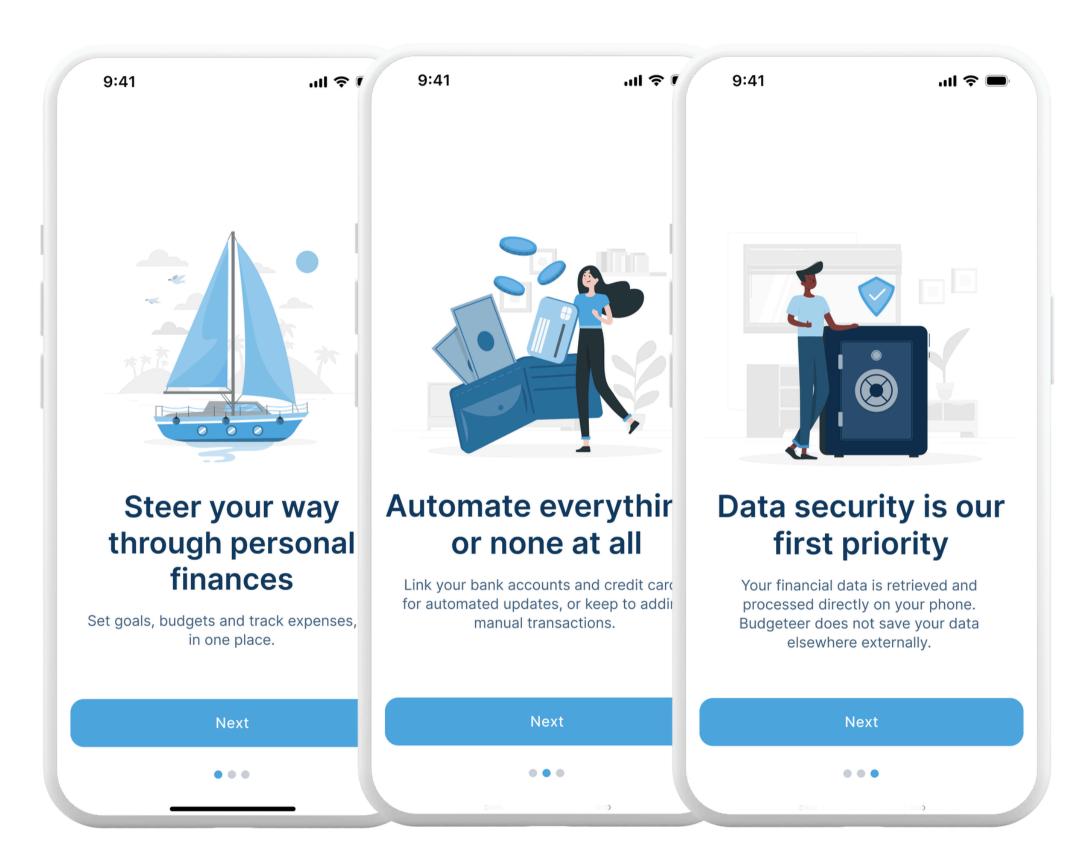




onboarding

Upon launching **Budgeteer**, users will be greeted with a series of splash screens.

It intends to guide users through the key features of the app, while providing them with a peace of mind regarding the app's security.



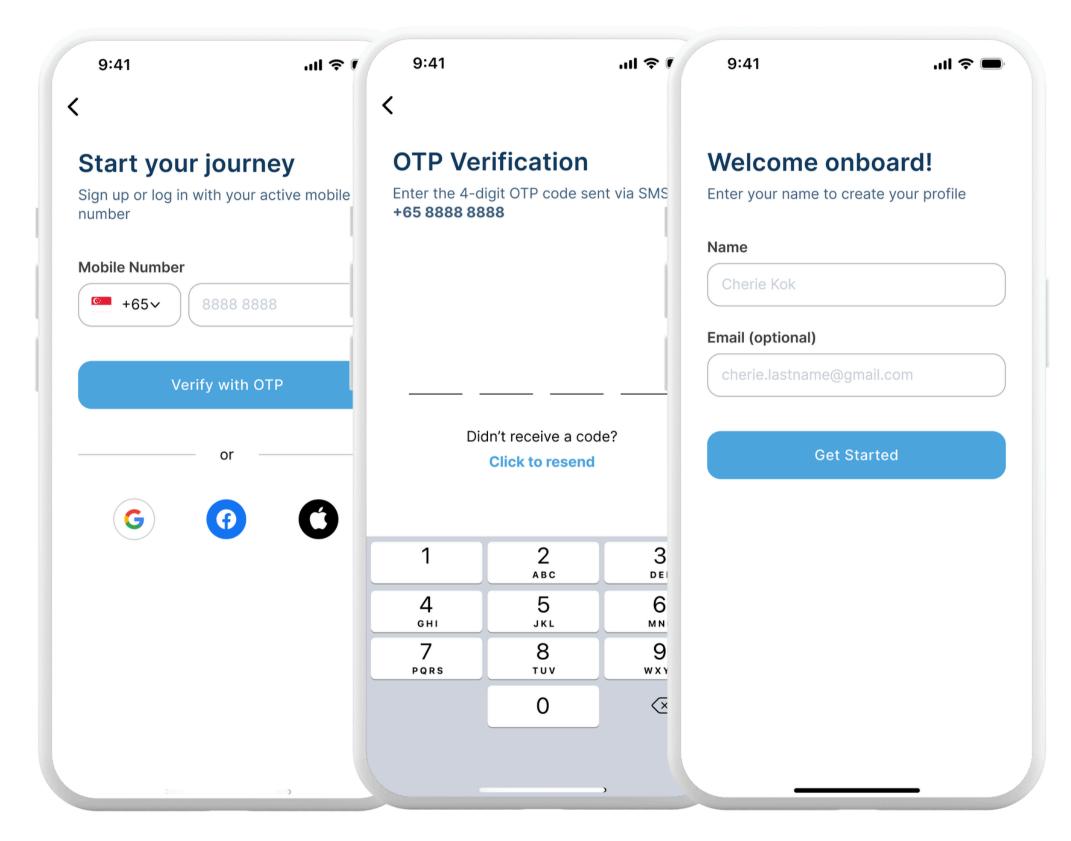
onboarding splash screens

introduction > empathise > define > ideate > prototype > conclusion

sign up / log in

I retained the feature of having a passwordless account but refined the interface to improve the user flow.

This optimises the number of taps the user would have to make, especially if they were a returning user that had logged out.

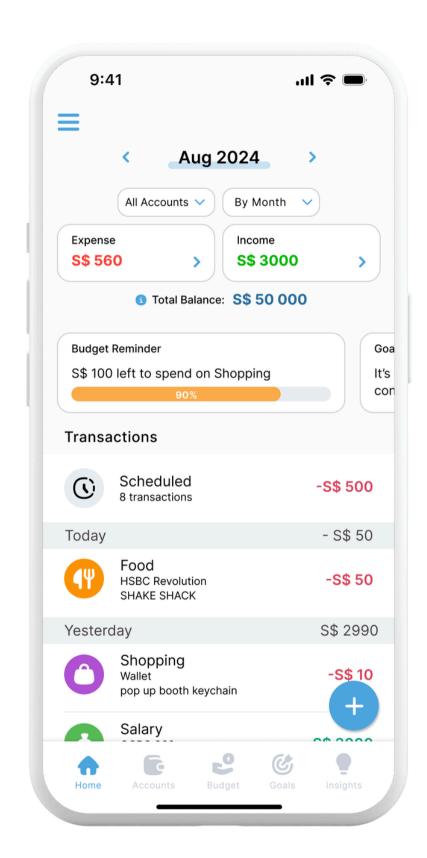


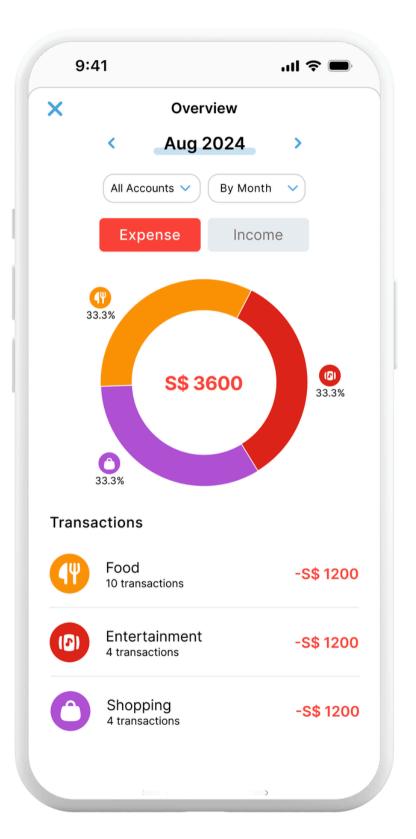
new user registration

view transactions

I made visual improvements to the **Home** and **Overview** pages, including making the calls to action more prominent too.

Functionally, it still serves as a dashboard for users showing key and recent information.



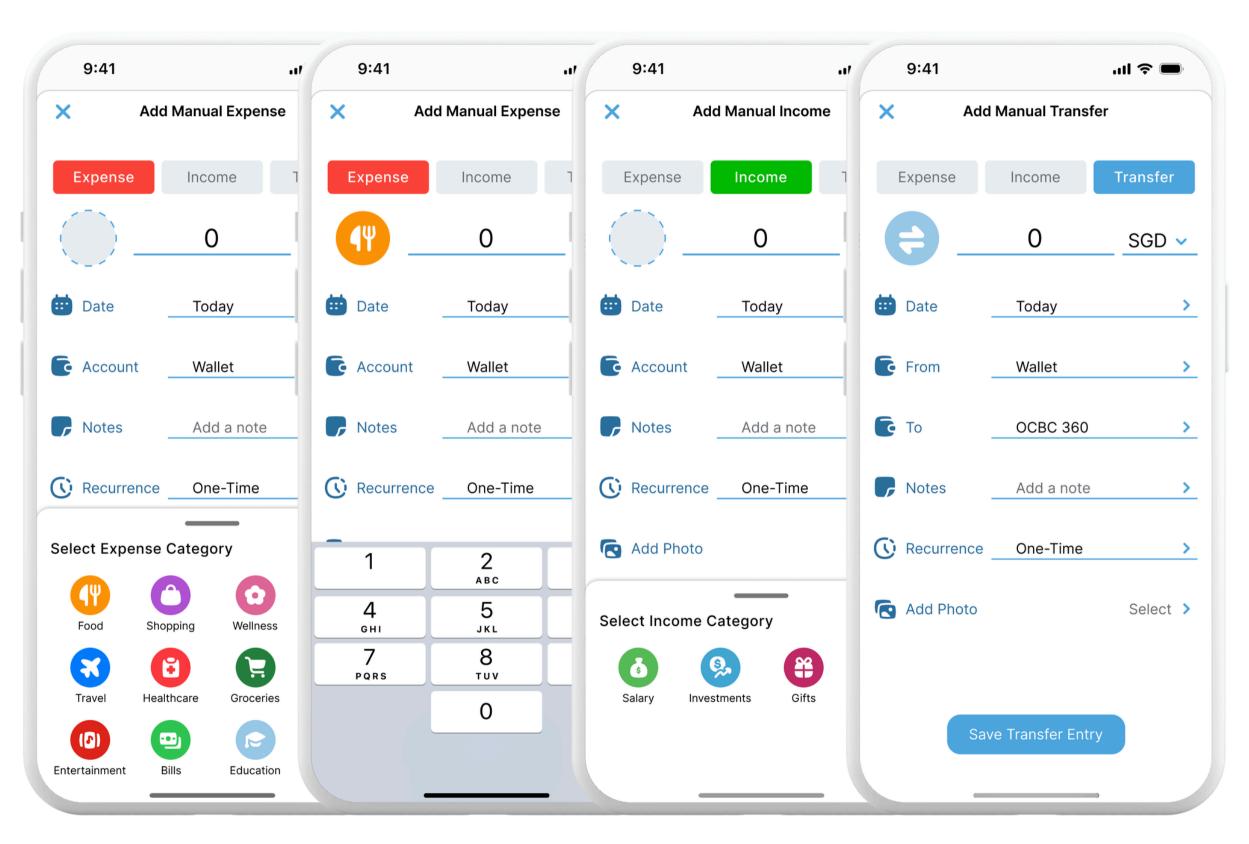


home and expense breakdown

add manual transactions

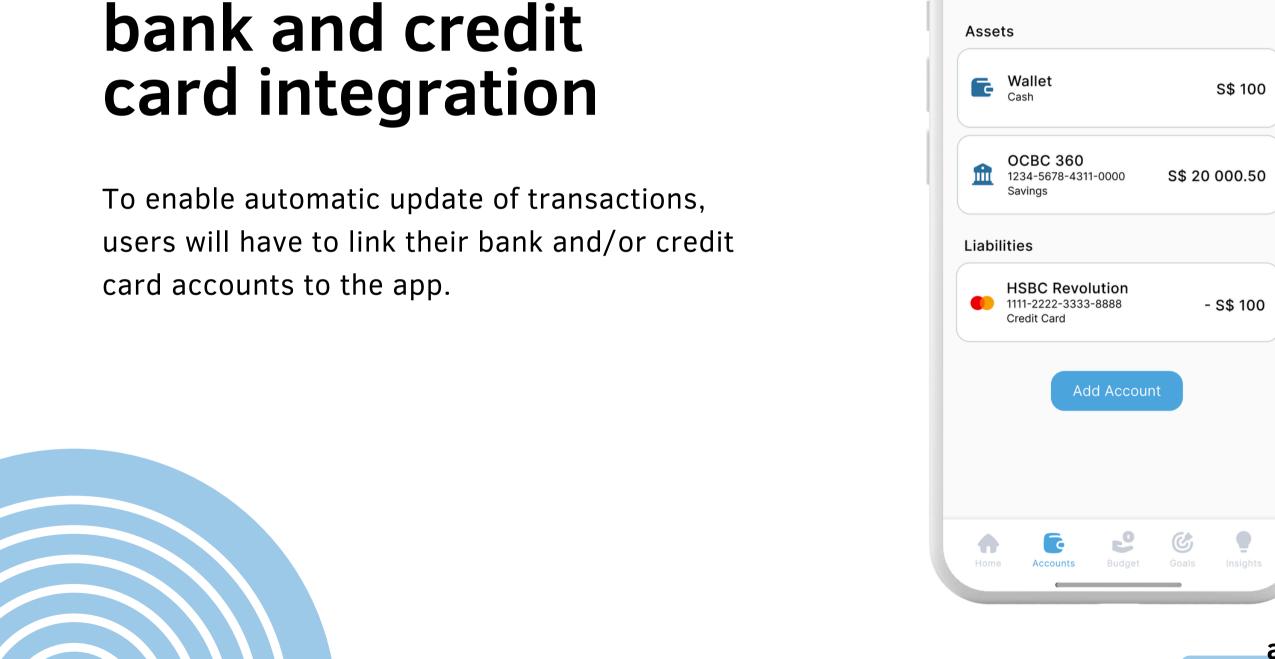
The interface of these screens were revised for a more cohesive look across the app.

In addition, bright and associative colours were used to help users easily differentiate between the transactions and categories.



toolbar screens

bank and credit



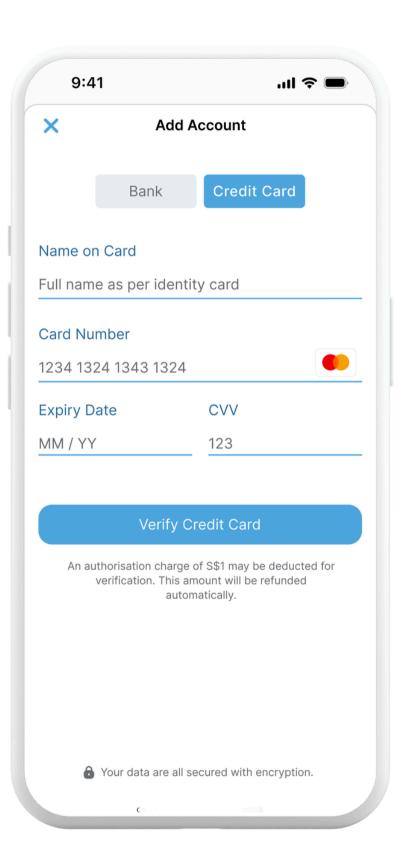
9:41

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Accounts

Net Assets 1

S\$ 20 000.50



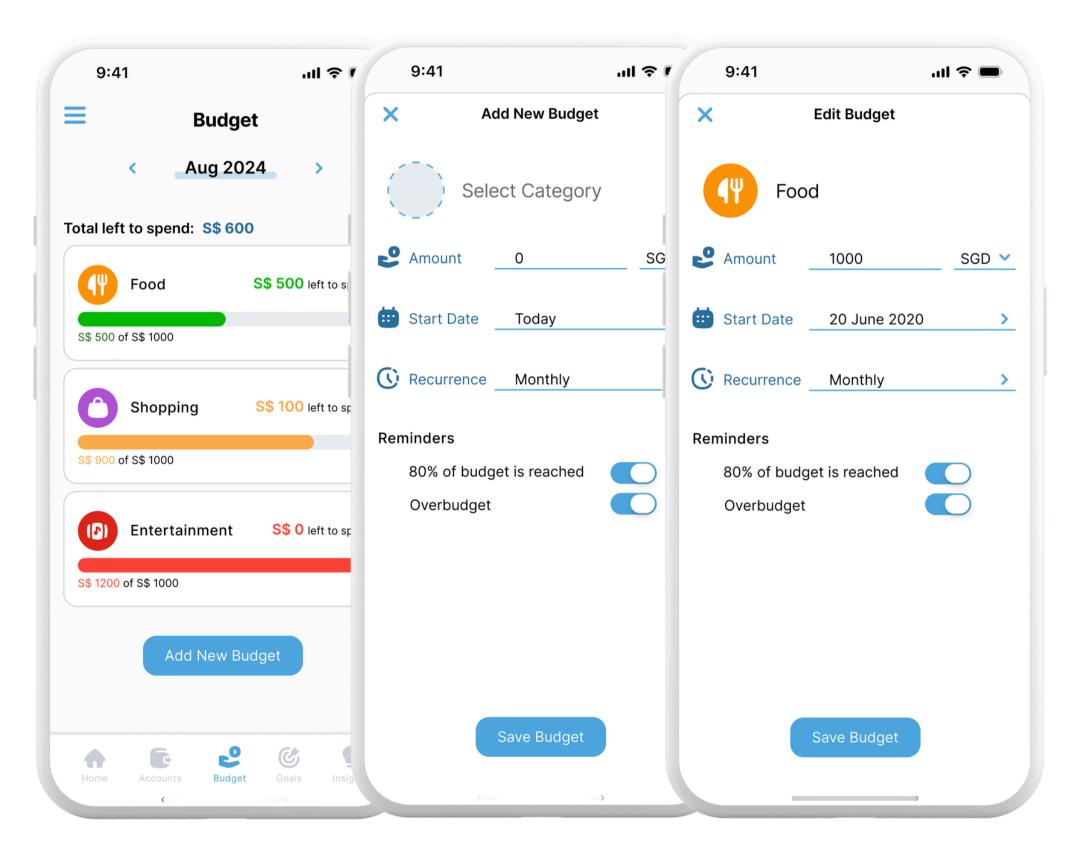


introduction > empathise > define > ideate > prototype > conclusion

budget setting

Budgeteer allows users to set budgets for individual expense categories.

Users can also toggle reminders for individual budgets, which will appear on the **Home** screen during designated expenditure trigger points.

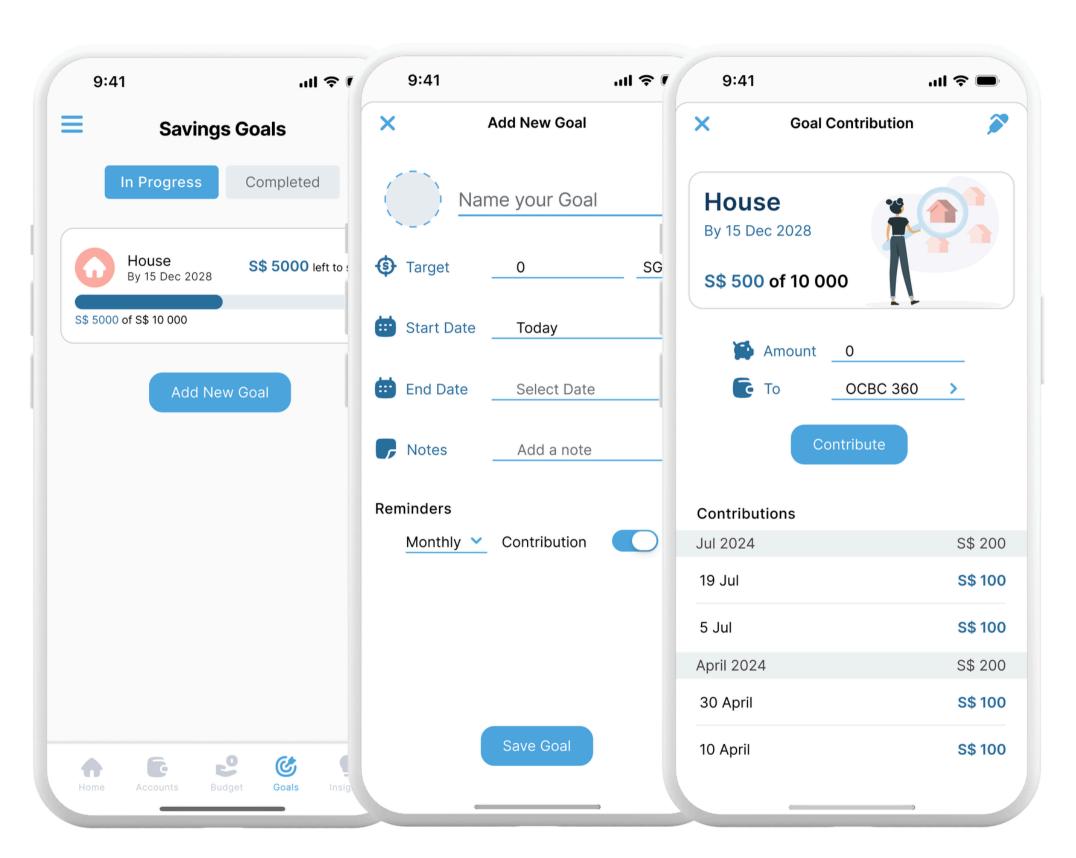


budget

goal setting

Users can set savings goals and toggle reminders for contributing towards the goal, which will appear on the **Home** screen at designated intervals.

The contribution entry was placed directly on each goal's main page to reduce the need for additional clicks and page transfer, which may otherwise be a hassle to users.

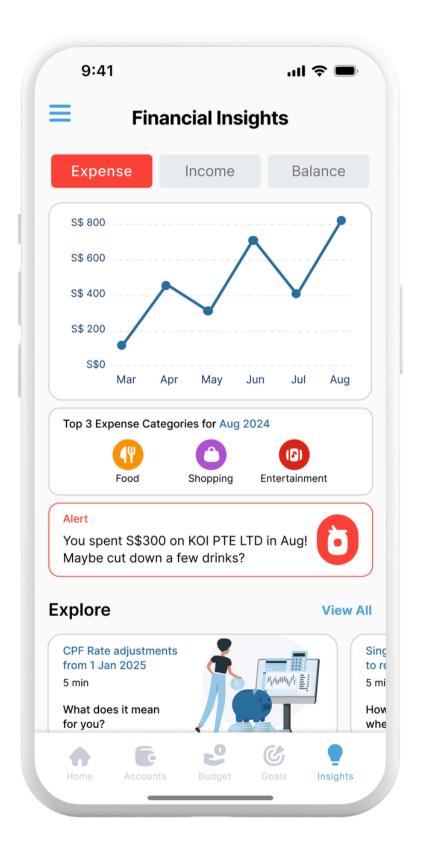


goals

receive personalised insights and recommendations

Financial Insights aims to provide a summary of the user's expense, income and balance patterns, while highlighting any potential anomalies detected.

In addition, the **Explore** section aims to improve user's financial literacy by providing them with bite-sized advice on how to manage money, based on real-world financial and economic events or trends.



financial insights

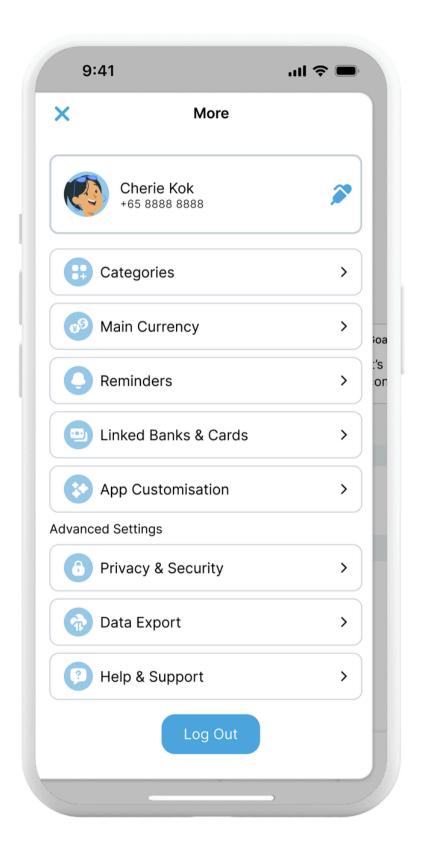
introduction > empathise > define > ideate > prototype > conclusion

settings and more

More appears as a hamburger menu accessible from the main pages hosted on the navigation toolbar. It was situated in the top left hand corner instead of the main toolbar itself as I expected it to be one of the less-used buttons post-initial setup.

Primarily, it allows users to view and/or edit:

- Their user profile
- Certain transaction-related settings
- App-related settings

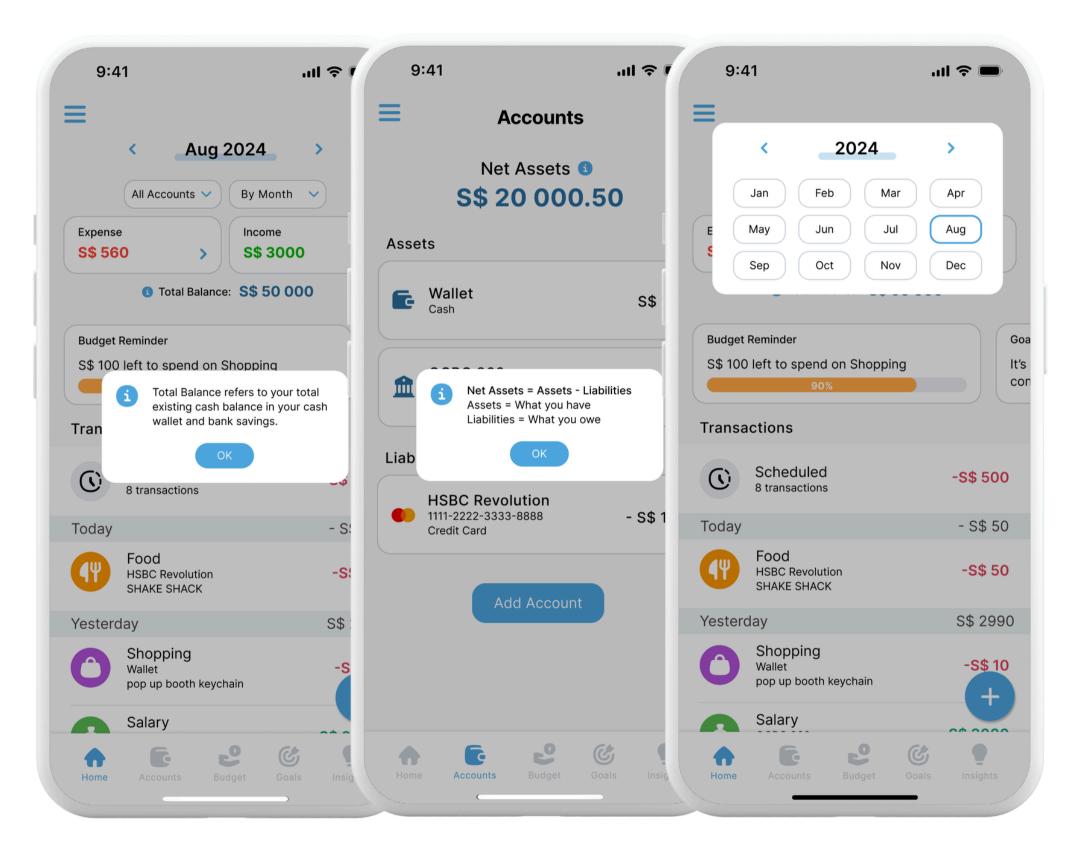


user profile and settings

quality of life features

Keeping in mind that a portion of users may be new to personal finances, tooltips were added to explain terms specific to finance and **Budgeteer**. The choice to retain use of the jargon aims to educate users and improve their financial literacy.

A calendar pop-up was also included to enable quick selection of a time period.



tooltips and calendar selection

high-fidelity prototype

click here to view on Figma

(best viewed on PC or Figma mobile app)









high-fidelity prototype user testing

I surveyed a handful of users for feedback following the development of the high-fidelity prototype.

Overall, the prototype was well-received, with many commenting that it "looked like a real app they would use".

Visually appealing

Users appreciated the neat interface that did not feel cluttered even with the various information presented

Cohesive experience

Users liked the brand's direction and found that there was a good balance between aesthetic graphics and professionalism

Room for improvement

Financial Insights page had many colours, which caused the users to be slightly disoriented before mentally registering the different elements

product roadmap

After the MVP launch of the app, the next steps will involve designing features beyond the initial scope, including user stories categorised as "Could Have" in the MoSCoW prioritization exercise.

Additional user research and testing will also be necessary to validate these potential new features and prevent content bloat.

Financial Insights

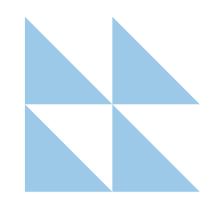
Yearly round-up review of user's financial statistics in comparison to an average user

Accounts Integration

For users to be notified whenever they receive a statement and payment due date on their credit card(s)

Search and Filters

To enable a global search and filter selections for transactions based on category, etc.



reflections

Although I had prior knowledge of UX design, this Capstone Project was my first time conducting the full UX design process, from initial research to delivering a high-fidelity prototype for a new product.

From this experience, my main takeaways are:

- Recognising the value of user research. As the foundation of the UX design process, thorough user research is crucial to guide design decisions and minimise wasted effort in later iterations.
- Understanding and prioritising user needs. It is essential to focus on what users truly need and adhere to a clear work plan to avoid scope creep, ensuring a successful delivery of the minimum viable product.
- Be aware of users' mental model. Instead of reinventing the wheel, applying established design practices can improve user experience by creating interfaces and interactions that align with user expectations.

While **Budgeteer** may not address every user need, I believe that a well-designed financial app can significantly empower users on their financial management journey.



thank you for viewing!

For questions and comments, please reach out to me via:



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attributions and links

Credits

- Slides created on Canva
- Illustrations by <u>Storyset</u>
- Icons by <u>Streamline icons</u>
- UX Persona template adapted from UXPressia
- Persona 1: <u>Image by benzoix on Freepik</u>
- Persona 2: <u>Image by tirachardz on Freepik</u>
- User Stories and Prioritisation sorted on Trello

Figma

- <u>Design File</u>
- <u>High-Fidelity Prototype</u>

