

Designing a Subscription Management App to Enable Cost-Efficient Decisions among Young Adults

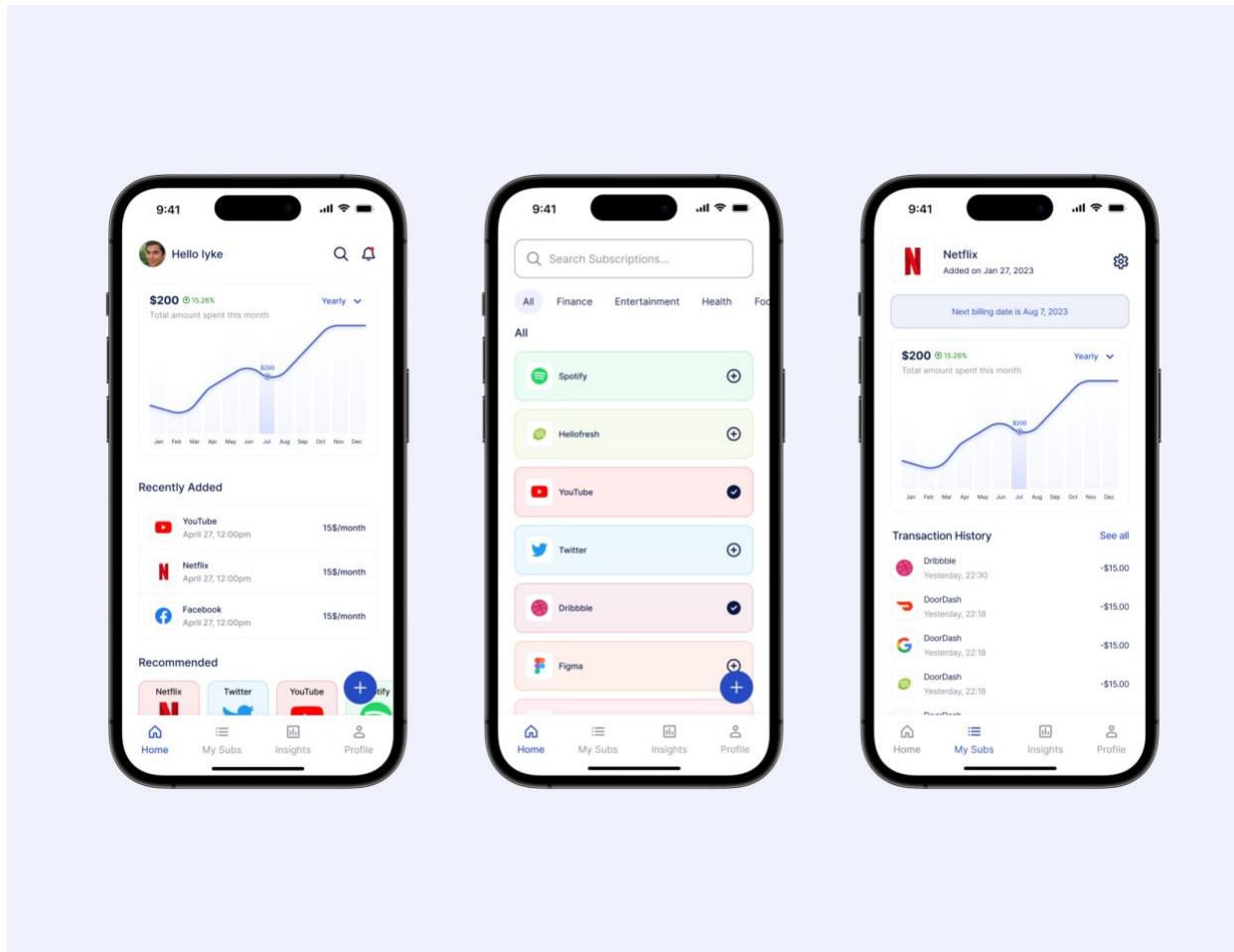


Figure 1: Showing UI Design MockUp

ABSTRACT

Young adults today spend a significant amount of money on subscription services, ranging from entertainment to wellness and education. While subscriptions offer convenience and access to premium content, it is easy to overlook the cumulative costs and end up overspending. It is therefore necessary for young adults to be able to manage and track their subscription usage so that they can make cost-efficient decisions.

This research aims to discuss the development of a subscription management app for young adults. The app provides a user-friendly platform for purchasing, managing, and tracking subscriptions. Using this service, users will be able to track their usage, set reminders for subscription renewals, and receive personalized recommendations.

This report concludes with an evaluation of the potential impact of the app on young adults' finances and the feasibility of launching such a product. It aims to help young adults make informed decisions about their subscriptions and ensure cost-effective spending.

INTRODUCTION

Subscription services have become ubiquitous in modern society, offering convenient access to an array of digital and tangible products at a recurring cost (Wlömert and Papies, 2016). While such services have undoubtedly revolutionized the way we consume content, the cumulative costs of multiple subscriptions can quickly add up, resulting in a financial burden for many young adults. As such, there is a pressing need for innovative solutions to manage subscription expenses and promote cost-efficient spending.

This research aims to discuss the design of a subscription management app tailored to the needs of young adults. The app will provide a platform that allows users to purchase, manage, and track their subscriptions in one place. It will enable users to track their usage, set reminders for subscription renewals, and provide personalized recommendations based on their usage history. This report covers various aspects such as user research, design thinking, prototype and app features. The ultimate goal of the app is to empower young adults to make informed decisions about their subscriptions and promote cost-efficient spending.

BACKGROUND RESEARCH

With the growing popularity of subscription-based services, young adults are spending a significant amount of money on recurring monthly bills for various services, including streaming media, software, food delivery, and others (Hsu and Lin, 2015). The subscription-based business model offers several benefits to consumers, such as premium access to a wide range of products and services. However, in many cases, managing multiple subscriptions and tracking usage can become a daunting task for many young adults, leading to overspending and financial strain (Anzarus Sabab et al., 2018).

Recent studies have shown that subscription management apps can help users manage their subscriptions, monitor their usage, and make informed decisions about their spending habits (Anzarus Sabab et al., 2018; Ekpo et al., 2022; “retrieve”, n.d.). These apps provide features such as reminders, notifications, and tracking tools to help users stay on top of their bills and avoid unnecessary expenses. Subscription management apps can also help users compare prices, cancel unnecessary subscriptions, and negotiate better deals with service providers.

These apps cater to various user preferences and offer unique value propositions to address the specific needs

Top 100 Subscription App Revenues in 2021

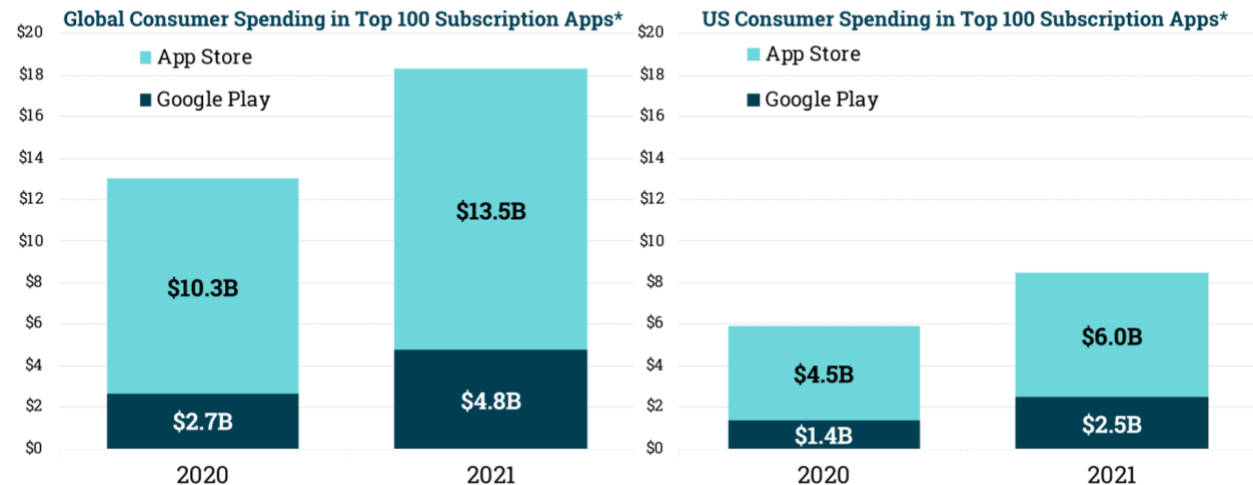


Figure 2: Published on the marketingcharts.com in March 2022 | Data source: Sensor Tower Store Intelligence

**Non-game apps; top 100 subscription apps by revenue.*

of different segments of users. Some apps focus on providing a comprehensive view of all subscriptions in one place, while others emphasize bill tracking and reminders. Some apps offer a personalized recommendation engine to help users discover new services, while others focus on negotiating better deals with service providers on behalf of their users.

While subscription apps are a necessity, there has been little development in terms of the range of options available for use. Also, With the increasing demand for subscription-based services and the challenges of managing multiple subscriptions, there is a significant need for an app that can help young adults make informed decisions about their spending habits (Hsu and Lin, 2015).

Many subscription-based companies offer free trial periods that can easily turn into paid subscriptions if not

cancelled on time (Wlömert and Papies, 2016). Additionally, some companies have tiered pricing plans that can be confusing and lead to overspending. A subscription management app can help users keep track of these offers and ensure that they are not inadvertently signing up for a subscription that they don't need or want.

Another key benefit of subscription management apps is their ability to help identify unnecessary or underused subscriptions that can be cancelled or downsized. The success of such an app will depend on its ability to provide relevant and actionable insights, offer personalized recommendations, and help users stay in control of their subscriptions and bills.

The Subscription Model - How it works?

Subscriptions typically work by offering users access to a product or service for a recurring fee, usually charged on a monthly or annual basis. There are a wide range of subscription products and services available, such as software, streaming media, magazines, and online courses.

When a user signs up for a subscription, they are usually required to provide payment information and agree to the subscription's terms and conditions, including the length of the subscription and the fee charged. The subscription will automatically renew at the end of the subscription period unless the user cancels it.

Many subscription services offer a free trial period during which the user can test the service for a limited time without being charged. If the user does not cancel before the end of the trial period, they will be charged for the subscription.

Subscription services can also offer different pricing plans with varying levels of features or benefits, allowing users to choose the plan that best fits their needs and budget. Overall, subscriptions provide a convenient and predictable way for users to access products and services while providing a stable source of revenue for companies.

UX PROCESS

The Double Diamond approach was used in the design of the subscription management app. It is a popular UX design framework developed by the UK Design Council which consists of four distinct phases; Discover, Define, Develop, and Deliver. It emphasizes gaining empathy for users, identifying user needs, brainstorming and testing design solutions, refining the design based on feedback, and finally delivering the product to the market. This approach is flexible, iterative, and focuses on user-centered design, making it popular among UX designers globally.

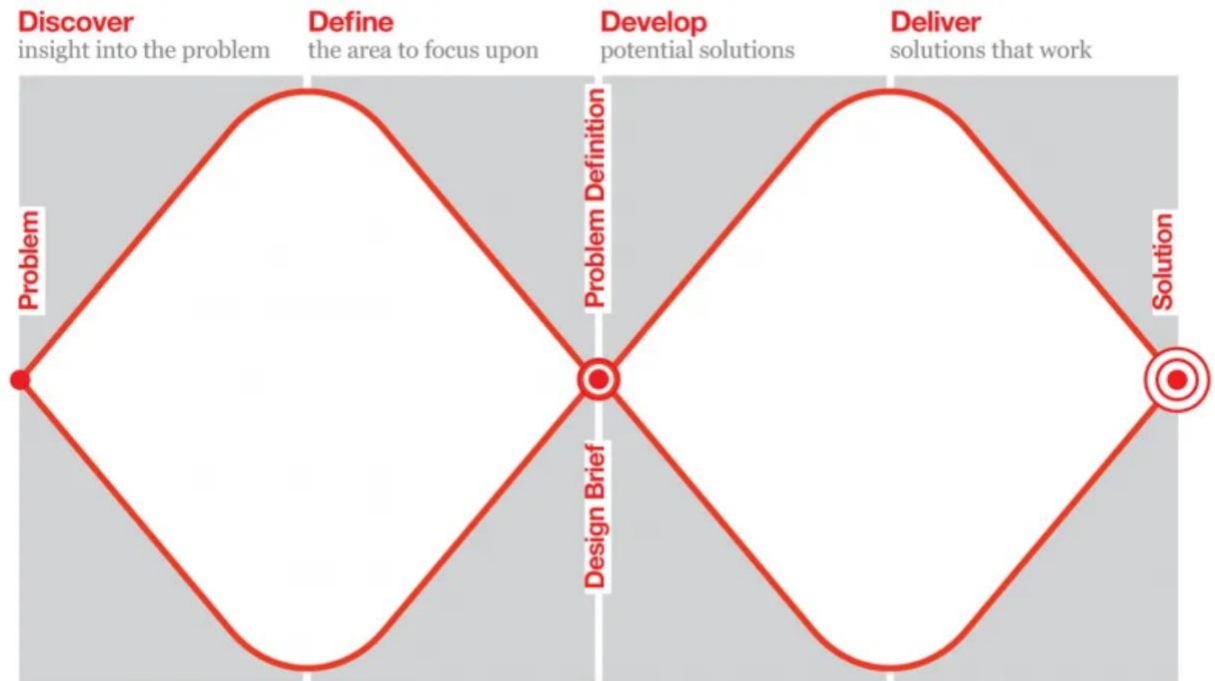


Figure 3: Design Council's Double Diamond, img source:

<http://static1.squarespace.com/static/55fa0341e4b06660c65bd4f0/t/5642c682e4b0b633d4fcc1fd/1447216776499/>

PROBLEM STATEMENT

With the rise of subscription-based services, young adults have been faced with an increasing number of monthly recurring bills. Managing multiple subscriptions, tracking usage, and making cost-efficient decisions has become a daunting task for many. Having a solution that helps them manage their subscriptions all in one place, and decide which services to keep and save on, would be cost-effective for them.

USER SURVEY

I conducted a survey in order to obtain quantitative data about subscription services and understand user behaviour around managing their subscriptions. The

survey received 24 responses, with 79% of participants having three or more subscriptions.

This survey was carried out with respect to ethical guidelines and participants were given details of what the study was for. All participants in this study are anonymous and have been stripped of any information that could be used to identify them.

In the figures below, we can see the trends and behaviours of the participants and this data would help refine the features for the design of the subscription management app.

8. How many subscription-based apps or services do you use? (Also select if you use a subscription-based app but do not pay for the subscription or on a freetrial)

[More Details](#) [Insights](#)

1-2	4
3-5	11
6 or more	8
None	1



Figure 3: 79% of participants having three or more subscriptions.

10. How do you currently manage your subscription-based apps or services?

[More Details](#) [Insights](#)

Manually tracking them on a spr...	2
Relying on email notifications fr...	20
Using a third-party app or servi...	0
Other	2



Figure 4: 84% of Participants say they rely on email notifications to manage their subscription-based apps or services.

12. How important is it for you to keep track of your spending on subscription-based apps or services?

[More Details](#)

Very important	8
Somewhat important	10
Not very important	5
Not at all important	1



Figure 5: 75% of Participants say it is important for them to keep track of their spendings on subscriptions.

13. Have you ever forgotten to cancel a subscription before it renewed?

[More Details](#)

Yes	11
No	13



Figure 6: 46% of Participants say they have forgotten to cancel their subscription before it renewed

14. If yes, Please state what platform and how much did it cost you?

9 Responses

ID ↑	Name	Responses
1	anonymous	Figma \$15
2	anonymous	Amazon
3	anonymous	Amazon prime, around 4 pound per month
4	anonymous	A number of them. Mostly trial anyway.
5	anonymous	Freelancer
6	anonymous	Pdf edition platform. About £10
7	anonymous	Apple music, 4.99 GBP
8	anonymous	Spotify, 10 Euros
9	anonymous	Linked In. It was around 25 pounds.

Figure 7: Out of the 46%, majority also stated that it cost them money as they were billed for recurring subscriptions because they failed to cancel a subscription they didn't need.

COMPETITIVE ANALYSIS

I carried out a competitor analysis using the S.W.C.D.UX.O Analysis table to better understand the competitors and uncover opportunities that can be explored. This analysis was done on the following apps, Truebill, Bobby, TrackMySubs and Emma.

In summary, I was able to learn from their weaknesses and shortcomings, and design successes, thus helping to guide my design decisions in creating a subscription management app that meets the needs of young adults.

The Competition							
Name of Competitor	URL or Download Link	Strengths	Weaknesses	Content	Design	UX	Opportunities
Whoooo are you? Who who? Who Who?	Paste the website address, or download link from the app store here	What does the site or app do really well overall? What are your first impressions like?	What are the major gaps or flaws in the app overall? Any glaring weaknesses you can see off the bat?	What's the voice and tone like? Does it fit the brand? Is the photography or video high quality, and useful?	Visually, did they make good choices for the intended audience? Are icons done well? Illustrations on point? How's the overall typography stack?	Does the site flow well? Any dead ends? Any interactions that leave you feeling lost? Any really wonderful experiences?	What can we learn from this site or app? Is there anything we could be doing better or differently? Did they miss the mark somewhere we can capitalize on?
RocketMoney (Truebill)	https://www.rocketmoney.com	Able to track of subscriptions and bills comprehensively. Users are also able to cancel subscriptions within the app. You also have an option to negotiate bills	Some features are only for premium subscribers. Also some users have reported issues when trying to cancel subscriptions.	It has a detailed overview of subscriptions, bills, and spending. It also highlights saving opportunities. It tracks your budget and offers insight on credit scores.	It has a clean and modern design and an easy to use interface.	It has a user friendly interface and easy access to important features. It also notifies you about upcoming bills and subscription renewals.	There is a potential to expand the savings options and an integration with other financial management tools.
Bobby	https://bobbyapp.co/	Users are able to add subscriptions and bills into categories.	Some users have reported issues with syncing. Also users have no option to cancel subscriptions within the app.	Users get to see a detailed overview of subscriptions and bills and are able to add custom subscriptions and bills as they choose. The app also helps with budget tracking.	It has a clean and modern design and an easy-to-use interface.	Navigation on the app is seamless and user-friendly. Users also get notifications for upcoming bills and subscription renewals	Expand subscription management features and integrate with more payment options so that users are able to buy or cancel subscriptions from within the app.
TrackMySubs	https://trackmysubs.com/	Offers comprehensive subscription management features. Ability to add subscriptions into categories and folders. Also gives you a summary of your expenses.	Offers limited integrations with subscription services and also no ability to negotiate bills.	It shows subscription history and spending breakdowns. Customizable subscription categories, notifications and alerts.	Simple and clean design. Easy to navigate.	User-friendly interface with easy navigation.	Integration with additional financial management tools.
Emma - Budget Planner Tracker		Comprehensive budgeting tools, ability to track multiple accounts and budgets	Limited investment tracking, occasional glitches with transaction categorization	The app consist of expense tracking and categorization, budgeting and savings tools.	Minimalistic and clean design with a focus on simplicity and ease of use. Uses bright colors and playful animations to make the app visually appealing.	Provides a straightforward onboarding process and easy navigation. Uses gamification to encourage users to achieve financial goals.	Expand investment tracking features, improve transaction categorization accuracy

Figure 9: Showing the S.W.C.D.UX.O Table

15. What features would you like to see in a subscription management app? (Select all that apply)

[More Details](#)

- Consolidated view of all subscri... 21
- Notification of upcoming billing... 23
- Cost breakdown and analysis of ... 14
- Ability to cancel subscriptions w... 20
- Personalized recommendations ... 15
- Integration with budgeting or fi... 7
- Other 2

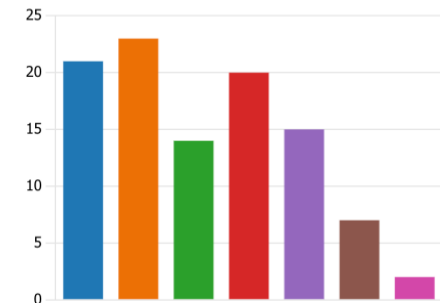


Figure 8: Majority wanted to view all subscriptions in one place, be notified on upcoming billings, the ability to cancel subscriptions, personalised recommendations and cost breakdown and analysis of spendings on subscriptions.

BRAIN STORMING

Decision Matrix

I used the How Might We (HMW) decision matrix, which is a brainstorming tool that can be used to generate and evaluate ideas during the design process. It involves framing a problem statement as a series of questions that begin with "How might we...?" and then evaluating potential solutions using three criteria: How easy is it to implement (How), How effective is it in addressing the problem (Now), and How innovative or impactful is it (Wow).

I was able to list out possible ideas that could be implemented and sorted them out based on those three criterias.

Understanding the users, Brain Dump & Crazy 8s

Understanding the user is a crucial part of the design process for any product. It involves researching and analyzing the needs, preferences, and behaviors of the target audience. By understanding the user, the design team can create a user-centered product that meets the needs of the target audience.

I conducted a Brain dump session, a brainstorming technique where ideas are generated and recorded without any filter or evaluation. The goal was to generate as many ideas as possible without any restrictions, which can then be refined and evaluated later in the design process.

Crazy 8s is an effective ideation tool that allows for rapid exploration of multiple design ideas. I drew 8 sketches in 8 minutes to envision what the home screen may look like and had colleagues vote for the ones they prefer most.

Decision Matrix

A decision matrix is used to assist in making decisions. Using the matrix you validate a question or idea against a set of criteria (x and y). Decide on what two criteria you want to measure against.

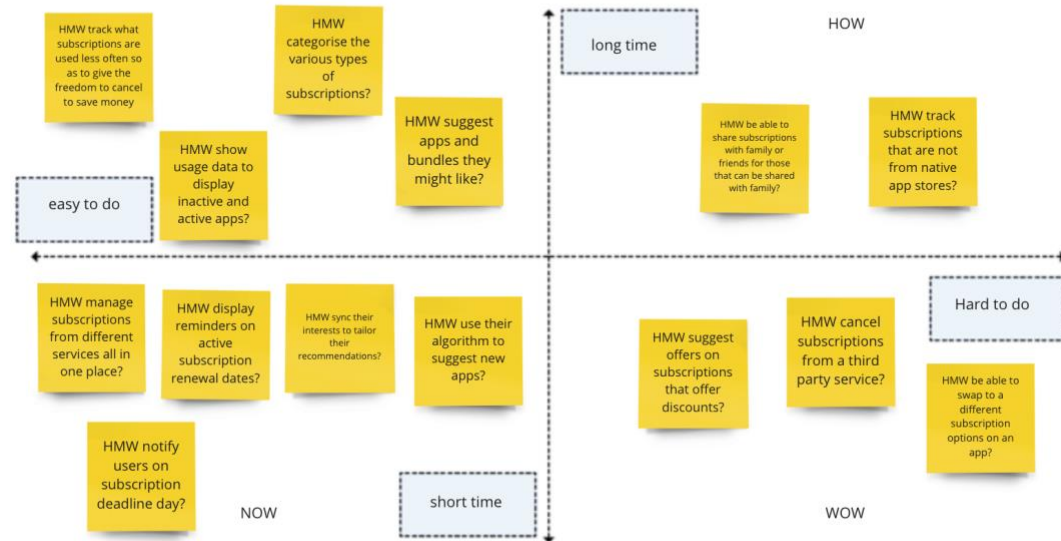


Figure 10: Showing a list of how might we's grouped using the decision matrix

Understanding your customer

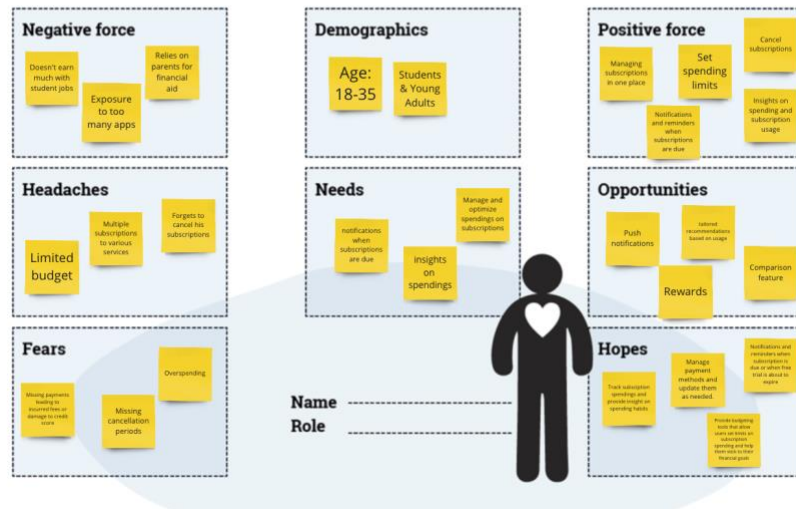


Figure 11: Showing the behaviours of the target audience

Scamper Method

SCAMPER is a brainstorming technique that encourages the generation of creative solutions by asking questions related to the product or problem at hand. SCAMPER is an acronym for Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, and Rearrange. Each letter prompts a specific set of questions to stimulate new ideas and uncover potential improvements.

For the design of this subscription management app, the SCAMPER method was used to explore various ways to enhance the user experience and create a more effective product.

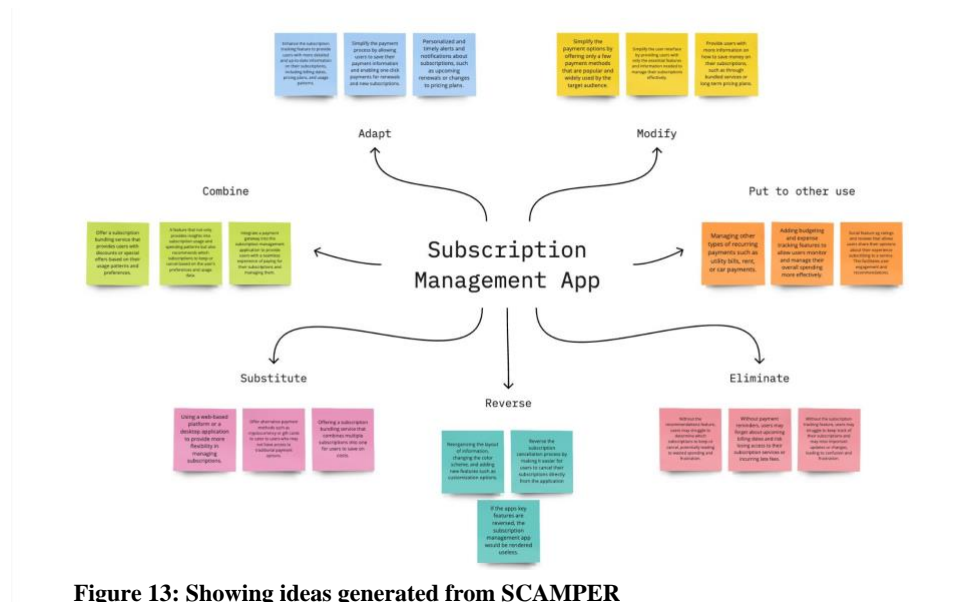


Figure 13: Showing ideas generated from SCAMPER

Braindump

Consolidate and capture insights

Problem Statement

Young adults who use subscription-based applications are seeking a comprehensive solution that allows them to conveniently manage, pay for, and monitor their subscriptions from a single platform. They desire an application that assists them in determining which services are worth retaining and which ones they can do without, in order to save money and achieve cost-effectiveness.

Benefits to customer

Customers can easily view and manage all their subscriptions in one place, eliminating the need to track them down on various platforms.

Customers can conveniently make payments, cancel or modify their subscriptions, and track their usage and billing history from a single platform.

Customers can receive insights and recommendations on their subscriptions, allowing them to identify services they can do without or switch to a more affordable plan.

Customers can better manage their budget by tracking their spending on subscriptions and setting up alerts for upcoming due dates.

Benefits to business

By providing a convenient solution that helps customers manage their subscriptions and optimize their spending, the app can help businesses retain customers and reduce churn.

A subscription management app that offers valuable insights and recommendations to customers can help build loyalty and trust with the brand.

Generate revenue through subscriptions, fees, or partnerships with other subscription-based services.

Provide valuable data on customer behavior and usage patterns. This can then be used to improve the app's features, as well as inform business decisions on product offerings and marketing strategies.

Details

The target audience is young adults who frequently use subscription-based applications.

The target audience values convenience in managing their subscriptions, and is looking for an application that simplifies the process.

The target audience is seeking a comprehensive solution that allows them to manage, pay for, and monitor their subscriptions conveniently from a single platform.

The target audience desires an application that assists them in determining which services are worth retaining and which ones they can do without, in order to save money and achieve cost-effectiveness.

Impact to Long-Term Goal

Young adults can simplify their subscription management process, reducing the time and effort spent on manual tracking, billing, and reminders.

This will lead to an increase in financial literacy among young adults by providing insights and recommendations on which subscriptions to keep, cancel, or downgrade.

Young adults can optimize their subscription expenses, save money, and use their resources more efficiently.

User Personas

After conducting extensive research, I developed two user personas that effectively represent my target audience. Allow me to introduce Josh and Grace.

The purpose of this user persona is to analyse the behaviour of two main types of users of the proposed subscription management app (Salminen *et al.*, 2022). Josh a creative and student looking for ways to manage his subscriptions and Grace a busy medical student who is looking for an automated process in order to save time and effort.

Looking at both personas, we can see that both have similar needs but have varying lifestyles. Josh's creative nature makes him want to try out so many new apps and which, for many require subscriptions. Grace on the other hand is a medical student who has a very busy schedule with school. She also has a wide range of subscription apps, ranging from medical apps, social and e-commerce. Both Josh and Grace find it difficult to

keep track on their spendings. As students, they have access to limited budget as they only depend on monies from their guardians and their part time jobs.

User Journey Map

User journey maps represent how a user accomplishes a particular task or achieves a specific goal. It includes the user's actions, emotions, and touchpoints with the product, service, or organization during the entire process. Below we can see Josh's and Grace's journey as they interact with the product.

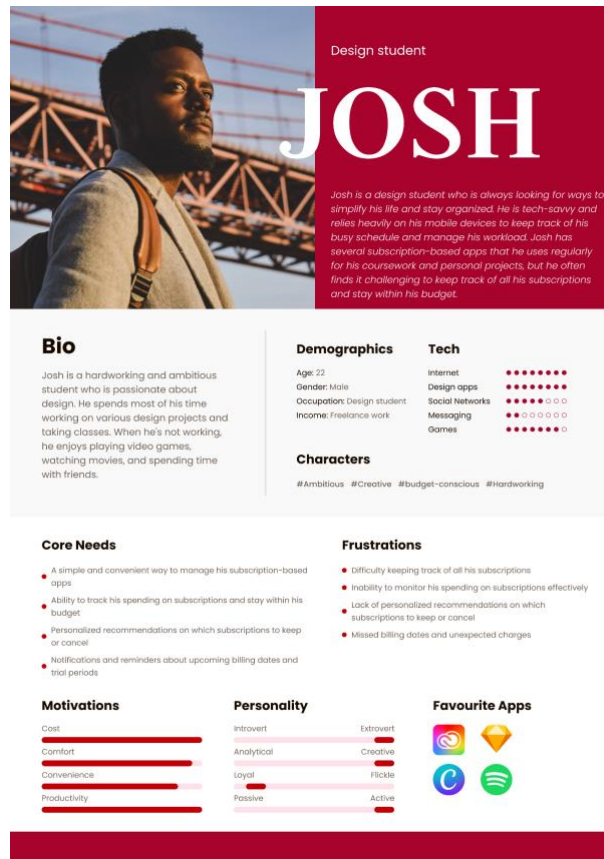


Figure 14: Showing a user persona for Josh

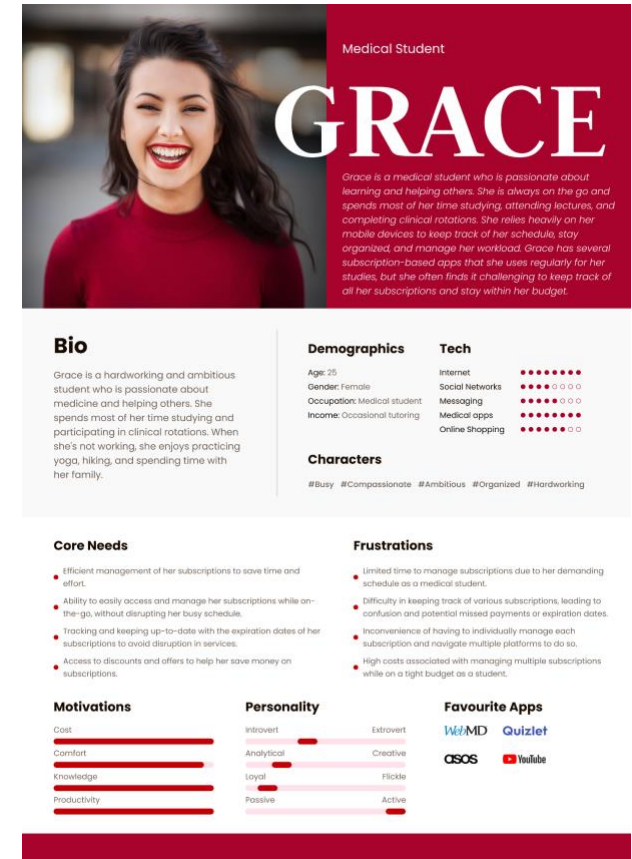


Figure 15: Showing a user persona for Grace



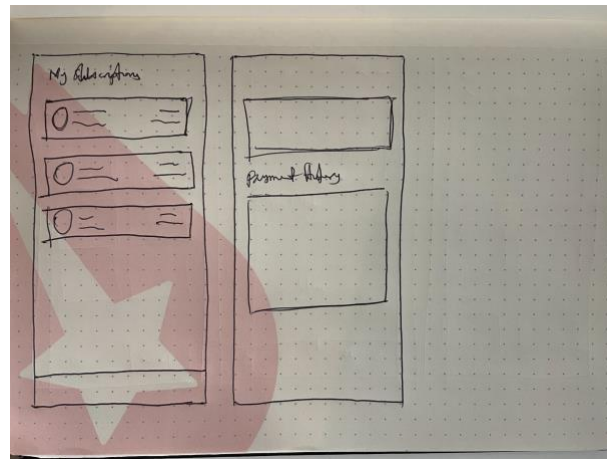
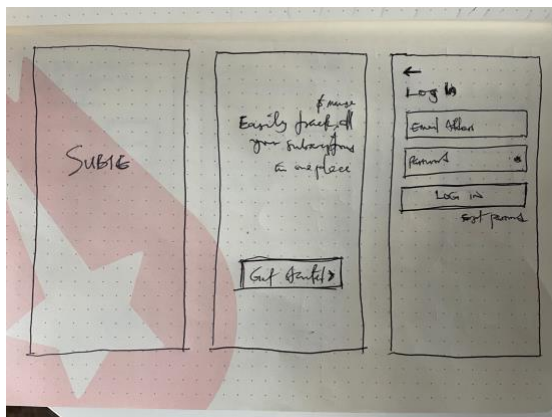
Figure 16: Showing Josh's Journey



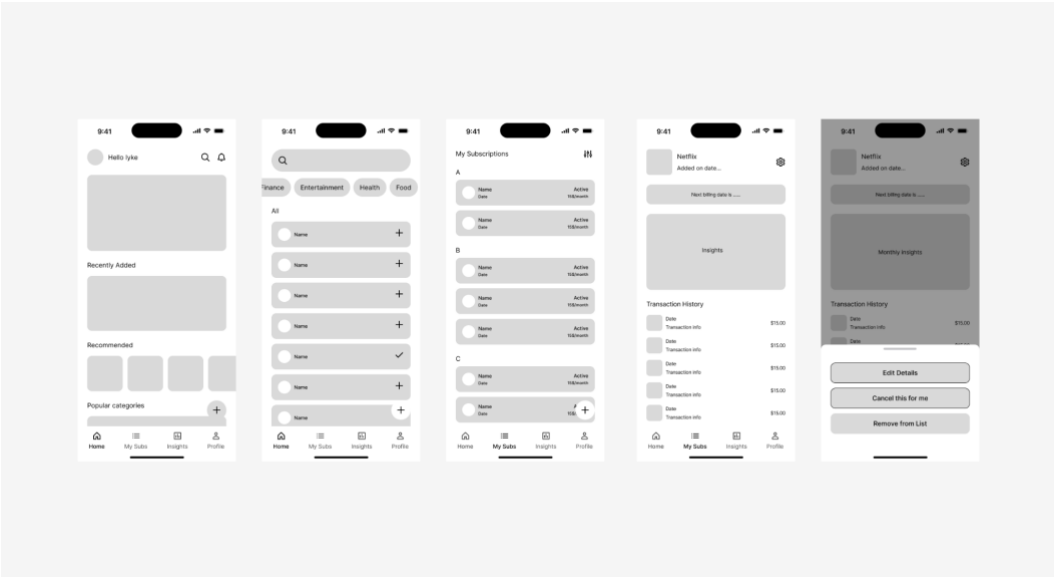
Figure 17: Showing Grace's Journey

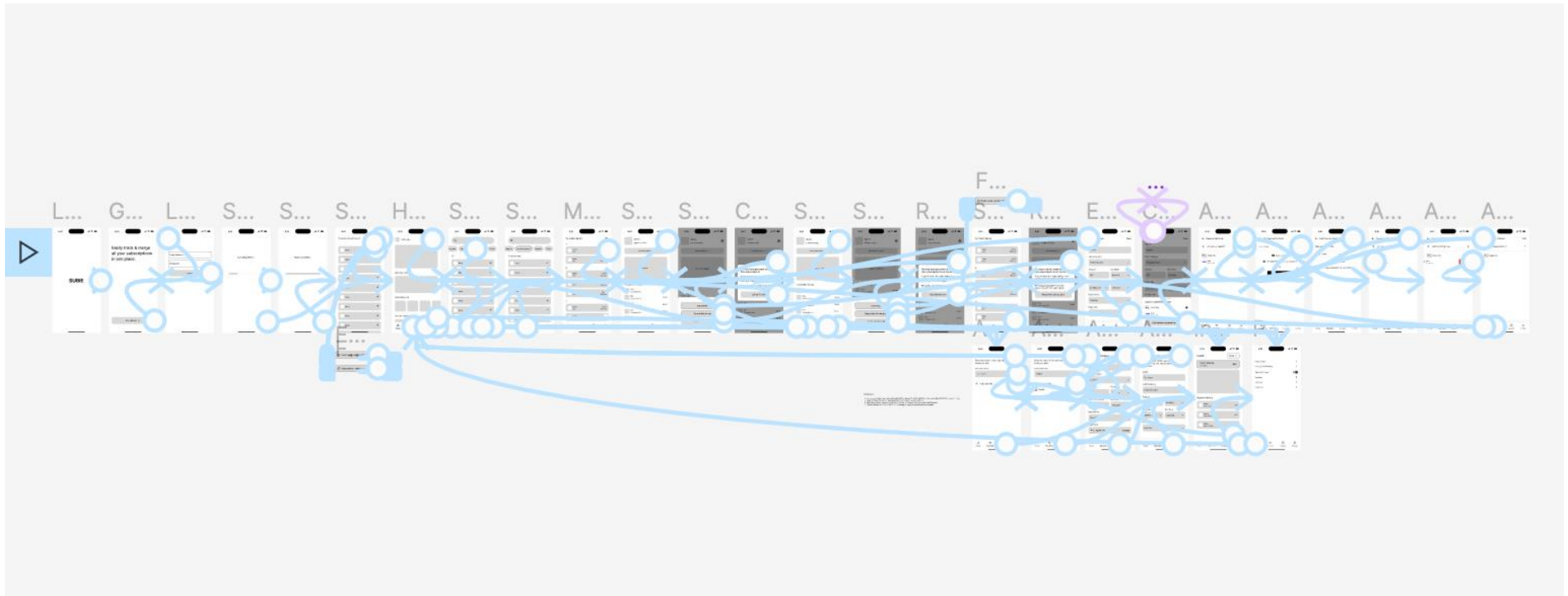
LOW-FI WIREFRAME

I created quick sketches on paper to show the major screens and steps the user can take to perform a task on the app.



Afterwards, I took these sketches and proceeded to shape them out on Figma. I also created a prototype to test these out with participants to test and further iterate to meet users needs.



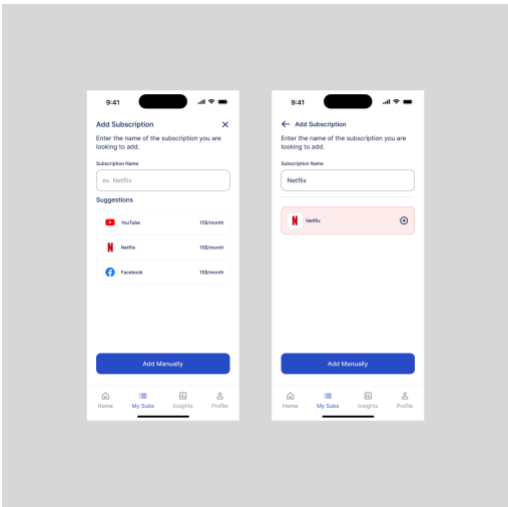
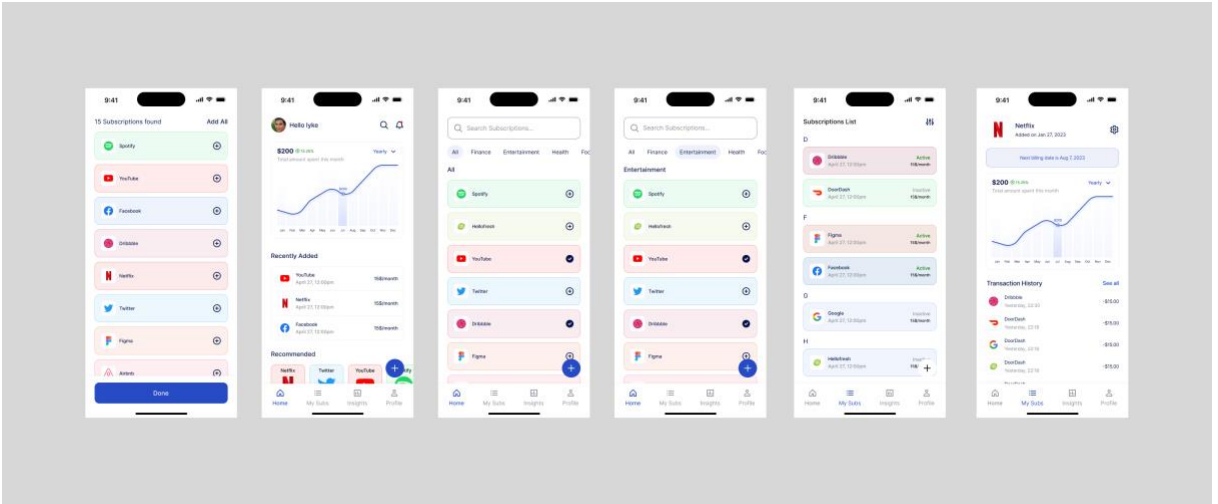
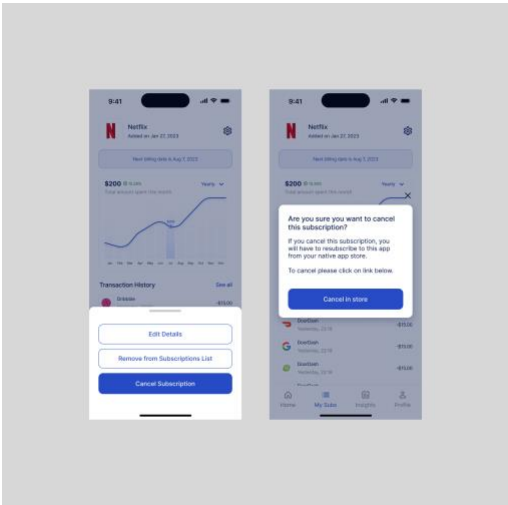
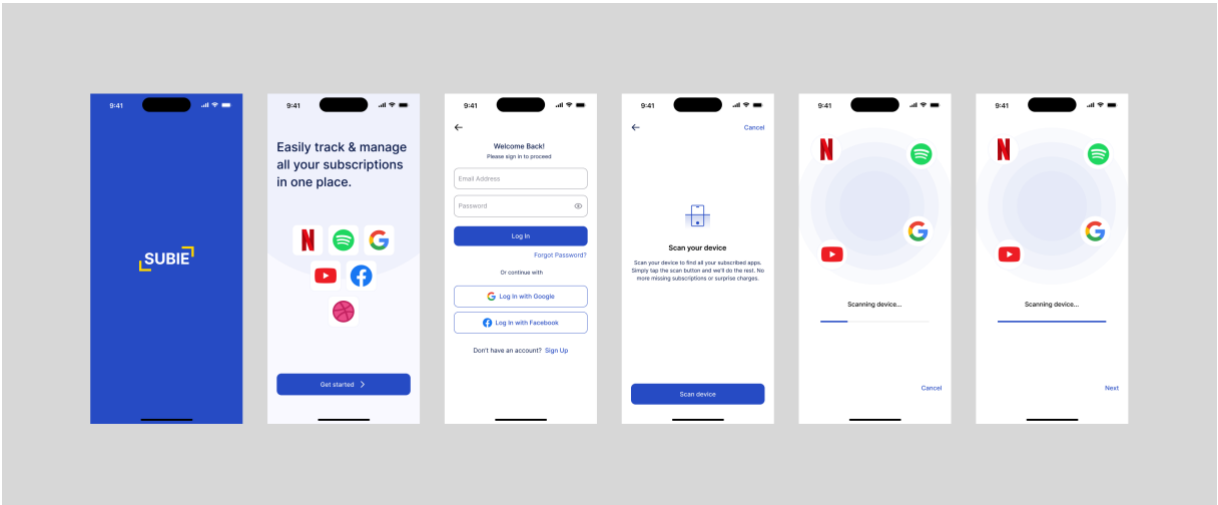


After testing with 4 participants, used the rainbow spreadsheet to write down observations and identify patterns or trends.

Each colour represents the various participants and help understand if and when participants have similar behaviours or observations during user testing.

Observations	P1	P2	P3	P4
Needs a cancel button just below the transaction history to enable users cancel subscription easily.		Blue	Red	Blue
Nice to have feature: Suggestions on subscriptions to cancel	Orange			
Populated state when users skip scanning	Orange			
Place subscriptions in alphabetical order (have a sort by button)	Orange			
Add subscription: create a suggestion list after the search bar before the "add manually"	Orange			
User took a while to figure out the save button on the top right corner of the add subscription page.		Blue		
Complained about not knowing why the device was scanning and for what reason. Suggested maybe adding an extra info to help users understand whats actually going on.				Blue
Add button should be added at the bottom of the "add subscription page" to allow users add the subscription.				Blue
Suggested using categories instead of alphabetical order to sort the "my subs"				Blue
ux copy suggestions for cancel subscription pop up.				Blue
ux copy suggestions for "remove from list pop up".				Blue

HIFI WIREFRAME



DISCUSSIONS

This research highlights the problem of managing multiple subscriptions, which is a common issue faced by young people (Furnham, 1999). The proposed design of a subscription management app can solve this problem by providing users with an efficient and user-friendly platform to manage their subscriptions effectively.

Based on research, it has been shown tracking and expense management can help young people make cost-efficient decisions.

FUTURE WORK

In the future, and with the growing trend in Artificial intelligence, Tracking and managing subscriptions may become a lot much. One way AI can enhance a subscription management app is through personalized recommendations. By analyzing a user's subscription history and usage patterns, AI algorithms can suggest new subscriptions that are likely to be of interest to the user or recommend changes to existing subscriptions that may better suit their needs. This can help users save money and avoid overpaying for subscriptions they don't need.

Another way AI can improve subscription management apps is by providing real-time alerts and notifications. For example, if a subscription is about to renew at a higher rate or if there is an unusual charge on a user's account, AI can automatically send an alert to the user to take action.

However, it is important to note that AI technology is not foolproof and can make mistakes. Therefore, it is crucial for subscription management apps to have a human oversight mechanism in place to ensure accuracy and prevent errors or oversights.

Overall, AI has the potential to revolutionize the way subscription management apps work by providing personalized recommendations, automating tedious tasks, and providing real-time alerts to users. As the use of AI technology continues to grow, we can expect to see even more innovations in the subscription management space.

LINK TO FIGMA

<https://www.figma.com/file/fzA9WxcfdoLRLMch8hICI/Subscription-Management-App?type=design&node-id=75%3A1813&t=LTia95WQ5NXmr7TA-1>

LINK TO MIRO

https://miro.com/welcomeonboard/TUJIV2xpck1IWW1UbE1rd0RKs3VsMUNEeHNVZ0FPdGVxeUZjNTIQR1RFYXNTc0F5Z0dsdkJMbzl5cWRlcVNQWHwzNDU4NzY0NTQ3Njg5NzQ2MTYwfDI=?share_link_id=422898817904

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