Applying the User-Centered System Design Process

Chapter I. Introduction

Background of the Study

In an era where digital subscriptions are ubiquitous, managing multiple services can be overwhelming for consumers. The multitude of subscriptions, ranging from streaming services and software applications to meal delivery plans and fitness memberships, often leads to cognitive overload and financial inefficiency. Recognizing this challenge, Subscribr aims to offer a comprehensive solution by simplifying subscription management through a unified platform.

Statement of the Problem

Current subscription management solutions fall short in various aspects, such as user interface design, functionality, and comprehensive service coverage. Users often face difficulties in keeping track of their subscriptions, leading to unintended renewals, missed cancellations, and unutilized promotional offers. This not only results in financial wastage but also adds to the cognitive burden of managing multiple services.

1. **User Interface Design**: Many existing platforms have complicated and non-intuitive interfaces, making it difficult for users to navigate and manage their subscriptions effectively.

2. **Functionality**: Limited features that do not cover the comprehensive needs of users, such as auto-cancellation, promo checking, and billing alerts.

3. **Service Coverage**: Inadequate support for a wide range of subscription services, leading to fragmented management and oversight.

4. **Financial Inefficiency**: Users often face unintended renewals and missed cancellations, resulting in unnecessary expenses and financial waste.

Assumption of the Study

The Subscribr app is assumed to provide a unified and user-friendly platform for subscription management, users will experience a significant reduction in cognitive load and financial waste.

1. **Unified Subscription Management**: Centralized platform to track and manage various digital services.

2. **User-Friendly Interface**: Intuitive and easy-to-navigate design for efficient use.

3. Accessibility: Features ensuring usability for people with disabilities.

4. Analytics and Insights: Tools to provide users with insights into their spending and subscription patterns.

5. Promo Checking: Identification and application of promotional offers to maximize savings.

6. Billing Alerts: Timely notifications regarding billing cycles and upcoming payments.

Significance of the Study

The development of Subscribr is significant as it addresses the growing complexity and financial inefficiencies associated with managing multiple digital subscriptions.

1. Financial Efficiency: Helps users avoid unnecessary expenses through features like auto-cancellation and promo checking.

2. Enhanced User Convenience: Provides a seamless, user-friendly platform for tracking and managing subscriptions.

3. Improved Financial Awareness: Offers insights and analytics to help users better understand their spending patterns.

4. Informed Consumption: Encourages more efficient and informed use of digital services.

Chapter II. Research Design

Subscribr's is an application with the goal to reduce cognitive load and financial waste for customers by streamlining subscription management through the provision of a unified platform for tracking and administering many digital services. A seamless user experience is intended to be provided via the app's capabilities, which include auto-cancellation, promo checking, subscription management, and billing alerts.

A. Task Analysis:

Important Characteristics of the Task Performed by Users:

A user must be able to do the following with the system:

- Track and manage all their subscription.
- Cancel unwanted subscription.
- Receive payment reminders for their subscription.
- Receive notification for a promo on a subscription.
- Receive notification on increased subscription rates before paying one.

Important Characteristics of the Task Environment:

- Subscriptions do not have a unified way of cancellation with some companies doing their best to obscure the way to unsubscribe the subscription.
- Subscription fee changes from time to time.
- Subscription promo / coupon is only applicable to a set number of users.

Task Analysis of the Problem:

Task: Track and manage all the user's subscription

- **Subtask 1:** Automatically direct the user to cancel a subscription based on a set criterion.
  - Choose a subscription
  - Set the criteria for the auto cancellation
  - Direct the user to the cancel subscription page of the subscription
- **Subtask 2 :** Check the overall subscription expenses by week, month, or year.
  - Open the analytics tab
  - Modify the filter to see the total expenses by week, month, or year
- **Subtask 3:** Check the promos offered for a subscription.
  - Choose a subscription
  - Click on the promo tab to see the promos offered at the moment

B. Requirements Gathering

The team decided on a heuristic evaluation for Subscribr. Interviews with our participants are conducted online, and member(s) of the team accompany the users during the evaluation process.

During the evaluation, present member(s) will note down:

- **User's Click Path**
  - Record the path the participant took to complete the task, noting each step and decision point.
- **Personal Observations**
  - Note behaviors, opinions, and attitudes along with any errors, issues, or areas of confusion experienced by the participant.
- **Quotes**
  - Record any significant quotes from participants, both positive and negative, to capture their genuine reactions and feedback.
- **Task Completion**
  - Assess if the task was:
    - a) easy to complete
    - b) completed but with difficulty
    - c) not completed

C. Storyboarding and Prototyping

Storyboard

Problem Statement: A user Miguel has lost a large sum of money due to his negligence in maintaining his subscription services, he has a busy schedule and does not have much time for chatter, being on his phone, and keeping track of his selection of services manually, his current goal is to find an application that will suit his needs and that would allow him quick and easy access to manage his subscription services that would allow him to keep track of the services that he frequents and those that are inactive .
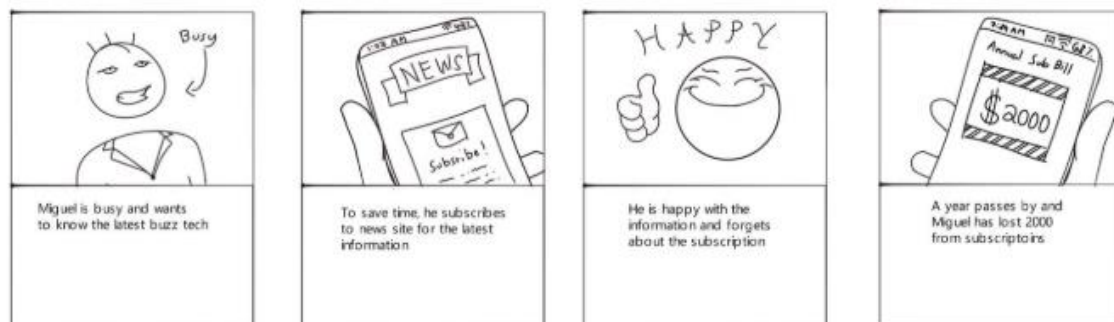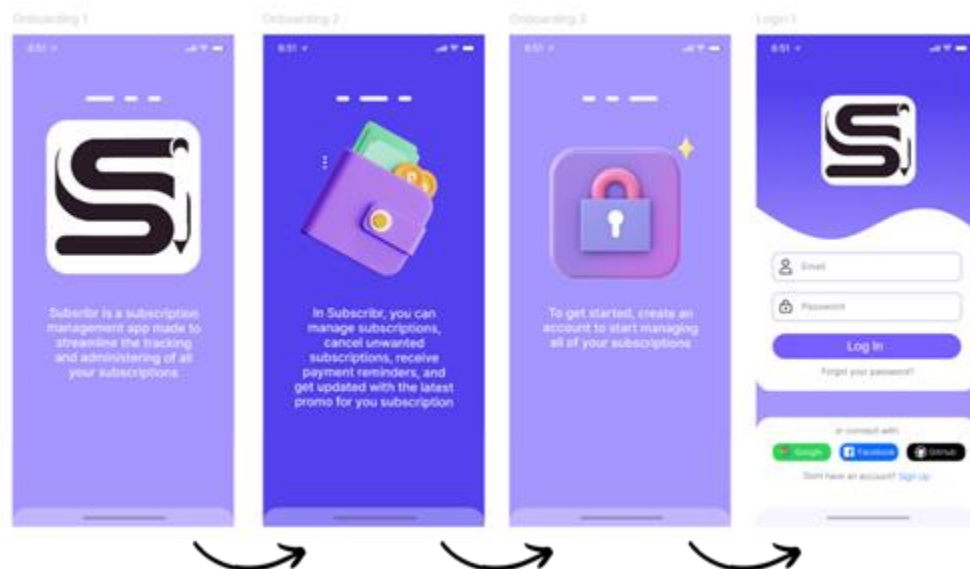

Prototype Flow:

Figure 1: Onboarding Flow

Figure 1 shows the onboarding flow going to the login screen. The onboarding will only show up the first time the user has opened the application.

Figure 2: Logout

Figure 2 shows how the user can exit the application back to the login screen. The settings can be accessed by clicking on the user icon on the home page.
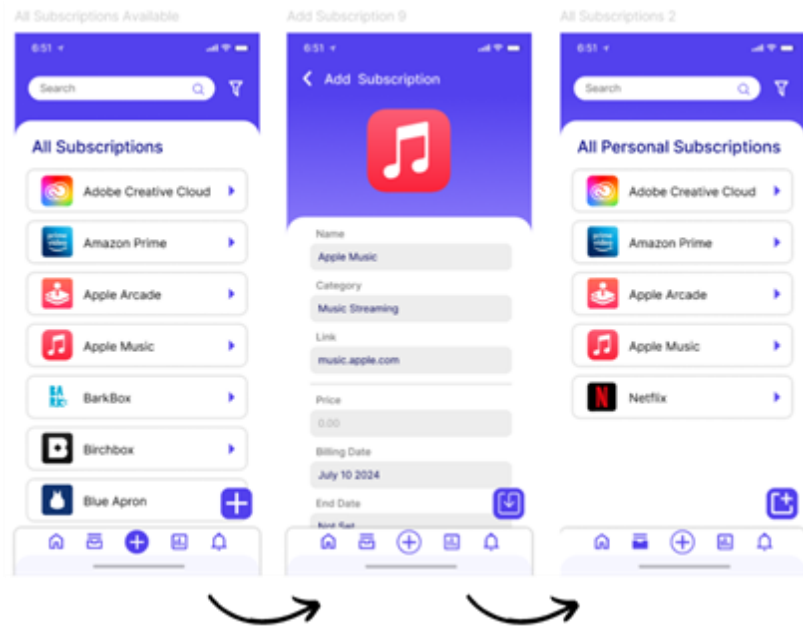

Figure 3.1: Add Subscription

Figure 3.1 shows how the user can add a subscription. In this scenario, the user can choose from the templates the app offers and the user will have most of the information filled up.
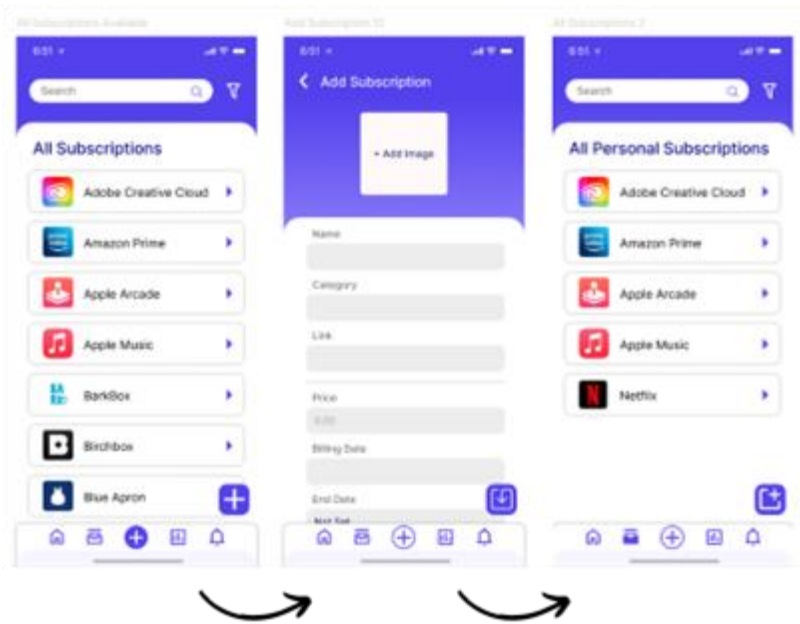
Figure 3.2: Add Custom Subscription

Figure 3.2 shows how the user can add a custom subscription. In this scenario, the user clicks the button at the bottom right of the screen and will be shown an empty form to fill up.
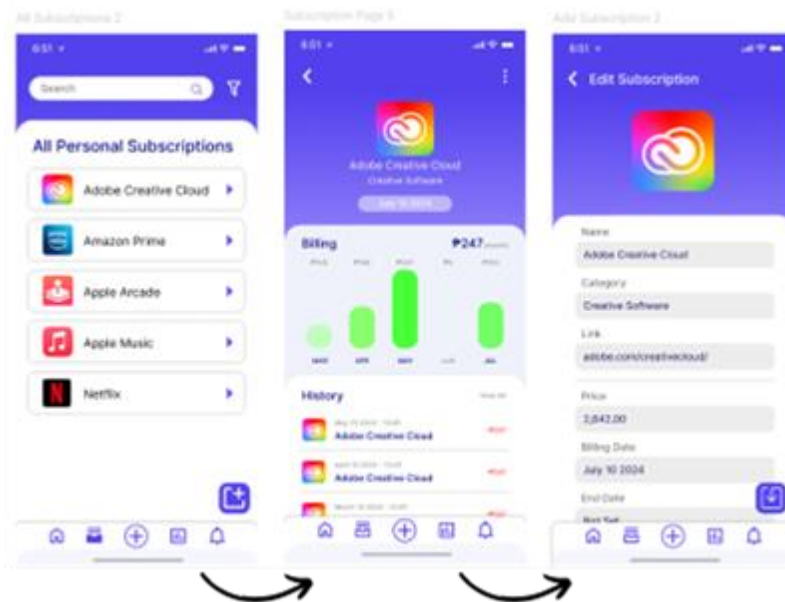

Figure 4: Edit Subscription

Figure 4 shows how the user can edit a subscription. The user can click on one of their subscriptions to check its data and click the 3 ellipses on the top left corner to edit their subscription.

D. Evaluation of Prototype

Evaluation Criteria (Based on the 10 heuristics of design evaluation)

Area of Evaluation	5	4	3	2	1
A. Visibility of System Status - The system design provides appropriate feedback like message prompts in response to user actions.		✓			
- The message prompts are clear, visible and understandable.	✓				
B. Match between the system and the real world - Used words, phrases and concepts according to users' language rather than system-oriented words and computer jargons.	✓				
C. User control and freedom - The system design provides ways of allowing users to easily "get in" and "get out" if they find themselves in unfamiliar parts of the system.		✓			
D. Consistency and Standards - The colors, text, labels, buttons and other elements in the design are uniform from start to finish.		✓			
- Text and icons are not too small or too big.		✓			
- Menus and other features of the system are arranged and positioned in a consistent way. (For ex. If your website has navigation buttons on the top under the page title on one page, the users will automatically look there for the same features on other pages.		✓			
A. Error Prevention - The system design provides an automatic detection of errors and preventing them to occur in the first place.		✓			
- Idiot proofing mechanisms are applied		✓			
F. Help users recognize, diagnose and recover from errors **-** Error messages and the terms used are recognizable, familiar and understandable for the users.		✓			
G. Recognition rather than recall **-** Objects, icons, actions and options are visible for the user. - Objects are labeled well with text and icons that can immediately be spotted by the user and matched with what they want to do.	✓				

H. Flexibility and efficiency of use - The system design provides easy to navigate menus. - the system does not make wasteful time of system resources.	✓				
I. Aesthetic and minimalist design **-**Graphics and animations used are not difficult to look at and does not clutter (mess) up the screen. - Information provided is relevant and needed for the system design.		✓			
J. Help and Documentation **-**the system design provides information that can be easily searched and provides help in a set of concrete steps that can easily be followed.		✓			

Chapter III. Conclusion and Recommendation

Recommendation

It is recommended that further development and refinement of Subscribr focus on enhancing user customization options and expanding service coverage to include a broader range of subscription types. Additionally, integrating advanced analytics and personalized insights will provide users with deeper understanding and control over their subscriptions. Regular user feedback should be incorporated to continuously improve the interface and functionality, ensuring that Subscribr remains user centric. Collaboration with major subscription service providers can also enhance the app's capabilities and accuracy. Ultimately, these efforts will help maximize the app's effectiveness in reducing cognitive load and financial waste, thereby achieving its goal of streamlining subscription management for users.

Conclusion

Our development process for Subscribr was grounded in extensive research. We conducted thorough market analysis to identify the most pressing needs and pain points associated with subscription management. This research was augmented by gathering diverse opinions and feedback from potential users, industry experts, and stakeholders. This collaborative approach allowed us to gain invaluable insights, ensuring that Subscribr is not just another subscription tracker, but a solution that truly resonates with and addresses the needs of its users.

By incorporating varied perspectives, our team was able to integrate features and functionalities that might have otherwise been overlooked. This inclusive approach has not only refined the user experience but has also helped us innovate and enhance Subscribr, making it a standout tool in the market.

The trajectory of Subscribr's design was initially an aspect of the project that though given proper thought, we did not expect that there would be many more aspects that we could improve for our project, so therefore we have a lot of things to learn before finally allowing our product will be fully working and deployable.