**Project Description:**

MasSafe is a Finance Management Mobile Application. Users will be asked to create a profile for their personal use. The main page of the application will contain the user's current balance alongside the banks they frequently use. Their card information will also be used. The use of Cash-in/Cash-out methods such as Gcash and Paymaya will also be implemented. They will also be supplied with a history of their transactions, containing date, amount, bank used, and location of transaction.

**Requirements Summary:**

|  |  |  |
| --- | --- | --- |
| **Minimum Requirements** | Processor Cores | **Dual-Core (A9+ Chip)** |
| OS | **Ios 12+** |
| RAM | **2 GB** |
| **Recommended Requirements** | Processor Cores | **Quad-Core (A12+ Bionic Chip)** |
| OS | **Ios 15+** |
| RAM | **4GB+** |
| **Other Requirements** | **Permissions** | **Notifications and Storage** |

***Table 1. System Requirements***

The minimal prerequisites for a banking transaction iOS mobile app are a dual-core CPU (A9 chip), iOS 12, and 2GB of RAM. To ensure the best performance and security, a quad-core CPU (A12 Bionic chip), iOS 15, and 4 GB or more of RAM are recommended.

**Overview**

The data collection methods to be used for this project will be done through Google Docs forms. A survey will be distributed for students to go through and test our application. They will have the ability to navigate through it and then leave their feedback about it. This data will be used to calibrate and draw conclusions for the overall performance of our app. Users will also be able to leave comments which will serve as a basis for improvements in our app.

We will also be utilizing the Discord platform for user testing. As it is most convenient for many of our participants are active users of this platform. Below is a table describing each technique:

|  |  |
| --- | --- |
| **Technique** | **Description** |
| Usability Specifications | The method used to assess the prototype's degree of usability is called Usability Specifications. It is made up of assignments that Participants will complete. In addition, the technique will involve timing each participant's pace while completing a certain job. The sections are, Welcome Page, Sign In Page, Main Page, Transaction Page, Card Details Page, Request Page, and Profile Page. |
| Heuristics Evaluation | The prototype's UX design will be assessed using heuristics. in a usability principle that is industry standard. This method is selected to offer a rapid and user-friendly method of evaluating the correctness of the design of the prototype when resources or time are limited. |
| Participant Survey and Feedback | Participants will get a survey following the completion of the prototype. There will be quantitative questions in the survey that are  translated into a Likert scale with five points in addition to qualitative inquiries in the shape of comments. This will guarantee that nobody  Designer bias will be applied to the evaluation's outcome. |

The tasks for this prototype will be split into 7 sections: Welcome Page, Sign In Page, Main Page, Transaction Page, Card Details Page, Request Page, and Profile Page. The below will include the following tasks to be tested throughout the Prototype’s Interface:

* Access the App (Welcome Page)
* Create an Account (Sign in Page)
* Navigate the App (Home Page)
* Select and input Card Information (Card Details Page)
* Transaction (Transaction Page)
* Generate QR (Request Page)
* Manage Profile (Profile Page)

The previously mentioned pages were designed in a specific way to consider the maneuverability of users while using the app:

* Easy Navigation
* Seamless Transactions
* Friendly UI

**Methods of Conducting Prototype tests:**

A screenshot of a phone

Description automatically generatedA screenshot of a computer

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**Discord Testing**

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**Discord Testing 2**

**Data Presentation**

**Data Analysis**

***Usability Specifications***

Team MaCeVi has observed that the participants have been interacting with the prototype quite successfully throughout the online testing with the participants. Most participants completed all the tasks assigned to them by the team members with little to no difficulty. After more observation, the participants were able to pick up on and become familiar with the Prototype's navigational instructions. The prototype was simple for them to use and navigate. Nevertheless, when the participants tried to click on several of the prototype's buttons, the buttons were inattentive. It is assumed that these are constraints that the couple overlooked when creating the prototype.

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Mean** | **Interpretation** | **Classification** |
| Welcome Page Task | 0.20 Minutes | Highly Acceptable | Successful |
| Sign In Task | 3 Minutes | Highly Acceptable | Successful |
| Home Page Task | 1 Minute | Highly Acceptable | Successful |
| Transactions Task | 2 Minutes and 5 seconds | Highly Acceptable | Successful |
| Card Details Task | 3 Minutes and 22 Seconds | Highly Acceptable | Successful |
| Request Task | 1 Minutes and 30 seconds | Highly Acceptable | Successful |
| Profile Task | 2 Minutes and 2 seconds | Highly Acceptable | Successful |

Table 3. Tasks and Results

Table 3 shows the results during the online testing. The data shows that each participant was able to successfully accomplish each task.

***Heuristic Evaluation***

Evaluation for MasSafe app using Heuristic Evaluation.

***Visibility of System Status***

The attendees may learn what was happening within the prototype prototype.

***Match between System and Real World***

The prototype speaks in simple English that people of all ages may understand our attendees. Words and phrases that participants could understand with ease.

***User Control and Freedom***

The prototype has fail-safe buttons like "X" and "Cancel" that activate whenever. Participants were either misclicking or misinterpreting the directions. Rewind Buttons were included as an additional fail-safe measure.

***Consistency and Standards***

Consistency was followed by an occasional hiccup. Problems like unevenness in the placement of the Back buttons and the tap location.

***Error Prevention***

The user may see and utilize options, objects, and actions during the prototype.

***Recognition rather than Recall***

The prototype was simple to comprehend and utilized skillfully by both the novice and expert in the FIGMA-style prototype.

***Flexibility and Efficiency of Use***

The Prototype's sleek and straightforward design links to the earlier Modern blueprint.

minimalistic impression. Additionally, information that is not necessary was not displayed.

within the model.

***Aesthetic and Minimalist Design***

The Prototype has a sleek, uncomplicated design that links to the earlier Modern Minimalistic concept. Furthermore, the prototype did not display any information that was not necessary.

***Help Users Recognize, Diagnose, and Recover from Errors***

Regretfully, this form of evaluation is a problem for the prototype. As the prototype can alert users when they click on a non-interactive section, but it can't provide users with plain language assistance it can only provide signs.

***Help and Documentation***

The current team members served as a means for users to obtain Help or Assistance.

***Heuristics Conclusion***

Overall, the Prototype was able to comply with most of the evaluations; however, there are still certain problems that require attention or correction.

***Participant Survey and Feedback.***

|  |  |  |  |
| --- | --- | --- | --- |
| **Section 1** | | | |
| **Question** | **Mean** | **Interpretation** | **Classification** |
| On a scale of 1 to 5 how would you rate your experience with the MasSafe Prototype? | 4 | Acceptable | Successful |
| On a scale of 1 to 5 how was the UI design of the prototype. | 4.19 | Acceptable | Successful |
| How easily were you able to follow the provided tasks? | 4.10 | Acceptable | Successful |
| **Section 2** | | | |
| Welcome Page | 4.20 | Acceptable | Successful |
| Sign In Page | 4.40 | Acceptable | Successful |
| Home Page | 3.90 | Moderately Acceptable | Neutral |
| Card Details Page | 4.80 | Highly Acceptable | Successful |
| Transaction Page | 4.50 | Highly Acceptable | Successful |
| Request Page | 4.60 | Highly Acceptable | Successful |
| Profile Page | 4.60 | Highly Acceptable | Successful |
| **Average** | 4.33 | Acceptable | Successful |

Table 4. Data Interpretation.

Two sections of the table display the findings from user assessments of the MasSafe Prototype. Section 2 assesses individual pages, such as the Welcome Page and six others including the Sign in Page and Home Page. Section 1 covers overall experience, UI design, and task easiness; each is assessed on a scale of 1 to 5, with typical scores around 4, classed as "Acceptable" and "Successful." All pages have an average score of 4.33, which indicates overall success. The scores for these range from 3.90 to 4.80, with many pages being evaluated as "Highly Acceptable" and "Successful," except for the Home Page, which is scored as "Moderately Acceptable" and "Neutral."

**Feedback**

Even still, most of the comments were extremely favorable. A few comments are targeted on a few matters. The Prototype's renaming function is the center of these frequent problems. These problems often give rise to concerns that the Renaming was not entirely clear.

**Design Implications:**

1. **Does your prototype need to be altered to address the results of the analysis, or was it completely successful?**

* It was completely successful. From the data gathered, the participants were satisfied with what was given to them, disregarding the need to make any changes to our prototype.

1. **What improvements could be made to the design to address any shortcomings?**

* Perhaps changing the color of the background and adding more efficient options soon, just to make it even easier to use for users.

1. **Did you discover any major flaws that would suggest a completely different type of design?**

* No, no major flaws were discovered throughout our analysis.

**Critique and Summary**

**What were the advantages and disadvantages of your evaluation?**

* One benefit of conducting this evaluation was that the team was able to collect vital data and information that are necessary for the prototype. Additionally, using social media to get in touch with participants for the successful online test evaluation and provide them the relevant information was made easy. The drawback of all of this, though, is that neither laboratory work nor sufficient physical interaction occurred, which would have allowed for the collection of further data for the prototype. Additionally, because internet speed affects how well the team can see the exchanges, the team has frequently had to wait until a participant can be reached in full due to the ongoing internet problems in the Philippines.

**What would you have done differently knowing what you know now (both design wise and evaluation-wise)? Given more resources, what could you have done that would have produced significantly more insightful evaluation results (again, whether this is an improved prototype or a different evaluation path).**

* With more time, the group would have come up with two distinct assessments, one for the one for the proposed prototype and another for the updated version. This could possibly offer the prototype that requires critical evaluation to be finished. Additionally, with a lot of further resources, the group believed that back-end coding could be implemented to strengthen the prototype solution even further so that it may be submitted as a working application to the global app marketplaces. The group would have also enhanced the prototype by including extra features like internet functionality and notifications.

**Summary of the Project**

In conclusion, the MasSafe mobile transaction banking app aims to address the fragmented user experience, complexity, security concerns, and financial inclusion challenges faced by users in the Philippines. By integrating traditional banking services with digital wallets like GCash and PayMaya, MasSafe provides a seamless and efficient platform for managing financial transactions. The user-centered design ensures that the app is intuitive and accessible to both tech-savvy users and those less familiar with digital technology. Enhanced security measures build trust among users, and features designed for financial inclusion make banking services accessible to the unbanked and underbanked populations.

Based on the findings and insights gathered through interviews, surveys, and the design thinking process, the following recommendations are made: First, continuous user feedback should be sought to refine and enhance the app's features, ensuring it evolves with user needs. Second, partnerships with banks and digital wallet providers should be strengthened to maintain seamless integration and expand service offerings. Third, robust user education programs should be implemented to assist users in understanding and utilizing the app's features effectively. Lastly, regular security audits and updates should be conducted to ensure the app remains secure and compliant with regulatory standards. By following these recommendations, MasSafe can become a leading mobile banking solution that significantly improves the financial management experience for users in the Philippines.