Project Description:

Pinans is a financial education application that provides users with a gamified approach to acquiring financial literacy. The app offers educational modules with expert-curated video lectures and quizzes that empower users with tailored financial knowledge. Users are also able to earn reward points to redeem rewards after completing modules, fostering learning motivation and transforming financial learning into an engaging, interactive experience. Pinans also offers community forums where users can discuss financial topics, share experiences, and seek advice: fostering community support. By assisting others in community forums, users can earn reward points, incentivizing community assistance.

Requirements Summary:

Minimum Requirements	Processor Cores	Single Core
	Android OS	Version12 Snow Cone
	iOS	Version 16
	RAM	2GB
Recommended Requirements	Processor Cores	Quad Core
	Android OS	Version 14 Upside Down Cake
	iOS	Version 17
	RAM	4GB
Other Requirements	Permissions	Notifications and Storage

Table 1. System Requirements

Since the app is not demanding on the hardware, the app only requires a single processor core and the oldest supported version of the respective OS of the phone with a 2GB RAM.

Overview

The evaluation will be using three different techniques: the participant survey, usability specification, and the heuristic evaluation.

Technique	Description
Participant Survey	The team will be conducting the participant survey by sharing the app's Figma link to evaluators and ask them questions regarding the prototype. We will then gather their feedback which will be used to assess the prototype's performance. The survey will be conducted through the use of Google Forms as it helps close the distance for between the team and the evaluators and evaluation can be conducted anytime and anywhere.
Usability Specification	In the usability specification, we will be measuring the usability of our prototype by recording how long a participant takes to perform specific tasks. This shall be conducted on Discord with the participant streaming their screen in order for the team to see how long a participant took to finish a task. We have assigned three tasks for participants to perform: Account Creation, Quiz Taking, and Reward Redemption. These tasks were chosen as they are at the core of what Pinans is trying to accomplish; a personalized learning platform that incentivizes learning.
Heuristic Evaluation	We will use the Heuristic evaluation technique in order to evaluate the UX design of the prototype. The technique inspects the usability of an interface using 10 heuristics which will then be used to analyze flaws in the system.

Table 2. Evaluation Techniques

Through this evaluation process, the team aims to comprehensively assess the effectiveness of the Pinans app in enhancing financial literacy through an engaging, gamified approach. By evaluating the user's feedback, the findings will provide actionable insights to optimize the app and better serve its users.

Method of conducting online tests:

For the participation survey, Google Forms was used to gather data from participants.

Image 1. Sample Forms

For the Usability specification, we asked the participants to join the team on Discord in order for the team to evaluate how long it took for a participant to accomplish a specific task.
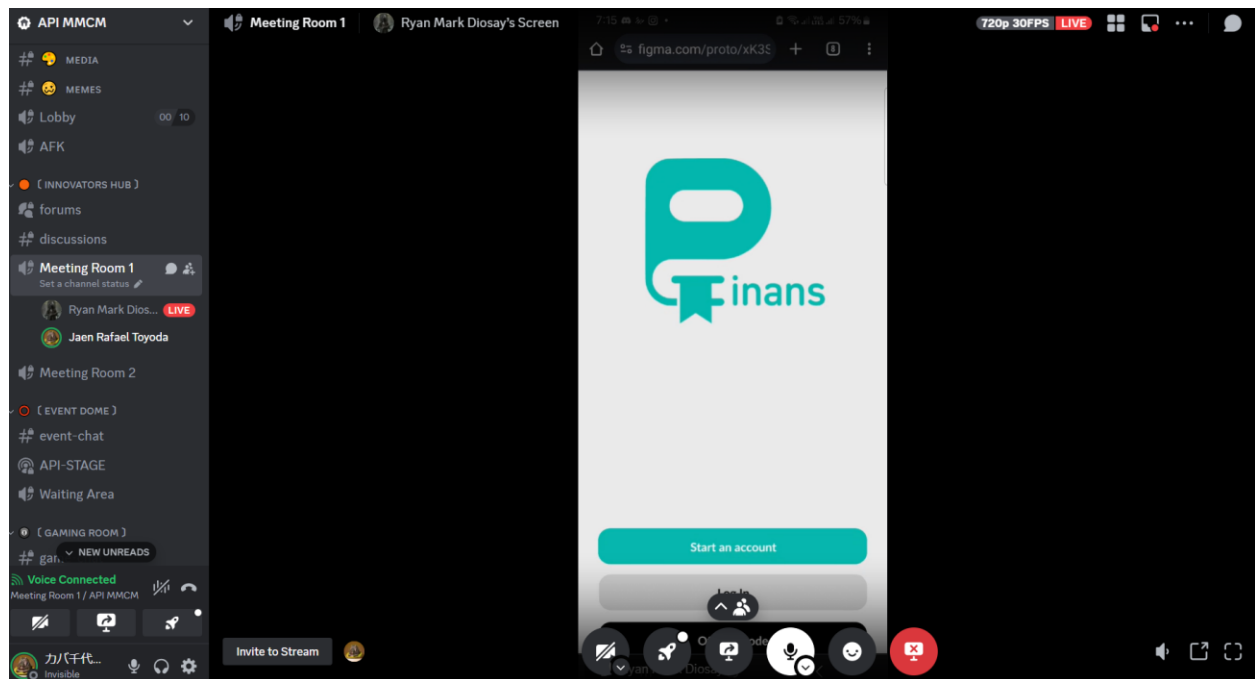

Image 2. Discord Call

Data Presentation and Analysis

Participant Survey

SECTION 1			
Question	**Average**	**Interpretation**	**Classification**
On a scale of 1 to 5, how would you rate your experience with Pinans?	4.90	Highly Acceptable	Successful
On a scale of 1 to 5, how would you rate the overall user interface of Pinans?	4.80	Highly Acceptable	Successful
On a scale of 1 to 5, how easily were you able to easily perform tasks using Pinans?	4.80	Highly Acceptable	Successful
SECTION 2			
Interface Design	**Average**	**Interpretation**	**Classification**
Color Palette	4.60	Highly Acceptable	Successful
Widget Design	4.20	Acceptable	Successful
Visual Appeal	4.60	Highly Acceptable	Successful
Consistency and Standards	4.90	Highly Acceptable	Successful
Clarity of Information	4.50	Acceptable	Successful
SECTION 3			
Task	**Average**	**Interpretation**	**Classification**
Creating an account	5.00	Highly Acceptable	Successful
Accessing Modules	4.80	Highly Acceptable	Successful
Taking Quizzes	4.80	Highly Acceptable	Successful
Redeeming Prizes	4.50	Acceptable	Successful

Table 3. Participant Survey Table

The participants showed and overwhelmingly positive response to the prototype, with users generally praising its user interface design. They have also commented on the easiness of completing task, stating that despite them being unfamiliar with the UI, they were able to easily understand the flow and identify which section of the app they need to be in for them to complete tasks. Overall, the survey for the prototype was successful.

Usability Specification

Task	**Average**	**Interpretation**	**Classification**
Account Creation	17 seconds	Highly Acceptable	Successful
Quiz Taking	1 minute and 19 seconds	Highly Acceptable	Successful
Reward Redemption	18 seconds	Highly Acceptable	Successful

Table 4. Usability Specification Result

The usability specification has revealed interaction between users and the prototype was going well, with the average participant being able to perform task at a much faster rate than expected, even without guidance. Some issues, especially with the navbar hindered the performance of the participants, so that issue needed to be addressed before we asked the participant to move on with the task.

Heuristic Evaluation

Heuristic	Analysis
Visibility of system status	The prototype offers feedback on your answers in quizzes and indicates how many lives you have left before you fail a quiz. If you finish the quiz, the screen will state the percentage of answers you got right and whether you passed or failed the quiz.
Match Between System and the Real World	The app uses real world financial terms and offers real life scenarios in the quizzes in order to for users to apply the knowledge they gained from the modules practically.
User Control and Freedom	Users can any modules they wish, giving them control over their learning path.
Consistency and Standards	The prototype has an overall consistent design. The buttons work as intended, sending you to the proper location. The positioning of other resources are also mostly consistent however the navbar of the prototype differed from the phone and laptop, with phone users complaining about not being able to access it.
Error Prevention	There are some error preventions in place, however participants often complained about misclicking an answer and getting it wrong.
Recognition Rather Than Recall	Users commented on the recognizability of the widgets and icons, with most of them understanding the function of each button by simply looking at its design.
Flexibility and Efficiency of Use	Most users were able to navigate the prototype without guidance, whether they are experience or inexperienced.
Aesthetic and Minimalist Design	The prototype only uses 4 primary colors: white, black, grey, and green. This greatly minimalizes the design of the prototype, giving it a modern aesthetic that is pleasing to the eyes.
Help Users Recognize, Diagnose, and Recover from Errors	While the prototype provides feedback on your answers in quizzes, telling you whether you have gotten the correct or wrong answer, it does not help users to recognize other errors.
Help and Documentation	The team has documented the functionalities of the app in great detail and Figma also provides a visualization tool in order to keep track of the functionalities of each button.

Table 5. Heuristic Evaluation

Design Implications

The results of the Prototype evaluation were generally successful but there were some issues that needed to be addressed. One issue was the navbar. Although there were no issues when users accessed the Figma link through their Desktop devices, mobile devices had an issue wherein the nav bar would not be visible due to the constrains placed on it. To fix the issue at hand, the team has constrained the navbar relative to the bottom of the screen instead of positioning it in a fixed position.

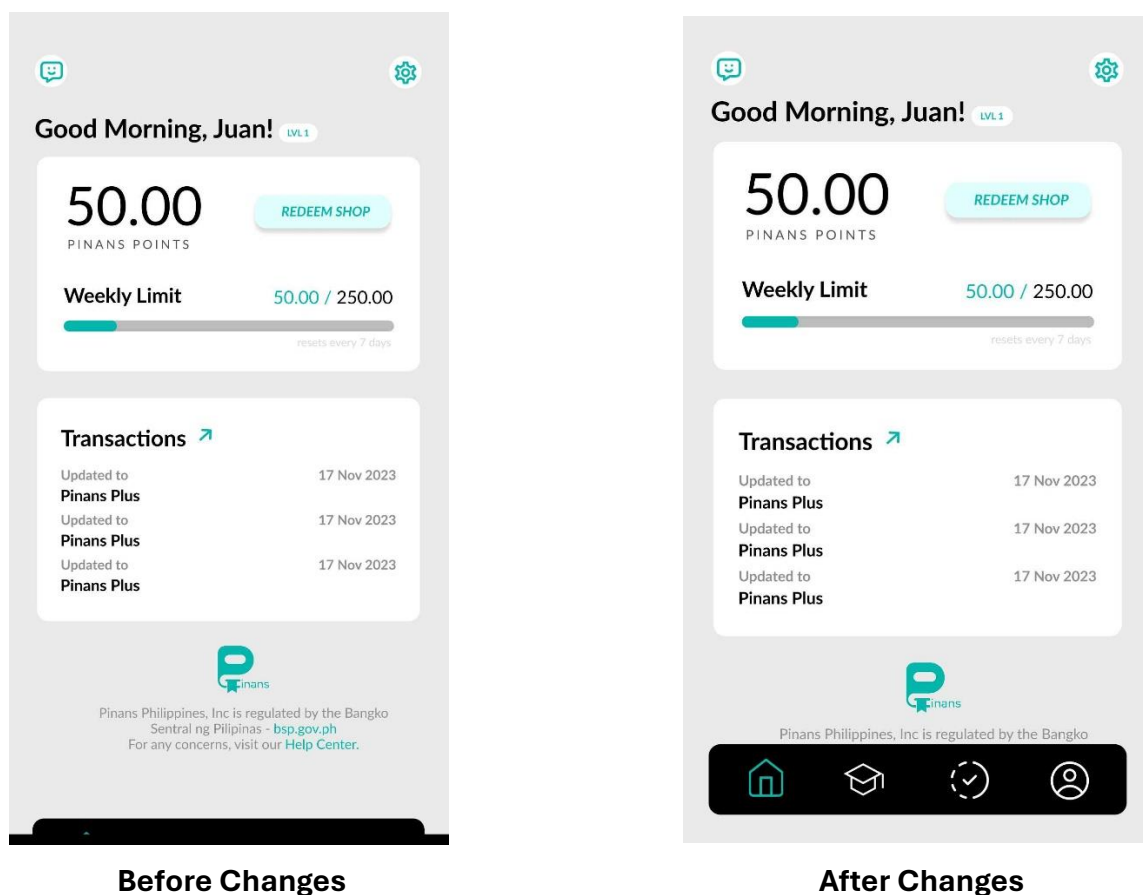**Before Changes**   **After Changes**

Image 3. Navbar Changes

As you can see in the image above, the navbar was not visible to mobile users even after scrolling down, making the buttons inaccessible. Changes were made in the constraints to control navbar positioning.

Before Changes   **After Changes**

Image 4. Navbar Constraints

Fortunately, no major flaw that would require a complete redesign of the application presented itself during the evaluation process. Evaluators commented on the feedback users get when they answer quizzes and how the life point system was functional. This made it easy for users to keep track of their financial knowledge, which satisfies the goal for the prototype.

Critique and Summary

Evaluation Advantages

Our evaluation process provided an easy way for evaluators to evaluate our prototype anywhere including the comfort of their own home. Everything from accessing the prototype to gathering user feedback was done remotely. This also made it easier for the team to reach out to more participants and close the distance between the team and the participants. Remote evaluation also streamlines the whole process with users having the ability to send feedback through forms.

Evaluation Disadvantages

Our evaluation also did have some disadvantages. The team could not collect certain data due to the nature of the evaluation process. For example, Figma does not provide a way to keep track of click counts. Internet connection can also limit the communication between the team and the evaluators.

A look back into the process

Given more time, the team would have created a fully functional application instead of relying on a Figma prototype. The prototype only has the frontend aspect of the application and completely lacks any backend functionalities. Furthermore, the prototype does not have a database to store user information, so the team had to work around this

problem and created quizzes using a decision tree like structure in order for the prototype to keep track of the user's points and how many lives they have left.

Also given enough more time, the team would have most likely collected more data in order to get more accurate results. While the current evaluation process satisfies the requirements for this project, it is always better to have a larger survey population in order to diversify the collected data.

Summary of the Project

The prototype proved to be a success with participants generally giving positive feedback to the UX and UI design. The minor issues have presented itself in the evaluation process such as the constraint issue with the navbar in mobile devices, but no major problems that would require a system redesign were present. Participants were able to perform assigned task within a short period of time, with them commenting on the easy navigation of the app. Unfortunately, the prototype only has a frontend design and has no backend or database functionalities, though the team worked around this by using a decision tree like model in order to keep track of the user's points and lives left. Overall, the project was a resounding success.

In conclusion, Pinans has the potential to become an innovative financial education application that blends gamification with practical learning. By offering expert-curated video lectures, interactive quizzes, and a robust reward system, the app transforms financial literacy into an engaging and motivational journey. While the app demonstrates several strengths, such as user control, consistency in navigation, and a minimalist design, there are opportunities for enhancement. Other features such as a robust error prevention and recovery strategy will significantly elevate the user experience, earning the prototype more credibility. With the knowledge gained from this project, the team is now able to apply what they have learned into other projects moving forward.