Deliverable G - Prototype III & Customer Feedback

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Introduction

In this deliverable, we made our last prototype and tested it according to the test plan outlined in Deliverable H. This document intends to discuss the results and feedback from the prototype. The first section aims to explain the objectives of the experimental model made, explaining what new additions were made to the previous prototype and what new subsystems were created. The subsequent section analyzes the test results, followed by analyzing the feedback gathered from the potential users. And finally, it ends with the conclusion and Wrike Plan.

Experimental Model

Our last experimental model was a Figma WebApp Prototype of what the users (i.e. banks, businesses or point holders) would see when they login to see our Loyalty Program.

(For a better look at the prototype than just the pictures shown in this deliverable, here are the links to the Web App Prototype and the Flow Chart, which will be shown and discussed later).
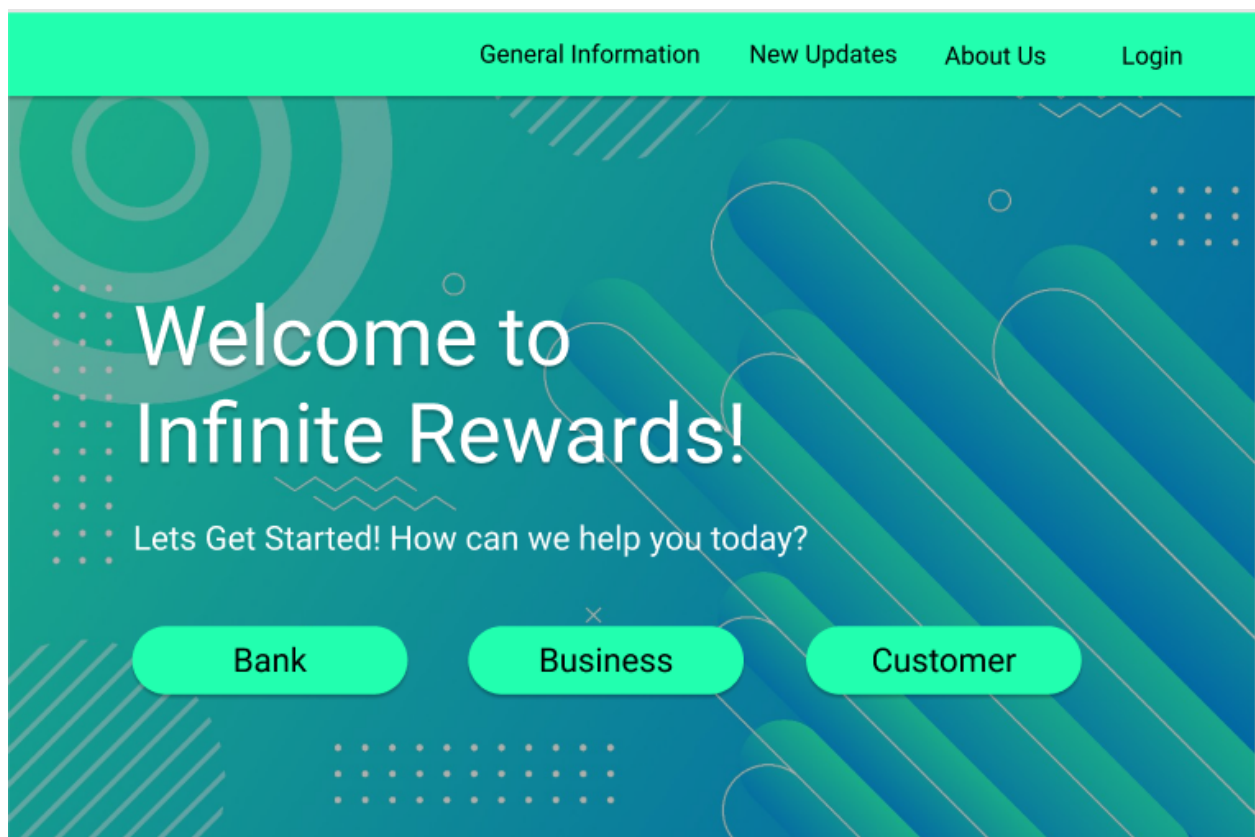

Figure 1 - This is the homepage of the Web Interface

The Homepage is a navigation page which was one of our ideas for the 3rd subsystem: User Interface. It is an open-source approach that gives retailers guidelines on integrating their business to allow for partner integration.

Since this is a WebApp prototype on Figma, it isn't entirely built out. The headings "General Information", "New Updates" and "About Us" in the top navigation bar don't 'lead' anywhere because we didn't focus on building out those pages as they would not add to the main focus of this prototype which was Partner Integration. The "Login" Button, however, does lead to the login page shown below (Figure 2), and if the "Bank", "Business", or "Customer" buttons are clicked, it will also take the user to the login page.
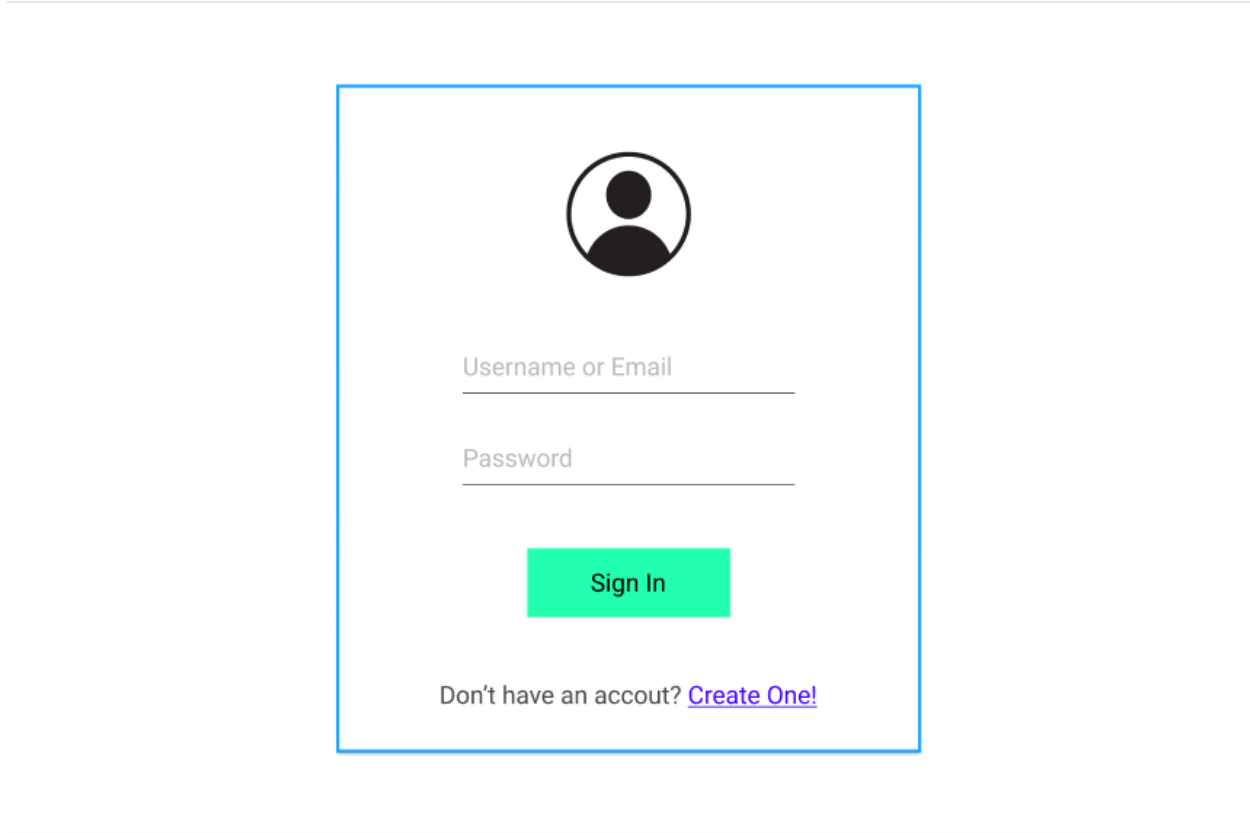

Figure 2 - Login Page

Once a User logs in, depending on whether the user was someone from a bank, a business or a customer, they will be redirected to their respective homepages. Again, since the main focus of this prototype was partner integration (which is a B2B, or Business to Bank solution), the Customer Homepage was not built, and only the Bank and Business Homepages were built. Zafin also mentioned that they want a solution to sell to the Banks, which would allow them to set up their Loyalty Program how they please. So this was another reason why we decided to focus on the democratization of points instead of coming up with a Loyalty Program that the banks could implement. (We also only were two people, so we had to cut out a lot of the plans we originally had).
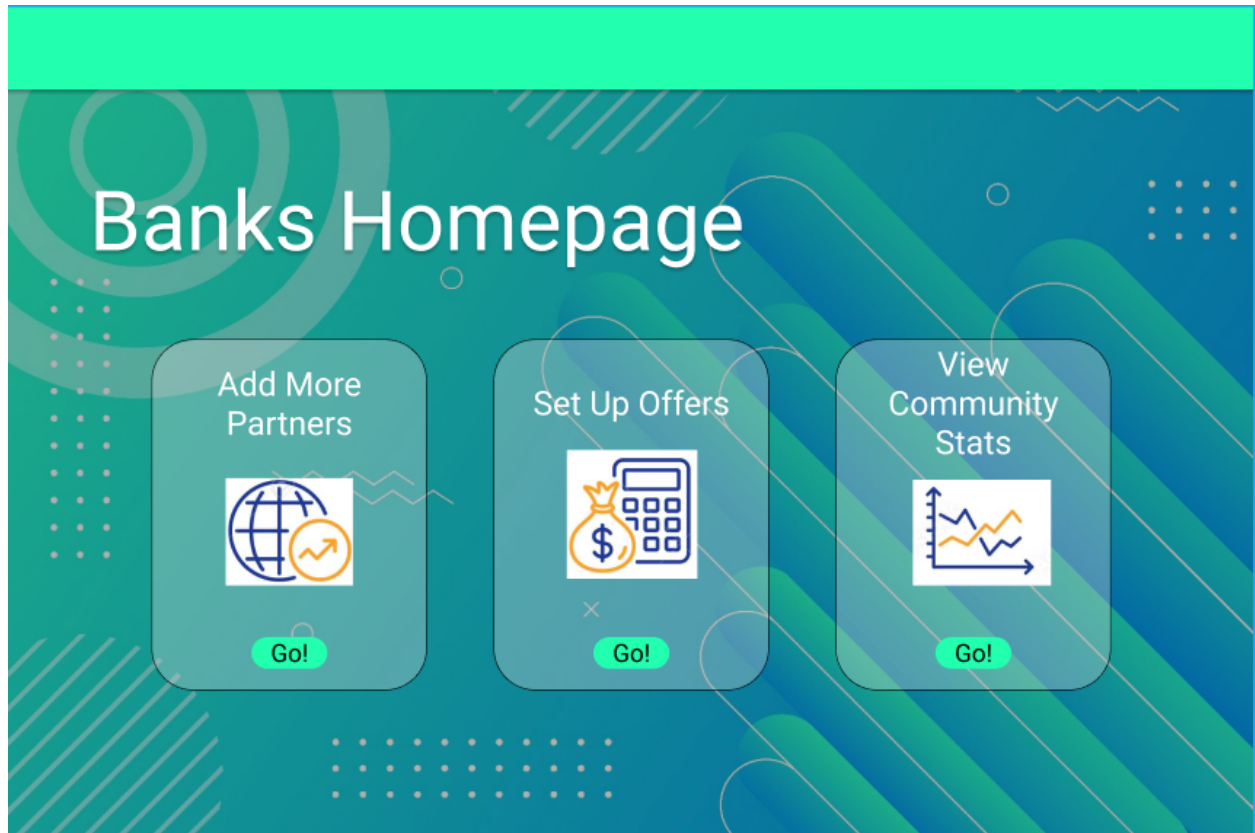
Banks

Figure 3 - This is the Homepage for the Banks that they land on when they sign in.

Above is the Bank Homepage, and it can lead to 3 separate pages that would be useful to the banks. The first page is the Add Partners page, the second is the setup offers page, and the last is the View Comunity Stats page.

The first page is the Add Partners page (Figure 4) which would allow the Banks to see requests from different businesses to become partners.
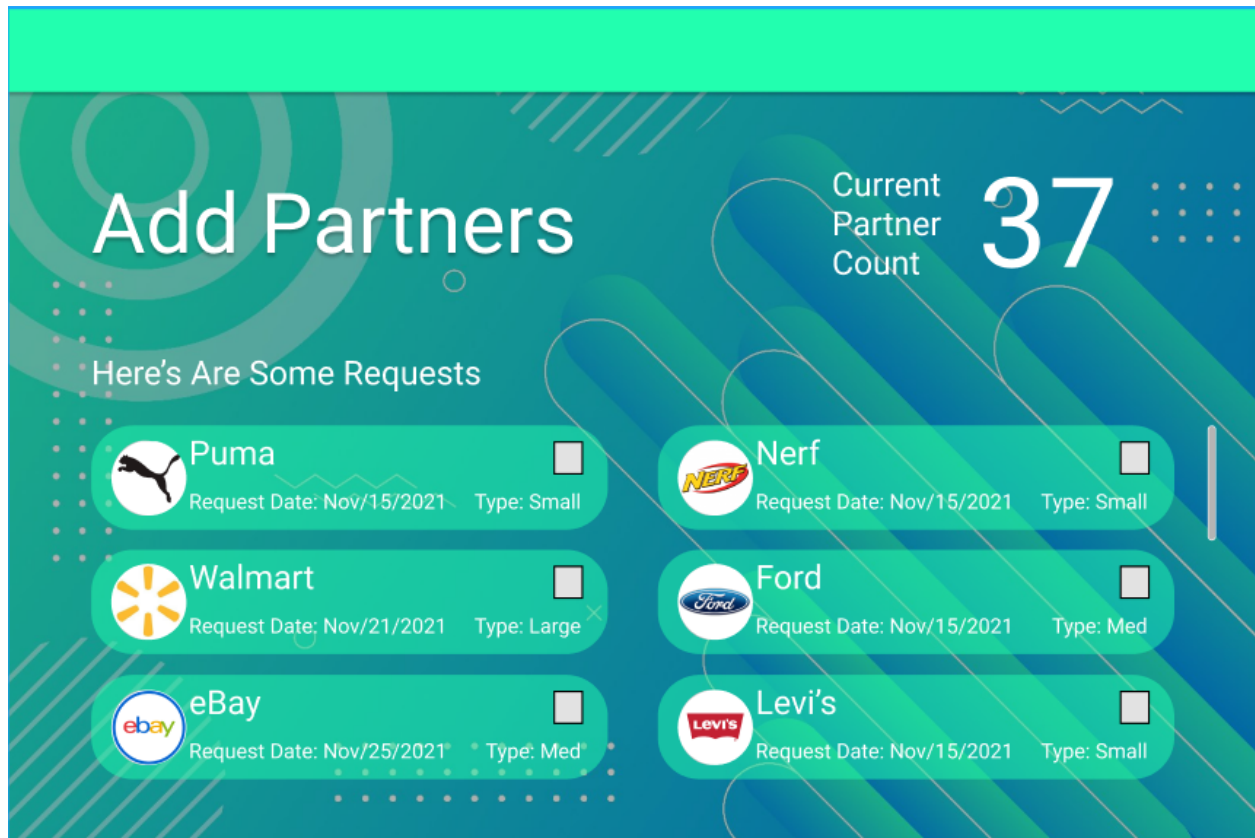
Figure 4 - Add Partners Application

It would show the date the company sent the request, and it would also sort the business from smallest to largest, so the small companies are shown at the top and are more likely to be integrated into the program by the bank. The business just needs to check the box and an email will be sent to the company saying that their request has been accepted and that they can join the program.

In the future, we plan for this part of the WebApp to be coded with some software that receives the request from the businesses and presents them in the WebApp. It would be similar to an inbox.

In the top right corner is a business counter for the number of current partners to motivate the banks to accept more offers, especially ones from small businesses. Every time a partner is added, that counter will update.

The Next page is the Setup Offers page which was not made since it deals with incentivizing users to spend their points with special deals.

The last page is the Comunity Stats page (Figure 5) and this page can be accessed from both the Bank and Business Homepages.

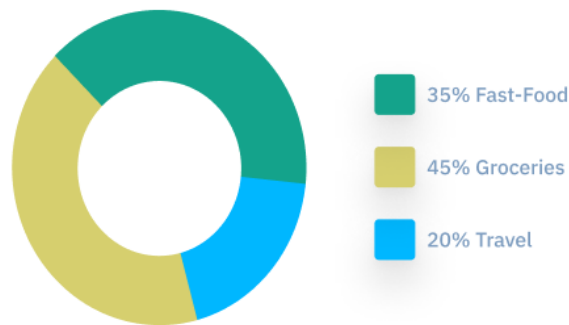*Figure 5 - The Community Stats Page*

This page takes the graphs and data from Power BI made in our previous prototypes and displays them on this page so the two interfaces would be synced. However, the graphs in the

Comunity Stats page would be the general stats (shown by the titles of the graphs), not the 'In-depth' data analytics graphs, which would be used to perform a comprehensive analysis by the banks. They would be able to log into their Power BI through this page by clicking the "want to see more stats?" button to see that data.

The graphs shown are not the graphs made in Power BI from our first prototype; they are pre-made graphs from a [Figma Website Template](#) found on the internet. I (Tuba) just changed the title and what the colours represent. Still, they are meant to reflect some of the data generated in Power BI.

Favourite Spending Places
in last 7 days

- 35% Fast-Food
- 45% Groceries
- 20% Travel

Try Setting Up Special Offers at Grocery Stores!

Figure 6 - A close up view of the first graph on the Community Stats page

Figure 6 shows a zoomed-in version of the first graph. It only uses the data received over the past week to generate the visual. (The actual Power BI has more business types, though.)

Businesses

If a business were to log in through the login portal they would be taken to the Business Hompage shown below (Figure 7).
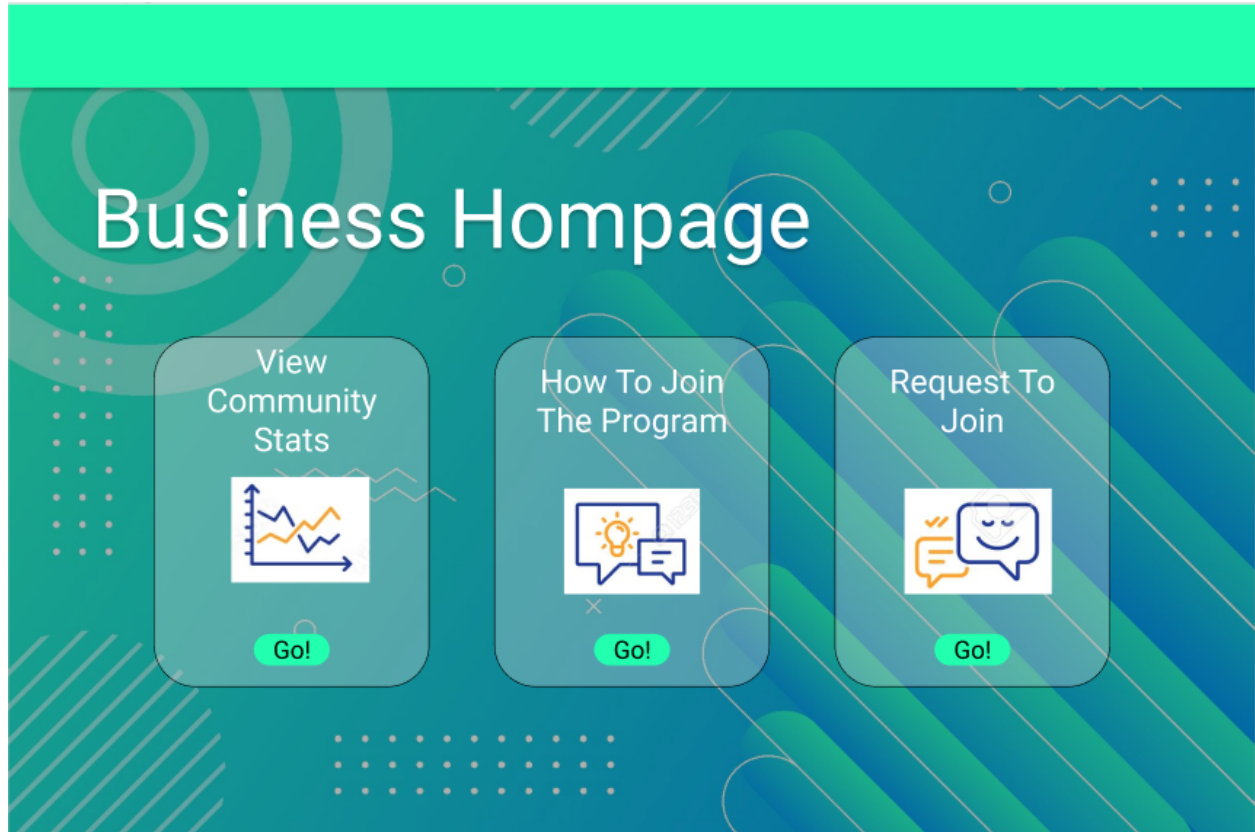
Figure 7 - The homepage businesses will land on when they log in.

It's noticeable that it looks very similar to the Banks Hompage, and this was done to be consistent with the format of the WebApp. As mentioned earlier, the View Comunity Stats page can also be accessed through the Business Homepage. This was done to encourage businesses to join the program. If by looking at the general stats, they see that other small businesses are becoming popular or that they're also benefiting, then they'll feel encouraged to join the Loyalty Program. The 'Request to join' page was not made due to time constraints and but the 'How to join the program' page was created and is shown below (Figure 8).
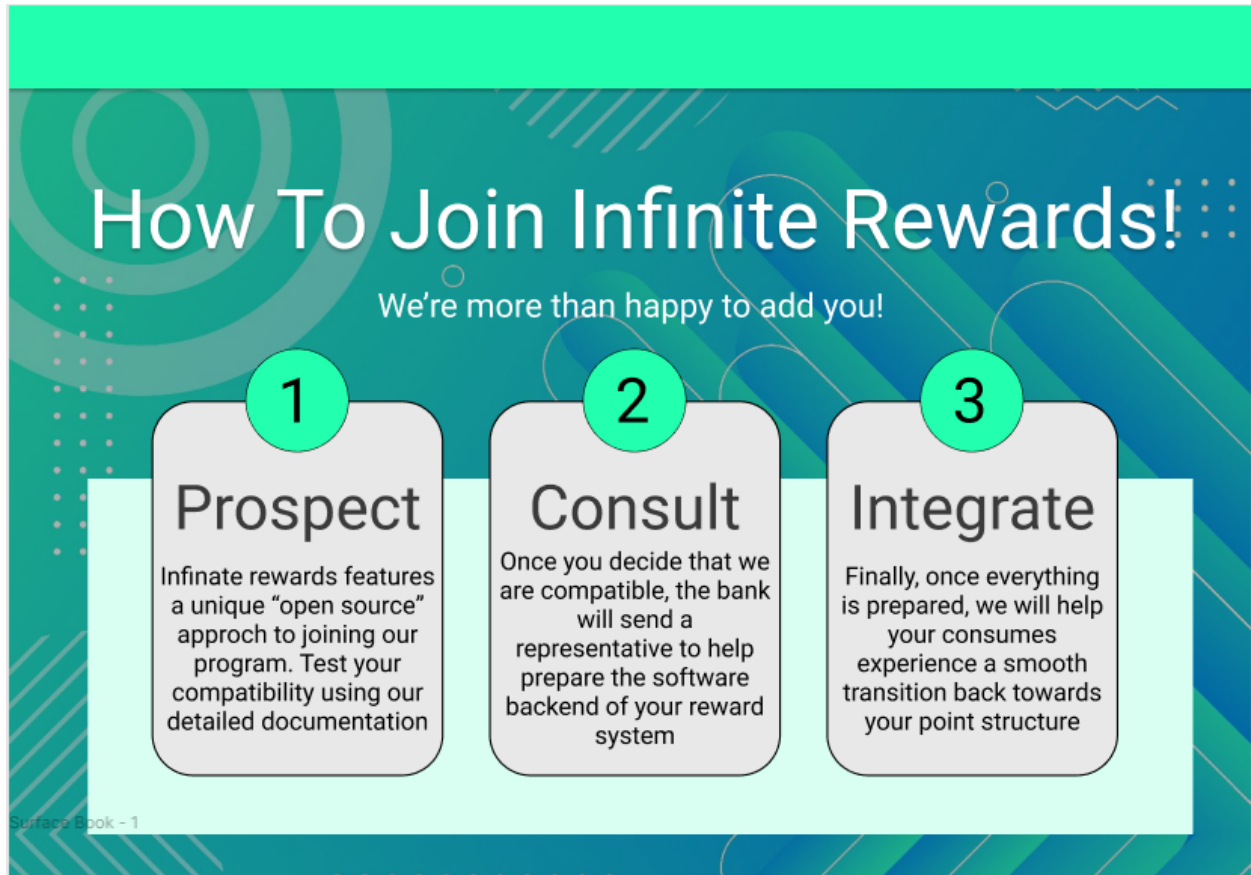
Figure 8 - This is the How To Join Page which shows simple 3-step process

This page was designed to show potential partners of the bank how easy it is to join the program with a more in-depth explanation using the figma flow chart which is shown later on the page.Compared to previous prototypes, in this iteration, we wanted to have a particular focus on what we believe to be one of the most unique features of our design, our partner integration. This is a broad topic that connects to business and software aspects simultaneously. To help us understand and convey the process- we created a flowchart representing the full flow of implementing a business into our reward system.
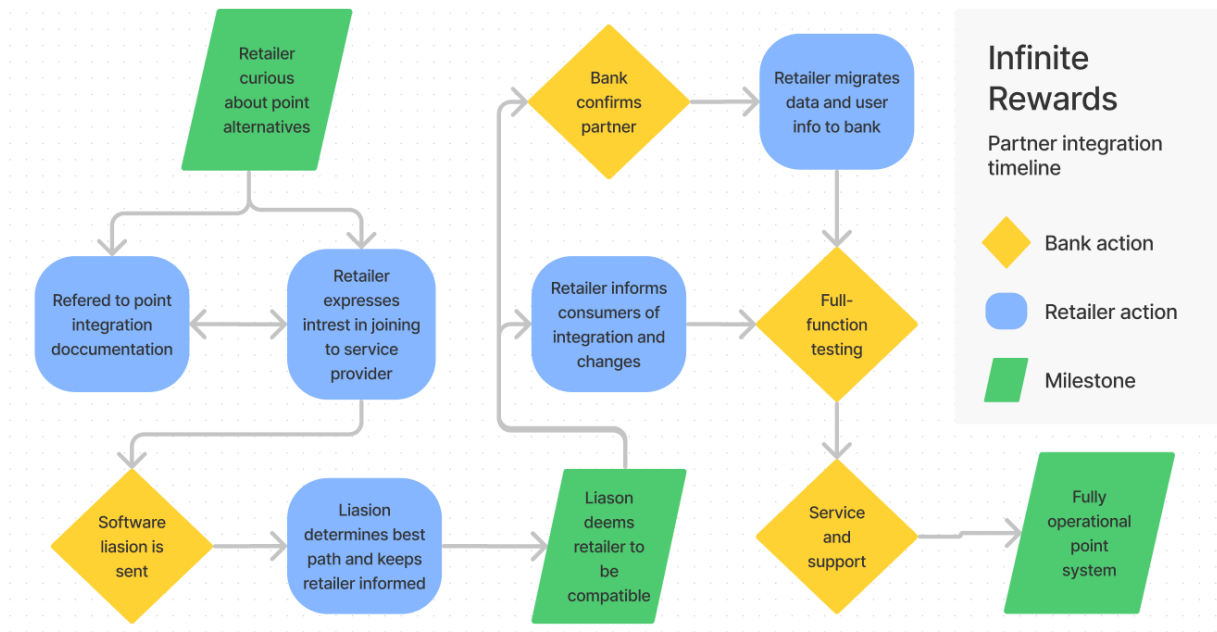
Figure 9 - A close-up version of the Figma Flow Chart

Each step represents a different action, question or milestone along the implementation process and covers how each group works to move forward.

Results & Analysis

The tests that we performed were aimed to if the WebApp was simple and easy to use for a variety of everyday users. The test subjects were asked perform two tasks. They had to pretend that they were a...

1) Bank who wanted to integrate 3 new businesses (Test 1)
2) Business who wanted to see find out which is the current most popular business (Test 2) (the answer is Shawarma)

Becasue the WebApp is only a prototype, I (Tuba) had to navigate manually between the different pages but it would have been done automatically when if it was a real WebApp. Also due to time constraints, we only ran two tests on two people. Test Subject 1 was my mom (she isn't too experienced with technology) and my younger brother (11 yrs) - he only understood the first task so I asked my other younger brother (14 yrs) to do the second test as Test Subject 2.

Test 1: Can the user pretend to be a bank and add 3 partners?

Test Subject 1: It was very easy for them to find the page to add new partners, they 'clicked' the banks button on the homepage (which was 'correct') and then they 'logged in' which brought

them to the Bank Homepage. There they clicked on the the three businesses they wanted to add, but they didn't click the checkbox, they clicked the icon that showed the business.
Test Subject 2: The second user also had a very easy time adding new partners, they followed the exact same steps as Test Subject 1, but they clicked the check boxes to add the businesses like they should have since it was designed that way.

Test 2: Can the user find out which is the current most popular business?

Test Subject 1: Since this was the second test the login process was much the same as in the previous test, except they landed in the Business Hompage. They clicked the View Comunity Stats Button which showed the Stats page and tired to figure out which was the most popular business by reading the graphs. It took them a little longer than I thought - a little over a minute - but they did answer correctly.
Test Subject 2: Again the login process was similar to the first test and they did manage to find the page with the community statistics quite easily. It took him about 1 minute to find the answer which was also correctly answered.

Improvements

After doing these two tests it is evident that the WebApp is fairly easy to use, to the experienced and inexperienced users. However, we could make some slight adjustments to the way the checkboxes were made or where they were placed and we could also layout the graphs in a more appealing and easy-to-read manner.

Feedback

Prototype III is a cumulative design featuring objectives and testing from all previous iterations. Our group thought that this would be an invaluable opportunity to get feedback from real people who worked in industries involved with our product. We conducted a series of over-the-phone interviews expressing.

- What the course and project was
- Our problem statement
- Our current approach to creating a solution (past ideation and prototypes)

We conducted three interviews, each with a person in a different occupation, each with novel perspectives.

Name: Robert D.	Company: BMO	Position: Business Technology consultant
Key feedback: • Expressed that we need to be very considerate of tracking money flow. If money can		

be moved and extracted without tracing- our system could become a tool for money laundering. ● Believes that most retailers are working to outsource as many technical subsystems as possible (i.e. PoS, stock management etc.), and our solution would be the next in outsourcing the design of reward systems. ● Using messages to automatically recruit/invite retailers to our project might violate the CASL (Canadian Anti-Spam Legislation)		

Name: Kathrine K.	**Company:** Caterpillar .inc	**Position:** Service Operation Manager (former)
Key feedback: ● Believes that our data analytics feature will be invaluable for all retailers as it provides a "free" opportunity to collect information about their customers. ● Concerned about how our product will deal with inter-institutional competition. ○ I.e. if RBC sets up our loyalty system with Walmart, would another bank be able to do the same?		

| **Name:** Thomas D.	**Company:** Northwood Studios	**Position:** IT Administrator
Key feedback: ● Curious about the volume of traffic that will be going through our system, depending on how we manage our data, it could become very taxing ● Mentioned that we need to understand our breakpoints (failure modes) well, and how we would respond to them. ○ If a terminal at a store stops working, how would that affect the system vs an entire bank's server going offline? ● Interested in the open-source approach of partner implementation, it reminds him of working with software tools, making them easy to implement and adapt.		

Conclusion

This design project presented a number of unique challenges, ranging from technical issues to group organization. However by following through the design process our group was able to to develop a conceptually-directed prototype. Our prototype is high fidelity, in exchange for technical complexity. It gives users a perspective of how "Infinite Rewards" will look and feel as a full-feature system.

Regardless, this prototype has also acted as a key point for feedback, with a number of professionals giving novel feedback relevant to our project, opening up new pathways of thinking to adapt our approach with.

With design day approaching rapidly, our group will take this information, alongside all data from throughout the course to create a clear and enticing pitch presentation. We hope that Zafin sees the promise in our approach, and rewards our unique solutions.

Wrike Plan
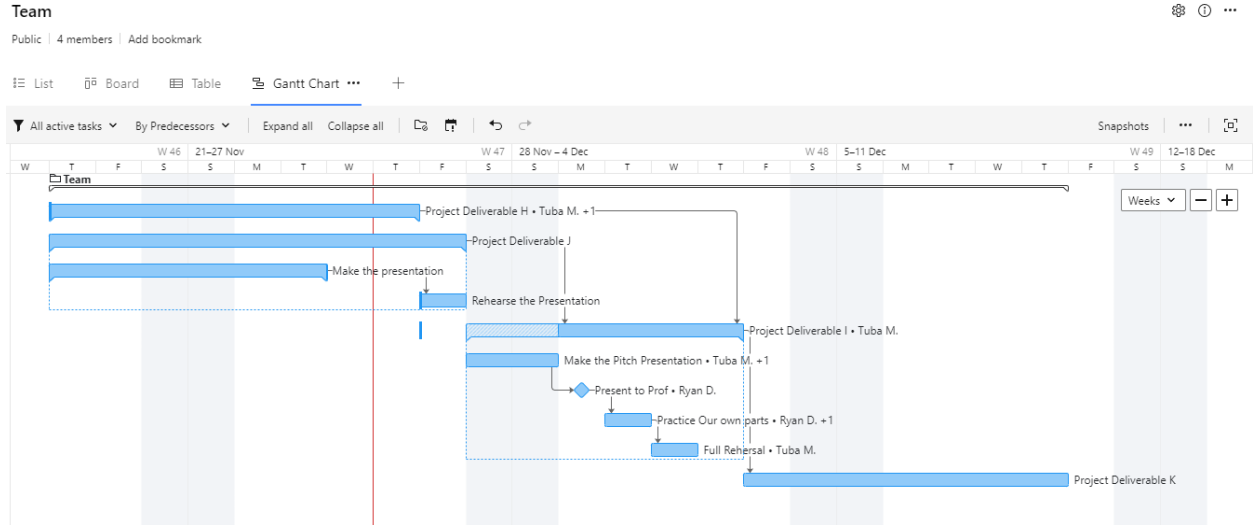
(You might have to Zoom in to see the words clearly) if that doesn't work here is the Wrike link.