

# **Project Deliverable E**

## **Project Plan and Cost Estimate**

Group 3

Alejandro Arreaga-Gonzalez  
Alyce Van Staveran  
Amy Barnhill  
Jiachen Hu  
Yendra Yogarajan

October 23, 2021

## Table of Contents

<b>Introduction</b>	<b>3</b>
<b>Final Design Concepts</b>	<b>4</b>
Customer Subsystem	4
Figure 1 & 2	4
Figure 3 & 4	5
Financial Institution Subsystem	6
Figure 5	6
Retailer Subsystem	7
Figure 6	7
<b>Prototype Test Plan</b>	<b>8</b>
Mobile App Prototyping Test Plan	8
Table 1	8
Banking Institution Prototyping Test Plan	9
Table 2	9
Retail/Partner Prototyping Test Plan	10
Table 3	10
Prototype Test Plan Actions	11
<b>Risks &amp; contingency plans</b>	<b>12</b>
Table 4	12
<b>Bill of materials</b>	<b>13</b>
Table 5	13
<b>Project Schedule</b>	<b>14</b>
Table 6	14
<b>Stopping Criteria</b>	<b>18</b>
<b>Wrike Gantt Chart Update</b>	<b>18</b>
Figure 7:	18
Figure 8:	19
Figure 9:	20
Figure 10:	21
<b>Conclusion</b>	<b>21</b>

## Introduction

After our client meeting, we had received some questions but very little feedback. The main question we received was how we were to determine the exchange rate between the different loyalty points. During the feedback portion, Zafin had left it very open-ended and stated that they did not want to intervene in the process and the solution was mainly up to us. This is both good and bad as we have free reign to do what we need, but also little constraints so we could end up making something Zafin would not want. Regardless, based on the interview our team has finalized and prototype drawings and will now start thinking of bringing our ideas to life.

# Final Design Concepts

## Customer Subsystem

Figure 1 & 2

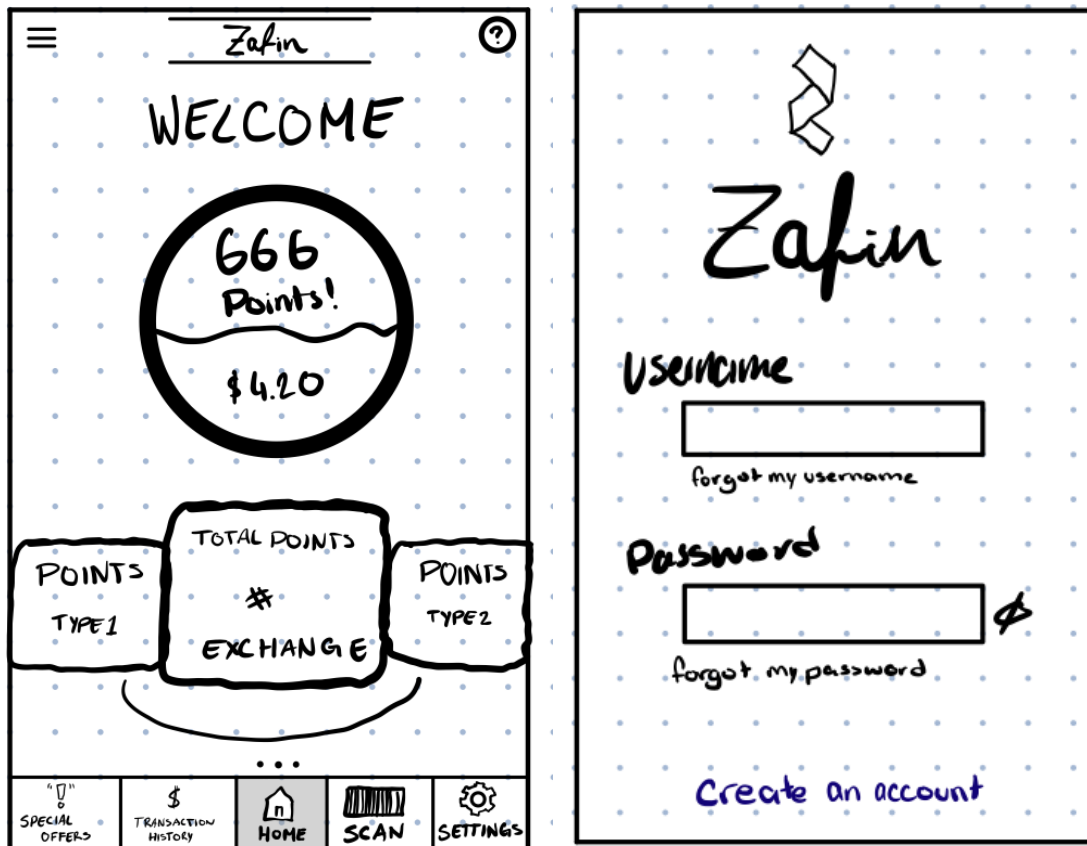


Figure 3 & 4

☰
Zafin
?

## TRANSACTIONS

Overview  
 \$121.00 Spent  
 1002 Points earned

7D

30D

6M

All-time

Transaction #	Location	Amount	Points earned
1	A	\$8.00	4 Air Miles
2	B	\$29.00	29 Petro Points
3	C	\$31.41	31 Pe optimum
4	D	\$79.69	79 Petro Points
<b>Total</b>		<b>\$121.00</b>	<b>1002 POINTS</b>

REQUEST PDF Format

"!"  
SPECIAL OFFERS

\$  
TRANSACTION HISTORY

HOME

SCAN

SETTINGS

☰
Zafin
?

## SPECIAL OFFERS

Company Offered "X Amount Saved"  
 Product Offered  
 Exp 01/12/2022

Company Offered "X Amount Saved"  
 Product Offered  
 Exp 01/12/2022

Company Offered "X Amount Saved"  
 Product Offered  
 Exp 01/12/2022

↓  
 "You have no more new offers"

"!"  
SPECIAL OFFERS

\$  
TRANSACTION HISTORY

HOME


SCAN


SETTINGS

# Financial Institution Subsystem

Figure 5

**BANK**

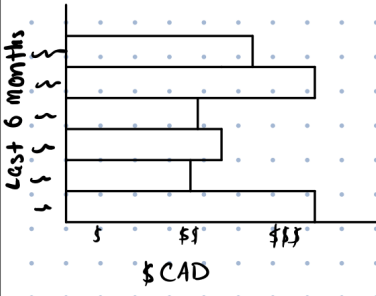


[Home](#) | [Resource Centre](#) | [McLovin](#)  Sign Out

[Finances](#) > [Retail Applications](#) > [Growth Prospect](#) [Retail Partners](#) [Other Online Services](#)

## Dashboard

### Retailer points by month



**Loyalty point Exchange**

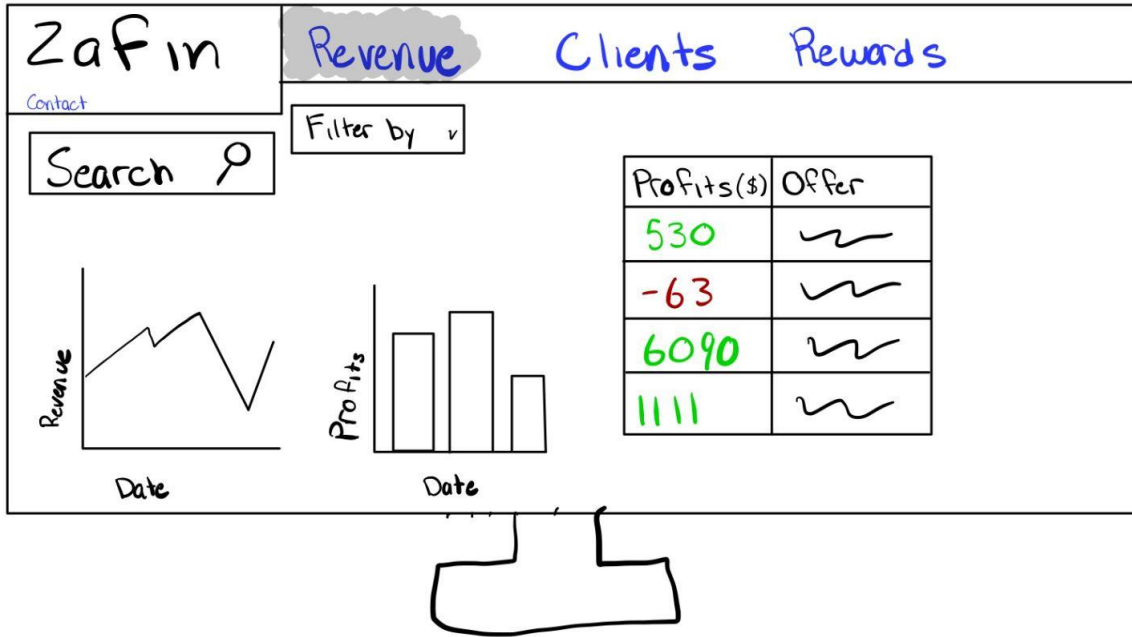
+ Add Retail ↓ Reorder

<input type="checkbox"/>	Retail	Last Price	Change	% change	Ccy	Avg Volume
<input type="checkbox"/>	AAPL	~	+	+%	USD	~
<input type="checkbox"/>	DIS	~	+	+%	CAD	~
<input type="checkbox"/>	TSLA	~	+	+%	USD	~
<input type="checkbox"/>	L	~	-	-%	MXN	~
<input type="checkbox"/>	ENB	~	+	+%	USD	~
<input type="checkbox"/>	AMZN	~	-	-%	USD	~
<input type="checkbox"/>	BBDB	~	+	+%	CHF	~
<input type="checkbox"/>	AC	~	+	+%	CAD	~
<input type="checkbox"/>	BTE	~	-	-%	USD	~

# Retailer Subsystem

Figure 6

## Partner Design



# Prototype Test Plan

## Mobile App Prototyping Test Plan

Table 1

Test ID	Test Objective (Why)	Description of Prototype used and of Basic Test Method (What)	Description of Results recorded and how these results will be used (How)	Estimated Test and duration and planned start date (When)
1	Does the login system work with each login having its own information.	The prototype is a login page, asking for users' username and password. We will attempt logging into 3 different accounts all with different information and different point balances.	We will see if the information within the app changes depending on which login it is. We will use any error found and try to investigate that section within the code of the app.	During our Nov 2nd team meeting, assuming 10-15 minutes.
2	The functionality of points within the app	Prototype is all of the different subsystems in the user UI. We will analyze the number of points that appear in the app and try exchanging points between programs.	We will analyze, 1) if the points were exchanged, 2) if the number of points that were exchanged are correct. We will see which sections have errors and based on those errors, we will try to narrow down which part of the program is causing errors.	During our Nov 2nd team meeting, assuming 10-15 minutes.
3	The overall functionality of the application	Prototype is all of the different subsystems in the user UI. We will ask users to test it, and they will tell us how they like certain components, and if there's anything that	We will watch for body language and facial expressions while the tester is using the application. We will also listen to any feedback given, and use the feedback	Nov 2nd team meeting, assuming 10-15 minutes.



		could make their experience better.	given to brainstorm solutions.	
--	--	-------------------------------------	--------------------------------	--

## Banking Institution Prototyping Test Plan

Table 2

Test ID	Test Objective (Why)	Description of Prototype Used and of Basic Test Method (What)	Description of Results recorded and how these results will be used. (How)	Estimated Test and duration and planned start date (When)
1	Is the login secure and efficient?	Prototype is a login page asking for the bank name, ID # and password to enter the server. Attempted login from a user testing our prototype, attempted login from a team member.	People testing will rank ease of use and we will time how long it takes to switch to the next page of the application. The testers will also test if each section can be typed into the application without difficulty.	Test duration will be a portion of our next team meeting, and it will be done on Nov 2nd.
2	Is all retailer/user data easily accessible?	Experimental modelling => time how long it takes new and more experienced users to pull up data, see if there are lags	People testing will note how long it took to reach data and how easy it is. These results will allow to ensure that the set up of the UI is effective and make any changes necessary based on feedback	Test duration will be during our team meeting after the next.
3	Profitability and exchange rates easy to find and analyze	Experimental modelling => get experienced finance users to test the usability of the UI and rate it	Testers will attempt to use each part of the design and see if they can get all the necessary information. The feedback relating to	Test duration will be during our team meeting after the next.

			issues found through the test will allow us to adapt our prototype to better fulfill all requirements.	
--	--	--	--	--

## Retail/Partner Prototyping Test Plan

Table 3

Test ID	Test Objective (Why)	Description of Prototype Used and of Basic Test Method (What)	Description of Results recorded and how these results will be used. (How)	Estimated Test and duration and planned start date (When)
1	Ability to view participating loyalty rewards programs	The prototype will allow users to see all programs they are a part of and how many points from each program and in their account	This will be done by actual use of the app. Testers will use different mobile platforms (ios and android) with different types of devices to make sure features work across different devices.	Customer feedback and testing. The test should not take more than a few minutes to make sure all features are working correctly
2	Is the login secure and efficient?	Prototype is the login page, which contains the retailer name, retailer ID and password. Attempted login from a user testing our prototype, attempted login from a team member.	People testing will rank ease of use and we will time how long it takes to switch to the next page of the application. The testers will also test if each section can be typed into the application without difficulty.	During Nov 2nd team meeting. Should take 10-15 minutes.
3	Customer data and profits are easily accessible.	Experimental modelling => time how long it takes new	The use of these components will be timed and compared	Nov 2nd during the team meeting; should

		and more experienced users to pull up data, see if there are lags	to those that were benchmarked, and to those in the design analysis. We will also ask the user for their feedback and use it to update our future prototypes.	take 10-15 minutes.
--	--	---	---	---------------------

## Prototype Test Plan Actions

1. Once prototypes have been made, it will be shared with the entire team, and feedback will be given to the prototype from each group member
2. A pros and cons list of each prototype will be made
3. Team members will iterate their prototypes based on the feedback
4. Repeat steps 1-3 until team members are satisfied with the prototype, and the prototype meets stopping criteria

The prototypes will start off with low fidelity, but as we approach milestones it will start to get higher amounts of fidelity. Being very realistic is unlikely, as our team has little to no experience in software, the end product will still have below-average amounts of fidelity.

# Risks & contingency plans

Table 4

Risks	Likelihood	Contingency Plan
App doesn't function as well as desired	Moderate	Ask the PM/TA for help.
Group member does not complete task on time	Moderate / Unlikely	Other team members will help the team member complete the task, let them know that it shouldn't happen again.
Forgetting to answer/upload a portion of deliverable	Moderate / Unlikely	Read through the instructions <b>thoroughly</b> to make sure everything needed is there, and also compare to the rubric. Have an assigned person per deliverable to be responsible for the submission.
Not uploading a deliverable on time	Unlikely	Follow the schedule in wrike, and update tasks if things are not working. Also not a bad idea to contact the PM/TA for advice to not allow it to happen again.
Chosen platform is not working as well as hoped, or too difficult to learn.	Moderate	Ask the TA/PM for advice or tips, if it continues to be difficult to work with, consider switching platforms to a more user-friendly one.
Team members not communicating effectively or efficiently	Moderate	Communicate in chats and participate in meetings, if this is not helping, talk with them or ask the PM/TA for help.

# Bill of materials

Table 5

Item	Cost per month	Use	Reasoning	Pros	Cons
------	----------------	-----	-----------	------	------

Figma free	\$0	Create a phone app for free	Create an application prototype	Free, unlimited cloud storage, 30-day version history	Only 2 editors and 3 projects
Figma subscription	\$12	Create a more in-depth app	Allows for more editors to contribute to the prototype	Unlimited projects and history, more editors	\$15/month pay per editor
Bravo studio free	\$0	Phone app builder	Turns Figma prototypes into apps without needing to code	Connected to Figma to create useable apps	Only 3 shares per app, Bravo branding
Bravo studio pro	\$27	In-depth app builder	Unlimited app builds with more support from Bravo	Unlimited app shares, 15-day free trial	\$27/month, still has Bravo branding
Canva free	\$0	Graphic design program	Design aesthetically pleasing designs	Free templates, many design types, free photos, easy to use	Less branding options, less freedom than photoshop
Wix	\$0	Website builder	Create a powerful website without coding	Free SSL certificate, 1GB bandwidth, 24/7 customer care	Have to pay for the customizable domain name
Vulnerability & penetration testing	\$\$\$ (Will only be needed if chosen)	Curb application vulnerabilities	Detect any application security issues	Allows customers and users to feel that	Very expensive, only to be used if the design is chosen.

				their information is secure	
Sum	\$39.00				

Excel Spreadsheet Link:

[https://uottawa-my.sharepoint.com/:x:/r/personal/avans005\\_uottawa\\_ca/\\_layouts/15/guestaccess.aspx?docid=1e4cf6c16c00443ff87ed50ab0416a898&authkey=AcrvBf9-XfsiiZUJRJLDnj8&e=tTINcO&isSPOFile=1](https://uottawa-my.sharepoint.com/:x:/r/personal/avans005_uottawa_ca/_layouts/15/guestaccess.aspx?docid=1e4cf6c16c00443ff87ed50ab0416a898&authkey=AcrvBf9-XfsiiZUJRJLDnj8&e=tTINcO&isSPOFile=1)

## Project Schedule

Table 6

<u>Task</u>	<u>Subtask</u>	<u>Dependencies</u>	<u>Start Date</u>	<u>End Date</u>	<u>Owner</u>
Customer UI prototype I draft		Sketches	Oct 22nd	Oct 29th	Alejandro & Yendra
Retailer UI prototype I draft		Sketches	Oct 22nd	Oct 29th	Amy & Jiachen
Bank UI prototype I draft		Sketches	Oct 22nd	Oct 29th	Alyce & Jiachen
Feedback & improvements		Prototype I drafts	Oct 29th	Nov 1st	Everyone
	Each group member submits a document containing feedback and improvements for prototype I		Oct 29th	Nov 1st	Everyone
Team meeting		Feedback & drafts	Nov 2nd	Nov 2nd	Everyone

	Analysis of prototype I test plan				Alyce & Alejandro
	Intro & conclusion				Yendra
	Prototype I				Everyone
	Justifications & reasons				Jiachen
	Prototype II test plan				Amy & Yendra
<b>Deliverable F Submission</b>				Nov 3rd	Amy
Write update			Nov 3rd	Nov 3rd	Amy
Customer UI prototype II draft		Prototype I	Nov 3rd	Nov 6th	Yendra & Alejandro
Retailer UI prototype II draft		Prototype I	Nov 3rd	Nov 6th	Amy & Jiachen
Bank UI prototype II draft		Prototype I	Nov 3rd	Nov 6th	Alyce & Jiachen
Feedback & improvements		Prototype II drafts	Nov 6th	Nov 7th	Everyone
	Each group member submits a document containing feedback and improvements for prototype II		Nov 6th	Nov 7th	Everyone
Team Meeting		Feedback & drafts	Nov 7th	Nov 7th	Everyone
	Analysis of				Amy &

	prototype II test plan				Alyce
	Intro & conclusion				Jiachen
	Prototype II				Everyone
	Justifications and reasons				Yendra
	Prototype III test plan				Alejandro & Jiachen
<b>Deliverable G submission</b>				Nov 8th	Alejandro
Wrike update			Nov 8th	Nov 8th	Alejandro
Customer UI prototype III draft		Prototype II	Nov 11th	Nov 17th	Yendra & Alejandro
Retailer UI prototype III draft		Prototype II	Nov 11th	Nov 17th	Amy & Jiachen
Bank UI prototype III draft		Prototype II	Nov 11th	Nov 17th	Alyce & Jiachen
Feedback & improvements		Prototype III drafts	Nov 17th	Nov 19th	Everyone
	Each group member submits a document containing feedback and improvements for prototype II		Nov 17th	Nov 19th	Everyone
Team meeting		Feedback & drafts	Nov 19th	Nov 19th	Everyone



	Analysis of prototype III test plan				Jiachen & Yendra
	Intro & conclusion				Alejandro
	Prototype III				Everyone
	Justifications & reasons *referencing previous prototypes*				Alyce & Amy
<b>Deliverable H submission</b>			Nov 20th	Nov 20th	Jiachen
Write update			Nov 20th	Nov 20th	Yendra
Deliverable I		Deliverable H	Nov 20th	Nov 27th	Everyone
Deliverable J		Deliverable I	Dec 1st	Dec 1st	Everyone
Deliverable K		Final Prototype	Dec 2nd	Dec 6th	Everyone

## Stopping Criteria

1. People testing UI are satisfied and have no large critiques
2. The product meets all of our design criteria
3. The product has no significant flaws or bugs
4. Team members are satisfied with how the app looks and functions, and also how the testing went and what the data collected represented

# Wrike Gantt Chart Update

Figure 7:

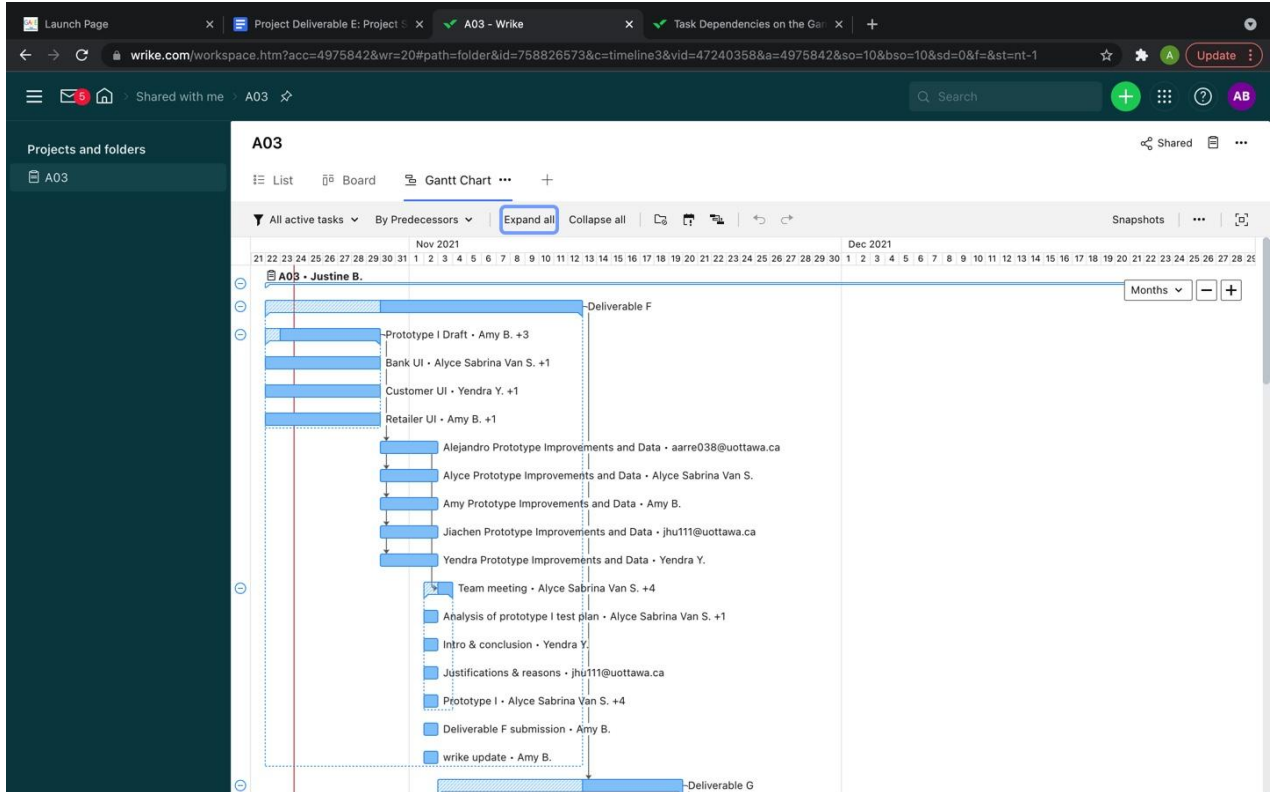


Figure 8:

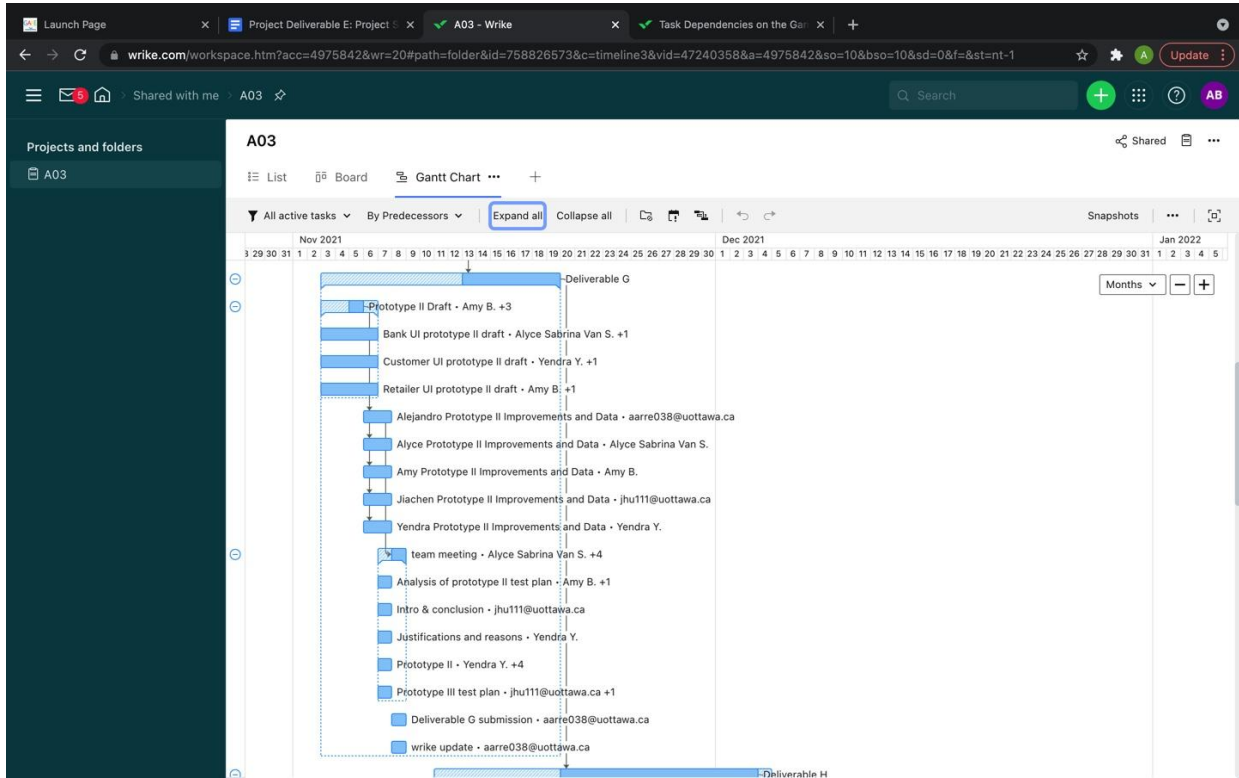


Figure 9:

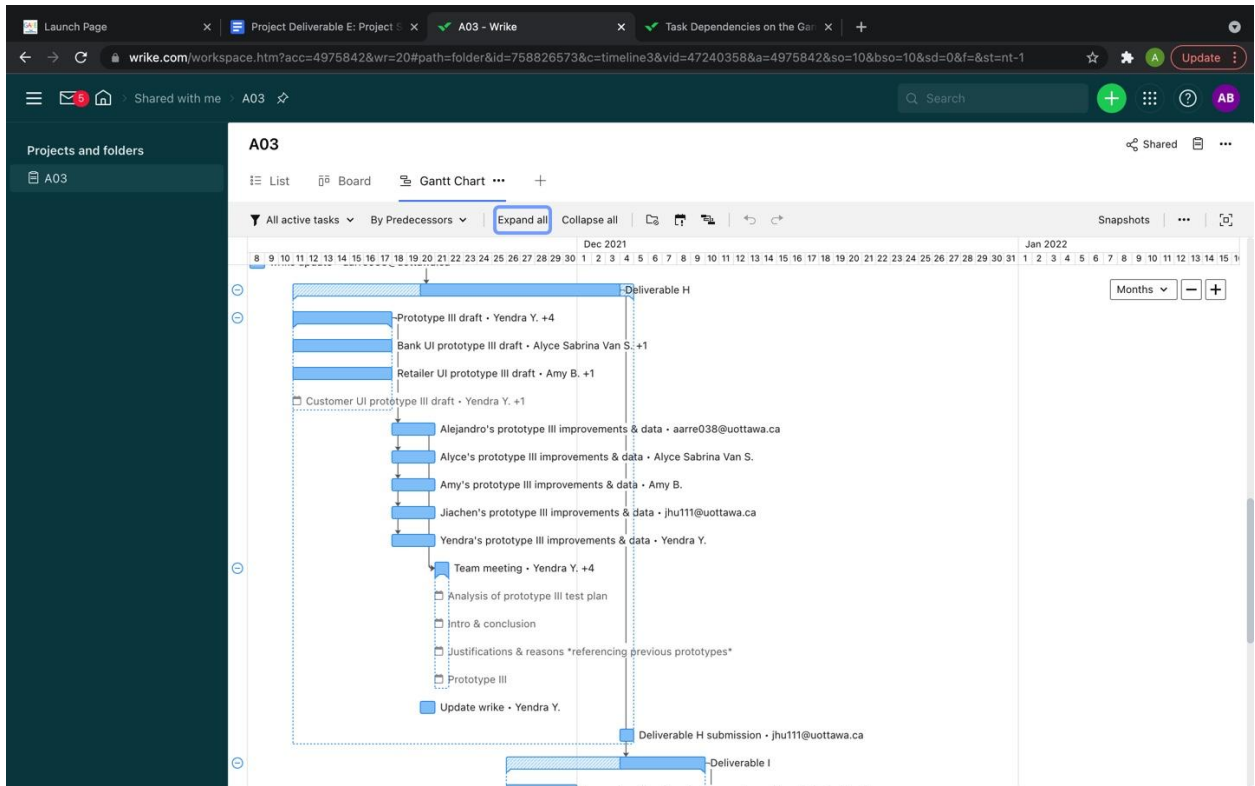
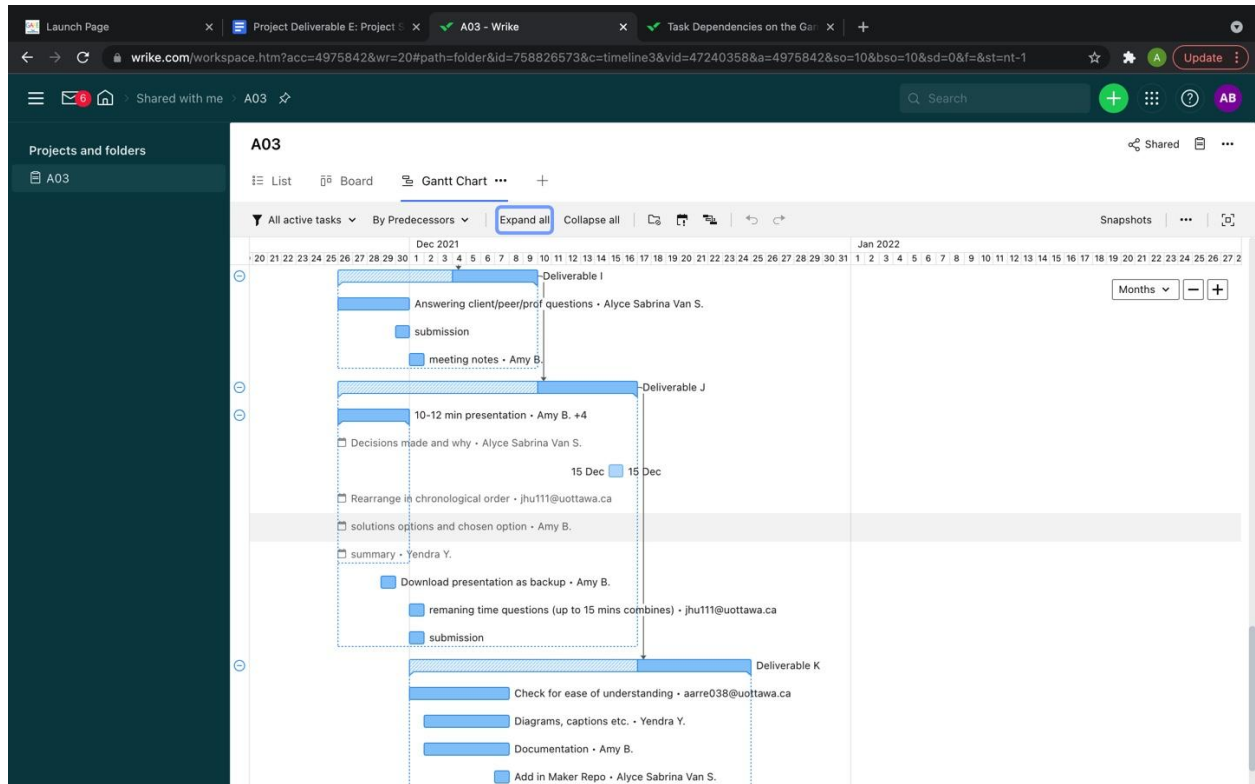


Figure 10:



## Conclusion

Our team now has a detailed plan with set deadlines and roles per member. Using this information we will start to prototype our 3 different user interfaces, customer, financial institution, and retailer. Hopefully, we will not have to use our contingency plans, but it is vital to have them in place as you can never predict the future.