# **Deliverable D: Conceptual Design**

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October 17, 2021

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### 1 Introduction

In this part of the project, we are going to develop 3 subsystems based on our benchmarking, which are User interface, Bank interface, and Business interface.

#### 1.1 User interface

This subsystem is what the end user will interact with, it will be the home page where they will view there point balance, earn/redeem and anything else the user will interact with.

#### 1.2 Bank interface

This subsystem is where the bank will track user trends, manage the earning and redeeming of points and the conversion of points.

#### 1.3 Business interface

This subsystem is where the businesses partnered with the bank will be able to see how their customers interact with them and where they will manage the point distribution regarding their business.

### 2 User interface

	Ideas
Quynh-Ni Au	-Point transaction tracking/history
	-Point balance
	-Zafin (or whatever reward system is called) app interface
	-Add-on to bank app interface
	-Personalized point-redemption offers based on spending trends -Points card; scan your card to add and use points -Credit card; each purchase you get points
	cicult cara, cach parchase you get points
Louis Choiniere	<ul> <li>-Homepage has point balance with featured offer on earning and redeeming points.</li> <li>Buttons to bring you to the other options below</li> <li>-Uses phone RFID/apple pay to be uses to pay with points (can uses account number to use for online shopping)</li> <li>-Transaction history + earning statistics</li> </ul>
	-Can redeem point by buying featured items (From partnered businesses) -A trade points menu where you can transfer points from other systems to this one

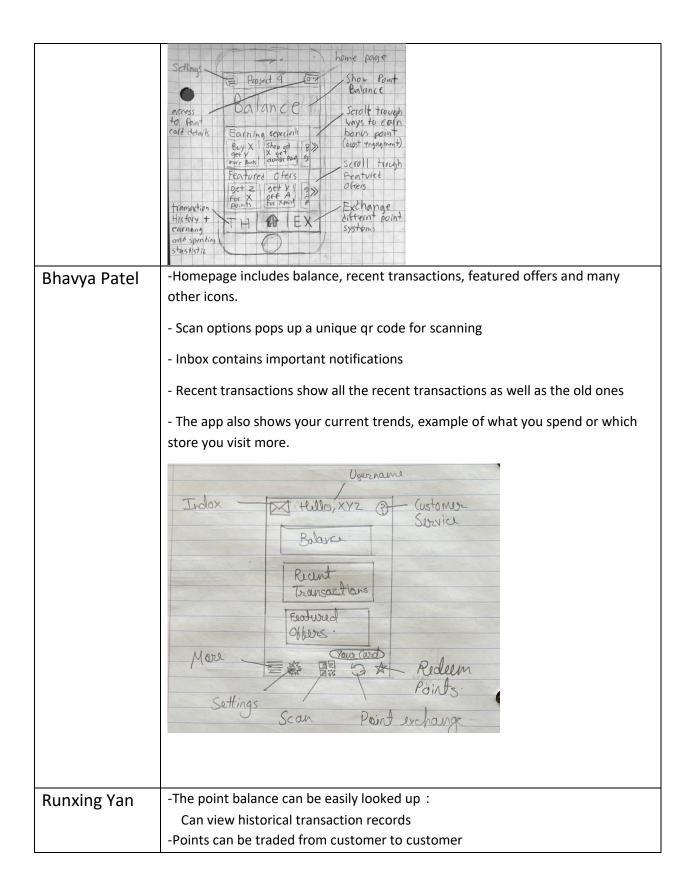


	Image: Bring Bring Hill     Constraints       Image: Bring Bring Hill     Constraints       Image: Bring Bring Hill     Image: Bring Bring Bring       Image: Bring Bring Bring     Image: Bring Bring       Image: Bring Bring     Image: Br		
Yimming Han	-Display the user's points and point grade, so that the customer has an intuitive feeling of points.		
	- Set the transfer function, users can transfer money freely to realize the flow of		
	funds. (QR code can also do this)		
	-!!! Like the "feedback" said- the business can make a "gold-silver-bronze" grade for the user. According to different levels, business will automatically give users		
	different benefits, and these bonuses can be used to "exchange gifts" and		
	"shopping exemption".		
	- Spending and participating in activities accumulate points for users, so you can set up activities to earn points.		

# 3 Bank interface

	Ideas
Quynh-Ni Au	-Online/in app bank account tracks points transactions, data collected by Zafin, organized into trends -Excel information gathered and shown in graph form $\underbrace{\mathbb{E}_{\mathcal{F}} \mathbb{E}_{\mathcal{F}}}_{p_{1}-2ty} \times \mathbb{E}_{\mathcal{F}} \mathbb$
Louis Choiniere	-Makes profiles off spending habits (and makes personalized offers based on that profiles)

	-Takes care of creating and running the "card" (transactions)
Bhavya Patel	<ul> <li>-Redeem points enables the user to buy the available items from the points</li> <li>Point exchange for conversion of points into other points .</li> <li>It also includes a virtual copy of the reward card .</li> </ul>
Runxing Yan	<ul> <li>-To make the app like a fund, so that customers can use points in their account to invest in bank's stock</li> <li>- Rank the customers who have the most points, and give corresponding rewards</li> <li>- Rewards the customers who invite new customers</li> </ul>
Yimming Han	-!!! Like the "feedback" said- the business can make a "gold-silver-bronze" grade for the user. According to different levels, business will automatically give users different benefits, and these bonuses can be used to "exchange gifts" and "shopping exemption".

## 4 Business interface

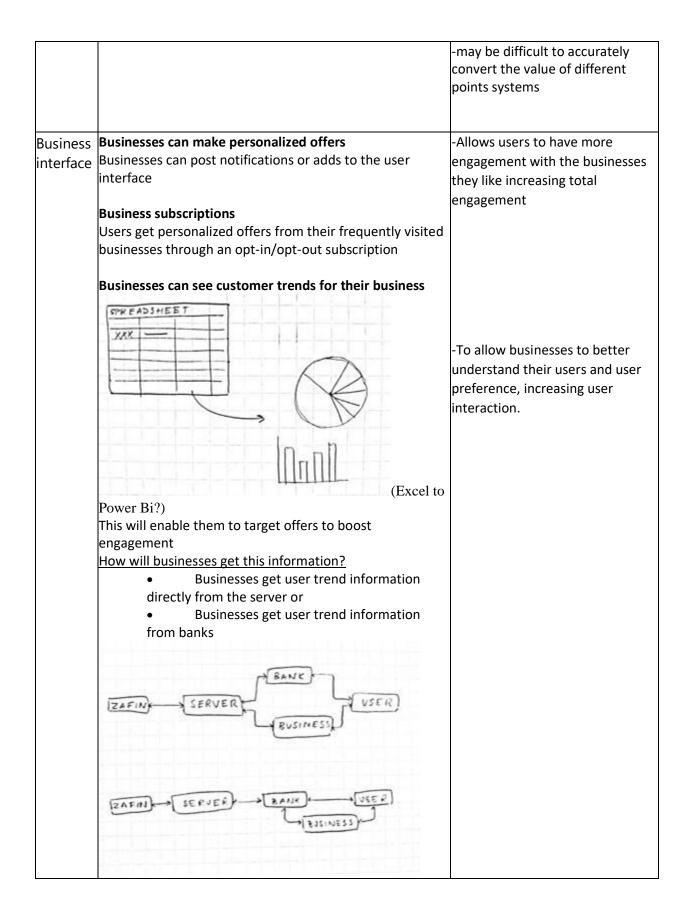
	Ideas
Quynh-Ni Au	<ul> <li>Businesses accept points as payment</li> <li>Businesses offer deals to earn points</li> <li>Businesses offer deals that can be redeemed with points</li> <li>Business interface that shows customer trends for their business (ex. Trends on certain offers or products)</li> <li>Sponsored offers on bank website or app</li> </ul>
Louis Choiniere	-Shows how customers interact with their business -Allows the business to create offers (earn and redeem)
Bhavya Patel	<ul> <li>Point exchange for conversion of points into other points.</li> <li>-It includes balance, recent transactions, featured offers and many other icons.</li> <li>Recent transactions show all the recent transactions as well as the old ones</li> </ul>

Runxing Yan	<ul> <li>Business allows to use points as a payment</li> <li>Points can be exchanged for another currencies (like USD, CAD)</li> <li>Points can be traded from customer to customer</li> </ul>
Yimming Han	-Business can track user's preferences based on their history and cookies.

### 5 Conclusion

This is the final model we decided on; it is a mix of all the ideas proposed above.

	Final idea	Reasons why we chose them
User	App:	-Point balance is essential for the
interface	Points balance	usability of the system
	Transaction history	-Help use to keep track of their
	<ul> <li>Personalized/featured offers</li> </ul>	points
	Ways to earn bonus points (ex. Bringing in	<ul> <li>Personalized/featured offers,</li> </ul>
	new clients, positive bank activity)	Ways to earn bonus points and
	<ul> <li>Milestones to earn rewards</li> </ul>	milestones to earn rewards are all
		to increase engagement with the
	Extension to existing bank apps/website:	system and businesses.
	Con:	
	Difficult to implement without accessing the banks app	-To give uses another way to
		access their account
	How to pay with points:	
	Mobile/digital scanning	-To give user alternative options
	Con:	to the way they earn their points
	What if you don't have your phone	
	Rewards card	
	Points are linked to your bank card	
	Encourages people to use the bank card	
	And phone number	
Bank	User trend information	-To keep track of user to improver
interface	Tracking number of points earned and redeemed at	user satisfaction and engagement
	certain businesses	-To offer bonus point to
	Tracking card activity and positive engagements with the	incentivise positive engagement
	bank	with the bank (ex. Opening a
		savings account)
	Point conversion	-to allow user to pay with points
	- Points are converted to equivalent dollar amount	at different businesses and cash
	-Points are converted to a universal points system	out points



# 6 Wrike Plan

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Divide tasks and establish subsystems • Quynh-Ni A. +4	a r. ++	
-Prainstorm conceptual designs + Quynh-Ni A, +4		
- Guilate conceptual designs - Louis C. +4 Create Presentation - Louis C. +2		
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🐼 🏟 Divide tasks and establish subsystems	9 Oct	Completed
	11 Oct	Completed
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S 🛟 Client Pitch	14 Oct	Completed
S 🚯 Format technical report	17 Oct	Completed
+ New task		
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Deliverable D—Brainstorming.docx	9 Oct Quynh	-Ni Au