HCI 481 - P1

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1.0 - Project Overview

Describe the nature of the project

A mobile application that allows users to easily transfer money to one another via a messaging chat room. Users will set up their preferred bank card once and will then be able to transfer money without having to input their credit information again. During this one time setup, users will also be connecting the application with their bank in order to receive payments instantly and without being prompted for any additional information. Anytime a transaction is completed both parties will receive a small notification, notifying the respective parties that a transaction of payment has been made and by whom.

How you expect your system to be used

We expect our application to be used on mobile devices due to the nature of our application where we want to ensure users have the option and ability to receive and transfer money immediately and with ease. Our application's value proposition lies in its ease of use where anytime someone needs to be spotted for a coffee or lunch, individuals feel confident in knowing that they can immediately pay someone back without risking to forget and making the situation awkward for both parties.

Who is going to use your system

The target audience is young individuals 16-35 years of age, who value social gatherings and find themselves in situations where they are short on cash and need a friend to spot them. These individuals value minimalistic designs and functionality, they do not care for applications that pose a lot of obstacles to get a task done. They simply want it to work the first time and quickly.

The context you expect it to be used

This mobile application will be used to allow individuals to send money to each other in a way that is as easy and quick as sending a text message. It will solely be for the mobile platform because its main focus is to make the process of transferring money convenient. We chose smartphones because that's the best platform to introduce convenience-focused products. We expect users to use

our app solely as a means of sending relatively small amounts of money to other people. We do not expect individuals to be using it to send large amounts of money overseas.

2.0 - Stakeholders

- Users
    - May have background knowledge with similar apps (venmo, apple pay, android pay, online banking apps)
    - Must have a bank account and at least one card linked to an account
    - May need to be prudent about who they hand their phones to, should that person make transactions without the consent of the user
    - Can use the system just for messaging features
    - Value speed and fluidity in systems
    - Would need to know at least one other person using the same system
    - Need not remember their commitments to pay others back
- Banks
    - Can be affected negatively if the app compromises their customer's security (ie: the user will be upset with a bank and/or app)
    - Could benefit the banks directly should there be a small fee associated with sending money
    - Would have to provide some method of access to their system in order to enable rapid sending of money (API or similar)
    - Would need to be equipped to handle financial disputes
- Us
    - Development of a new system is time-consuming and incurs a cost
    - Due to critical security needs, we will always need to respond to security concerns and update our systems and backends as needed
    - Would need to provide server infrastructure
    - Would need to be equipped to handle financial disputes

3.0 Research Tools Overview

Interview

We went around campus asking different students and professors to try their current way of sending money to their friends and family as a way to gain feedback. As the interview was conducted we discovered what needed to be changed or added to our design.

Question posed: “Is there anything tedious about sending money to others online using your current methods”Almost all users expressed complaints about having to enter a security question and a password for every time they try to transfer money to their peers.

Question posed: “Do you have to pay any extra fees as a part of your transfers?” Users that were not under a student plan in their bank posed concerns about having to pay some transfer fee for every transaction made. This was not the case for everyone we interviewed but for the majority.

Question posed: “When you find yourself in a situation where you need to spot someone some cash or need someone to cover a small bill when going out, how do you usually handle those situations?” The purpose of this question was to identify the current method in which users transfer money to one another or if they choose to opt out of the situation. The majority said they would lend money to friends when asked via cash or credit but with the knowledge that the likelihood of getting repaid would be low due to their friends and themselves forgetting.

Try It Ourselves

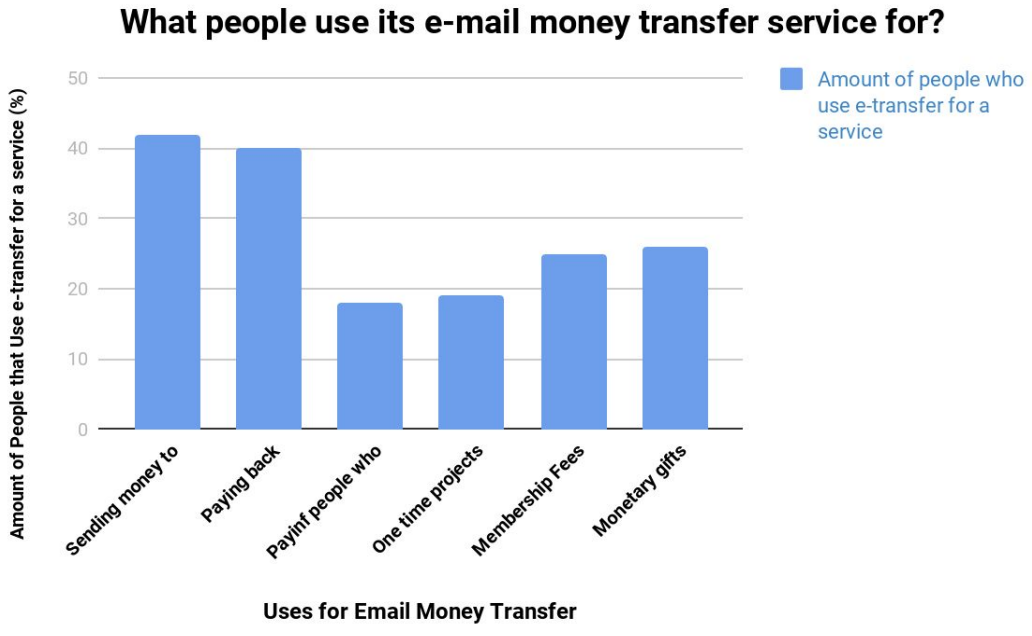
Because we are part of the user group, it is easy for us to imagine the application and process we desire in an app like this. We have discovered several key points that are core to our product when using it, and comparing it to similar software.

1. One time setup for preferred bank card - users do not want to enter information every time they receive or send a payment, it is time-consuming and would defeat the purpose of the convenience aspect
2. Users want to ensure only they can authenticate transactions - by using a mobile device’s built-in biometric security, we can conveniently ensure the real user is the only one making transactions

3. Users should be able to identify who they are sending money to easily - by providing the name and possibly additional information of the person they are about to send money to, the user can be certain the money is being sent to the intended recipient.
4. Users should not be able to mistakenly send money by slips - after the user presses on the money transfer button icon, the “send money” button will be greyed out and unclickable for a period of 5 seconds to prevent accidental screen clicks and to ensure the user reads the recipient name
5. Users should be able to change currency type easily - when typing the amount of money the user is about to send, there should be an option to change the currency type to at least the most popular currencies, this system should be accurate and up to date with global exchange rates
6. Users should be confident that their card information is not leaked or stored anywhere except their phone - All users should be notified of any encryption we use and that we discard card information from their phone immediately if they decided to delete their card payment method

Secondary Research

To get more information on the use of email money transfer, we used secondary research to help develop a solid point of view on the topic. We looked at the 2018 Globe and Mail article: https://www.theglobeandmail.com/globe-investor/personal-finance/e-mail-money-transfer-is-the-better-way/article4190103/, to gain further knowledge on the topic. From this we learnt about the increasing use of email money transfer rather than exchanging money physically. One thing that stood out to us came in a survey conducted by Interac. Where they asked people what they use it’s email money transfer service for, and 40% mentioned using it to pay back someone whom they owe money. We see this as a significant stat because it shows that there is an emerging market for our product.



4.0 - Research Tool Reflection

The two primary research methods we used were “Interview” and “Try it Ourselves”, supplementing those two research methods was some secondary research. We believe the first method went very well because we were able to get clear concise answers from the different students and professors that we interviewed around campus. From these, we were able to come to a general consensus to answer the questions we had. This is a good sign because our target audience is young people between the ages of 16-35 who often find themselves in situations where they are short on cash and need a friend to spot them. So it's fair to say that interviewing students at the University of Calgary covers a large part of our desired audience. So the answers we received could potentially be projected to the larger population.

The other research method we used was “Try It Ourselves”. Here we essentially thought about the key features and processes that we would like to see in an app like this. We think this was somewhat successful because it allowed us to bring to light key features that we need to include in our final product, which could lead to a better prototype in the future. This was also beneficial since it made us think more closely about the experience actual users may have. But it also had flaws since with this method we weren't out getting the public opinion on the product. So some of the features which we thought were important, may not be necessarily important to the majority of people in our target audience.

Something we would do differently next time would be to interview not only people at the University but also young people around the city in social places, like the mall, or the coffee shop. From this, we would get an even better answer to our questions since we will be talking to a wider variety of people. We would also add some rating scale question to the set of questions we ask so that we can also add a quantitative value to what people think of our product and the problem it can solve.

5.0 - Task Description Overview

Scenario 1: School

User 1 is at school and messages User 2 is asking if they are willing to pick up a coffee for User 1 on the way to class and promises to transfer the price of the coffee. User 2 shows up to class with the coffee, and User 1 QuickPays™ User 2 the amount owed.

Scenario 2: Nightlife

User 1 and User 2 are outside the club after a night of partying, trying to figure out how to get home for the night. They decided on calling a taxi or an uber to pick them up, but realize that both of them don't have any cash to pay the other back. User 1 and User 2 decide to split the bill by transferring money over to whoever pays for the uber. Once the uber is booked or the taxi is called for, the price for the ride is known. User 1 pays the driver through their card. User 2 QuickPays™ User 1 the amount owed.

Scenario 3: Stampede

User 1, User 2, and User 3 are at the stampede together. User 2 and User 3 are out of cash and all of them didn't bring their card in order to avoid getting it lost on rides. User 1 has enough money to buy 3 ride tickets for themselves and the two friends. Later on when User 2 and 3 get home, they both QuickPay™ User 1 for the value of 3 ride tickets.

Scenario 4: Second Hand Goods Market

User 1 is selling his used item on Facebook Marketplace or Kijiji, and they decide to meet up at a local coffee shop to show the item to User 2. User 2 shows up at the coffee shop without any cash. User 2 makes sure the item they are trying to buy is in a fair condition relative to the asked price. They negotiate and come to a price that they both agree on. User 2 QuickPays™ User 1 the negotiated price for the item.

Scenario 5: Traveller Stuck Abroad

A User is stuck abroad in China and needs money fast for necessities. They contact their parent on QuickPay™ and request some Yen. The parent can easily transfer the requested amount in Yen for their child.

Scenario 6: Small Businesses

User 1 wants to get her Eyelashes done by an eyelash technician. She messages her technician via QuickPay and books an appointment. After her last appointment is done, she pays her technician on QuickPay with tip and never has to carry cash around.