## *Names*

**Grant Weikel** - Edited and created questions for the final question list, conducted an interview for the user group of King County Residents working two jobs, created and completed the entire final report with information from teammates.

**Andrew Saputra** - Created seven of the initial questions to be used in interviews, and interviewed two people in the user group of SU students who live on campus. Assisted with the reflection and analysis sections of the report.

**Raviteja Poosala** - Conducted an interview for the user group of King County residents who work two jobs. Created his own questions to use for his interview of participant number three. Assisted with the reflection section of the report.

**Kalyani Erra** - Met with team and discussed questions during creation. Conducted an interview with a personal set of questions.

## *Project Description*

We decided to go with a digital credit card that houses all of your credit cards on one single card for our project. This way, you can save time fumbling in your bag for the right one, and you can have less clutter. Also, the card is meant to have a companion app that allows for easier tracking of spending from all the cards stored on it and additional safety features like locking cards from use if the card is lost or stolen. Additional safety features are intended like a

fingerprint sensor on the card itself to prevent theft and a button to quickly and easily switch between the different cards on the device.

## *Description of Participants*

Andrew recruited our first participant through his capstone project team. They are a Seattle University student who lives on campus to fit into our corresponding user group. Andrew reached out to them, set up a time to meet for the interview, and conducted it online.

Andrew also found our next participant through the SU CS club. He also is a Seattle University student who lives on campus, so he is a valid candidate. Andrew reached out to them and set up an interview time to conduct the questioning.

Raviteja recruited our third participant. She is a friend of his and fits under the user group of King County residents who work two jobs because she is a kindergarten teacher and works as chef at Shef.

Our fourth participant is a King County resident who is working as an office intern at a housing complex in Kent washington and also as the takeout hostess at BJ's at southcenter mall. She was recruited by Grant because she is his girlfriend and was happy to help. The interview was conducted in person with notes filled in by phone.

## *Description of Study*

_____To conduct the study, we met together and created the question list to conduct the interviews with. Andrew wrote down an initial list of seven questions of varying types to target

different usage preferences and difficulties with using credit/debit cards, and what types of features would be useful to card users or even non card users. We created the following workflow questions in order to help us understand the specific ways in which people are using their credit/debit cards:

- How often do you use a credit/debit card to make a purchase?

- How often do you misplace your credit/debit card?

- Do you use your credit/debit card online or in person more? Why?

- Do you think that having a single card to hold all of your cards would save you time during your busy schedule?

These questions were created by learning more about our participants' specific usage of their cards on a day-to-day basis. The last one is specifically to gain insight if a product like the one we are designing would indeed be desirable in the first place. Next, we have our goal-oriented questions to figure out our user's motives for using cards in the first place and why they use it over the alternatives:

- What's the main reason you use a credit/debit card?

- What is the main benefit of using a credit/debit card on campus?

The second one in this category is targeted at the user group of SU students who live on campus. We wanted to gain additional insight into how using cards could specifically help someone living on a college campus. Next, here are our system oriented questions to try and learn more about what functionality card users like and dislike to help inform us of superior design changes to make:

- How do you carry your credit/debit card with you on a day to day basis?

- If you could change one thing about the process of using a credit/debit card, what would it be?

- Why do you use a credit/debit card instead of cash?

Learning about what users don't like in similar products can highly inform us on what design decisions could make ours stand out and be more effective in the end. Finally, we have our attitude oriented questions, in order to further inquire about the users desires with functionality and feelings toward features or lack of features:

- Do you have multiple credit/debit cards?

- What is your least favorite part of using a credit/debit card?

These questions help us to see if the user would be a candidate for the product, as the basis is combining all your cards into one, but also discovering pain points in the usage of regular cards, in hoping to find out how to address them in our product.

## *Analysis*

The participants' goal is that people want to have a single source where they can store all of their credit/debit card information. Carrying multiple cards can be annoying because it's easier to misplace one, and fumbling for the right one in your wallet can be a burden. The other reason they do not want to use multiple cards is that it is hard for them to keep track of all their bank accounts at once.

We learned that users used their cards at least once per day in most cases, often times more than that. Yet, we found the use cases in each group were slightly different. The first group is workers who have two jobs. They use credit cards to use credit cards such as cashback and building credit history. The second group is students who live on campus who like to use credit

cards conveniently. While their use cases were slightly different, it was clear that the main pitfalls of using multiple cards at once were the annoyance of getting them out of your bag to use, and the account tracking aspect. Sometimes just the carrying of a card at all because virtual cards like Apple Pay and Google Pay were also mentioned multiple times as the preferred alternative. These virtual cards fulfill their desire partially. However, these virtual cards do not provide bank statements. They still need to open their bank account to keep track of their expenses.

## *Reflections*

In doing this survey, we learned about interviewing with the intent of improving a design for the users themselves. This ended up being an interesting case because our project shifted quite a bit after analyzing the responses from the interviews. Originally the main product was the card that allowed the user to have all their credit/debit cards in one with easy switching, and then a partner app that helps with security and other features. However, after analyzing the responses the main focus of the product is the app itself where the user is able to instead pay with their cards using their phones only, similarly to Apple Pay or Google Pay. This app however would improve on the pitfalls of those services by allowing use on all card readers and combining bank account tracking within the app itself to make payment tracking much easier with multiple cards. We did not foresee the project changing in this way, but it makes sense given the somewhat mediocre original design. Some of the difficulties in the process were communicating with the group and using consistent questions for interviews. Also, crafting questions to be useful for design feedback was difficult for some.

## _Design_

_____When observing the responses from our interviews, it's clear that many people are using their credit cards in very similar ways and carrying them with them in very similar ways. In general, it seems that there are similar sentiments all around in terms of usage and what works well and what doesn't. It's apparent that a product like the one we are designing around would be desirable to a degree since all the participants agreed that having all cards combined into one would indeed make things easier for them. One thing that popped up multiple times was the idea of having your cards on your phone with things like Apple Pay and Google Pay. This indicates that perhaps the main focus of the design in the end should perhaps be in the app itself and simply offer the physical card as a free feature for those who desired to have the card experience. This way, you can get the best of both worlds and people who want the card can still receive it and people who would simply only want to use the app still have that option. Additional features that apple pay doesn't include would make it stand out a lot like the ability to have gift cards, and potentially have more compatibility. This shifts quite a bit from our original idea of just the card and shifts it more toward a card management app with the option of a card if desired, because based on our questions, people use their card in person slightly more than online in most cases, even though that has been skewed a bit by the global covid-19 pandemic, as one user noted. This means the app still needs to have the features to shop effectively in person such as card scanning and account tracking. Having the ability to track every bank account in one app would be very useful according to one of our users who noted that one of the pain points in having multiple cards was keeping track of the accounts and the charges being made on each. Keeping these all on the app itself would definitely streamline the entire account tracking process. During one of the interviews conducted the user even mentioned the possible ability to add gift cards to the

app/card as well and that would be an awesome and unique feature as well. Overall, I think that these interviews have shown that cards are slightly outdated, and while streamlining them is super useful still, the ultimate goal is to have all the card functionality be on your phone since you always carry that with you anyway.

## *Appendix*

Andrew Saputra

4/10/2021

SU Students who live on campus

1.  [Workflow oriented] How often do you use a credit/debit card to make a purchase?

I use it pretty often, definitely at least once a day.

2.  [Goal oriented] What's the main reason you use credit/debit card?

Mainly for buying groceries or ordering food from outside

3.  [Workflow oriented] How often do you misplace your credit/debit card?

Rarely, I usually make sure to check if my cards are in my wallet

4.  [System oriented] How do you carry your credit/debit card with you on a day to day basis?

I carry them with me everywhere I go. Even if I'm not going to be using it, I still carry around my wallet everywhere.

5.  [Attitude oriented] Do you have multiple credit/debit cards?

No, I have one credit card and one debit card.

6.  [Attitude oriented] What is your least favorite part of using a credit/debit card?

I guess it's a little annoying to take them out and swipe them, as opposed to just using apple pay (which some credit cards support)

7.  [Goal oriented] What is the main benefit of using credit/debit card on campus?

When I lived on campus, you could pay for meals at C street using your credit/debit card which was nice.

8.  [System oriented] If you could change one thing about the process of using a credit/debit card, what would it be?

I think nowadays, using your phone (apple pay for example) is becoming more and more prominent. I think in the future we won't be carry cards, rather just our phone with us. So I guess I would speed things up and make credit cards virtual

9.  [Workflow oriented] Do you use you credit/debit card online or in person more? Why?

I use them in person more, but I also use them online as well, just not as frequent.

10. [Workflow oriented] Do you think that having a single card to hold all of your cards would save you time during your busy schedule?

Definitely, that would make it a lot easier to carry and pay for things.

Kalyani Erra
4/10/2021
**King County residents who work two jobs**

1. [System Oriented] How easy do you find the process to apply and get approved for the credit/ debit cards?
Ans. I don't find it easy at all as I feel like it's much easier to get a debit card for any bank accounts that we create while applying for a credit card there is a long process which checks your credit history with an extra hard inquiry.

2. [Goal oriented] Did you find it hard to get a credit/debit card when you applied for the first time?
Ans. It was really hard to get a credit card approved for the first time as I have no credit card history. Whereas applying for a debit card is super easy as it does not require any history.

3. [System Oriented] So how you got your first credit/debit card approved?
Ans. There is only one credit card company which I got to know was discover which gives student credit cards but there could be some more credit card companies which can provide but it was not available for all. So, I went for first those credit card companies and then a better one later on when I have built my credit history. On the other hand, it's super easy to get a debit card by calling on customer care.

4. [Workflow oriented] So, any suggestions for improvement for applying for credit/debit card as you find it tougher than debit cards?
Ans. A hard inquiry that incurs some harm to your credit history when you apply for a credit card. So, why not a soft inquiry could be done on the credit history or remove hard inquiries from the records when the application is rejected.

5. [Workflow oriented] How often you use a debit /credit card to make a purchase and why?
Ans. I never use cash. I use credit cards over debit cards almost always because of some benefits like cashback on the purchase and using credit cards helps maintain or improve the credit history. Also, a quick small loan if your bank balance is short. Which debit card does not provide. I would use a debit card if I can't use a credit card.

6. [Attitude oriented] What is the least favorite part of using credit/debit card?
Ans. For credit card, we need to keep track of our balances for high credit limits on due balance, as I will have to keep track of the bill amount so as to keep up with my credit score, while it does not matter if I timely pay after I get the bill. But also, debit cards have a disadvantage as well, which has no limits on using any amount available within a month.

7. [Workflow oriented] What benefits or disadvantages do you find with the higher or lower credit limits provided by a credit card?
Ans. I would prefer higher credits at least for credit history. High credit limits than your actual account balance is a benefit in time of need when needed, you could pay it next month with some interests incurred without separate application of loan and hard inquiry.

8. [Attitude oriented] Is there any company's credit card/debit card that you have but you don't use and why?
Ans. I have an Amex and google sync credit cards but I rarely use it because it doesn't work in most of the places and also, I have a debit card from chase which I never use because I would rather prefer to use credit card more often to maintain my credit score.

9. [Workflow oriented] Do you store and prefer to use your credit cards/debit cards in your phone with Apple pay or Google pay instead of keeping cards and why
(benefits/disadvantages)?

Raviteja Poosala
4/11/2021
**King County residents who work two jobs**

1.[Workflow oriented] Is it harder for you to track every month's spending especially if you are having multiple credit cards?
  Yes, maintaining multiple credit cards is very hard to track monthly bills.

2. [Goal oriented] When you applied for a credit card for the first time?
I applied for a credit card when I started working for Microsoft

3. [System Oriented] which e-commerce site gives better offers on credit card shopping?
  I use Amazon a lot to do online shopping because of its benefits and discounts on the items using a credit card. I also get good offers from Costco

4.[Workflow oriented] what benefits you get from using a debit card over a credit card?
  purchases made with a credit card are safer. This is because any unauthorized debit card activity results in funds being withdrawn directly from your bank account. Debit cards often don't come with anti-fraud insurance.

5. [System Oriented] Will you manage your day without having a credit card? if yes, how?
I regularly use credit cards and I cannot expect my day without a credit card.

6. [Attitude oriented] How to properly use credit/debit cards to avoid cyberattacks?
Change pin once a month.
Do not use credit/debit card at the public internet
Don't share your card details with anyone
If you find any security issue, immediately contact customer care to avoid further loss

7. [Workflow oriented] How you will avail of online shopping offers via credit cards?
Generally, once a week, I get offers from an eCommerce site. It says if I do this range of shopping amount I will get a good discount. I will use that offer which saves me money

8. [Attitude oriented] which bank offers better credit card plans with a low rate of interest?
BOI I'm using it for 5 years and it has a good reputation and benefits

9. [Workflow oriented] Any suggestions for how to schedule automatic bill payments through credit or debit cards?
 This option is straightforward. When you are entering your credit card number for monthly bill payments you will find this option asking you to select automatic payments. However, I advise you not to choose this option because it's automatic and sometimes it deducts the amount even you don't choose their service.

10. [System Oriented] how you will clear your credit history when the clearance amount is huge?
I will use my savings amount to clear credit card bills if it is a huge amount.

10.[Attitude oriented] What are the favorite part of using a credit card?
They are very easy to use, shopping offers with credit cards, automatic bill payments, no foreign transaction fees, no inked to checking/savings accounts.

Grant Weikel

4/11/21

**Interview for King County Resident Working Two Jobs**

1. Uses cards very often, at least once per day but often many more times than that.

2. The main reason she use cards is for the convenience and lack of germs

3. Loses one of their cards at least once per year. It is very annoying as it puts a stop to all purchases and needs a replacement.

4. Carried her cards in a wallet inside of her purse as the main method.

5. Yes, 3 debit cards, one for work, one for regular spending, and one for savings. One credit card. Sometimes it gets confusing to remember which is which.

6. The machines that take payments are slow and inconvenient. Also fishing the correct card out of the wallet.

7. If she could change one thing about the process, she would make the machines work faster so she could simply tap and leave.

8. Uses her cards slightly more in personal, but it's mostly even.

9. Having one card for them all would be desirable because it would save her time.

10. The main reason she uses a credit/debit card is for convenience and because it's the main method of payment in our more tech centric world where cash is being outdated.

Andrew Saputra

4/10/2021

SU Students who live on campus – Nick Nguyen

[Workflow oriented] How often do you use a credit/debit card to make a purchase?

At least once or twice every week

[Goal oriented] What's the main reason you use credit/debit card?

Groceries, paying rent, shopping, eating out, delivery

[Workflow oriented] How often do you misplace your credit/debit card?

Often, I always misplace my wallet with my cards

[System oriented] How do you carry your credit/debit card with you on a day to day basis?

In my wallet in pant pocket, or in a side bag.

[Attitude oriented] Do you have multiple credit/debit cards?

Yes, I have two cards.

[Attitude oriented] What is your least favorite part of using a credit/debit card?

Misplacing my debit card, also in quarantine having to physically pass my card to the cashier to use gets me concerned sometimes

[Goal oriented] What is the main benefit of using credit/debit card on campus?

On campus, there's lots of businesses so having a card to grab food or basic commodities is very useful

[System oriented] If you could change one thing about the process of using a credit/debit card, what would it be?

Removing an expiration date on my card, even though it does take a while to expire, it is inconvenient to have to renew


[Workflow oriented] Do you use you credit/debit card online or in person more? Why?


Online a lot more due to quarantine, I find myself using online mainly for shopping or food delivery, whereas otherwise I would use for groceries in person.

[Workflow oriented] Do you think that having a single card to hold all of your cards would save you time during your busy schedule?

Yes, it would reduce the stress needed to check on both card accounts and reduce the risk of misplacing one or the other.