Deliverable 3

Group 2: Mobile Banking Audrey, Lola, Tara, Chris

Usability Test Script

Take the participants to:

https://www.lucidchart.com/documents/view/f35d78ba-11a7-4c55-8237-9b1 64d8d7831/0

Hi, ______. My name is ______, and I'm going to be walking you through this session today. Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything. You probably already have a good idea of why we asked you here, but let me go over it again briefly. We're asking people to try using a mobile phone app that we're working on so we can see whether it works as intended. The session should take about an hour.

The first thing I want to make clear right away is that we're testing the app, not you. You can't do anything wrong here. In fact, this is probably the one place today where you don't have to worry about making mistakes. As you use the app, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help to us. Also, please don't worry that you're going to hurt our feelings. We're doing this to improve the app, so we need to hear your honest reactions.

If you have any questions as we go along, just ask them. I may not be able to answer them right away, since we're interested in how people do when they don't have someone sitting next to them to help. But if you still have any questions when we're done I'll try to answer them then. And if you need to take a break at any point, just let me know.

I may record and/or document this session via video or audio capture, so don't be alarmed. And it helps me, because I don't have to take as many notes.

Do you have any questions so far? OK. Before we look at the app, I'd like to ask you just a few quick questions.

First, what's your occupation? What do you do all day? Now, roughly how many hours a week altogether—just a ballpark estimate— would you say you spend using the Internet, including Web browsing and apps, at work and at home? And what's the split between app use and browsing—a rough percentage?

What kinds of apps do you typically use? Do you have any favorite Web sitesapps? OK, great. We're done with the questions, and we can start looking at things.

Bring the user to the homepage of the app.

First, I'm going to ask you to look at this page and tell me what you make of it: what strikes you about it, whose app you think it is, what you can do here, and what it's for. Just look around and do a little narrative. You can scroll if you want to, but don't click on anything yet.

Allow this to continue for three or four minutes, at most.

Thanks. Now I'm going to ask you to try doing some specific tasks. I'm going to read each one out loud and give you a printed copy. I'm also going to ask you to do these tasks without using Search. We'll learn a lot more about how well the app works that way. And again, as much as possible, it will help us if you can try to think out loud as you go along.

Hand the participant the first scenario, and read it aloud:

You are on the run and are at the grocery store. You are unsure of the current balance of your bank account as you bought a gift for your son's birthday earlier that day. How would you check your bank balance?

Check the balance of all your bank accounts.

Allow the user to proceed until you don't feel like it's producing any value or the user becomes very frustrated. Repeat for each task or until time runs out. Thanks, that was very helpful. Now we are going to move on to the other task.

Hand the participant the second scenario, and read it aloud:

You are at the local flower shop and need to buy an extreme amount of flowers for Valentine's Day. Your bank account is 60 dollars short of the total cost and need to transfer that amount between your several accounts. How would you perform this task?

Transfer \$60 between two accounts.

Allow the user to proceed until you don't feel like it's producing any value or the user becomes very frustrated. Repeat for each task or until time runs out. Thanks, that was very helpful. Now we are going to move on to the other task.

Do you have any questions for me, now that we're done?

Thank you for your time.

Script adapted from Krug.

Individual Usability Test Notes

Tara Knutsen

Date: February 28, 2016

Location of the study: Facilitators home

Duration of the study: 20 Minutes

Participant: Female, 20 Facilitator: Tara Knutsen

For my usability test, I studied a female in her early twenties. She matched our target user being that she is a novice when it comes to technology and that she uses

her banking app while on the go at the store. The location of the test was in my living room. This gave me the ability to control the environment and remove any distractions such as other people. This person is already an acquaintance, so recruiting her was not difficult. The study took approximately 20 minutes to conduct. This study was conducted in the evening on Sunday, February 28th.

Initial Reactions to the App Before Running through Scenarios

I presented the subject with the login page of the app. I asked her to look at it for a few minutes and tell me what she thought the app was and her initial impressions. She said the following statements:

- "It's a mobile banking app."
 - Her reasoning:
 - It says "Mobile Banking"
 - It asks for a PIN number

Scenario 1: Check Balance of All Accounts

I asked the subject to then check all of her account balances while thinking aloud. She accomplished this task successfully and took the following path:

- Click "PIN" box
 - Enter PIN number and click "GO"
- This took her to the accounts homepage
 - She instantly knew that "this is your account info"
 - It shows "accounts" and lists them
 - It also shows balances of accounts

Scenario 2: Transfer \$60 from Savings to Checking

I then asked the subject to transfer \$60 from savings to checking. She took the following steps and made the following comments:

- Pressed "Transfer" on the tab at the bottom of the screen.
 - "Transfer means transfer. Not sure what else it could mean."
- She then pressed the drop down labeled "From" and chose savings
 - "It's at the top and seemed most logical."
- She then pressed the second drop down labeled "To" and selected her checking account.
 - o "It's sequential."

- She then entered the amount (\$60)
 - "The label is self explanatory."
- She then pressed the submit button

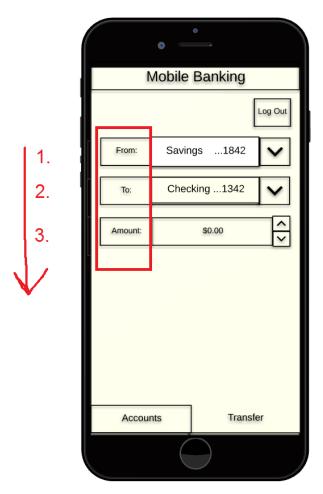


Figure 1 - The steps that the user took started from the top action sequentially to the bottom action.

Her Afterthoughts and Comments

I asked the subject what she found to be most challenging but she found the process as "It makes perfect sense. The design looks like my banking app that I use." She didn't find any issues with the app. She said the transfer page had just the right amount of information on it.

She said that the app looked like it could use some color. I informed her that this was next in the process of iterative design. She felt that the app would look good with a blue interface because it would look "regal". She also said that the "mobile banking" header should be bigger.

I asked her if this app would benefit her. She felt that it would if she had multiple bank accounts. She said that it was less steps than the current app she uses (BECU).

Chris Kubec

Date: February 28, 2016

Location of the study: Facilitator's Workspace

Duration of the study: 30 minutes

Participant: Female, 31 Facilitator: Chris Kubec

The completion of this usability test took place in my office at home. My test subject was a female in her early 30's, who works as a teaching artist for the Seattle Symphony, teaching children about instruments and early elementary music. She spends approximately 30 hours a week using technology web based and application based with the split between them being approximately 50/50. Her many uses of technology include checking social sites such as Facebook, Tumblr, Instagram, Pinterest, and uses her mobile banking app from BECU. With her favorite site being Instagram. The test subject is an arts major graduate who is less technically proficient busy on the go user who fits into our intended user segment. Overall the process of completing the usability study took approximately 30 minutes.

Initial Reactions:

The initial reaction to the low-fi prototype starting out was somewhat mixed. She started by pointing out that she wished for the application to be more eye catching. She also pointed out that she enjoyed the simplicity of the design that she noted she could tell she was looking at a banking application from the fact it had a simple PIN box(Figure 1 below). One thing to note was that she stated the fact that she liked the fact the PIN entering text box was large enough that she felt she wouldn't miss click the box. Her overall impression of the application was that its primary priority was to return a status of checking one's bank accounts.

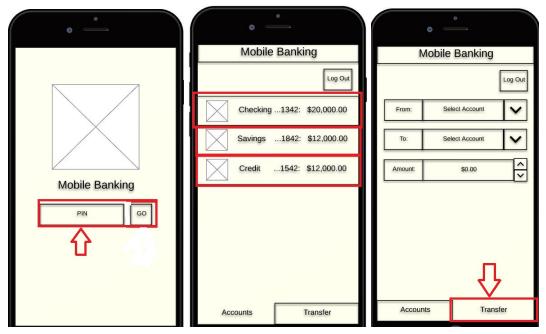


Figure 1: Login Screen Figure 2: Account Screen Figure 3: Transfer Page

Scenario 1 Check Balance:

Starting with our first scenario I asked the user to check her balance. This task went relatively smoothly, she said she would enter her PIN. Then hits the Go button, reaching her accounts page. Her instinct at the account screen was to want to click one of the account boxes to see any transactions in process(Figure 2 above). Giving the feedback that the convenience of quickly accessing her account was nice and easy. Also after finishing the scenario she quipped that she thought the scenario was a joke since it was such a quick action.

Scenario 2 Transfer 60\$ Between Two Accounts:

With the second scenario the subject was asked to transfer 60 dollars from one account to another. The user said she liked the simple handy transfer tab at the bottom, saying she instinctively knew clicking the accounts button would lead her back to the previous screen once she moved into the transfer tab(Figure 3 above). Starting with clicking the from dropdown she picked her savings. Then moved onto the to dropdown and moved onto the amount selection tool. She disliked that the amount was set to 60 dollars and she couldn't type in her own amount. Moving on she enjoyed the large submit button leading her to the temporary confirmation page.

Concluding Thoughts:

Finishing the scenarios in a timely fashion we turned the usability study towards direct feedback at this point. The user had several questions about the application

stating that she had a iPhone, she noticed the application had a logout button and assumed to get out she would just press the giant iPhone home button at the bottom of the device to exit. She also enjoyed the straightforward visual queues that helped her navigate through the application to complete her tasks. She also stated she was confused with the boxes that had X's through them throughout the application to which I explained that those were place holders for some kind of image or logo.

Lola Howell

Date: February 28, 2016

Location of the study: Participant's Apartment, Tacoma, WA

Duration of the study: 30 minutes

Participant: Female, 50's Facilitator: Lola Howell

The person I interviewed for this usability test for our mobile banking application is female, in her 50's, and she is non tech savvy. She uses her bank's mobile banking app primarily when out of the house, to check balances or complete transfers. She never uses Android phones, the current device she owns is a iPhone6. She uses a Mac to complete most of her tasks when she is at the house, because as she pointed out "The bigger screen is easier on the eyes." She is my acquaintance and was sincerely interested in participating in the usability test.

Initial Feedback

I took the participant to the website of the prototype https://www.lucidchart.com/documents/view/f35d78ba-11a7-4c55-8237-9b164d8d7831/

I asked her to look at it and tell me what are her first impressions, what does she think the application is for and what does she anticipate to see on the next screen. She provided me with following answers:

- "It's a mobile banking application, it seems like it would be easy to use. I asked her why she think that and her answer was: "To get in all you have to do is type in the PIN and press Go."
- "On the next screen I think I will see the accounts and their balances."

First Scenario - Check the balance of all your bank accounts.

I asked her to accomplish the task of checking the bank accounts and think out loud while doing so. The task was accomplished as follows:

- She clicked on the "PIN" area and typed in the pin on the keyboard as if she is typing it in on the phone. Then she clicked "Ok".
- It took her to the next screen with account balances. Her expression was "Wow, so fast and there I am, all my accounts and balances are here for me to see." However she said that it doesn't let her know that she is in the "Accounts" right now, since word "Accounts" just floating there. (Figure 1).

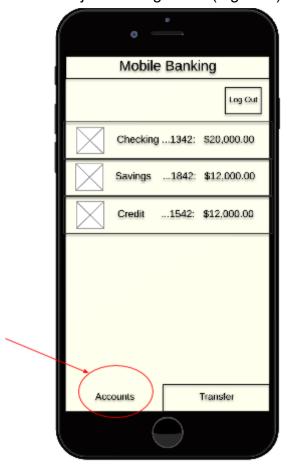


Figure 1. Accounts

Second Scenario - Transfer \$60 from Savings to Checking Account.

As previously I asked her to accomplish the task of the transferring money while thinking out loud. The task was accomplished as follows:

- She clicked on the "Transfer" at the bottom of the balance screen. She said that she is expecting the form that she can fill to show up on the next screen.
- On the next screen she said it was missing something. When I asked her to carefully look and tell me what is missing, she said it was the "Complete Transfer" button. When she was ready to continue she clicked on the drop down menu for the "From" option, picked the "Savings" account. Then she pressed on the drop down menu for the "To" option, picked "Checking" account. Then she

clicked on "0.00" space and wanted to type in the amount, however it wouldn't let her. Then she clicked on down, then up arrow and "60.00" showed up in the Amount area. She commented that it was confusing and wished she could "just type in the amount". She clicked on "Submit" and got confused again it took her a while to realise that she was automatically transferred to the "Accounts" screen and now can see the outcome of the transfer. She said that she was expecting the confirmation page, letting her know that the transaction was successful instead of being transferred (Figure 2).

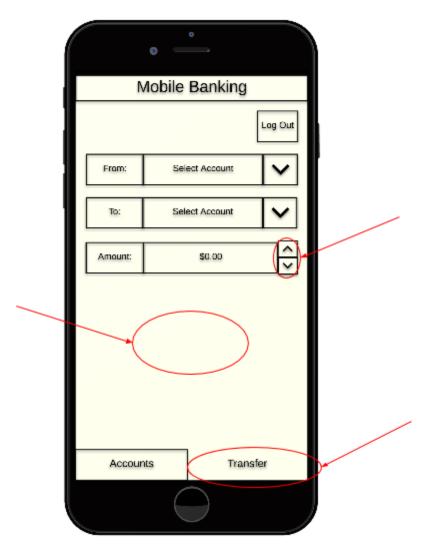


Figure 2. Transfer

Q&A after the Usability Test

I asked about overall experience, she commented that it was easy and fast and she would like to see her bank to adopt something like this. However, she said there was some confusion on some screens that she pointed out, especially the process of having to scroll up and down to get the amount to show up in the transfer screen.

Audrey Chavarria Calderon

Date: February 28, 2016

Location of the study: Participants dining room

Duration of the study: 30 minutes

Participant: Female, 40

Facilitator: Audrey Chavarria Calderon

The person I decided to ask to do the usability test was a female in her 40's. She doesn't know a lot about how to do the advanced stuff on her phone but she does uses it for messaging, calling, surfing the internet, checking Facebook and checking her banking on the go. The testing took place in the dining room of the test person. The person is a family friend. She was told that she should be as honest as possible and that my feelings would not be hurt from honest feedback. The study took about 30 minutes and took place on Sunday, February 28 in the afternoon.

Initial Reactions to the App before Running through Scenarios

The first thing I did, after discussing the script with the subject, was to ask her what was her initial reaction to the paper prototype in front of her.

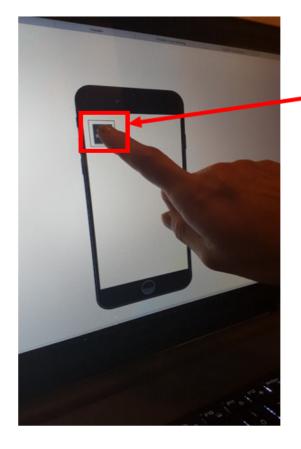
- She said this looked like an "app for banking" that showed a logo and that she would need to put in her pin and then press the Go button to move forward.
- She described that after she clicked on the pin box and typed in her pin and pressed on the "Go" button the screen would change to reflect her account balances.

Scenario 1: Check Balance of All Accounts

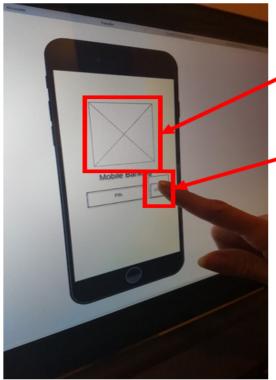
After getting her initial reactions to the app I read the first scenario to the user and asked her to do it and talk her mind out as she went through it.

- Click "PIN" box
 - Enter PIN number

- She was able to figure out how to enter her pin.
- o She pressed the "Go" button to move forward
- This took her to the accounts homepage
 - She said she would press on the numbers of the first account to see all transactions. And when she wanted to come back she would probably press where the Accounts tab is showing now.
 - She said Tabs didn't seem to stand out as much as they should and that she had mostly seen tabs at the top as opposed to the bottom.

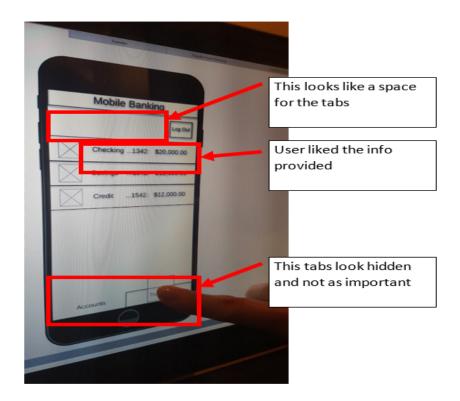


Clicked on App Button to start app



Easy to Find and knew its purpose

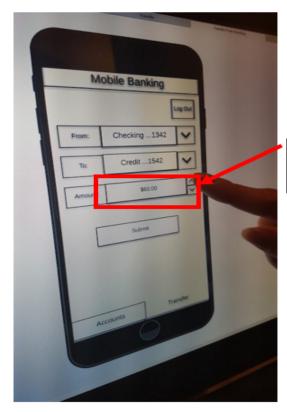
Easy to Find and knew its purpose



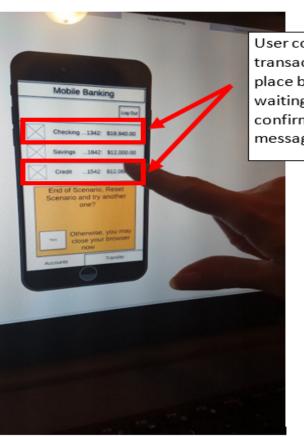
Scenario 2: Transfer \$60 Between Two Accounts

I then asked the subject to transfer \$60 between two of her accounts.

- Pressed "Transfer" on the tab at the bottom of the screen
 - She stepped through the app from top to bottom fairly smoothly.
- She first pressed the drop down button on the right of the text box labeled "Select Account" and choose Checking
 - "I always start from the top"
- She then pressed the second drop down button next to the "Select Account" and selected her credit account.
- She pressed the up arrow button to increase the amount to "\$60"
- Then she pressed "Submit"
 - She could see that the transaction took place but it she was still waiting for a confirmation message.



User Liked interface and how short and easy it was



User could tell transaction took place but was still waiting for confirmation message

Her Afterthoughts and Comments

After the testing was over I asked for her impression of the app.

She said that an app like this "saves her time from going to the bank and making payments and also lets her check her balances wherever she goes".

She said that both scenarios were "Really fast" and "very smooth."

She said that the tabs at the bottom seemed "a little bit hidden." She said that given the fact that the current app's purpose is to do these two things they should have been more visible. She said also the way the tabs work at the bottom is a "little weird." Since you would normally see tabs, "like in folders" at the top and not at the bottom.

She also said that at the end of the transfer she still was "waiting for a confirmation message" just to double check that her transaction was successful, maybe even with a confirmation number for her to see and save for later reference.

Report of Usability Tests

Date of Report: 2/29/2016

Prepared by: Tara Knutsen, Lola Howell, Chris Kubec, Audrey Chavarria Calderon

Location of Tests: Tacoma. WA

Executive Summary

The main goal of the usability tests that we conducted is to see if the mobile banking application is being used as expected. It was our intention to recognize user's pain points when using our mobile banking application during usability tests. We have asked four individual participants to complete two main scenarios, check bank account balances and to transfer \$60 between two accounts, using our mobile application. Each session took between 20- 30 minutes and two of them were completed at the participants' homes, while the other two occurred at the facilitators' homes. All four participants were female ages from 20's to 50's. All four participants were 100% able to complete both scenarios. Below is a report of the findings and recommendations as well as the statistics of the participants.

Methodology

Who we tested

Our mobile banking application was evaluated by four participants, who are non-tech savvy users who mainly use their mobile banking applications outside of the their homes.

Age		Gender	
18-25	1	Women	4
26-39	1	Men	0
40-59	2	TOTAL	4
TOTAL (participants)	4	(participants)	

What participants did

The usability test was conducted on low fidelity prototypes using Lucidchart, on the computer. Each session took between 20-30 minutes and both of the scenarios were completed in all four usability tests. Participants also asked and answered several questions. Each individual gave generous feedback and outsider insight into how our general design decisions are perceived by an outside force.

What data we collected

Data collected from users included but wasn't limited to:

- Paths selected during the two main scenarios.
- Verbal feedback while completing the scenarios.
- Satisfaction with the overall experience of the application while completing the scenarios.
- Improvements and considerations in further iterations.

Major findings and recommendations

Major issues:

- Confirmation page is missing after the transfer is completed.
- User wanted to be able to type the amount to be transferred instead of up and down buttons.
- The tabs "Accounts" and "Transfer" are not visible or highlighted, when currently in use.
- The "Transfer" screen missing "Submit" button.
- The "LogOut" button is unnecessary.
- Empty left top area is confusing some of the users.

Solutions:

- Confirmation screen should be added after the the "transfer" is completed.
- The option for user to type in the amount to transfer should be added.
- Make the tabs on the Bottom more visible with color and accent "active" state versus "inactive" to give the users a sense of belonging.
- Add "Submit" button or "Complete Transfer" and keep it in inactive state until user types in the amount to be transferred after which the button will become active.
- Remove "LogOut" button.
- Add hamburger menu implying there are other options which are not primary scenarios for the app.

Detailed findings and Recommendations

Introductory Questions & Tasks

Questions	Responses
Do you use any mobile banking	All participants use or have used
apps?	mobile banking apps.
Just from looking at this site, what kinds of information do you think	All participants correctly defined the purpose of the site. Participants
you could get from this app?	used phrases from major headers
Please be specific.	and labels to describe the
	information on the site. The login
	PIN screen was the main signifier
	for participants.
Who do you think this app is	Participants correctly identified the
designed for?	users to be people who bank and
	don't have a lot of time.

Scenario 1 - Checking Balance

You are on the run and are at the grocery store. You are unsure of the current balance of your bank account as you bought a gift for your son's birthday earlier that day. How would you check your bank balance?

Number of participants	4
Percent successful	100%

Findings	Recommendations
4 participants completed the	N/A
task with ease (score of "2") by	
checking their balance.	

0 participants needed prompting or had significant difficulty completing the task (score of "1") 0 participants did not complete the task (score of "0").	

Scenario 2 - Transfer \$60 between the two accounts

You are at the local flower shop and need to buy an extreme amount of flowers for Valentine's Day. Your bank account is 60 dollars short of the total cost and need to transfer that amount between your several accounts. How would you perform this task?

Number of participants	4
Percent successful	100%

Findings	Recommendations
4 participants completed the task with ease (score of "2") by finding the [target]. 0 participants needed prompting or had significant difficulty completing the task (score of "1") 0 participants did not complete the task (score of "0").	N/A

Exit Questions/User Impressions

Questions	Responses
What is your overall impression of the mobile application?	Participants liked having all their account located in the same place. They also felt that it was fast and easy to use.
What is your impression of the initial login PIN page?	It's fast and efficient. Users felt that it was conventional and matched ATMs and other bank login pages.
Do you feel this app is current? Why?	Yes because it displays the current account balances and updates with the new account balance after transactions.

What did you like best about the	The small number of steps was
app?	simple.
What did you like least about the	No way to confirm transfer and no
app?	way to input another monetary
	amount.
Is there anything that you feel is	There should be a way to view
missing on this app?	account account history and confirm
	transactions,
Do you have any other final	Needs images and color.
comments or questions?	

High Fidelity Prototype PDF

https://drive.google.com/file/d/0B8TmHTp8rdLrY1NhNjRkc0JjV1U/view?usp=sharing

High Fidelity Prototype Click-Through

https://projects.invisionapp.com/share/PH6CH5WES#/screens

Envisionment Video

https://drive.google.com/file/d/0B8TmHTp8rdLrYThmSEIVR3I3WWM/view?usp=sharing