

CS565: Inclusive Design

ElderMag

Simplifying Banking for Everyone

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Our Facets

- **Attitude towards Financial Risk**

- *Attributes:* Security, Privacy, Risk
- *Values:* Risk Aware – Risk Unaware

The level of awareness on privacy, security policies and the ability to incur financial loss.

- **Technology Adoption**

- *Attributes:* Technology Adoption, Independence
- *Values:* High Adoption – Low Adoption

The level of how much our population accepts, integrates, and uses new technology.

- **Confidence about Task Completion**

- *Attributes:* Memory, Attention, Risk
- *Values:* High Assurance – Low Assurance

Being able to determine if a task is acceptable to complete or not; based on ability to think or whether there is concern for the type of task being at risk.

- **Complexity of Tasks**

- *Attributes:* Problem Solving, Ailments, Attention, Comprehension
- *Values:* Difficult – Simple

The difficulty of tasks that our population can comfortably handle individually.

- **Tendency towards Error**

- *Attributes:* Security, Ailments
- *Values:* Less Prone – More Prone

Errors made by our population due to physical/mental constraints.

- **Comprehension of Information**

- *Attributes:* Comprehension, Technology Adoption
- *Values:* Fast – Slow

The pace at which our population comprehends new information displayed to them on a screen.

Underserved Personas

Emma the Elder, Female (Age: 71)

Background

- Emma lives alone but requires help with monthly mortgage payments. Does not like being dependent on others.¹
- Emma has been scammed before and lost a lot of money.
13,16,17,18
- She enjoys keeping contact with family and friends using her smart-device² but misses some of her old friends who are not on social media.^{3,23,26}



Attitude towards Financial Risk

- Emma is less likely to trust anyone that she can't speak to in person about her finances because she was a victim to an online scam before in the form of a fake government agent.^{4,19,20,21}
- She feels vulnerable since she has a retirement fund and assets and wishes to pass them onto her family when she is deceased. She doesn't know who to trust to help with setting up this process.
5,21

Technology Adoption

- Emma owns a tablet to watch television and messages to family members. She had to have a family member help her set up the tablet when she first got it.^{2,22,24}
- She makes sure to hop on a video chat every Sunday to talk with family. The same family member that set up her tablet helped her get the video chat program set up for this.^{2,3,23,26}

¹ Millions of Americans manage money or property for a loved one who is unable to pay bills or make financial decisions [7]

² In 2000, 14% of those ages 65 and older were internet users; now 73% are. And while smartphone ownership was uncommon at all ages around the turn of the 21st century, now about half (53%) of people 65 and older are smartphone owners. [10]

³ A significant majority of older adults say they need assistance when it comes to using new digital devices. Just 18% would feel comfortable learning to use a new technology device such as a smartphone or tablet on their own, while 77% indicate they would need someone to help walk them through the process. And among seniors who go online but do not currently use social networking sites such as Facebook or Twitter, 56% would need assistance if they wanted to use these sites to connect with friends or family members.[2]

⁴ Seniors, who are often on fixed incomes and may already feel financially vulnerable, may be especially worried about the potential monetary loss from online identity theft and the like. [1]

Confidence about Task Completion

- Emma dislikes when a web page has an overload of information because she doesn't know what to look at first. She finds this frustrating and most often leaves the web page and would rather seek help.^{7, 3,27,28}
- She is more skeptical about online links due to being scammed before. If the link isn't from someone she knows and has verbally verified that it was from them, she won't use it.^{4, 11,25}

Complexity of Tasks

- Emma must have detailed written instructions to ensure accuracy for complex tasks. Often, she forgets steps or the order of the steps to complete the task.^{3,7,15}
- She gets frustrated when a web page has an overload of information because she doesn't know where to start. She would just back out of the web page.^{8, 13,14}

⁵ Some older adults may: - Have regular income and accumulated assets, - Be trusting and polite, - Be lonely and socially isolated, - Be vulnerable due to grief from the loss of a spouse, family member, friend, or pet. [3]

⁶ The adoption of smartphones, computers and the internet broadly are up among the elderly — nearly three-fourths of people 65 and older use the internet in 2018, compared to just 14 percent in 2000, according to Pew Research. [9]

⁷ Increased distractibility is a sign of cognitive aging... Older adults appear more easily distracted by irrelevant information than younger people when they experience stress or powerful emotions [8]

⁸ Elderly requires a step by step approach at a slower pace while the cognitive structure of millennials enables them to process multiple information at once [6]

⁹ Unfortunately, seniors are especially likely to suffer from access issues involving login, password, or security check difficulties, preventing them from even beginning the online banking task. Seniors who are frequently asked to change their passwords, complete complicated security checks, or otherwise face security-driven obstacles are at risk of giving up on digital interactions [1]

¹⁰ This was that hand dexterity performance on steadiness and line tracking were better explained by age than strength, but aiming and tapping dexterity were better explained by strength than age [11]

¹¹ One of the biggest barriers for seniors looking to access online banking is a lack of knowledge around modern technology. To use their bank's digital services, they would need access to a computer, phone or other digital device, which seniors may be less familiar with than younger family members for whom they are an intrinsic part of modern life. [4]

¹² The elderly represents a significant business opportunity for online marketers [9], and it may be a missed opportunity if the elderly's needs are not catered for in the technology rollout. Technology continuously changes and the elderly lack educational opportunities to keep up with it [5]

¹³ Loss of cognitive functioning — thinking, remembering, learning, and reasoning — and behavioral abilities to the extent that it interferes with a person's quality of life and activities.[12]

¹⁴ Older adults have internalized negative stereotypes about their tech savviness that don't always align with the reality of their tech usage. [13]

Tendency towards Error

- She tends to forget passwords for various logins. Many times, she has had to write them down on a piece of paper to remember them.^{9,27,28}
- Emma finds using a smartphone can be challenging as her fingerprint is not always recognized.^{10,27,28}
- Emma suffers from accessing accounts due to security-driven obstacles such as passwords and complicated security checks. It is hard for her to remember all the different passwords or using her fingerprint to get access.^{9,25,27,28}

¹⁵ It's normal to forget things once in a while as we age, but serious memory problems make it hard to do everyday things like driving, using the phone, and finding your way home. [12]

¹⁶ Technical support scams prey on older people's lack of knowledge about computers and cybersecurity. [13]

¹⁷ According to the FBI, senior citizens are less likely to report fraud. This is supported by figures from the FTC which show that while 44% of younger people aged 20–29 reported losing money to fraud, only 20% of older people ages 70–79 did the same. [14]

¹⁸ The FBI estimates that senior citizens lose more than \$3 billion each year to financial scams including romance scams and lottery and sweepstakes scams. [14]

¹⁹ More than \$37 billion is lost each year as a result of the financial exploitation of seniors (according to the Consumer Financial Protection Bureau) [15]

²⁰ The slower rate of technology adoption among some older people makes them easier targets for internet and email scams [16]

²¹ Those aged 20–29 had an average loss of \$324 in 2020. For 60–69-year-olds, this number rose to \$426, while ages 70-79 suffered a median loss of \$635. However, it was ages 80 and upwards that were the worst affected. In this case, the median loss was \$1,300 [17]

²² 95 percent of adults aged 18 to 49 own a smartphone, while the penetration rate of smartphones amongst adults 65 years and older is only 61 percent [18]

²³ In 2000, 14% of those ages 65 and older were internet users; now 73% are. And while smartphone ownership was uncommon at all ages around the turn of the 21st century, now about half (53%) of people 65 and older are smartphone owners. [19]

²⁴ Similarly, those 65 and older also were the least likely to say they use social media sites like Facebook, Twitter or Instagram in the most recent survey. Some 45% reported using social media, compared with 84% of those ages 18 to 29 and 81% of those 30 to 49. At the same time, presence on social media among Americans 65 and older grew about fourfold since 2010, while use by the youngest adults remained relatively constant in that time frame. [20]

²⁵ Although fraud and data security are concerns for low- to moderate-income older adults, a more significant barrier is that fintech products don't align with their desire for granular control over their finances. [21]

²⁶ older people are turning to screens because of loneliness and isolation. According to the U.S. Census Bureau, more than 11 million elderly Americans live alone, and the likelihood of being without other human companionship increases the older a person gets.[22]

Comprehension of Information

- Emma does not understand new concepts and ideas quickly specifically when it comes to technology. Sometimes she must reread information multiple times to understand something or ask someone else to explain how something works.^{3, 11, 12}
- She finds it hard to keep up with new techs and gadgets because they're continuously being developed. It feels like every time she learns something new, they go and change how it works and she must learn it all over again. Her phone is constantly having updates to the various apps on it.^{8, 11, 12}

²⁷ Many seniors have physical conditions or health issues that make it difficult to use new technologies. Around two in five seniors indicate that they have a "physical or health condition that makes reading difficult or challenging" or a "disability, handicap, or chronic disease that prevents them from fully participating in many common daily activities". This group is significantly less likely than seniors who do not face these physical challenges to go online (49% vs. 66%), to have broadband at home (38% vs. 53%), and to own most major digital devices.[2]

²⁸ Age-related differences in learning reflect a selective impairment in the ability to represent uncertainty rather than a general deficit in the ability to learn from prediction errors. [22]

References

- [1]Melamedov, Leor. “New Survey Shows Seniors Are Eager for Digital Banking—but Worried about Security.” Lightico, Lightico, 25 Aug. 2020.
- [2]Smith, Aaron. “Older Adults and Technology Use.” Pew Research Center: Internet, Science & Tech, Pew Research Center, 30 May 2020.
- [3]“Money Smart for Older Adults.” FDIC, 2022.
- [4]“What Are the Biggest Challenges for Seniors Who Are Looking to Access Online Banking?” AZNHA, 25 Feb. 2022.
- [5]Enablers and Barriers for Mobile Commerce and Banking Services Among the Elderly in Developing Countries: A Systematic Review, Msweli et al.
- [6]UX Case Study: Designing Mobile Banking App for the Elderly, Alfiani.
- [7]Financial Protection for Aging Adults & Caregivers, Bank of America.
- [8]Newcomb, Beth. “Why People Become More Prone to Distraction with Age.” USC News, 7 May 2018.
- [9]Dellinger, AJ. “Seniors Are Using Screens to Make up for Lost Human Connections.” Mic, Mic, 15 Aug. 2019.
- [10]Livingston, Gretchen. “Americans 60 and Older Are Spending More Time in Front of Their Screens than a Decade Ago.” Pew Research Center, Pew Research Center, 16 June 2021.
- [11]Martin JA, Ramsay J, Hughes C, Peters DM, Edwards MG. Age and grip strength predict hand dexterity in adults. PLoS One. 2015 Feb 17;10(2):e0117598. doi: 10.1371/journal.pone.0117598. PMID: 25689161; PMCID: PMC4331509.
- [12] “Memory, Forgetfulness, and Aging: What's Normal and What's Not?” National Institute on Aging, U.S. Department of Health and Human Services, <https://www.nia.nih.gov/health/memory-forgetfulness-and-aging-whats-normal-and-whats-not>.
- [13] Associate, Written by Hannah Gdalmán Senior, et al. “Fintech over 50: Designing for Low- to Moderate-Income Older Adults.” Financial Health Network, 8 May 2020.
- [14] “Senior Scam Statistics 2022: Is Elder Fraud on the Rise?” Comparitech, 7 Oct. 2022.

[15] “Financial Protection for Aging Adults & Caregivers.” Bank of America.

[16] The National Council on Aging.

[17] “Senior Scam Statistics 2022: Is Elder Fraud on the Rise?” Comparitech, 7 Oct. 2022.

[18] Laricchia, Federica. “Smartphone Ownership in the US by Age 2021.” Statista, 18 Oct. 2022.

[19] Livingston, Gretchen. “Americans 60 and Older Are Spending More Time in Front of Their Screens than a Decade Ago.” Pew Research Center, Pew Research Center, 16 June 2021.

[20]Faverio, Michelle. “Share of Those 65 and Older Who Are Tech Users Has Grown in the Past Decade.” Pew Research Center, Pew Research Center, 13 Jan. 2022.

[21]Faverio, Michelle. “Share of Those 65 and Older Who Are Tech Users Has Grown in the Past Decade.” Pew Research Center, Pew Research Center, 13 Jan. 2022.

[22]Nassar, Matthew R, et al. “Age Differences in Learning Emerge from an Insufficient Representation of Uncertainty in Older Adults.” Nature Communications, U.S. National Library of Medicine, 10 June 2016.

Mainstream Personas

John the Junior Developer, Male (Age: 25)

Background

- John is a Software Development Engineer who works for an e-commerce company.
- He is a tech-savvy individual who has been exposed to technology from an early age.
- He is active on social media and is aware of privacy and security issues. Also, gains experience from his work.
- In his free time, he plays club soccer and is in peak physical and mental health.
- Being an SDE is a demanding job which requires John to have strong problem-solving skills and prolonged attention span.



Attitude towards Financial Risk

- John works as a SDE and understands his financial risk-taking ability is high. He possesses a lot of savings and is also not involved in family expenses.
- John is aware of the best security practices and has enabled multi factor authentication on all supported applications.
- He also believes that there are no risks in mobile banking.¹
- John has always been quick-witted and avoids phishing emails and messages. He relies on-devices features to keep his accounts secure.
- Although John tries to maintain full understanding, he does not pay attention to privacy terms and often uses recommended settings with all the data sharing switched on due to a shorter attention-span.

Technology Adoption

- John has quickly adapted to technology being born in the technological era; his familiarity makes learning newer technologies quick and easy.²
- John loves his free-time, so he owns many smart-home technologies and gadgets in his daily routine. He finds his schedule and routine to be more open for his hobbies.
- He is confident about using and trying out new technologies. John loves the latest smartphones and is eager to get hands on them as soon as they are launched.

Confidence about Task Completion

- John always struggled with long-term memory as he finds it hard to remember his long passwords and events that are months away.
- John spent the last few years learning about the stock market. He has grown more confident with his concise decision making for quick daily trades. He continues to invest for annual traveling and to be financially secure.

Complexity of Tasks

- John developed imposter syndrome with how demanding his profession is. He feels somewhat capable as he has been known to be an effective problem solver.
- John effectively breaks down complex tasks to assimilate information. He's found this method to be especially effective when tackling SDE projects.
- John's athleticism gives him the confidence to stay on top of his work. He still stays humble despite his high confidence.

Tendency towards Error

- John a risk-free individual, he relies on-devices features to keep his accounts secure.
- He wears vision correction glasses and often requires staring at the screen to figure out his next interaction. With his profession, he finds himself darting his eyes among multiple screens. He takes frequent breaks to avoid straining his eyes too much.

¹https://aznha.org/.what-are-the-biggest-challenges-for-seniors-who-are-looking-to-access-online-banking/?utm_source=rss&utm_medium=rss&utm_campaign=%ef%bf%bcwhat-are-the-biggest-challenges-for-seniors-who-are-looking-to-access-online-banking

Comprehension of Information

- John is a multitasker, involved in many tasks in a day. He is very fast in understanding information and applying it practically.³ When he's presented with a new piece of technology, he finds enjoyment in tinkering with its settings and learning of its specifications.
- Given useful documentation and tutorials he can break down complex tasks and execute them effectively. His peers and family would rely on him to troubleshoot their technical issues, and John is always ready to assist.

²<https://www.pewresearch.org/fact-tank/2022/01/13/share-of-those-65-and-older-who-are-tech-users-has-grown-in-the-past-decade/>

³<https://www.techfunnel.com/fintech/mobile-banking/>

Use-cases

Underserved Population

1. I am logging into my bank account with a secure login. I want to use an already existing authentication service, such as Google or Microsoft, that I already use for logging into other applications. I need to give a one-time approval in the banking application to use the Third-Party Account access. Once the approval has been granted, I want future access to be granted immediately.
2. I am looking for my bank account's routing and account numbers to link my banking information to pay for my electric bill. It would be convenient to provide my bank's routing and account numbers, so I open my banking app and find where the routing and account numbers are located for me to easily copy over to my electric provider. I will need to be able to copy the entire routing number and then the bank account number separately to pay my electric bill.
3. I am transferring/depositing money to my daughter's bank account that I have custodial privileges over. I need to be certain that I am wiring the money to the correct account. The banking confirms with me twice that I am certain right before the money leaves my bank account.
4. I need to activate my new bank card. I need to be able to log into my bank account and find the section to activate a new card. Once I locate the section, I am prompted to verify the new card's expiration date and the new card's CVV (Card Verification Value). I am also prompted to verify that it is me activating the card with a secure code that is either emailed or texted to me with my default settings for both.
5. I'd like to track a suspected fraudulent transaction made on my credit card on a specific date at a grocery store so that I can contest it for fraudulent charges. I want to be able to quickly search for a specific transaction and file a charge-reversal complaint.

Mainstream Population

1. I am logging into my bank account with a secure login. I want to use an already existing authentication service, such as Google or Microsoft, that I already use for logging into other applications. I need to give a one-time approval in the banking application to use the Third-Party Account access. Once the approval has been granted, I want future access to be granted immediately.
2. I am looking for my bank account's routing and account numbers to link my banking information to pay for my electric bill. It would be convenient to provide my bank's routing and account numbers, so I open my banking app and find where the routing and account numbers are located for me to easily copy over to my electric provider. I will need to be able to copy the entire routing number and then the bank account number separately to pay my electric bill.
3. I am transferring/depositing money to my daughter's bank account that I have custodial privileges over. I need to be certain that I am wiring the money to the correct account. The banking confirms with me twice that I am certain right before the money leaves my bank account.
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5. I'd like to track a suspected fraudulent transaction made on my credit card on a specific date at a grocery store so that I can contest it for fraudulent charges. I want to be able to quickly search for a specific transaction and file a charge-reversal complaint.

Prototypes

Low Fidelity Prototypes

Concept #1

For: Use-case #1

Description and Justification

Use-case #1 is improving the login experience by allowing the user to be signed in through Single Sign-On (SSO). This reduces the potential of error that elders could experience when logging in, due to possible dexterity issues [7] or remembering their password [6].

With this concept, we are allowing an easy click of the button to immediately have access to the user's bank account. We want elders to feel safe, secure, and to have a simple way to access their finances while utilizing advanced security technology without the worry of the typical challenges they could face with technology [5].

There are 3 paths presented in our use-case. The first is the ideal path, one clicks for the Trusted 3rd Party and then they are in their bank account. The second path is having to occasionally confirm it is still them by logging into the Trusted 3rd Party App and reaffirming approval. The final path is a onetime experience, due to the bank requesting authorization to use the Trusted 3rd Party App.

Key Features

- Single Sign-on (SSO)

Many elders are very protective of their finances [1]. Due to being more easily scammed [4], having additional security to ensure that their money is secure with Single Sign-On (SSO) through a Trusted 3rd Party App helps provide a more secure experience [3]. Passwords are also a common security issue, and this will help reduce security risks [2, 3].

The external login key and redesigned MFA had mixed reviews from the Design Gallery #1, which is why we chose not to use them and inclined on industry wide accepted solution to solve this use-case.

[1]<https://www.lightico.com/blog/new-survey-shows-seniors-are-eager-for-digital-banking-but-worried-about-security/#:~:text=Seniors%2C%20who%20are%20often%20on,online%20banking%2C%20including%20older%20adults>

[2]https://cheatsheetseries.owasp.org/cheatsheets/Authentication_Cheat_Sheet.html#implement-proper-password-strength-controls

Facets Involved

- Attitude towards Financial Risk
- Technology Adoption
- Tendency towards Errors

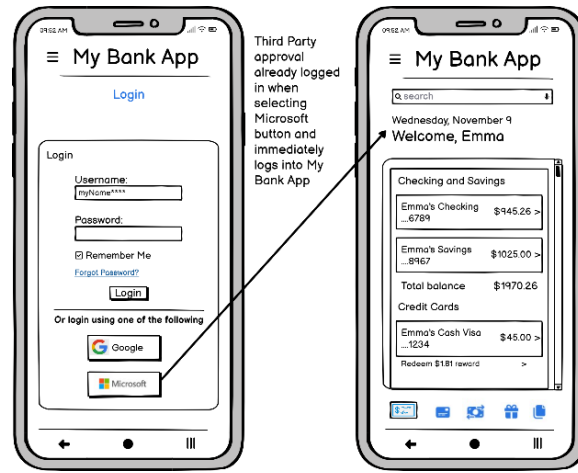


Figure 1: User is active session with third party authentication service

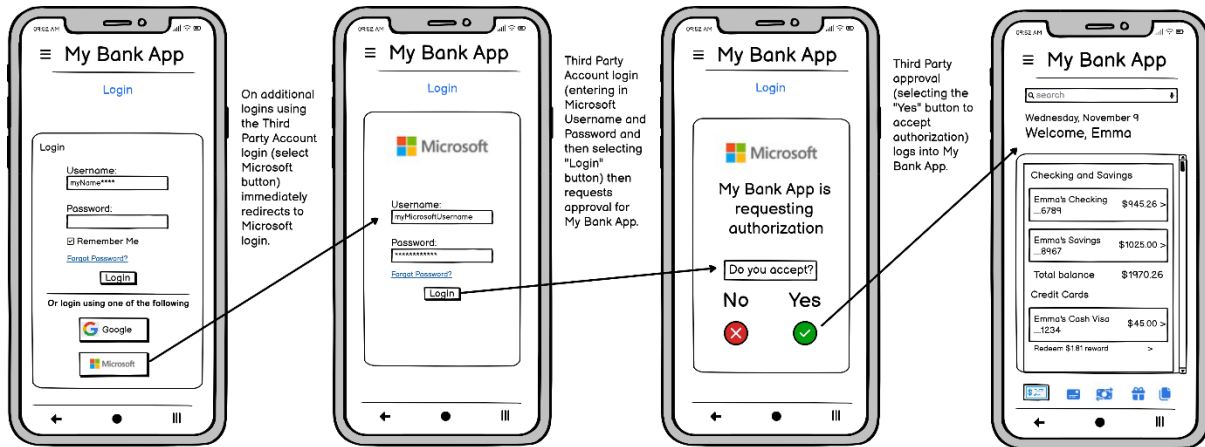


Figure 2: User prompted for login

[3] <https://learn.microsoft.com/en-us/microsoft-365/admin/misc/password-policy-recommendations?view=o365-worldwide#password-guidelines-for-administrators>

[4] <https://ncoa.org/article/top-5-financial-scams-targeting-older-adults>

[5] <https://www.pewresearch.org/fact-tank/2019/06/18/americans-60-and-older-are-spending-more-time-in-front-of-their-screens-than-a-decade-ago/>

[6] <https://www.nia.nih.gov/health/memory-forgetfulness-and-aging-whats-normal-and-whats-not>

[7] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4331509/#:~:text=In%20the%20scientific%20literature%2C%20there,coordinated%20and%20less%20controlled%20performances>

Account linking is a one-time activity which can be delegated to Bank

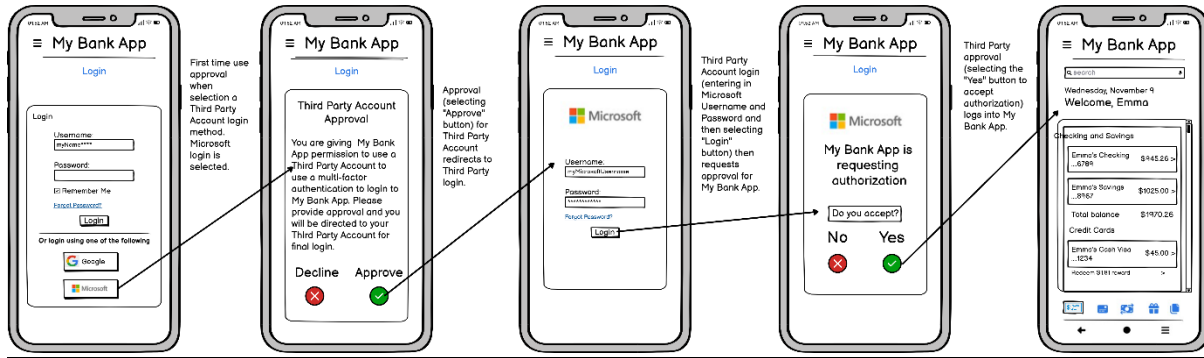


Figure 3: User account linking with third party service

Concept #2

For: Use-case #2

Description and Justification

Our minimal design for use case #2 aims to minimize error tendency with their sensitive data of account/routing number. Normally banking apps do not have the copy feature, meaning the users would need to write it down or other external methods for a simple task.

After a simple click of a button, a large interactive pop-up will be triggered at the top of the screen with signifying colors for the selection.

Key Features

- Gives users the option to copy their account/routing number.
- A warning/caution popup when the sensitive information is copied.
- Ability to un-copy through the popup.

Feedback from design gallery #1 brought attention that copying the sensitive data could be a risk. They could accidentally make it public given the elder population aren't very knowledgeable when it comes to mobile banking and technology [1, 2]. To solve this problem, we decided to include a triggered pop-up that is interactive and informative for the user after copying the data. This way the user understands the information could make them vulnerable and continue, or they could completely remove the information from their clipboard.

From our earlier research, elders not only have a hard time reading smaller text [4], they also may have specific hand-coordination ailments [3] that would make it more difficult to even select a button. Conscious of our underserved population, we design the pop-up slightly larger than normal

[1] <https://www.pewresearch.org/fact-tank/2022/01/13/share-of-those-65-and-older-who-are-tech-users-has-grown-in-the-past-decade/>

[2] <https://blog.adobe.com/en/publish/2019/11/20/adobe-analytics-research-how-different-generations-bank#:~:text=72%25%20of%20GenZ%20visit%20a,%25>

[3] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4331509/#:~:text=In%20the%20scientific%20literature%2C%20there,coordinated%20and%20I,ess%20controlled%20performances>

[4] <https://www.sciencedirect.com/science/article/pii/S0141938212001126>

Facets Involved

- Technology Adoption
- Tendency towards Error
- Complexity of Tasks

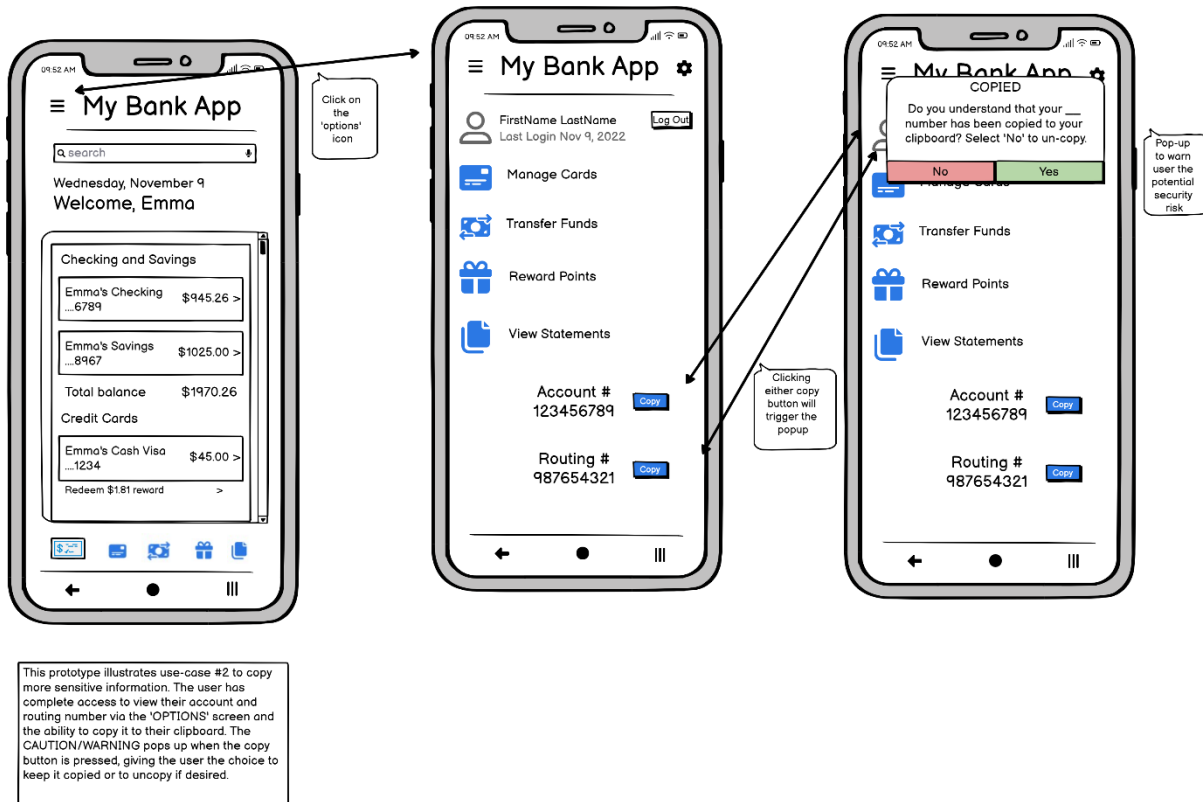


Figure 4: User copying his account details

Concept #3

For: Use-case #3

Description and Justification

Use-case #3 illustrates the scenario where a user must initiate a transaction. According to Forbes [1], a survey conducted by Cornerstone Advisors ranked peer-to-peer fund transfer as the 2nd most critical feature in a banking application.

In this concept we have redesigned traditional fund transfer user experience to a systematic, error-preventing series of steps/milestones. The goal is to provide users with confidence about the task they are performing. The concept presented here has the best features integrated from other concepts that were presented in the previous assignments.

Key Features

- Progress Indicators
- Tasks groups into Steps
- Transaction Limits
- Transaction Revert (undo)

From our research we have learned that our underserved population suffer from short term memory which leads to confusion when conducting complex tasks [2]. To alleviate this [3], we have progress indicators and tasks grouped into steps which also received positive feedback in the design gallery #1. Our unique feature in the fund transfer flow is the ability to revert transactions at the end. This concept received very positive feedback in both the design galleries, we believe that it will help instill confidence of task completion in both of our population [4].

[1]<https://www.forbes.com/sites/ronshevlin/2021/03/29/new-research-identifies-the-most-critical-mobile-banking-features/?sh=21289fde1851>

[2] <https://news.usc.edu/142450/distracted-older-adults/>

[3] Newcomb, Beth. "Why People Become More Prone to Distraction with Age." USC News, 7 May 2018.

[4] "What Are the Biggest Challenges for Seniors Who Are Looking to Access Online Banking?" AZNHA, 25 Feb. 2022.

Facets Involved

- Confidence about Task Completion
- Tendency towards Errors
- Complexity of Tasks

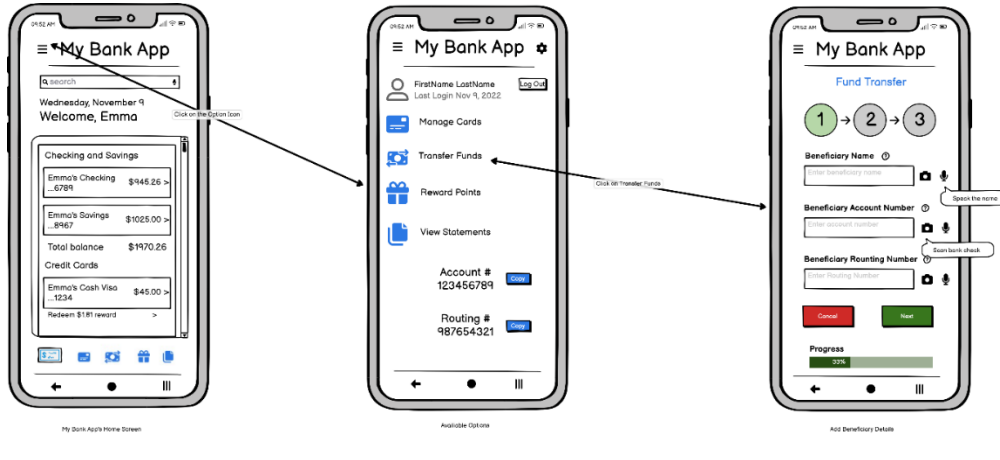


Figure 5: User starting the fund transfer process

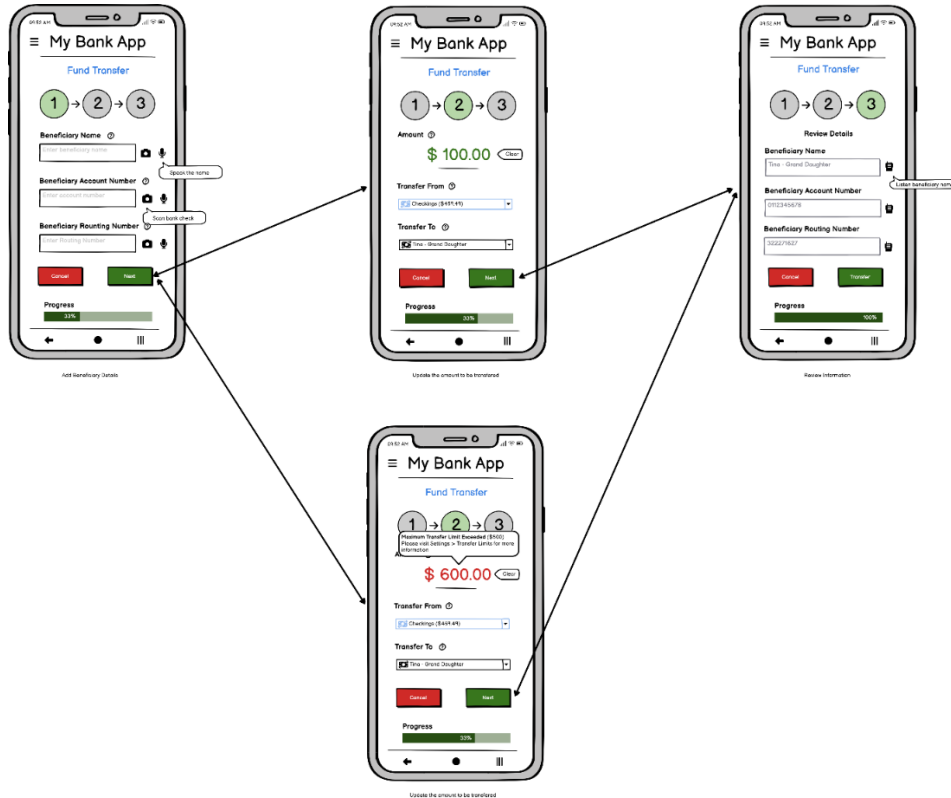


Figure 6: Maximum transaction limit exceeded

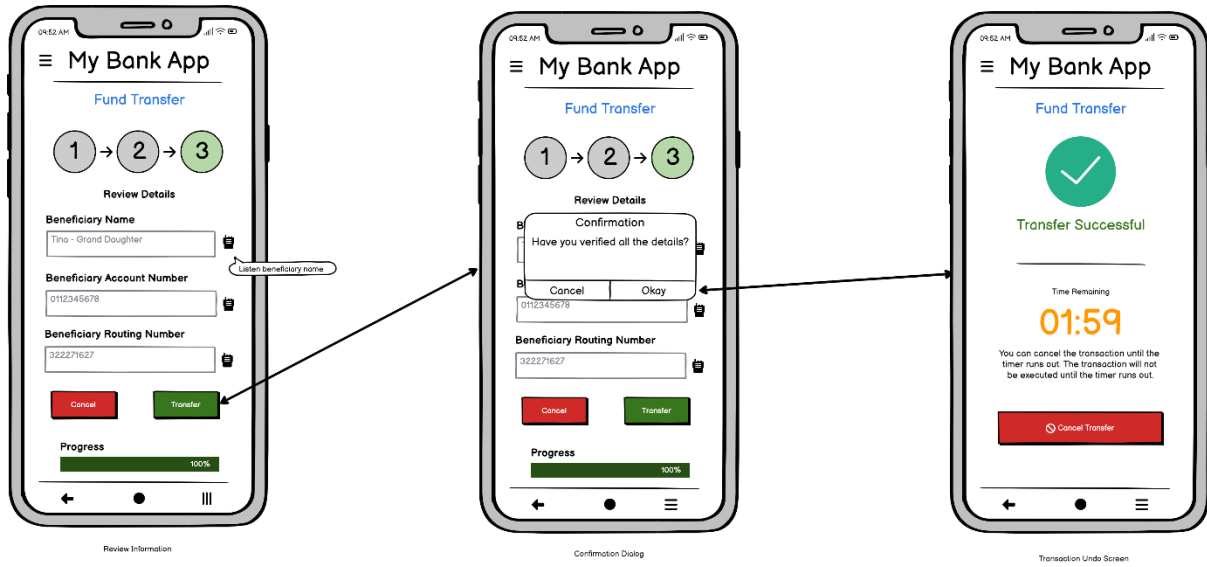


Figure 7: Undo transaction feature

Concept #4

For: Use-case #4

Description and Justification

The concept depicts the ATM card activation process. To make mobile banking widely available to our underserved population, we redesigned the process of activating an ATM card in this concept.

According to our research, the elderly population still uses traditional banking methods, such as going to banks. Our goal is to increase our population's adoption of mobile banking, and in this concept, we attempted to bridge the gap by providing simple and easy mobile banking activities.

Activating an ATM card includes features such as a progress indicator, voice and scan text intakes, and visual articulation. The process is divided into stages and indicated by a progress bar to provide confidence in completing the task [1]. We have given voice, scan/picture, and text inputs to lessen the tendency toward error [3]. Finally, with this concept, we attempted to comprehend the information by visual articulation so that it would be easy and quick for them to understand [2]. With the help of this concept, we believe we are solving the problem of technology adoption for our underserved population [4].

Key features

- Voice based text input
- Scan/picture the card for input
- Visual aids to recognize data

The concept incorporates the best of features that were appraised in the previous design galleries of other concepts. Also, the application follows a similar task flow to minimize surprises in conducting the tasks.

[1] "Memory, Forgetfulness, and Aging: What's Normal and What's Not?" National Institute on Aging, U.S. Department of Health and Human Services, <https://www.nia.nih.gov/health/memory-forgetfulness-and-aging-whats-normal-and-whats-not>.

[2] Smith, Aaron. "Older Adults and Technology Use." Pew Research Center: Internet, Science & Tech, Pew Research Center, 30 May 2020.

[3] Martin JA, Ramsay J, Hughes C, Peters DM, Edwards MG. Age and grip strength predict hand dexterity in adults. PLoS One. 2015 Feb 17;10(2):e0117598. doi: 10.1371/journal.pone.0117598. PMID: 25689161; PMCID: PMC4331509.

[4] Dellinger, AJ. "Seniors Are Using Screens to Make up for Lost Human Connections." Mic, Mic, 15 Aug. 2019.

Facets Involved

- Technology Adoption
- Confidence about Task Completion
- Tendency towards Error
- Comprehension of Information

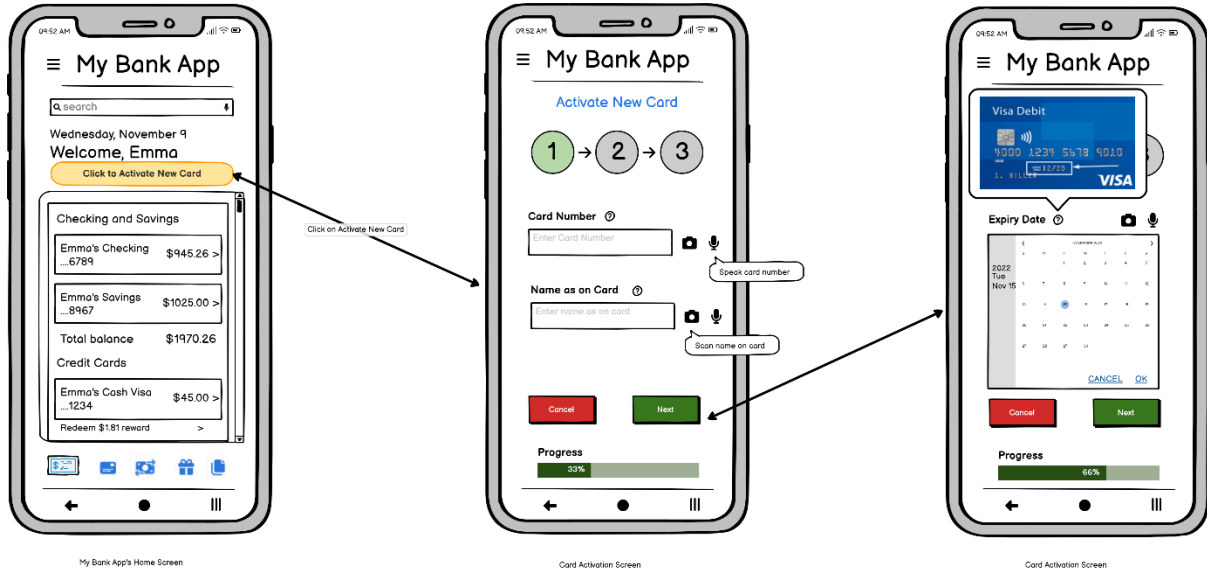


Figure 8: New card activation process – 1

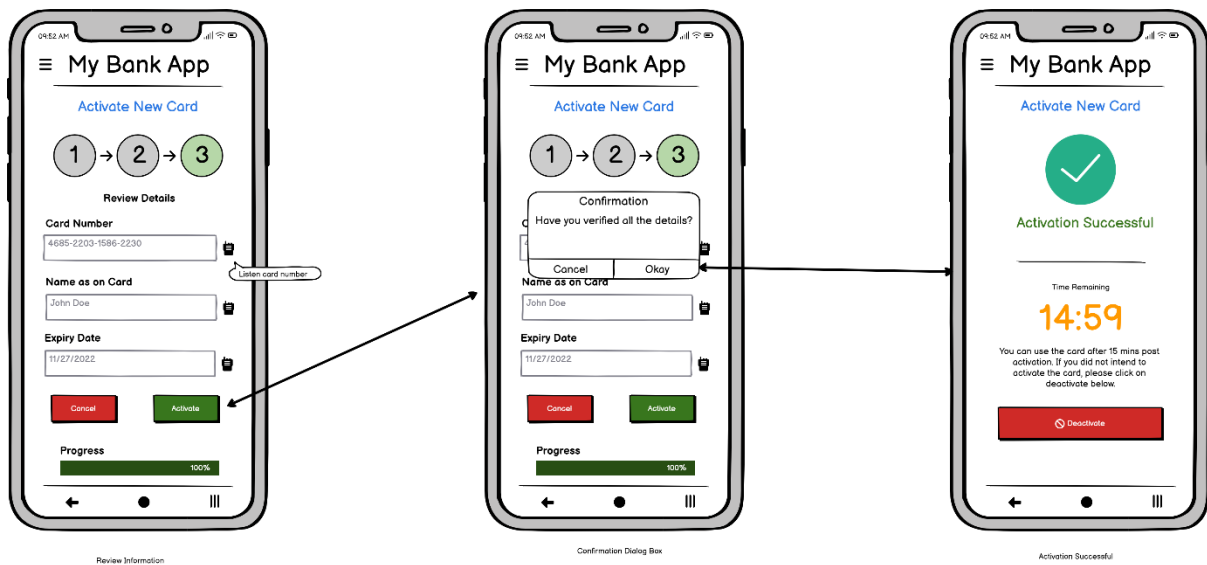


Figure 9: New card activation process - 2

Concept #5

For: Use-case #5

Description and Justification

This prototype aims to streamline use case #5. This use case dealt with quickly identifying, tracking, and reporting suspected fraudulent charges. During our research we found that the elderly is more likely to lose money from financial scams [2,3]. Given their susceptibility, we determined that it is even more important that older adults can easily report fraud which historically has not been the case [1,4]. In the corresponding diagram (use case 5), the user can use multiple features to search for charges that they believe may be fraudulent. This will allow the user to use any known information to quickly locate the suspected transaction, rather than searching through all past transactions. Once a transaction is selected, the user will then be brought to a confirmation screen that gives more information about the specified transaction. Here they will be able to see the progress of this transaction.

Using this information, the user can take necessary action to stop the fraudulent charge by reporting it to the bank. This concept was heavily influenced by Design Gallery #1. Originally the idea of adding transaction filters and transaction status were parts of two separate filters. During the design gallery, a few students mentioned how each feature would be beneficial to the user, so we decided to combine both concepts. This would ensure that we were not making any sacrifices to usability when finalizing our concept.

Key Features

- Allowing the users to use **transaction filters** to narrow down searches for fraudulent charges.
- Users will be able to see the **transaction status** of specific transactions.

[1] <https://finhealthnetwork.org/research/fintech-over-50-designing-for-low-to-moderate-income-older-adults/>

[2] <https://ncoa.org/article/top-5-financial-scams-targeting-older-adults>

[3] <https://www.comparitech.com/identity-theft-protection/senior-scam-statistics/#:~:text=The%20FBI%20estimates%20that%20senior,and%20lottery%20and%20sweepstakes%20scams>

[4] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7134387/>

Facets Involved

- Attitude towards Financial Risk
- Comprehension of Information

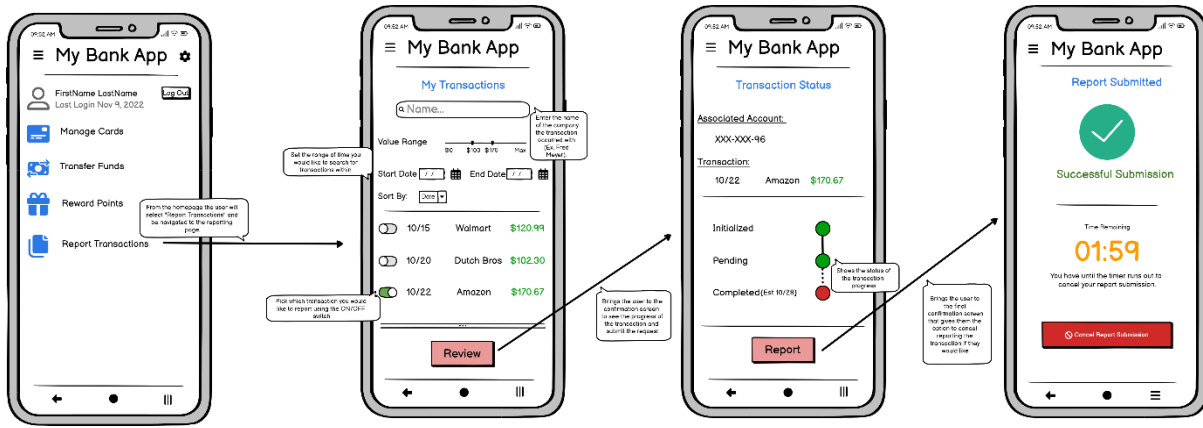


Figure 10: User searching for transaction and reporting

ElderMag Evaluation: Cognitive Walkthrough

Underserved Persona

CW: Use-case #3

Scenario (Overall Goal): Transfer Funds

(e.g., Abi wants to find a science fiction book.)

Subgoal #_1_: Navigate to transfer fund screen

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
Emma is used to traditional banking and hence is aware that we need she need to enter details of the beneficiary to make a transfer. So, we believe that she would look to navigate to the transfer screen.		

Action #1: Click on the sliding navigation pane

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Technology Adoption <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Comprehension of Information
Why?		
		Emma might search for transfer funds options using the search box on the home screen, which is not intended for this purpose.
What in the UI helped/confused Emma in this step?		
		<p>The home page icons were confusing and that there were no labels to clearly indicate the transfer fund option.</p> <p>Also, the sliding navigation pane might not be common across other application where most used features are listed.</p>

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
Emma would see a transfer funds option in the sliding navigation pane which will validate her step.		
What in the UI helped/confused Emma in this step?		
The navigation pane has the icons and labels listed.		

Subgoal #_2_: Enter the details

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
Entering details would be the natural intuition as similar is done in traditional banking.		

Action #1: Enter the beneficiary details

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above

Why?		
The screen prompts with labels and auto-focused text fields to enter the details. Also, we have hints and tool tips to aid the user.		
What in the UI helped/confused Emma in this step?		
There are a lot of UI elements to handhold the user through the transfer process. Eg: Progress Bars, Step indicators, tool tips, hints, voice-to-text		

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		

Post entering the information, they are validated and navigates to the next screen for further inputs.

What in the UI helped/confused Emma in this step?

Subgoal #_3_: Complete transfer

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user is prompted a review screen where they can validate their details – comprehend information easily. This will provide confidence to the user to initiate the transfer.</p>		

Action #1: Review and initiate transfer

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
The user is confident about details entered, and they can review the details shown.	Not all the details are mentioned in the review screen and depending on the financial risk the user might backout. Also, because of tendency towards error, the user might want to redo the tasks.	
What in the UI helped/confused Emma in this step?		
	The review screen is missing few important/useful information that can help the user make an informed decision.	

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
	<p>There were UI elements obstructing data. Hence, the user may not about the information beneath the UI element</p>	
What in the UI helped/confused Emma in this step?		
	<p>An alert box was hiding important information that user might want to review before initiating the transfer.</p>	

Action #2: Navigate to home screen

(e.g., Tap 'Browse Off'.)

1. **[BEFORE ACTION]** Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
Post task completion, users are likely to head back the home screen to check their balance and transaction record.		
What in the UI helped/confused Emma in this step?		

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Technology Adoption <input type="checkbox"/> Complexity of Tasks
Why?		
		The transfer status screen talks about canceling the transaction but there are no visual cues to send the user back to the home screen.
What in the UI helped/confused Emma in this step?		
		The final screen does not have "Go back to home" options which will confuse the user of their next steps.

Scenario (Overall Goal): Activate new card

(e.g., Abi wants to find a science fiction book.)

Subgoal #_1_: Navigate to activate card screen

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
User has opened the banking application as instructed by the new card activation instruction received over mail.		

Action #1: Click on the activate card banner

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The instructions have indicated to use the banking application. The user can see an activate card banner right after they have opened the application.</p>		
What in the UI helped/confused Emma in this step?		
<p>A loud banner is shown on the home screen to activate the card.</p>		

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
The user will see the activate card screen with all the instructions.		
What in the UI helped/confused Emma in this step?		

Subgoal #_2_ : Enter the details

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>Entering details would be the natural intuition as similar is done in traditional banking.</p>		

Action #1: Enter card details

(e.g., Tap 'Browse Off'.)

1. **[BEFORE ACTION]** Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The screen prompts with labels and auto-focused text fields to enter the details. Also, we have hints and tool tips to aid the user.</p>		
What in the UI helped/confused Emma in this step?		
<p>There are a lot of UI elements to handhold the user through the transfer process.</p> <p>Eg: Progress Bars, Step indicators, tool tips, hints, voice-to-text</p>		

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
<p>Post entering the information, they are validated and navigates to the next screen for further inputs.</p>		
What in the UI helped/confused Emma in this step?		

Subgoal #_3_ : Review and activate

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user is prompted a review screen where they can validate their details – comprehend information easily. This will provide confidence to the user to initiate the transfer.</p>		

Action #1: Review and click on activate

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user is confident about details entered, and they can review the details shown. And this less financially risky operation.</p>		
What in the UI helped/confused Emma in this step?		

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
	There were UI elements obstructing data. Hence, the user may not about the information beneath the UI element	
What in the UI helped/confused Emma in this step?		
	An alert box was hiding important information that user might want to review before initiating the transfer.	

Action #2: Navigate to home screen

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>Post task completion, users are likely to head back the home screen to check their balance or perform other tasks.</p>		
What in the UI helped/confused Emma in this step?		

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Technology Adoption <input type="checkbox"/> Complexity of Tasks
Why?		
		In the final screen here are no visual cues to send the user back to the home screen.
What in the UI helped/confused Emma in this step?		
		The final screen does not have "Go back to home" options which will confuse the user of their next steps.

Scenario (Overall Goal): Search and Report Transaction

(e.g., Abi wants to find a science fiction book.)

Subgoal #_1_: Navigate to report transaction screen

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
The first instinct of the user would be to search for the option to get started with goal.		

Action #1: Click on the sliding navigation pane

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error	<input type="checkbox"/> Technology Adoption <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Comprehension of Information

<input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Comprehension of Information</i>	
<input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>None of the above</i>	
Why?		
		Emma might search for report transaction option using the search box on the home screen, which is not intended for this purpose.
What in the UI helped/confused Emma in this step?		
		The home page icons were confusing and that there were no labels to clearly indicate the report transaction option. Also, the sliding navigation pane might not be common across other application where most used features are listed.

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>

<i>Why?</i>		
Emma would see a report transaction option in the sliding navigation pane which will validate her step.		
<i>What in the UI helped/confused Emma in this step?</i>		
The navigation pane has the icons and labels listed.		

Subgoal #_2_ : Search transaction

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>To quickly find a transaction user will resort to filters and search features.</p>		

Action #1: Filter for transactions

(e.g., Tap 'Browse Off'.)

1. **[BEFORE ACTION]** Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
	<p>The screen prompts with labels. Also, we have hints and tool tips to aid the user.</p> <p>Or the user might resort to scrolling through the list of transactions.</p>	
What in the UI helped/confused Emma in this step?		
	<p>There are a lot of UI elements to handhold the user through the transfer process.</p> <p>Eg: Progress Bars, Step indicators, tool tips, hints, voice-to-text</p>	

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user will be able to see the filtered transaction on the screen.</p>		
What in the UI helped/confused Emma in this step?		

Subgoal #_3_: Report transaction

1. Will Emma have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
	<p>The user might not even be able to find the transaction, or the user might find clarification about the same.</p>	

Action #1: Select transaction to report

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion

<input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
	Not all the details are mentioned in the screen especially the applied filters and table headers.	
What in the UI helped/confused Emma in this step?		
	The screen has some missing details.	

2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Comprehension of Information
Why?		
		The user is confused with the next steps as they are prompted to review rather than report

What in the UI helped/confused Emma in this step?		

Action #2: Navigate to home screen

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will Emma do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
Post task completion, users are likely to head back the home screen to check their balance or perform other tasks		
What in the UI helped/confused Emma in this step?		

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2. **[AFTER ACTION]** If Emma does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of Emma's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Technology Adoption <input type="checkbox"/> Complexity of Tasks
Why?		
		The review screen talks about the transaction status and but there are no visual cues to send the user back to the home screen.
What in the UI helped/confused Emma in this step?		
		The screen does not have "Go back to home" options which will confuse the user of their next steps.

Mainstream Persona

CW: Use-case #3

Scenario (Overall Goal): Transfer Funds

(e.g., Abi wants to find a science fiction book.)

Subgoal #_1_: Navigate to transfer fund screen

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
John is a tech-savvy individual and is familiar with different navigation patterns used in applications.		

Action #1: Click on the sliding navigation pane

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
John has used many other applications using different navigation patterns.		
What in the UI helped/confused John in this step?		

2. [AFTER ACTION] If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i>

<input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
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Why?

<p>John would see a transfer funds option in the sliding navigation pane which will validate his step.</p>		
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What in the UI helped/confused John in this step?

<p>The navigation pane has the icons and labels listed.</p>		
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Subgoal #_2_ : Enter the details

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>Entering details would be the natural intuition as the screen auto focuses on the text field.</p>		

Action #1: Enter the beneficiary details

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The screen prompts with labels and auto-focused text fields to enter the details. Also, we have hints and tool tips to aid the user.</p>		
What in the UI helped/confused John in this step?		
<p>There are a lot of UI elements to handhold the user through the transfer process.</p> <p>Eg: Progress Bars, Step indicators, tool tips, hints, voice-to-text</p>		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>Post entering the information, they are validated and navigates to the next screen for further inputs.</p>		
What in the UI helped/confused John in this step?		

Subgoal #_3_: Complete transfer

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
<p>The user is prompted a review screen where they can validate their details – comprehend information easily. This will provide confidence to the user to initiate the transfer.</p>		

Action #1: Review and initiate transfer

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user is confident about details entered, and they can review the details shown. They have fast comprehension, so he is more of a skimmer of details.</p>		
What in the UI helped/confused John in this step?		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
The user is confident about details entered. They have fast comprehension, so he is more of a skimmer of details. He also has low tendency towards error which will influence this action.	There were UI elements obstructing data. Hence, the user may not about the information beneath the UI element.	
What in the UI helped/confused John in this step?		
	An alert box was hiding important information that user might want to review before initiating the transfer.	

Action #2: Navigate to home screen

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>Post task completion, users are likely to head back the home screen to check their balance and transaction record.</p>		
What in the UI helped/confused John in this step?		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Technology Adoption <input type="checkbox"/> Complexity of Tasks
Why?		
		The transfer status screen talks about canceling the transaction but there are no visual cues to send the user back to the home screen.
What in the UI helped/confused John in this step?		
		The final screen does not have "Go back to home" options which will confuse the user of their next steps.

Scenario (Overall Goal): Activate new card

(e.g., Abi wants to find a science fiction book.)

Subgoal #_1_: Navigate to activate card screen

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
User has opened the banking application as instructed by the new card activation instruction received over mail.		

Action #1: Click on the activate card banner

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
The instructions have indicated to use the banking application. The user can see an activate card banner right after they have opened the application.		
What in the UI helped/confused John in this step?		
A loud banner is shown on the home screen to activate the card.		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
<i>Which, if any, of John's facets did you use to answer the question?</i>		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user will see the activate card screen with all the instructions.</p>		
<i>What in the UI helped/confused John in this step?</i>		

Subgoal #_2_ : Enter the details

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>Entering details would be the natural intuition as the user would see an autofocused text field prompting for input.</p>		

Action #1: Enter card details

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
The screen prompts with labels and auto-focused text fields to enter the details. Also, we have hints and tool tips to aid the user.		
What in the UI helped/confused John in this step?		
There are a lot of UI elements to handhold the user through the transfer process. Eg: Progress Bars, Step indicators, tool tips, hints, voice-to-text		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>Post entering the information, they are validated and navigates to the next screen for further inputs.</p>		
What in the UI helped/confused John in this step?		

Subgoal #_3_ : Review and activate

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user is prompted a review screen where they can validate their details – comprehend information easily. This will provide confidence to the user to initiate the transfer.</p>		

Action #1: Review and click on activate

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user is prompted a review screen where they can validate their details – comprehend information easily. This will provide confidence to the user to initiate the transfer.</p>		
What in the UI helped/confused John in this step?		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user is confident about details entered, and they can review the details shown. They have fast comprehension, so he is more of a skimmer of details</p>	<p>There were UI elements obstructing data. Hence, the user may not about the information beneath the UI element.</p>	
What in the UI helped/confused John in this step?		
	<p>An alert box was hiding important information that user might want to review before initiating the transfer.</p>	

Action #2: Navigate to home screen

(e.g., Tap 'Browse Off'.)

1. **[BEFORE ACTION]** Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
Post task completion, users are likely to head back the home screen to check their balance or perform other tasks.		
What in the UI helped/confused John in this step?		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Technology Adoption <input type="checkbox"/> Complexity of Tasks
Why?		
		In the final screen here are no visual cues to send the user back to the home screen.
What in the UI helped/confused John in this step?		
		The final screen does not have "Go back to home" options which will confuse the user of their next steps.

Scenario (Overall Goal): Search and Report Transaction

(e.g., Abi wants to find a science fiction book.)

Subgoal #_1_: Navigate to report transaction screen

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The first instinct of the user would be to search for the option to get started with goal.</p>		

Action #1: Click on the sliding navigation pane

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
John has used many other applications using different navigation patterns.		
What in the UI helped/confused John in this step?		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
<i>Which, if any, of John's facets did you use to answer the question?</i>		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
<i>Why?</i>		
<p>John would see a report transaction option in the sliding navigation pane which will validate her step.</p>		
<i>What in the UI helped/confused John in this step?</i>		
<p>The navigation pane has the icons and labels listed.</p>		

Subgoal #_2_: Search transaction

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>To quickly find a transaction user will resort to filters and search features.</p>		

Action #1: Filter for transactions

(e.g., Tap 'Browse Off'.)

1. **[BEFORE ACTION]** Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>John is a tech-savvy individual, he is exposed to various filtering options across many applications.</p>		
What in the UI helped/confused John in this step?		
<p>There are a lot of UI elements to handhold the user through the transfer process.</p> <p>Eg: Progress Bars, Step indicators, tool tips, hints, voice-to-text</p>		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Comprehension of Information</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
<p>The user will be able to see the filtered transaction on the screen.</p>		
What in the UI helped/confused John in this step?		

Subgoal #_3_ : Report transaction

1. Will John have formed this sub-goal as a step to their overall goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
	<p>The user might not even be able to find the transaction, or the user might find clarification about the same.</p>	

Action #1: Select transaction to report

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above
Why?		
	Not all the details are mentioned in the screen especially the applied filters and table headers.	
What in the UI helped/confused John in this step?		
	The screen has some missing details.	

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
<i>Which, if any, of John's facets did you use to answer the question?</i>		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Comprehension of Information
Why?		
		The user is confused with the next steps as they are prompted to review rather than report
<i>What in the UI helped/confused John in this step?</i>		

Action #2: Navigate to home screen

(e.g., Tap 'Browse Off'.)

1. [BEFORE ACTION] Will John do this? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> <i>Confidence about Task Completion</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>	<input type="checkbox"/> <i>Attitude towards Financial Risk</i> <input type="checkbox"/> <i>Technology Adoption</i> <input type="checkbox"/> <i>Confidence about Task Completion</i> <input type="checkbox"/> <i>Complexity of Tasks</i> <input type="checkbox"/> <i>Tendency towards Error</i> <input type="checkbox"/> <i>Comprehension of Information</i> <input type="checkbox"/> <i>None of the above</i>
Why?		
Post task completion, users are likely to head back the home screen to check their balance or perform other tasks		
What in the UI helped/confused John in this step?		

2. **[AFTER ACTION]** If John does this, will they know they did the right thing and are making progress toward their goal? Why?

<input type="checkbox"/> Yes	<input type="checkbox"/> Maybe	<input type="checkbox"/> No
Which, if any, of John's facets did you use to answer the question?		
<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Attitude towards Financial Risk <input type="checkbox"/> Technology Adoption <input type="checkbox"/> Confidence about Task Completion <input type="checkbox"/> Complexity of Tasks <input type="checkbox"/> Tendency towards Error <input type="checkbox"/> Comprehension of Information <input type="checkbox"/> None of the above	<input type="checkbox"/> Technology Adoption <input type="checkbox"/> Complexity of Tasks
Why?		
		The review screen talks about the transaction status and but there are no visual cues to send the user back to the home screen.
What in the UI helped/confused John in this step?		
		The screen does not have "Go back to home" options which will confuse the user of their next steps.

High Fidelity Prototypes

Concept #1

For: Use-case #1

Updates and Justification

- Incorporated Single Sign-on (SSO) which aims to reduce security risks and remembering various passwords. It reduces the attack surfaces for possible security breaches. SSO reduces the number of logins to as minimum as one per day. This will help our underserved population in their short-term memory issues.
- We have added the face ID for easy authentication to keep the traditional login features that the mainstream population are more familiar with.
- Due to the mixed reviews of the Design Gallery feedback, we decided that the enhanced multi-factor authentication and the external login key concepts might not aid in improving login experience for our population.

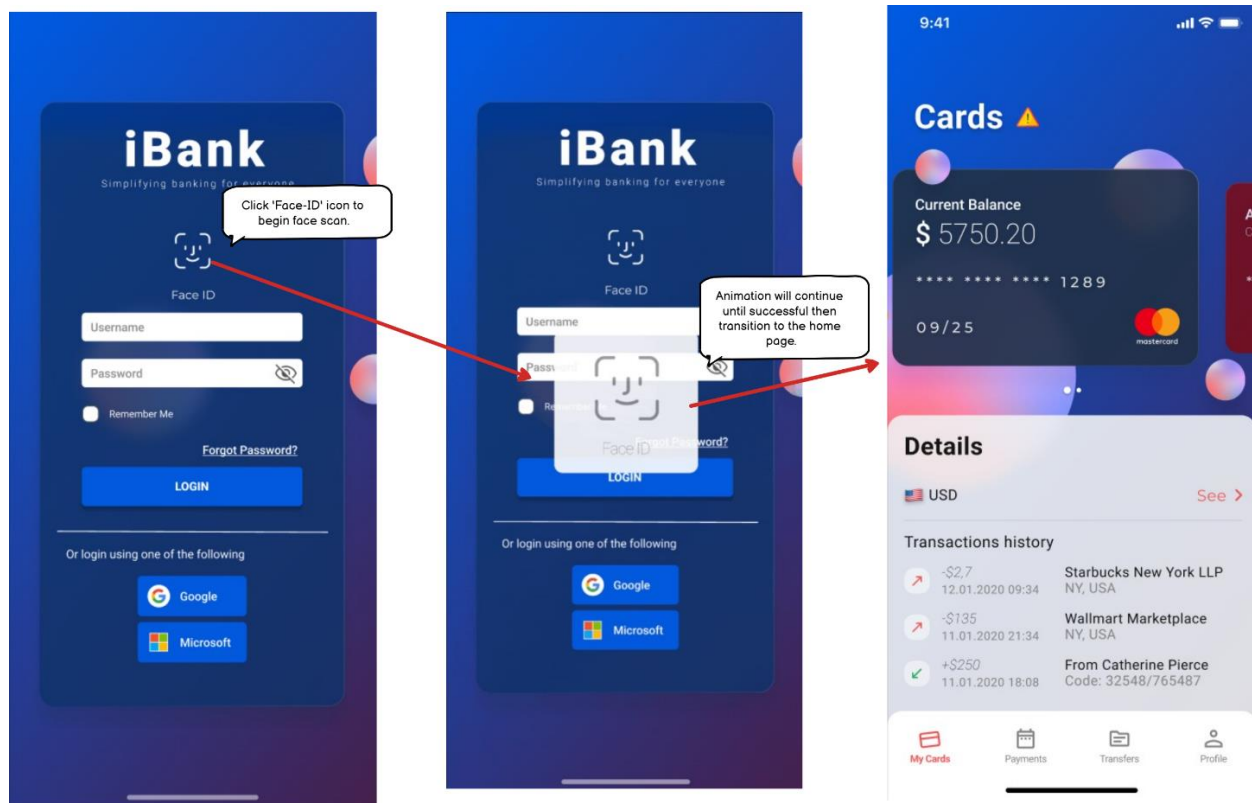


Figure 11: Face ID based authentication

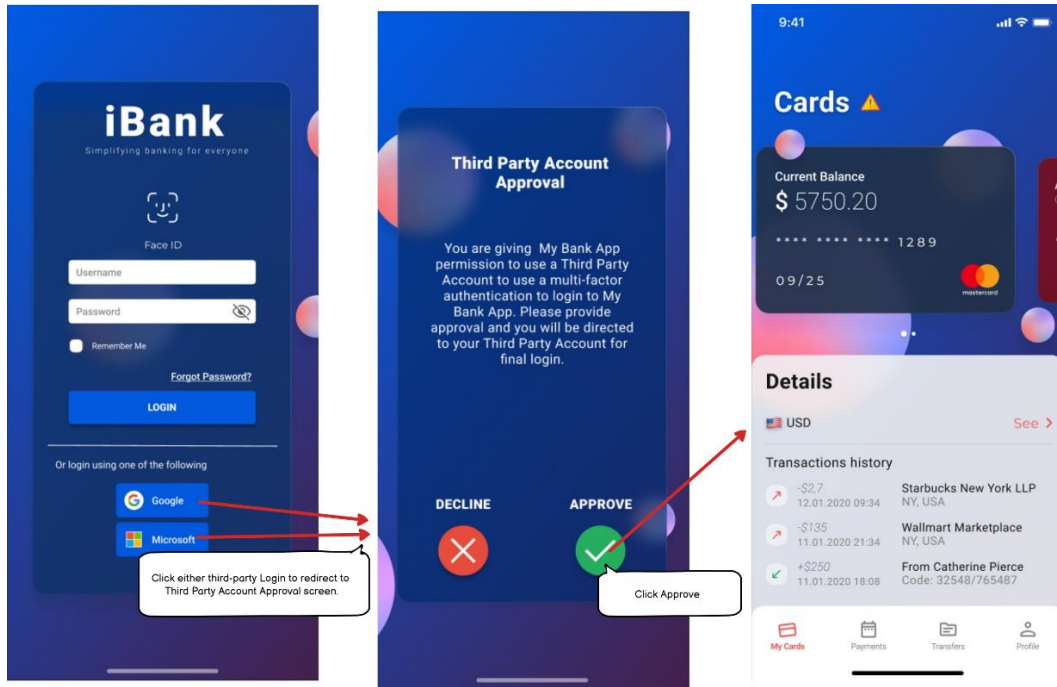


Figure 12: Third party login

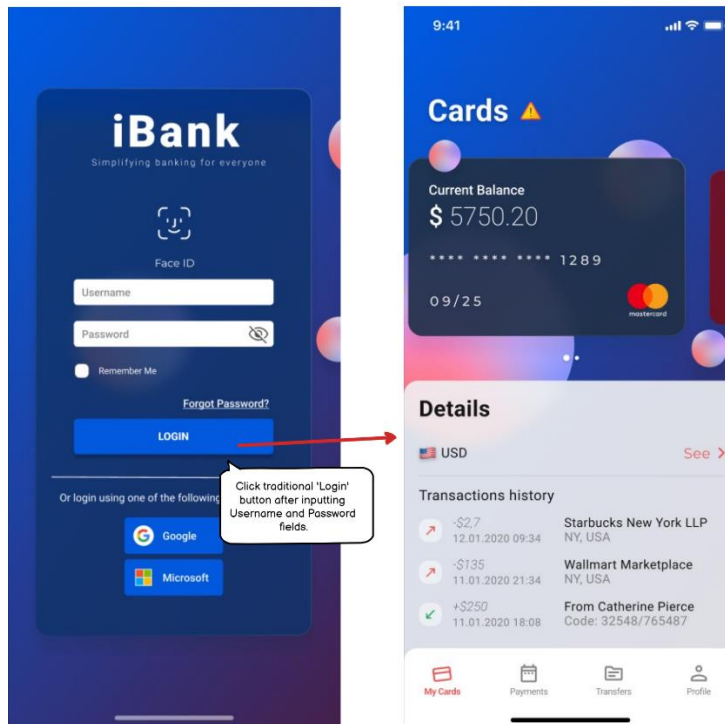


Figure 13: User in session

Concept #2

For: Use-case #2

Updates and Justification

- The copy and un-copy feature were liked based on Design Gallery #1 feedback with the only issue being it could leave the users vulnerable if they were to accidentally paste the sensitive information somewhere undesirable. We provided a small alert option on screen at the top to confirm the copying of sensitive information. Additionally, we have added the option to un-copy the account and routing number to ensure they will not accidentally paste it somewhere that could leave them vulnerable.
- We've minimized the design of the profile page based on Design Gallery #2 feedback mentioning that the first prototype contained an overload of information on the screen causing confusion for our underserved population.
- Design Gallery #3 feedback brought to our attention the buttons to copy the account and routing number and text were not very large. This created a possible problem for our underserved persona who often deal with slight vision, dexterity, and hand coordination issues. We've since enlarged the buttons and text within.

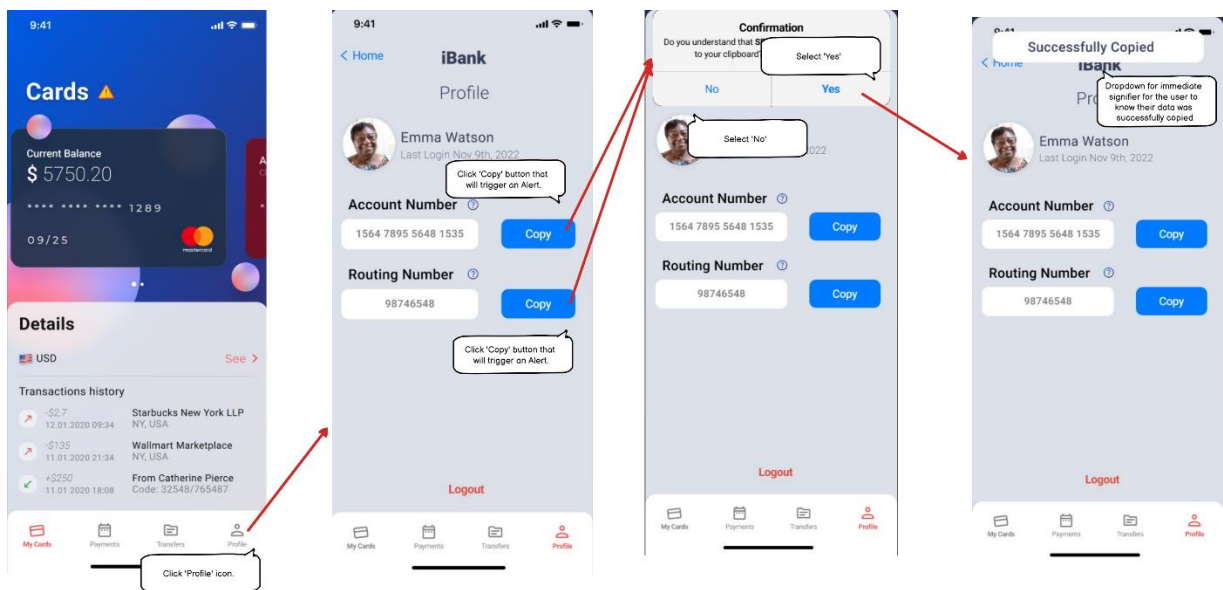


Figure 14: Get account details

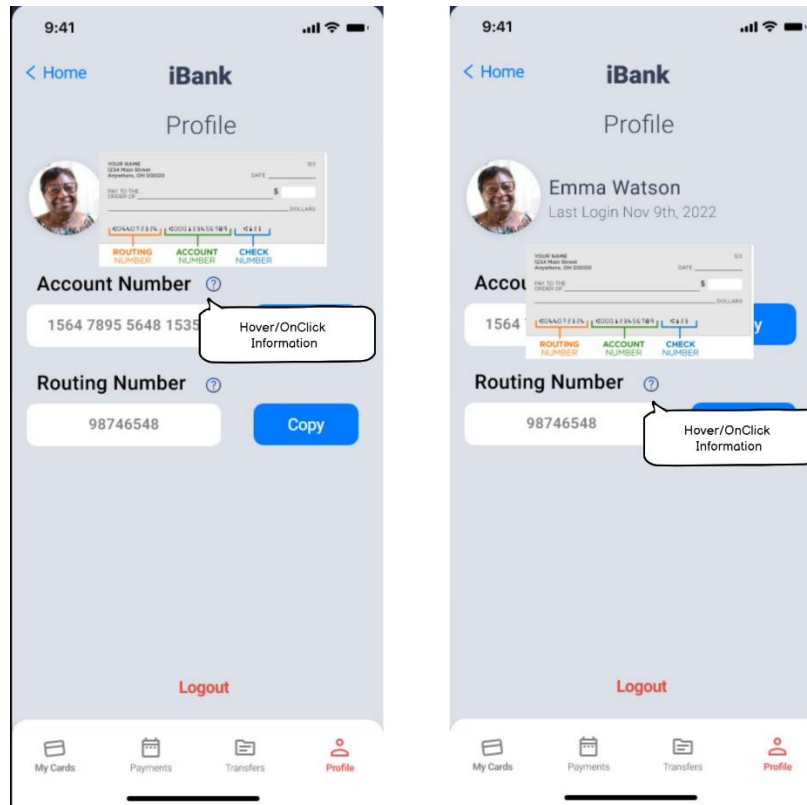


Figure 15: Tooltip for additional information

Concept #3

For: Use-case #3

Updates and Justification

- During our cognitive walkthrough we have found that our Underserved persona, Emma, was unable to navigate to the transfer funds screen because she was unfamiliar with the transfer funds icon on the home screen. To make it simpler for users to identify the functionality they need; we have labeled the icons.
- During Design Gallery #2, it was mentioned that it would be helpful for our users to have a small overview of the account balance next to the amount field when viewing the transfer funds screen. This would give the users more confidence transferring funds that they know they have.
- The cognitive walkthrough showed us that some transfer funds details were missing from a review screen to help the user make an informed decision. As a result, it was causing issues with financial risk and tendency towards error. So, we updated the review screen to show all the transfer funds data for review.
- Design Gallery #2 gave us helpful feedback based on our alert box on our review screen. The alert box to confirm the crucial information on the review screen would cover the crucial information itself. Therefore, to solve that issue, we moved the alert box to the top of the screen, where users can now see the review details and access the alert box.
- We've received positive feedback with our 'Read-Aloud' feature on the review screen. This function reads out loud the details of the review screen so that our underserved persona can double-check the information they've entered.
- We have a unique feature that is an ability to revert the transfer funds translation within a certain time frame. This feature was very well received in the first two design galleries.
- In our cognitive walkthrough, we discovered that the lack of "Home" options on the successful transfer screen left the underserved and mainstream user unsure on what to do next. By including a 'Home' screen navigation button at the top, we were able to fix it.

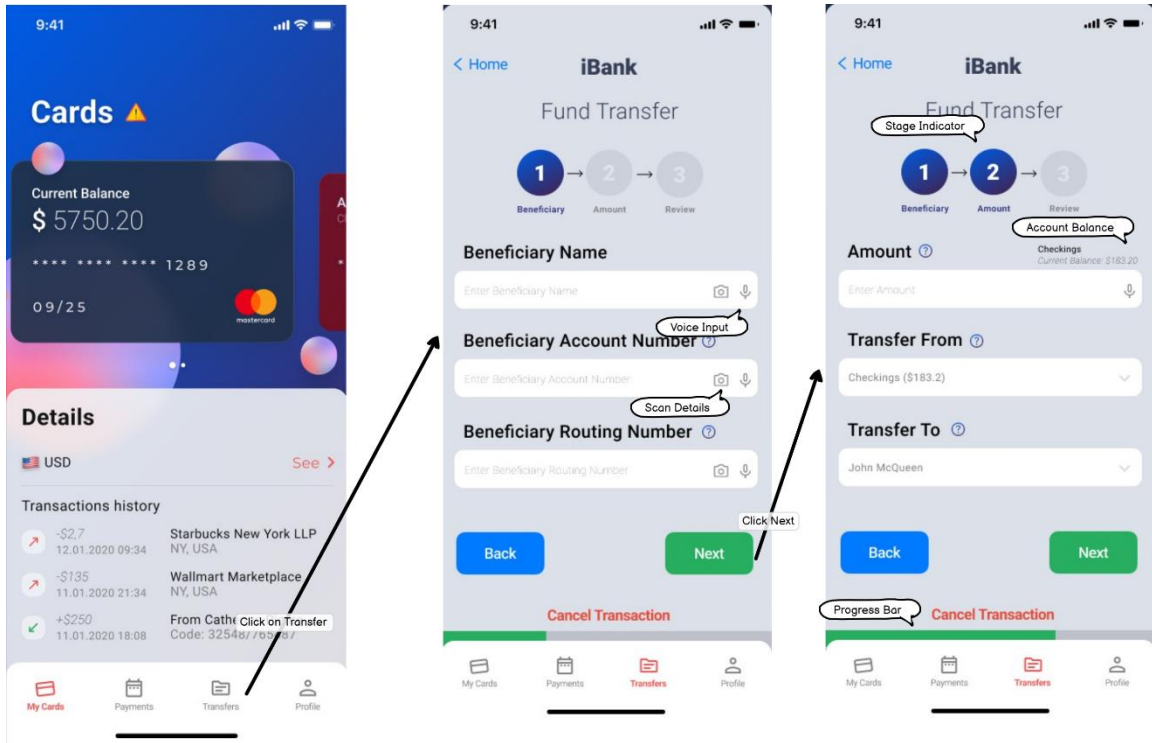


Figure 16: Fund Transfer Flow - 1

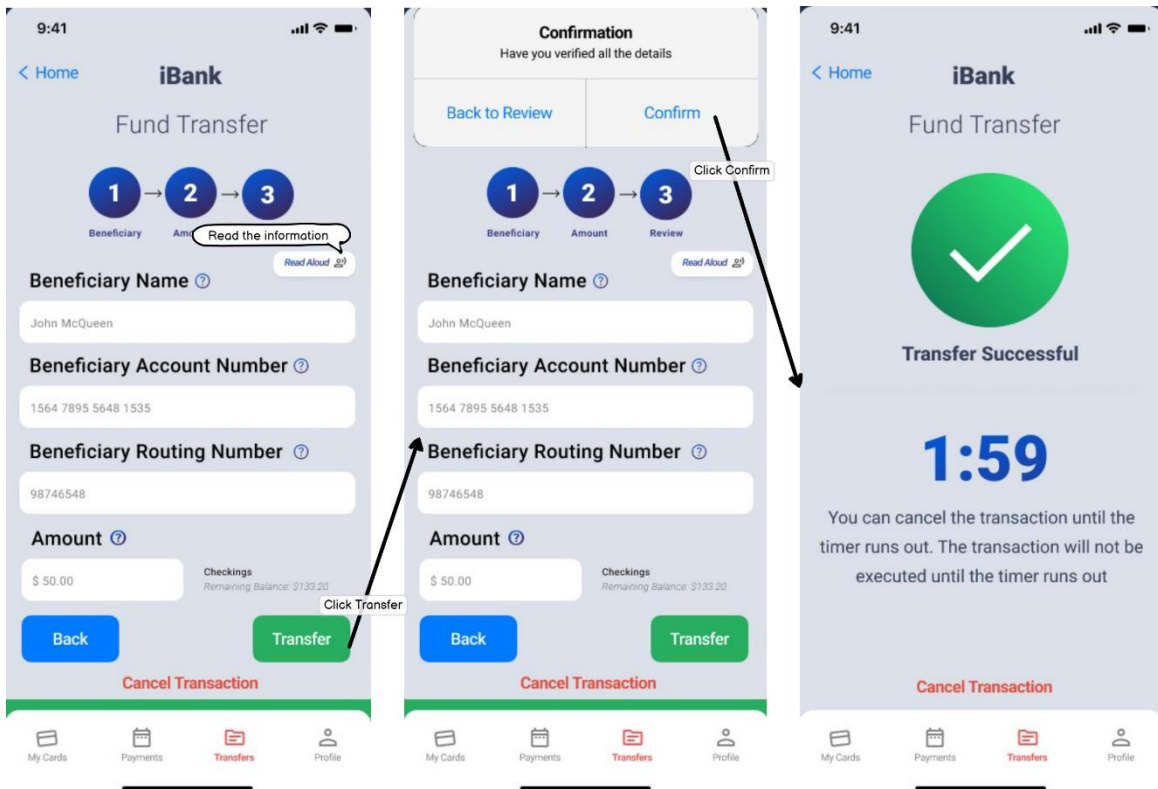


Figure 17: Fund Transfer Flow - 2

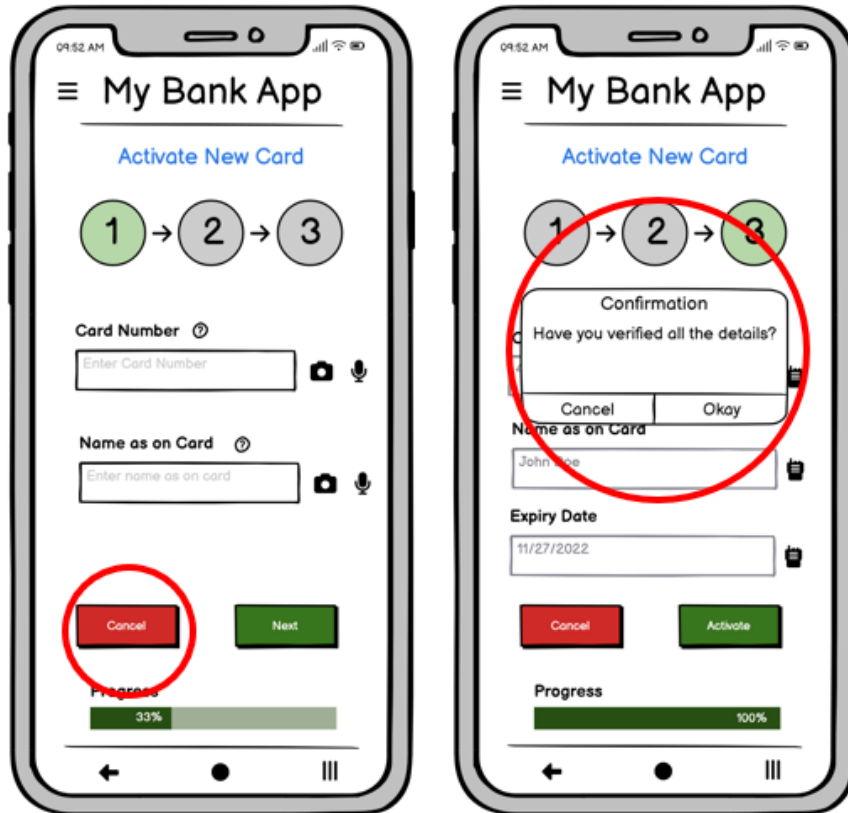


Figure 18: UI obstruction and confusion in navigation flow

Concept #4

For: Use-case #4

Updates and Justification

- The application follows a similar task flow across use-cases to minimize surprises in conducting the tasks, there are progress bars to give our underserved population confidence in task completion and tooltips with visual information for each input field.
- During our cognitive walkthrough
 - The review screen for activating card details, some of the information was missing, which was preventing the user from proceeding with the card activation. As a result, it is causing a tendency towards error. So, we modified the review screen to show all the activating card details for review.
 - We had an alert box on the review page to ensure that they had seen the details, but because of that alert box, the crucial information on the review screen was hidden. Therefore, to solve that issue, we moved the alert box to the top of the screen, where users can now see the review details and access the alert box.
 - Both our underserved and mainstream population found that our final screen lacked "Home" options, confusing the user about their next steps. So, we fixed that by adding a home screen navigation option.

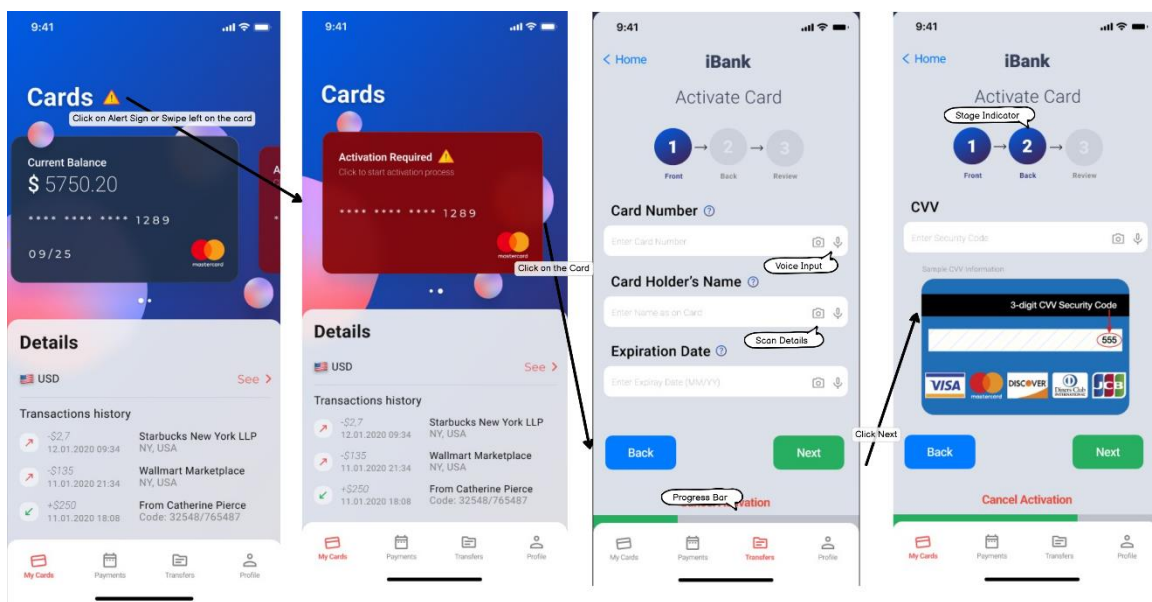


Figure 19: Card Activation Flow - 1

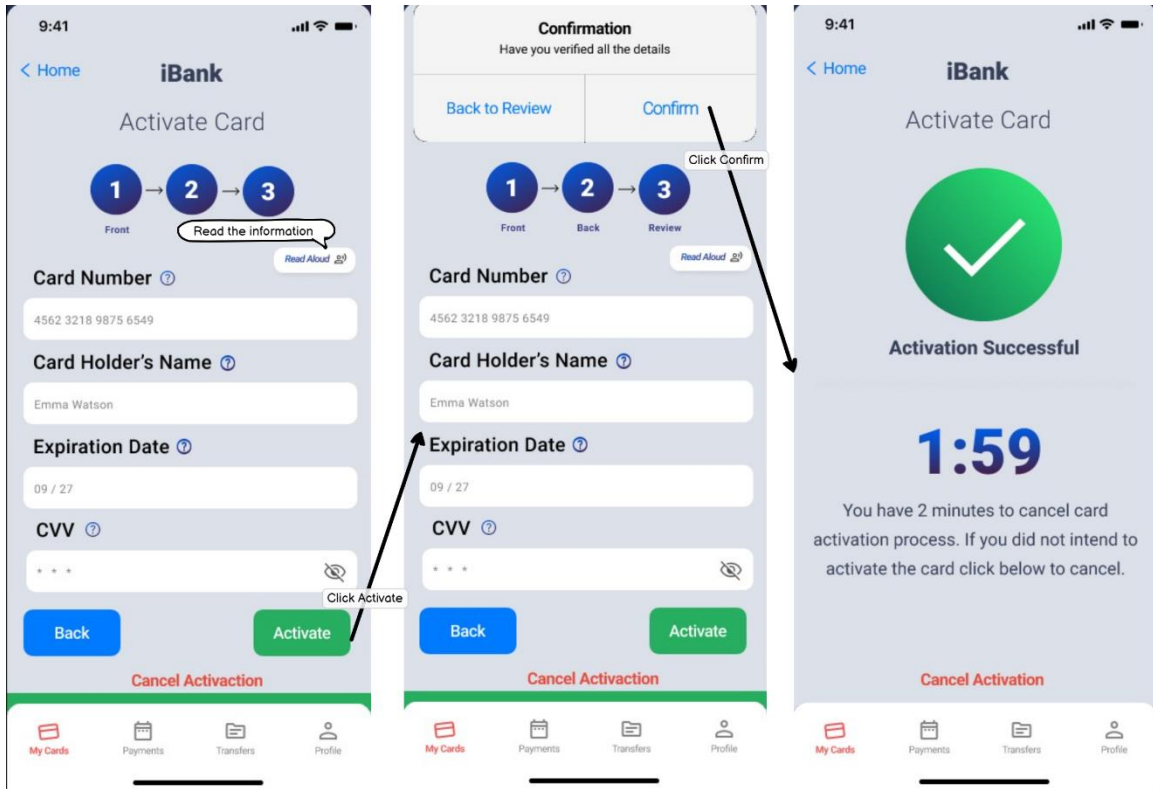


Figure 20: Card Activation Flow - 2

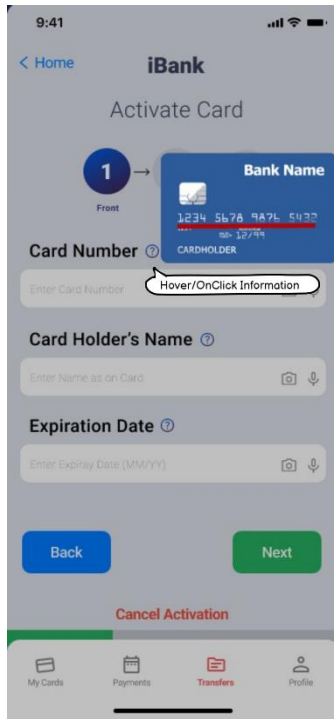


Figure 21: Hover/OnClick for additional information

Concept #5

For: Use-case #5

Updates and Justification

- During the Cognitive Walkthrough,
 - We discovered our success screen lacked "Back to home" options, confusing the user about their next steps. So, we fixed that by adding a home screen navigation option (seen in our high-fidelity screens).
 - Emma (Underserved persona) was unable to navigate to the report fraud screen because she was unaware of the report fraud icon on the home screen. As a result, we have labeled the icons to make it easier to determine the functionality they are looking for.
 - We had a review screen where some of the report fraud details were not present. As a result, it was hard to proceed further to report fraud. Hence this was contributing to a tendency towards error. So, we have fixed the review screen to display all the fraud related details to review.
 - The screen to report the fraud had a button that said "Review" which is confusing because "Report" would be expected, even if taken to a screen to review the details. We needed to change the button to read "Next" to navigate to the "Review" screen.
- There are a lot of UI elements on the report fraud screen, this will cause a lot of confusion for the user to filter the transaction they are looking for. So, we have provided a filters tag to show the user what all filters they have applied to find the transaction
- Because of the Design Gallery #1 feedback, we have removed the sliding navigation pane because it is not common in other applications and all our features were listed there.
- Both the Design Gallery feedback and the Cognitive Walkthrough showed that the details of the various transactions were confusing in the initial reporting screen. We gave the columns of data headers to explain what it is. Also, the suggestion to move the slide to select a transaction to report to be next to the money would make it easier to match up. We have moved the slide indicator to the right next to the money amounts and named the columns of details.

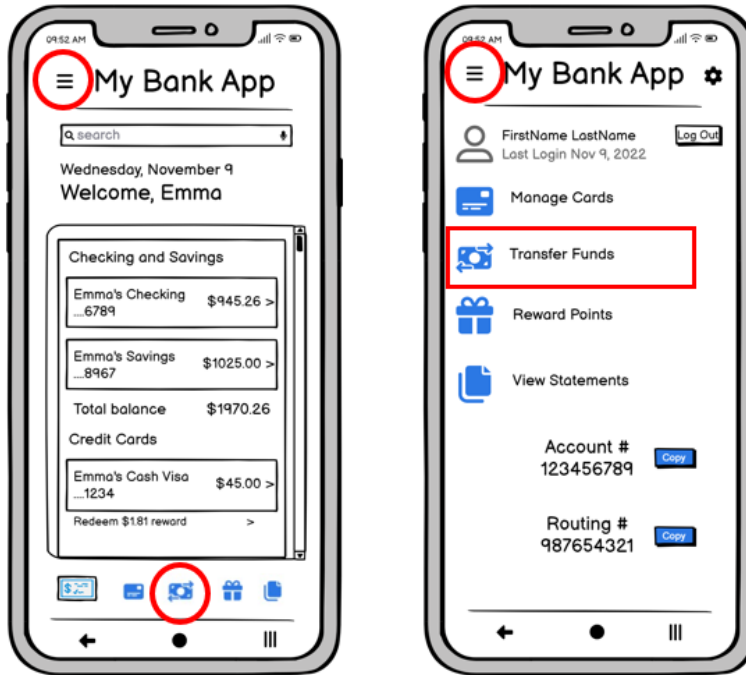


Figure 22: Homepage UI issues

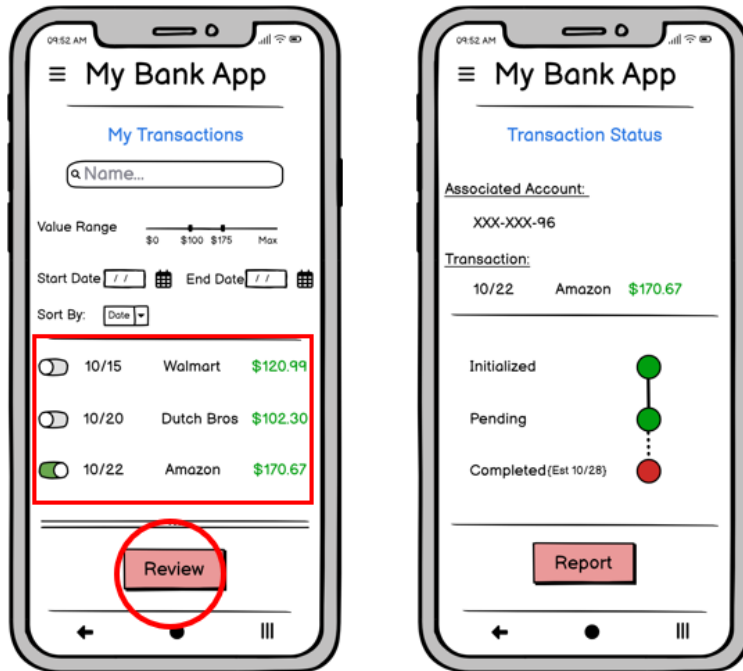


Figure 23: Missing table header and counter intuitive word choice

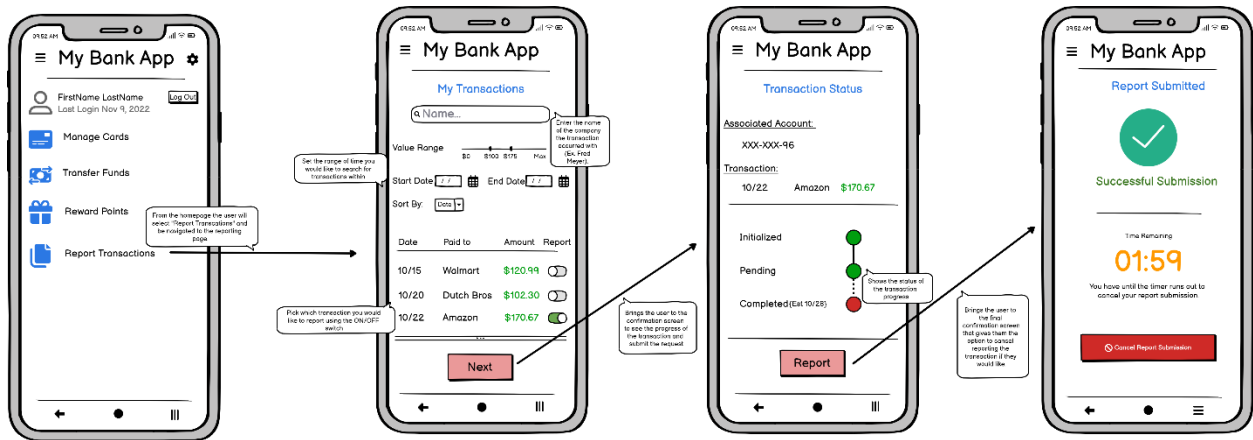


Figure 24: Reporting fraudulent transaction