BROKE but WOKE

SMAD 317 | FINAL REPORT

Julia Yeager & Kayla Schneider

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EXECUTIVE SUMMARY

College students need to track spending to learn how to budget money in the real world. Having independence from parents and home-life for the first time, can be a hard adjustment. College students seem to spend a lot of money on arbitrary things like fast food and delivery services and the small dollar amounts spent here and there will add up quicker than they think. When an unexpected monetary crisis comes up, the student is left not knowing how to pay for it. Budgeting is an extremely important life skill to learn, and college is the perfect time to start. This app is designed to be beneficial to primarily college students who may be partially dependant on their parents, or potenitally fully on their own. Budgeting money for the first time can be challenging and having multiple bank accounts can be hard to keep track of. Broke but Woke is a great way to consilidate everything into one place.

PROBLEM STATEMENT

The problem is that many college students struggle with over-spending and budgeting money. College is often the first-time students do not live with guardian figures who either have control over their finances or keep up with their transactions. Most often, students will arrive at college with little to no experience of how to budget their money. Moreover, students will arrive at college with little to no knowledge of what expenses to expect. Besides tuition, there are a lot of miscellaneous expenses such as textbooks, school supplies, groceries, ride-sharing fees, food-delivering services, etc. that students often overlook in their budget until they get to college. These factors can really dwindle down a summer-income savings or a parent's allowance. Budgeting is a real-world skill that everyone needs to master at some point, and college could be a great time for students to learn. There needs to be a way to easily keep track of spending and budgeting, specifically geared towards college students. There needs to be a way to keep college students steadily working towards saving money in a fun, engaging, and useful way. We want to create an app created by college students for college students that can make these needs possible and feasible.

RELATED WORKS

1. Mint | https://mint.intuit.com

The design problem that this system identifies is to decrease spending and budget out money. This system addresses this problem by helping users manage money on a one-stop-shop app, with custom budgeting, spending tracking, and subscription monitoring. Some good points and principles of this design is that Mint includes reminders such as when to pay bills, notifications when users get paid, and also offers tips to the users. We hope to do the same and make our app very interactive and conversational with the user. Mint is also very safe with bank information which is something that would be very important to our service too. Mint's design and look to the app is very sleek, modern, and easy to use which is why it is a very popular app among millennials. We hope to use these same techniques but cater them to an even younger generation and make the app very straightforward to use but also fun and more engaging to college students. This should fill the gap that Mint is missing by creating our app to be more attractive to college students through visual design, usability, and relatability.

2. TrueBill | https://www.truebill.com

The design problem that this system identifies is not having a source and platform to control and manage your finances. TrueBill is an automated financial hub that, similarly to Mint, aims to optimize spending, manage subscriptions, lower bills, etc. I really like how TrueBill is very clear and concise about what bills are coming up and when they are due. Similarly, I would definitely like to include a calendar about what payments are coming up and also include a graph like theirs of where the user is in terms of their monthly budget in our service. One downfall of TrueBill is that it is very highly marketed more as a subscription managing app than a money managing app. I have definitely heard of TrueBill before, but I thought it was solely an app that cancels unknown/unwanted subscriptions. While this is a cool feature and one we will include in our app, it would be one of our minor features. College kids often are still a little reliant on their parents and this is especially true in subscription cases, such as Netflix or Hulu. Subscription management would not be a very important feature in regard to college students.

RELATED WORKS

3. Simplifi by Quicken | https://get.simplifimoney.com

Simplifi by Quicken identifies the design problem of seeing all of your spending in one place. This service allows you to view a consolidated preview of all of your banking, credit cards, loans, and investment all in one place. Like most other services mentioned here, Simplifi allows you to track your spending and budget out what you need for living expenses. One design aspect I really liked is the Blog. It allows other users to share their own personal experiences and budgeting and saving tricks. One frustrating design aspect is the inability to try the service before signing up. A free trial is available, but still requires payment information, which can be frustrating to cancel if the user decides they do not like the service. A design aspect to consider is the overall preview of accounts and expenses to allow users to see the big picture overview of their money.

4. PocketGuard |https://pocketguard.com

Pocket Guard helps users track spending over multiple accounts and cards, in addition to cash. It allows users to spread out monthly payments to help alleviate some of the stress of paying everything on the first day of the month. It allows you to set goals and set aside money for special events that may require a month's worth of savings. Pocket Guard is also diligent about protecting your personal information and is securely encrypted. One design issue is that everything is on a phone application and does not seem to allow access on a desktop web browser. A design aspect to consider would be a phone and desktop application, with the ability to access it from anywhere.

5. Mvelopes | https://mvelopes.com

Mvelopes identifies a design problem that helps users learn their spending habits and how to adapt to a budget system. This system addresses the problem by having users take a short assessment to identify spending habits and to help create a budget that works best for them. The goal of Mvelopes is to make sure the money spent has a purpose and avoid any debt that might arise. In addition to a monthly subscription, Mvelopes offers various education courses on money management. Having the pre-assessment and user education are two features that will be kept in mind when creating our own system. While having a paid service may be a nuisance, the paid aspect gives you more benefits. However, with Mvelopes there is no way to avoid paying before having any knowledge of the service. A free trial will only help but so much. Something to consider implementing would be videos of how the service works and/or a way to view what you would be paying for so users can see if it has the features that work best for their needs.

User Research

Defining Our Users

Our users are primarily college students who struggle with overspending and budgeting money. Most often, students will arrive at college with little to no experience of how to budget their money and are in need of having a system to easily keep track of spending and budgeting, specifically geared towards college students.

The impact of this app is that young adults will learn how to save, track, and budget out money in college. Users will exponentially better themselves at budgeting which is a skill they will have with them for the rest of their lives. Budgeting is a necessary societal skill that has to be learned at some point so if this problem is not solved for a while, users will just procrastinate and continue to spend their money irresponsibly. This can lead to build up of debt and expenses in their later life. Without this app, financial instability can ensue and that can lead to unhealthy habits and numerous issues including an unhappy mental state.

For our interviews, we wanted to be diverse in our approach and we aimed to get a variety of users of different grade levels, gender, social agendas, and majors. We felt through these categories, we could get a good grasp of many different viewpoints and their spending/saving habits.

It was a little difficult for us to find people to interview as we are amid a global pandemic. We decided to interview people we knew or were connected with but made sure we were interviewing people to fit our differing demographics that we listed above. We decided to interview five college students- at least one in each different grade level.

DESIGN PROCESS

## User Research

Interview Process:

   With Covid-19 restrictions, we chose to utilize the internet and our phones and conducted interviews over the phone and through Facetime. Before conducting interviews, we realized that money is sometimes a private matter so we made sure to be respectful and understanding when asking about financial situations and saving/spending habits. Below is a little more information about our interviewees.

Interviewee #1: Jennifer: Female, Sophomore, Media Arts and Design Major: Interview conducted over the phone.
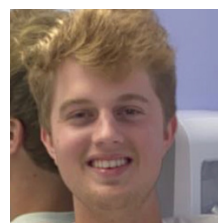

Interviewee #2: Aidan: Male, Freshman, Economics Major: Interview conducted through FaceTime.
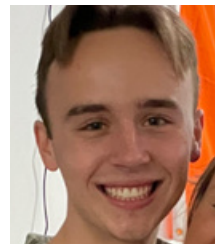
Interviewee #3: Carson: Male, Junior, Business Major: Interview conducted over the phone

Interviewee #4: Hannah: Female, Senior, Music Industry Major: Interview conducted on FaceTime.

Interviewee #5: Josh: Male, Junior, ISAT Major: Interview conducted over the phone.

DESIGN PROCESS

User Research

Interview Questions:

During the Interview, we asked each participants the following questions:

Intro/Building Rapport

- How are you doing today?
- Have you ever been interviewed like this before?/ Explain the purpose of the interview.
- What year are you?
- What is your major?
- What do you do in your free time aside from school?

Digging for stories and emotions

1. Do you have a bank account in your name? If so, do you have access to your checking and/or savings account?
2. When and on what things do you spend your money and when and on what things do your parents usually cover?
3. Explain your current way of managing your money.
4. Explain if there was a shift in parental involvement in your finances when you went off to college.
5. Tell me about your experience when you first got to college. Did you feel a sense of financial independence? Do you feel that you were responsible with your money?
6. Did you feel like you had a lot more miscellaneous expenses than expected when you got to college? What are they?
7. How does having financial independence feel? Does it stress you out, does it feel good, etc?
8. Do you actively feel like you need to save your money or do you feel like if you ran out, your parents would help you out?
9. Give me a breakdown of what you usually spend your money on?
10. Have you used a money managing app before? If so which one(s)?
11. What features would be useful to you if you were trying to save money?

User Research

Data Analysis and Results:

From the interview process, we had to come up with a way to analyze the data to find patterns and of behavior and what college students need in order to effectively budget and track spending. For privacy reasons, we chose to ask questions more along the lines of how the user was feeling about spending habits (i.e. what they spend money on) and parental involvement, instead of more in depth and personal questions about their spending (i.e. how much they spend or how much their parents pay for) We chose to focus on the similarities and differences from each user's response and consolidated them in a way to represent a wider variety of college aged users.

We went through our interviews question-to-question and compiled the answers on a large sharable chart. We wrote down everything from quotes to answers from our interviews.

We utilized Miro for this project as for Covid restrictions we could not be together and wrote and analyzed our data through this chart:

Participant	Do you have a bank account in your name? If so, do you have access to your checking and/or savings account?	When and on what things do you spend your money and when and on what things do your parents usually cover?	Explain your current way of managing your money	Explain if there was a shift in parental involvement in your finances when you went off to college.	Tell me about your experience when you first got to college. Did you feel a sense of financial independence? Do you feel that you were responsible with your money?	Did you feel like you had a lot more miscellaneous expenses than expected when you got to college? What are they?	How does having financial independence feel? Does it stress you out, does it feel good, etc?	Do you actively feel like you need to save your money or do you feel like if you ran out, your parents would help you out?	Give me a breakdown of what you usually spend your money on?	Have you used a money managing app before? If so which ones and how did they work?	What features would be useful to you if you were trying to save money?
Jennifer · SMAD Major · Sophomore	Yes I have an account and access to both my checking and savings. I usually just use my checking account.	I usually buy everything that I use and miscellaneous goods such as clothes or dinner when I go out to eat. My Dad will pay for my essentials such as car payments, tuition, and stuff of that nature.	I really don't have a way. I try to be frugal and work over the summer and put most into my checking account and drain it on my stuff throughout the duration of the year and hope I don't run out.	Not really, this was how I managed and spent my money in high school too.	I definitely felt independent however this was how I managed money in high school so I knew in the back of my mind to try and save when I could.	Yes I felt I had a lot more. I would spend money on -uber -food delivery -clothes -groceries -textbooks -school supplies, etc	I like not having to ask for money however it does stress me out a little, especially because when I run low I know I don't have a set income to compensate.	I feel really bad to ask for money so I really wouldn't like to but my parents would help me if I needed	-clothes	No but I would use one	-I think just a fun and easy app to use -maybe somehow connects to your bank and your bank rewards you for saving
Aidan · Freshman · Economics Major	Yes to both	I spend money on non-necessities but my parents help on gas and groceries. I get this through weekly allowances but can use it to my liking	Using my banking app to check my balance	Yes my mom used to put a spending limit on my account but now I don't have that	I felt independent but I was pretty reckless with lots of impulse buys	yes -clothes -campus cookies - restaurant tabs -bus ticket -door dash -sorority dues	Stresses me out more than it feels good	I feel like I have to save, but my parents are my safety nets but I know they would be mad at me and I don't want to disappoint them	--Clothes -Rent -Take- out and Food Delivery -Fun weekend activities -Venmo transactions	No just my banking app	--reminders -and alerts with question -goals to reach and hold accountable -"oh if your paycheck won't come in for another week, are you sure you want to buy this?" such notifications
Carson · Business Major · Junior	yes, checking and savings, and a credit card	i spend my own money anything recreational (eating out, small travel, etc.) parents cover- groceries, insurance, tuition, rent, etc.	checking banking apps and filing receipts	parents support me in any way they can, but as far as spending my own money- not much has changed	i let independent, however i realized how eating out and spending $8 here and there adds up quickly	nothing was a surprise, but it seemed like the expenses added up quick and i got my priorities straight -food delivery/ eating out -textbooks -club dues	it was stressful at first but after working over winter and summer break and building up my bank account, i was able to have a little more lee-way with spending money	my parents would help me out if i needed it, but my goal is to not have to take hand- outs from my parents	-food -girlfriend -textbooks -venmo	no, but i have considered it	-connect with any and all bank accounts -detect and sort what kind of purchase (food, gas) -rewards for spending less than budgeted
Hannah · Music Industry · Senior	yes to both	parents cover the majority of my college expenses, i pay for gas and eating out, and any other miscellaneous purchases	banking apps	they check in on my accounts once in a while, but not much has changed	i felt much more independent, but i still spent more than i should have, but never ran out of money	yes -food delivery -unexpected car repairs -textbooks -gas	I like having the financial independence and being willings to spend what I want to spend my money on.	my parents would help me if i needed it, but they would make sure i understood budgeting better, i would probably pay them back when i was able to	-food -clothes -club and sorority dues -gas -alcohol	no, i check my banking apps regularly, but i wish they were all in one place	-breakdown of spending habits -budget tracker and alerts when reaching limits -rewards for saving money (partners with companies to earn gift cards or store credits)
Josh · ISAT Major · Junior	yes to both	i am responsible for almost all of my spending, and will have loans to pay back after graduation my parents still cover my health and car insurance	banking apps	not much has changed, i knew i would have to take out loans to attend JMU, but i parents still cover some	i have felt independent with my money since high school, but i took initiative in college and found a part time job, so i could have spending money	nothing was a surprise, but the miscellaneous expenses add up -food -gas -venmo -dues for clubs	im not stressed at the moment, but thinking about finding a job and paying the loans back in a reasonable amount of time after graduation stresses me out	i dont feel like i need to save every penny i earn, but i know it's important to always have money on hand for unexpected expenses.	--gas -food -alcohol -rent -weekend outings	no, i just check all my banking apps and log my receipts	-monthly or quarterly saving goals -reminders when payments are due -categorize spending habits -track interest on loans and goals to help pay things off

Samantha

PROFILE

Samantha is a junior at James Madison University and is pursuing a degree in Business Management. She is a part of a social sorority on campus and participates in many service opportunities in the community. Samantha lives off-campus and is currently enrolled in 17 credit hours, and all of her classes are online. She also works a part- time job as a barista.

"I want to find a way to track my spending and expenses before graduation to be ready for the real world."

FRUSTRATIONS

Samantha's primary frustration with learning how to budget her money is how difficult it is to sort her spending by what kind of purchase it is. She wants to know how much she spends on eating out in comparison to groceries for making food at home; or how much she spends on her car each quarter (gas, repairs, etc.) Samantha also feels uneducated on how taxes work and what she is expected to do when the time comes to file taxes for herself.

GOALS

She is looking for an app that would consolidate all of her banking and monetary accounts into one place. One feature Samantha would like to have is a break down of her spending and expenses. She hopes to learn more about taxes and is looking for a feature that might help filing taxes easier.

SPENDING AND BUDGETING HABITS

Samantha's parents support her by paying for her larger expenses (i.e. tuition, rent, insurance, etc.), However she is responsible for any recreational spending while she's away at college. She enjoys going out to eat with her friends and tends to spend a lot of money at resturants in addition to food delivery. She keeps track of her spending just by checking her various banking apps and making sure she has enough money stored in case of an emergency.

TECHNOLOGY USE

Samantha is an active technology user. She is primarily on her laptop doing online classes and school work, but she also uses her phone often for social media and communication with friends. She has a great understanding of how technology works and could most likely learn how to use a new app with little to no assistance.

SECONDARY PERSONA

"I want an app that will keep me accountable of my transactions and be very interactive with me about when things are due, when to save, etc."

Ryan
PROFILE

Ryan is currently a Senior attending James Madison University and is pursuing a degree in Sociology. Ryan is one of seven children and is paying for college on his own and will have to save up for graduate school. He is enrolled in 15 credits but also works primarily nights and weekend days at a local restaurant as a server. In his free time, when he is not working or doing school work, he likes to go to the bars and breweries and hang out with his friends or drive to see his out of town girlfriend..

FRUSTRATIONS

Ryan's parent's helped him out when first coming to college with setting up his loans and making sure he pays his payments on time however he knows after graduation, he will be responsible. He has trouble keeping track of everything in different places and being on top of payments when things are due. He also manually logs his receipts into his current banking app. He also makes a lot of money through his tips at his work, therefore has problems tracking his cash income.

GOALS

Ryan is looking for an app that will give him updates and notifications when he should save money and when he can afford to spend. He wants to be accountable about his cash income and track that and find an easier alternative than to manually log his transactions through receipts. He knows he must pay his debt on time as his credit score can go down and it will effect him in the long run. He wants to stay on top of his finances.

SPENDING AND BUDGETING HABITS

With Ryan being one of seven children, he knew coming into college that he was going to have to pay for his tuition, miscellaneous costs, and rent. Knowing this, he aims to be pretty frugal. It did not use to be like that however, because in his first year, he expirenced a learning curve by spending too much money on social experiences. He learned very quickly that he would have to be consitent and save. He soon after got a job and took out student loans to help him out. Ryan still likes to go out and spend money with his friends, however he is very conscious.

TECHNOLOGY USE

Being a college student, Ryan is really adjusted to technology and is used to using apps and online programs. He is on his phone constantly tatly and tracks his payments and expenses in different places like the "Notes" app to log expenses, and the "Calendar" for knowing when to pay his interest and princlple.

# JOURNEY MAPS

Primary Journey Map

| Phase of journey	Frustrated		Searching		Interacting			Sharing	
Actions What does the customer do?	spending money	wanting to learn to budget money effectively	spends time thinking about what features they need to satisfy their frustrations	uses a search engine to research budgeting services	signs up for app	begins entering account information	personalizing experience	reccomends our app to friends	leaves a good review online
Touchpoint What part of the service do they interact with?	asking friends for recommendations for budgeting apps		uses friends' recommendations	thoroughly scrolling through our app	clicking and inputing information in the account portion	moving through the features to find the ones that meet their needs		invite friends to join for incentives	
Customer Thought What is the customer thinking?	I wish there was an easier way to track my spending	I hate having a bunch of different banking apps	this app meets my needs	how do I sign up	this app is super cool!	I'm glad I finally found a way to organize my spending		I love the incentives I earn for inviting my friends!	I'm so glad I found a new way for budgeting my money
Customer Feeling What is the customer feeling?	😩		🙂		🥳			🤩	

Secondary Journey Map

Phase of journey	Frustrated				Searching			Interacting			Sharing	
Actions What does the customer do?	spending money / spending money	wanting to learn to budget money effectively	doesn't keep track of cash income	manually tracks receipts	"I feel like there's nothing out there to help me"	manually tracks transactions	relies on parents teaching to learn about finances and more	signs up for app	begins entering account information	personalizing experience	reccomends our app to friends	leaves a good review online
Touchpoint What part of the service do they interact with?	asking friends for recommendations for budgeting app				uses friends' recommendations	university recommends it to students	career counselor advises this app	clicking and inputing information in the account portion	moving through the features to find the ones that meet their needs		invite friends to join for incentives	
Customer Thought What is the customer thinking?	I wish there was an easier way to track my spending	I hate having a bunch of different banking apps	I need to save for my debt and grad school	I am having to do this all by myself / when can I save and when can I spend	this app meets my needs	how do I sign up?	Can I set up my own settings?	this app is super cool!	I'm glad I finally found a way to organize my spending	I love that this app sends me notifications and reminders	I love the incentives I earn for inviting my friends!	I'm so glad I found a new way for budgeting my money
Customer Feeling What is the customer feeling?	😩				🙂			🥳			🤩	

STORYBOARDS

Primary Storyboard
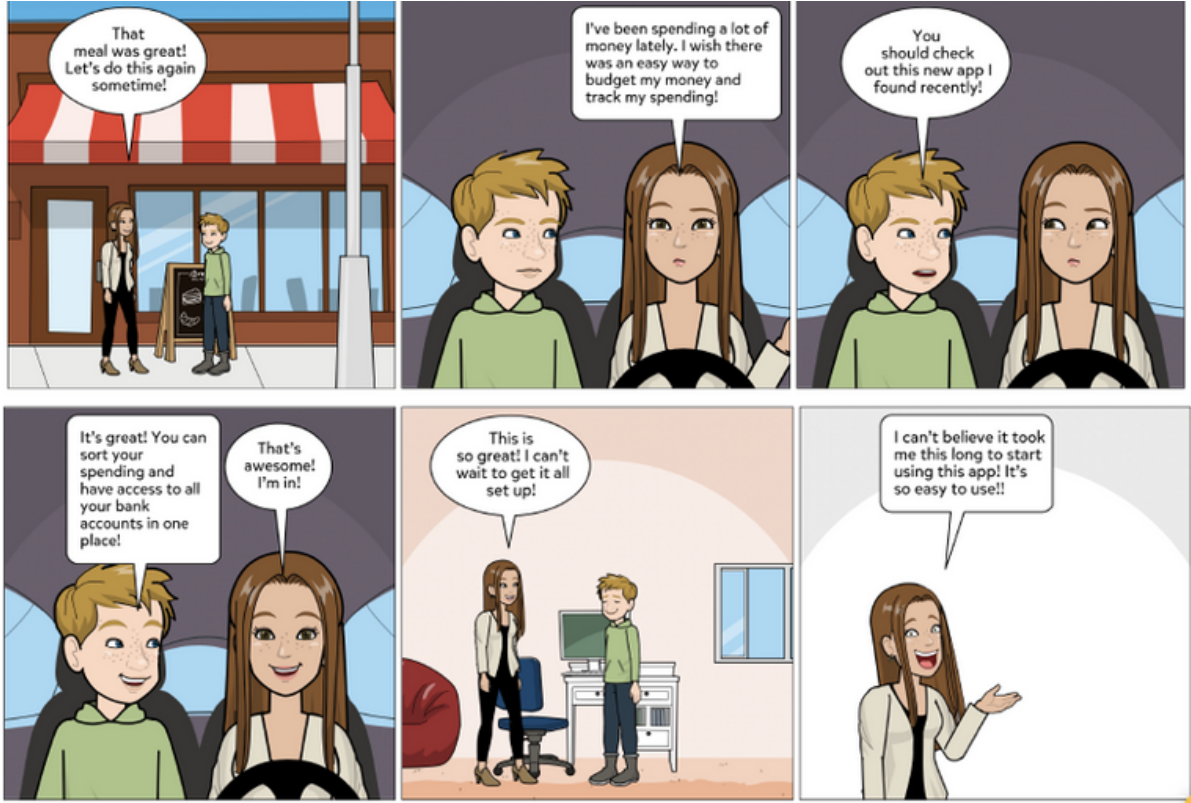
Secondary Storyboard
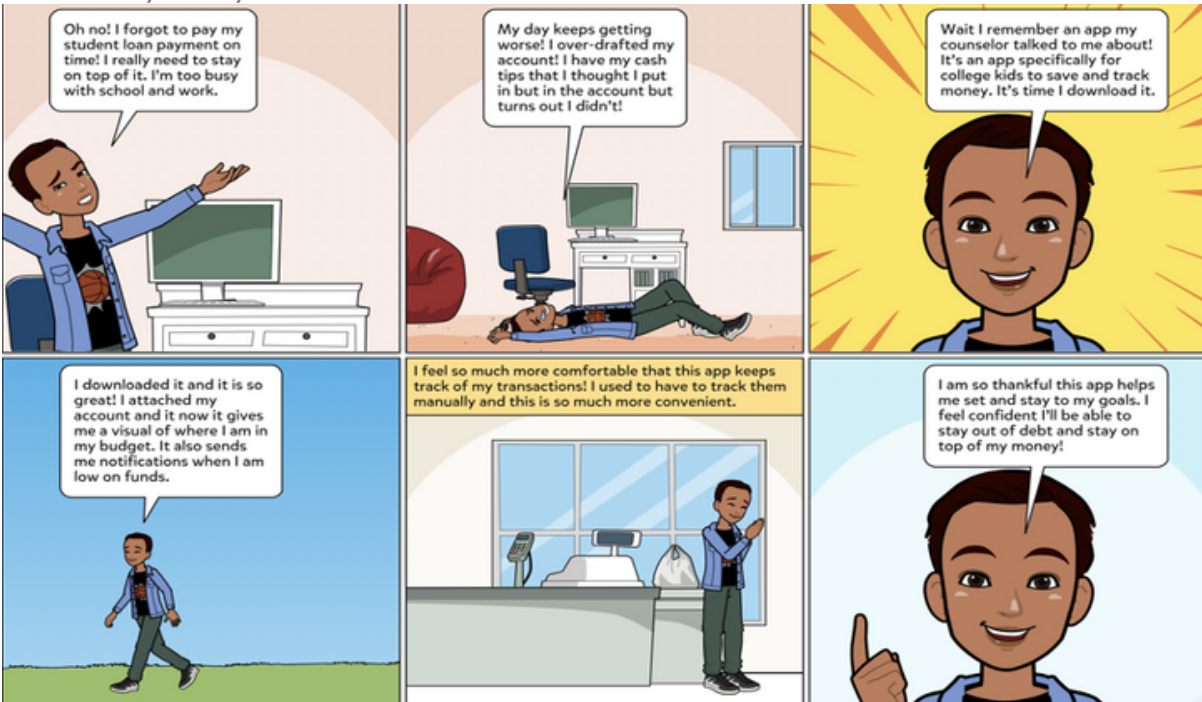
DESIGN REQUIREMENTS

● **Data Requirements:**
  - Should allow users to input personal information with proper security in place
  - Should be able to detect when and where a purchase is made, and categorize it according to the user's needs.
  - Should be able to accommodate multiple bank accounts

● **Functional Requirements:**
  - Should be a minimal and aesthetically pleasing interface that is easy to navigate.
  - Send notifications to users when they are coming close to going over budget
  - Users should be able to update their profile whenever necessary
  - Partner with outside companies to incentivise users to save money

● **Contextual Requirements:**
  - Should show users their spending habits in an easy way to understand
  - Should help users consolidate their information to simplify filing taxes

● **User Requirements:**
  - Users will need a valid email address and phone number to sign up
  - This app will prompt the users to take an optional survey to help the service learn more about their needs
  - Users should be able to share the service with their friends and rate their experience

● **Technical Requirements**
  - This app should be made to accommodate Apple and Android cell phones and tablets
  - Should also be accessible in a desktop format

SIX KEY TASKS

1- Support Multiple Bank Accounts

2- Find Spending Trends
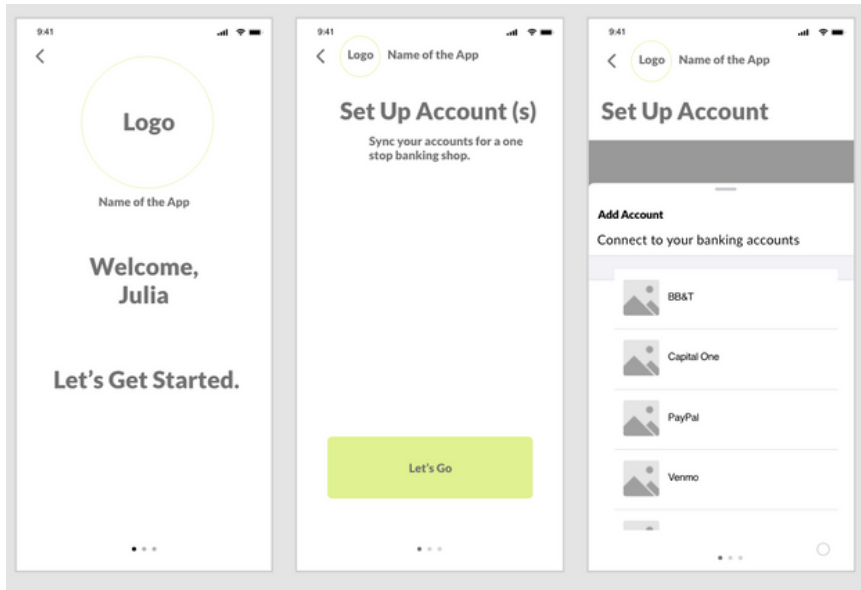Visualization and Analysis

3- Set Goals and Have Incentives
for Reaching Them

4- Add High Security to Protect
Personal Information

5- Send Reminders when Payments
are Due and Balance is Low

6- Categorize What Kind of
Purchase was Made (restaurant,
grocery store, etc.)

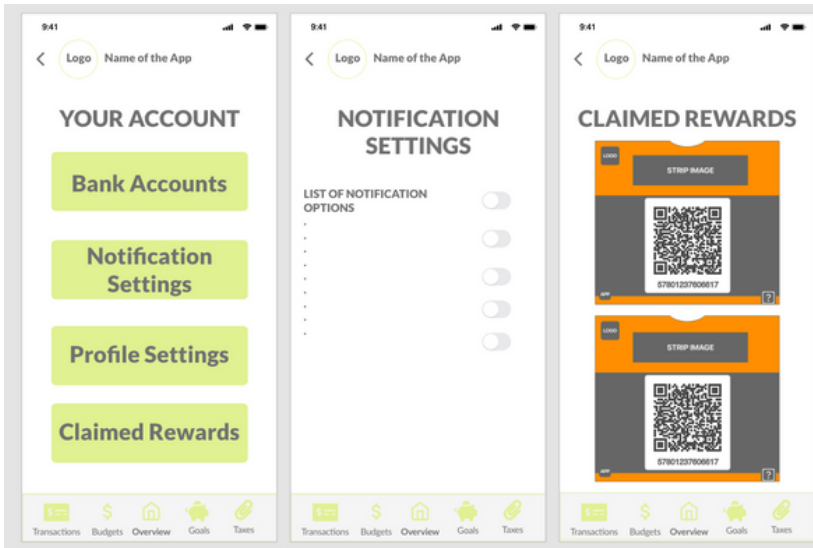# LOW-FIDELITY PROTOTYPE

1. Support Multiple Bank Accounts
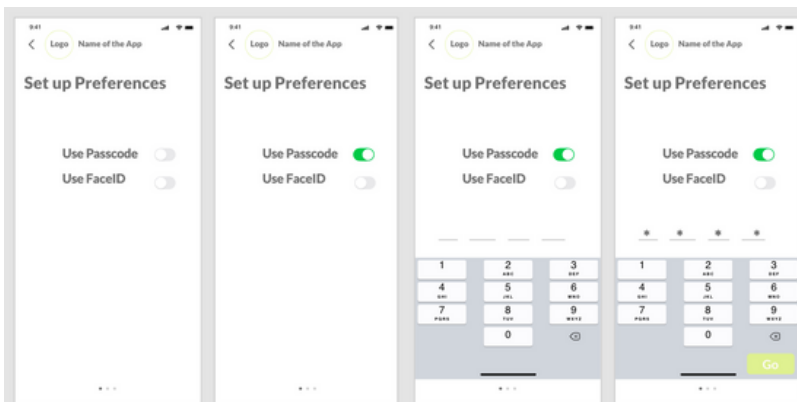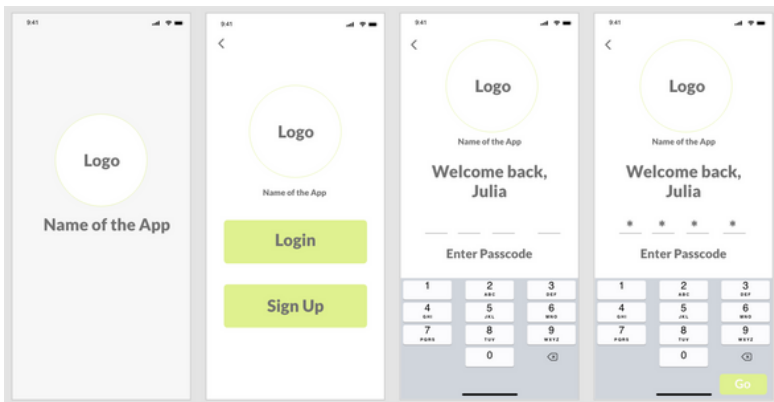

2. Find Spending Trends Visualization and Analysis

3. Set goals and Have Incentives for Reaching Them
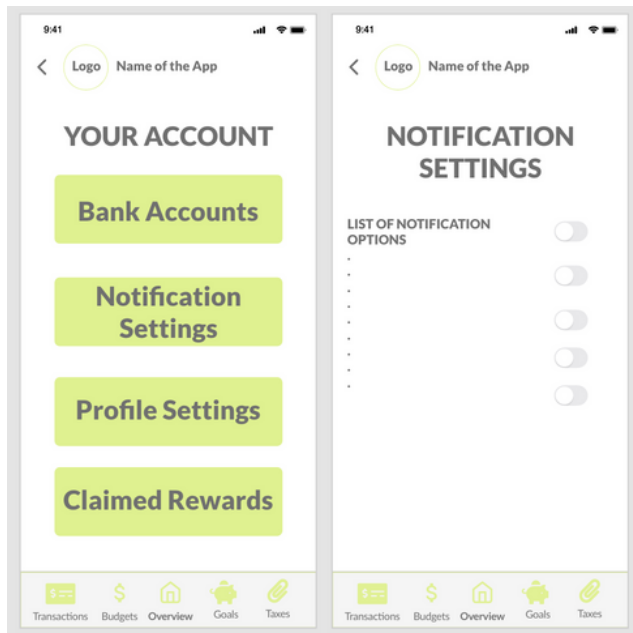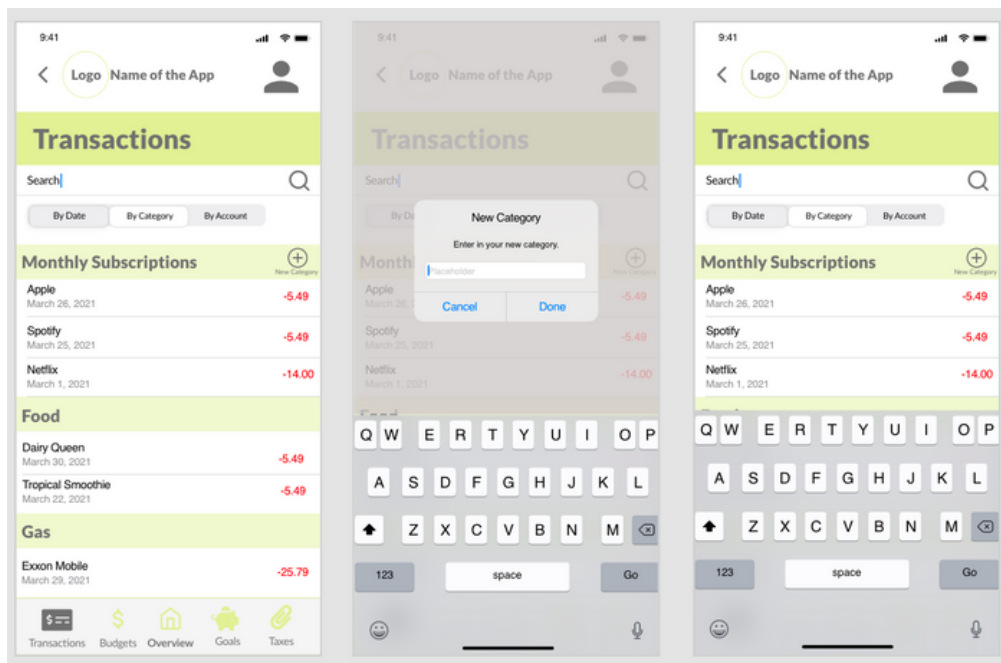

4. Add High Security to Protect Personal Information

5. Send Reminders When Payments Are Due and Balance is Low

6. Categorize what kind of purchase was made (restaurant, grocery store, etc.)

LOW-FIDELITY PROTOTYPE & FEEDBACK

Overall, we were able to figure out Adobe Xd fairly easily and navigate to make our interactive low-fidelity prototypes. With this outline, our app is coming along nicely and will be easier to create the high fidelity prototype later on, and the final project at the end of the semester. We are looking for a better and more understandable way to set goals under the goals tab, other than the slider tool, and an effective way to track the goals that will make it easier to earn rewards. Our current method with the slider tool could be inconsistent and hard to judge. With the current reward system; earning points by meeting goals, it is hard to determine when the goals are met, just with sliders. We are also looking for a way for the user to put in their banking information. We struggled with finding the next step for the user after selecting their bank because every banking website is different. We were thinking we could possibly do a new artboard asking for the routing number and the account number but I am not sure if that would be all that we need for the user's account information. We were also thinking we could just take the user to the bank's website and have them log in to gain access to their account information. We are not sure which method would be better so we would love to hear what you think or if you have another suggestion. For our Budgets tab, we are looking for a better way to visualize the individual budgets such as in the savings or fixed income. We are unsure if a line graph, pie chart, or like a "meter graph" would work better. We received very useful feedback after submitting this assignment and were able to make improvements and adjustments to our high fidelity prototype.

HIGH-FIDELITY PROTOTYPE

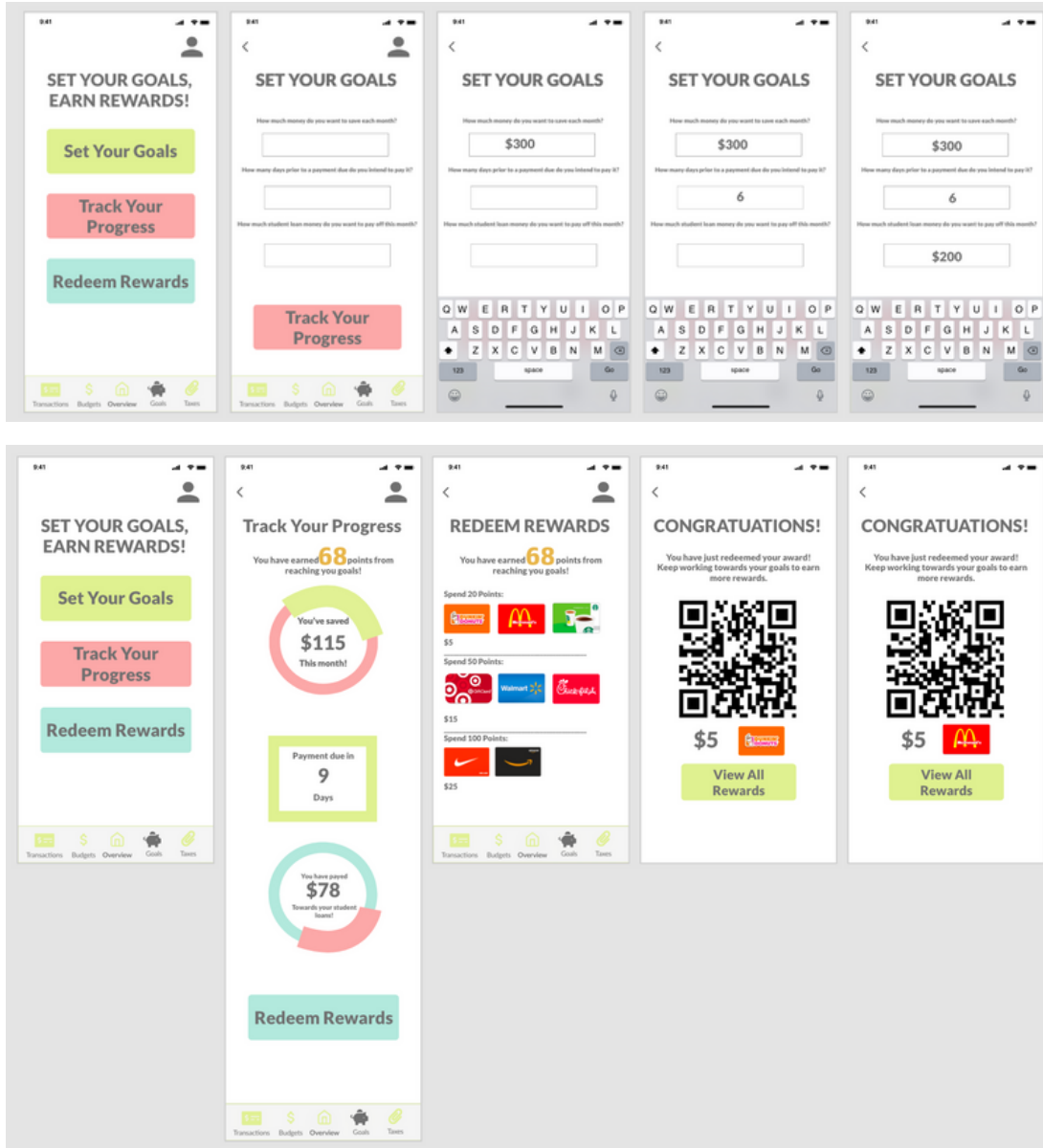## 1. Support Multiple Bank Accounts
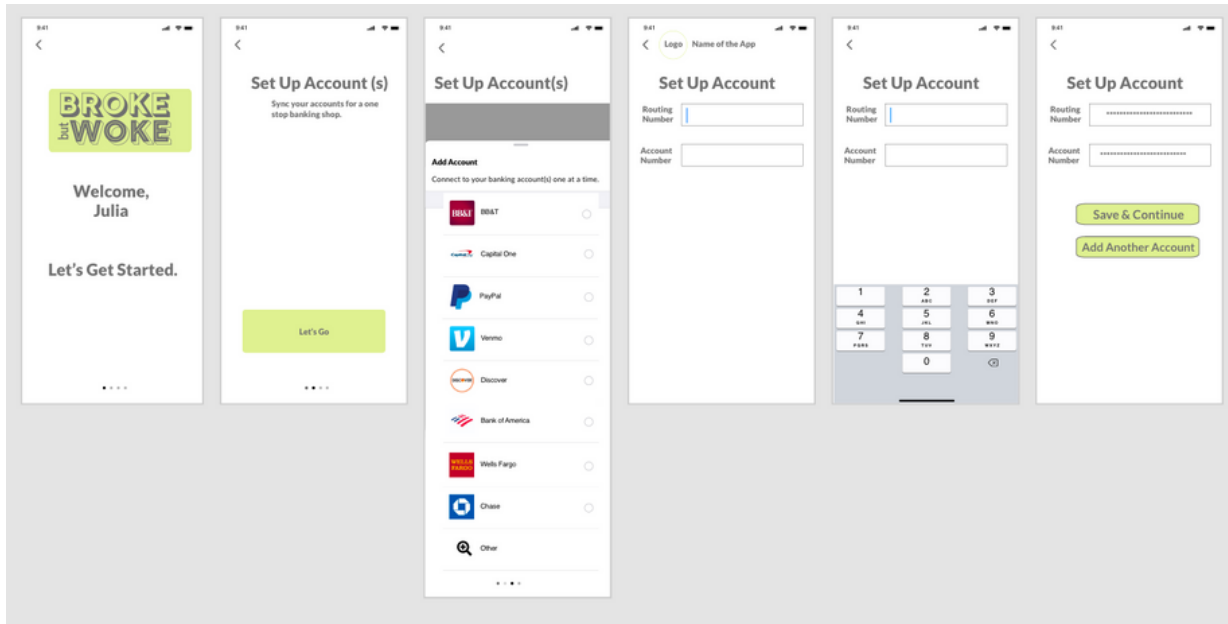
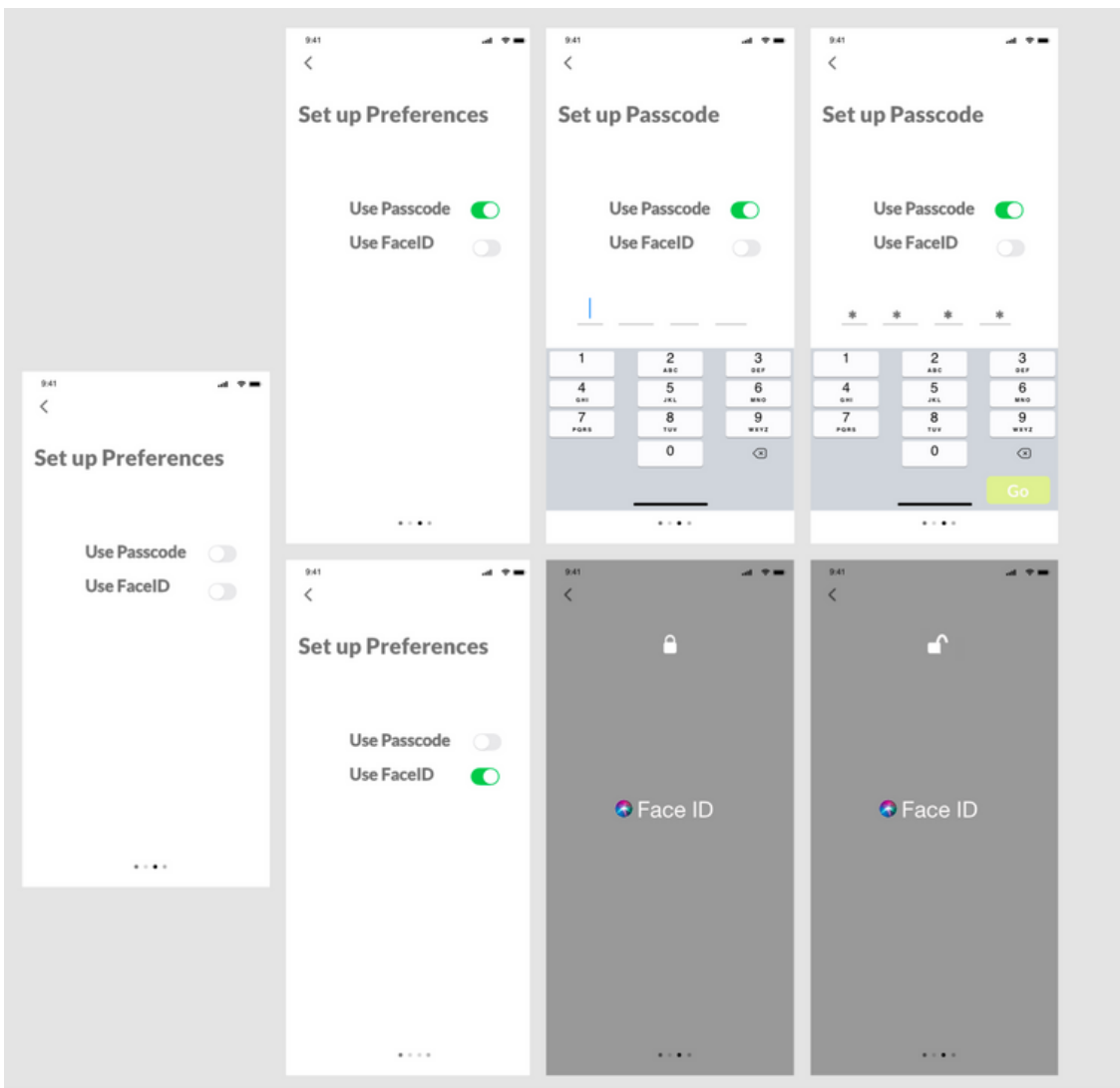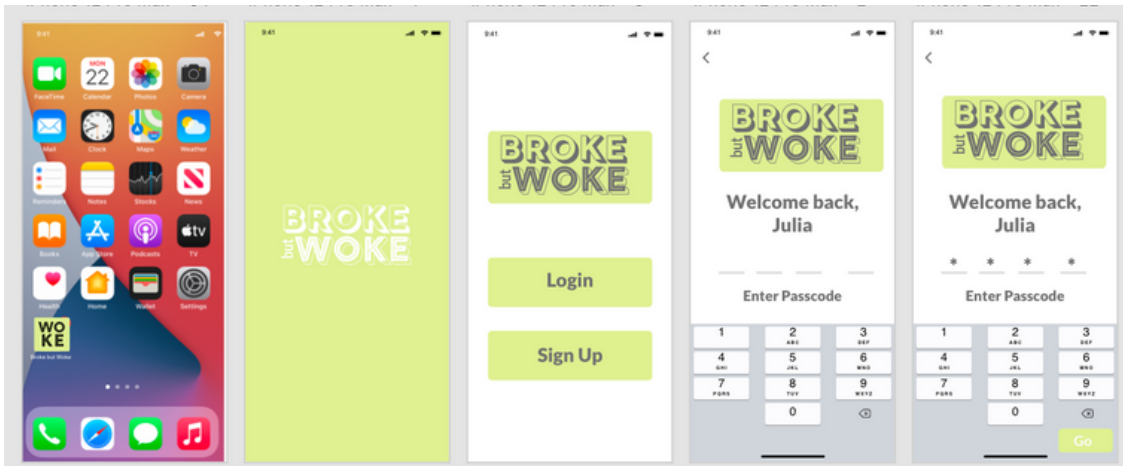## 2. Find Spending Trends Visualization and Analysis
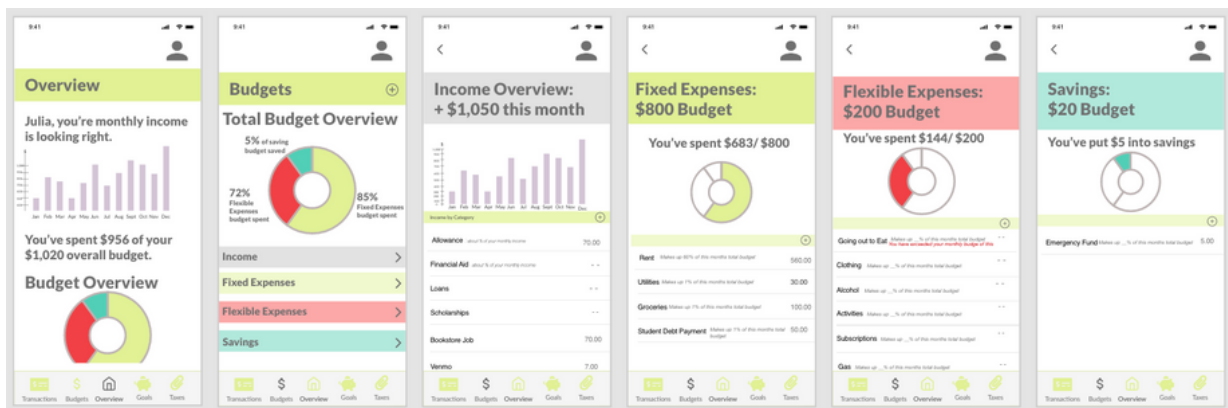
HIGH-FIDELITY PROTOTYPE

3. Set goals and Have Incentives for Reaching Them
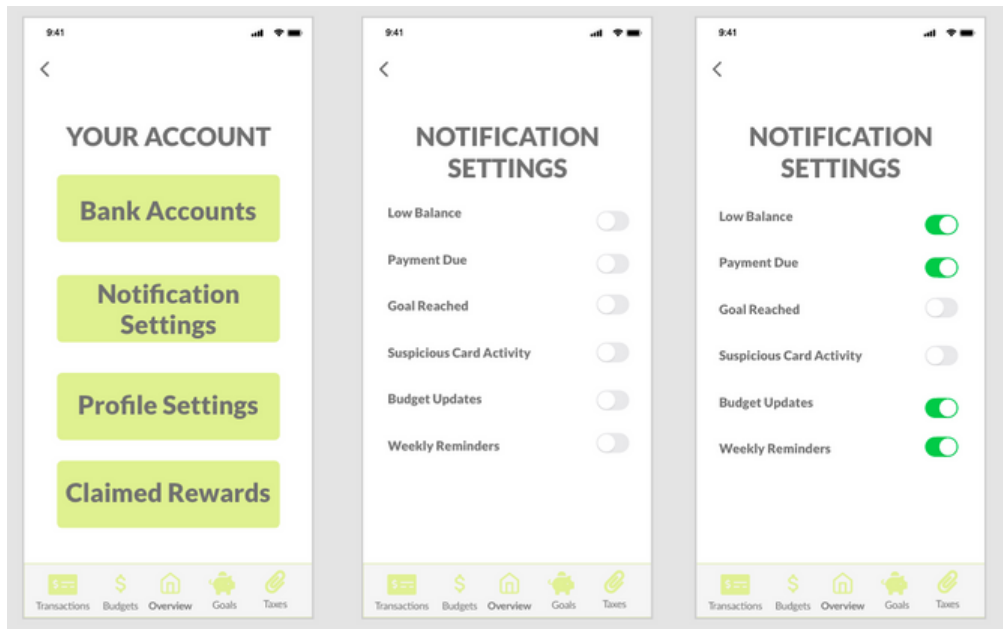
HIGH-FIDELITY PROTOTYPE

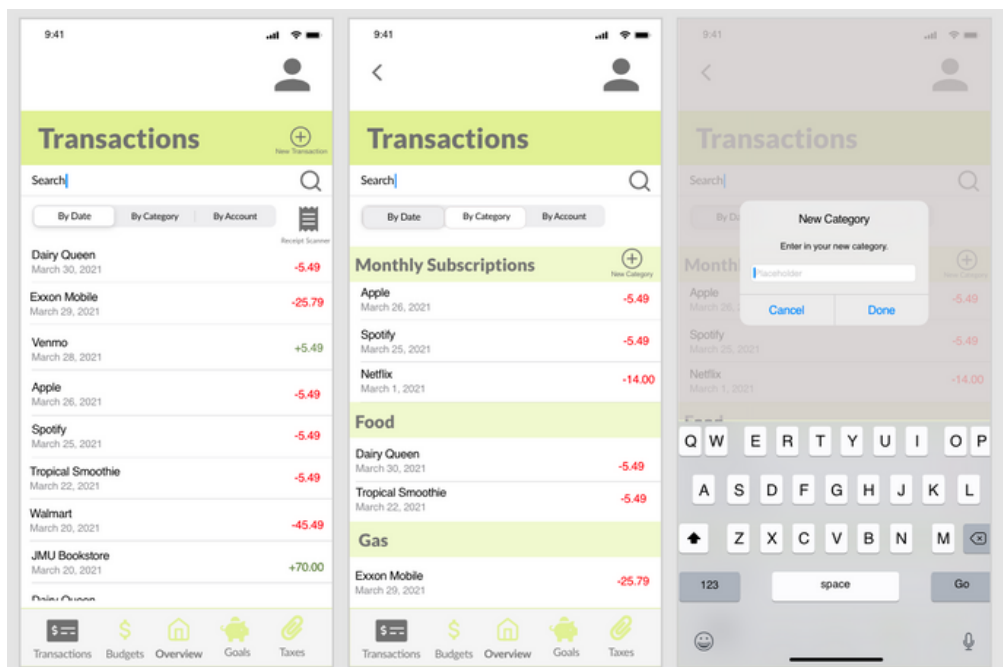## 4. Add High Security to Protect Personal Information

HIGH-FIDELITY PROTOTYPE

5. Send Reminders When Payments Are Due and Balance is Low

6. Categorize what kind of purchase was made (restaurant, grocery store, etc.)

HIGH-FIDELITY PROTOTYPE & FEEDBACK

Our app is now capable of supporting Face ID and a passcode option to login to the user account. This feature will allow for higher security when accessing the user accounts. We can now fully set up multiple bank accounts by inputting the routing number and account number. The user can set their own goals based on the pre-set questions. The user is now able to track the progress they've made on their goals with graphs and countdowns. There is a large selection of digital gift card rewards the user can choose to spend their points on. After redeeming a reward, the user is directed to a QR code to spend the reward and they can screenshot the code or access all of their active rewards in the profile tab. There is now a way to view transactions by category, by the account (the card used to make the purchase), and by the date the transaction occurred. The user is now able to view their bank account information accessible through the profile tab and they can edit and/or delete their account if needed. Notification settings have been determined and the user can choose to turn on any notifications they deem necessary. Lastly, there is now an option to scan or upload a tax document to add to the user's account.

DESIGN SOLUTIONS

Broke but Woke has a unique, yet clean and aesthetically pleasing look to allow for ease of use and enjoyment. Users will be able to have access to spending habits and budgeting tools from their smartphone. They will be able to assess their exact needs and have their account tailored to meet their goals. Our service will offer a platform for users to share experiences and ideas with other users. A solution to consider would be a way to set goals and rewards for achieving said goals.

PARTICIPANTS

- Participant 1 - Carson P.

- Age: 21

- Gender: Male

- Education: Junior Business major, Music minor, History minor

- Participant 2 - Jennifer Y.

- Age: 20

- Gender: Female

- Education: Sophomore SMAD major

- Participant 3 -Hannah S.

- Age: 20

- Gender:Female

- Education: Sophomore Music Industry major

TESTING METHODS

1. Participant Briefing

"The basis of the app that we created is to help college students become more independent and more confident with managing their money. We set six goal tasks to accomplish in the app that we thought to be the most beneficial to users. Today you will be navigating your way through the app to "complete" these six tasks and our goal is to test how quickly and effective you can complete these tasks and gain any feedback from this testing."

2. Explain the tasks that they will be required to complete
- Set your notification settings
- View your transactions by category
- Set a goal and redeem a reward
- Set up more than one bank account
- Add a passcode or FaceID
- View your spending trends and analysis through graphs

3. Provide the user with the prototype and begin testing

4. Once the testing is complete a short debriefing session will occur where the participant(s)/user(s) will be asked a few open-ended questions

Test measures
- How long did it take the participant/user to complete the required task?
- How many participants/users completed the required task?
- Did the participant/user encounter any errors? If so, then what happened?

Open-ended questions
- What were some strong points that this app offered?
- What were some areas where the app could be improved?
- During the testing did you ever find yourself confused?
- Are there any other suggestions that you would like to offer?

FINDINGS AND ANALYSIS

The usability testing went smoothly and the participants were all able to complete the tests with minimal issues. Each participant took a little bit of time getting used to the layout of the app, but caught on quickly. Participant one completed all six tasks in just under 20 minutes. Participant two took about 24 minutes, and participant three finished in about 30 minutes. The most complicated task for all three users was viewing spending trends, mostly because the graphs were difficult to read. All three users mentioned that their struggles came from performing these tasks in Adobe XD, and they all expressed that if it were in the comfort of a real smartphone app, the tasks might have been more manageable. Overall, we learned that the designated tasks were easy to execute, however there are many other areas of the app that could use more attention.

CONCLUSION

Throughout the semester, we have built on this prototype and have learned a lot about the User Experience and the needs of users; from our testing patrtciants and professor. We started by brainstorming multiple app ideas and narrowed it down to the one we thought would be the most beneficial to our target audience- college students. There have been multiple forms of this prototype created, starting with paper sketches, to a low- fidelity, and a high fidelity. Each step and level of testing has provided a lot of feedback and left room for improvement in the next step of the process. Overall, this project was a great opportunity to learn about UX and helped both of us develop skills that will be beneficial in the long run.

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