Koala

Koala is the recurring subscription management tool that let's you finally take control of your recurring services and payments.

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1. **Title** (above)
2. **The Team**
    - Jen Kang
    - Vivian Yu
    - Si Liu
    - Brendan Lee

At this point the project, we do not feel that our roles have been different enough to assign specific labels. We have each worked collaboratively on all parts of the project up till now. We each participated in inquiries, task ideation, sketching, storyboarding, and writing. We imagine for the second half of this project, we will begin to take on specialized roles, and thus this will be reflected in upcoming turn-ins.

3. **Problem and Solution Overview**

Our team is tackling problems inherent to maintaining multiple recurring subscriptions. We define a recurring subscription as any automatic payment that happens on a recurring schedule. This includes consumer tech services such as Netflix, recurring donations to charities, gym memberships, cable bills, and more. We are seeking to solve the many problems faced by any person who is subscribed to multiple recurring subscriptions. This includes difficulties with adding subscriptions, deleting subscriptions, and updating personal information across multiple subscriptions. More importantly, our goal is to give people insight into their portfolio of recurring subscriptions so that they can make informed, data-driven financial decisions and never be caught off-guard by an unexpected payment.

Our team will be addressing these problems with Koala. Koala is a mobile application that provides a single location to manage and interact with all of an individual's recurring subscriptions. Within one application, an individual will be able to add or delete any subscription. They will be able to update their billing information once and see those changes propagate to every service in their portfolio. And, they will be able to view important data, such as how much various services cost them and how much they use those services.

4. **Contextual Inquiry Target, Stakeholders, and Participants**: (1 page) -

We completed a total of four contextual inquiries. We searched for participants that met three requirements. First, they need to be tech enthusiasts, individuals likely to have multiple subscriptions and the desire to manage them using technology. Second, they needed to be moderately affluent, so that they can afford to finance a decent amount of subscriptions but would still be financially troubled if they had an unexpected charge. And third, they needed to have at least five recurring subscriptions. Within this target population, we wanted to try and have a diverse range of participants. We had three women and one man in our contextual inquiries. Half of our participants are currently students, while the other half are currently working in the tech industry.

Our first participant is Amanda*. She is in her mid-to-late 20s and is a full time software engineer at Palantir in Palo Alto, CA. She fits all three qualities that we were looking for. She's tech savvy in that she's a software engineer, works with technology regularly, and attended the recent Grace Hopper Celebration. She's affluent in that she does have extra pocket change from her job to spend. And finally, she has more than six subscriptions, or recurring payments. Amanda was unique in that she shared two of her subscriptions, her phone plan and Netflix, with her family. She explained that it was cheaper to stay on her family phone plan compared to starting a line on her own.

Our second participant is Bailey*. She is a student at Carnegie Mellon University's Human Computer Interaction 1-year Master's program. She received her Bachelor's degree in Electrical Engineering and worked for four years before going back to school. This fits our qualities of having an affluent background and being a tech savvy individual. The number of her subscriptions have varied since she has returned back to school. At one point in time, she had over 6 subscriptions, however she now currently holds four. We decided to include her in our contextual inquiries because she gave valuable insight in handling and canceling some of her subscriptions.

Our third participant is Carol*. She is a freshman studying computer science at North Seattle College. She had worked in industry for a year before immigrating to the U.S. She likes to try new technology and enjoys learning new programming languages and new IDEs. She comes from an affluent background but also worked for a year. She currently has eight recurring subscriptions.

And finally, our fourth participant is David*. He is currently a Program Manager at Tableau Software. He is quite passionate about technology; he reads tech blogs daily and likes trying out new gadgets. David also meets our bar of being moderately affluent in that he is currently working. In addition, he has nearly ten recurring subscriptions, the most out of all our participants. David was unique because he had previously tried (and failed) to manage his recurring subscriptions with different tools. He started off with Paypal; however, only a few of his subscriptions were able to be integrated. Then, he tried using an Excel spreadsheet, but it became too much of a hassle to keep up-to-date. Currently, David doesn't use any tools to keep track of his subscriptions.

*all names have been changed to maintain confidentiality of the participants.

5. **Contextual Inquiry Results and Themes**: (1 page)

We noticed that many people included bills and utilities that they manually paid. In the process of working on our design, we decided to strictly define the “recurring subscriptions” we would like to focus on. We consider any recurring subscription as a payment that is automatically charged to a card or account on a regular basis (e.g. Netflix, Amazon Prime, etc).

The following problems were common to many, if not all, of our participants:

- It was hard for people to recall what recurring payments they had. They either had to think for a while or required some prodding or reminders of what they might have. Perhaps this is related to the fact that most candidates don’t manage or keep track of what these payments are.
- People complained about Amazon not alerting them about the price increase on their Prime subscription or when it automatically renewed their subscription with the new price. (We later found out it does, but it sends an email which tends to get lost in the mass amount of emails people receive on a daily basis)
- All the candidates felt it was a lot of trouble to cancel their phone or internet plan. They said you had to call and the provider would try to convince you stay on with “deals.”

One common task that everyone had to do at one point was cancelling a recurring payment. Everyone agreed Amazon Prime is pretty easy to cancel, but phone and internet plans are not. Another task is updating their credit card information when their card is about to expire. Participants said that they received emails from certain subscriptions and providers alerting them when their card was about to expire.

Other take-aways we saw across all or majority of participants:

- People talked about being aware of better “deals.” For example, Amanda said she was on her family phone plan because she looked into it and it was cheaper to stay on the plan than to start her own. On the other hand, Bailey said she was on her family phone plan but had no idea if maybe she should move to her own because she didn’t know what was the better deal.
- People expressed interest over control of notifications, whether that be for price increases, payments to be charged, etc. They’d like to be able to specify frequency of notifications and when they receive them.
- At least half of our participants had at least one shared subscription.

As we considered our contextual inquiries in our design process, there were two themes that ended up playing a factor in our choice of tasks. The first theme is the common tasks involved with updating subscriptions, i.e. cancelling/updating billing information. The second theme is the lack of insight into what recurring subscriptions individuals have and the worth of their subscriptions to them.

6. **Answers to Task Analysis Questions**: (2 pages)

1. Who is going to use the design?
   Anyone with recurring subscriptions could use our design and find value in it. The more recurring subscriptions a person has, the more value they will receive from our product. Specifically, as mentioned above, our target customer will have the following:
   - Enthusiasm for tech and a general tech savviness
   - A moderate amount of disposable income
   - At least five automated recurring payments

2. What tasks do they now perform?
   - Cancelling a recurring subscription manually (service by service)
   - Keeping record of their recurring subscriptions and pay dates
   - Updating billing information manually (service by service)

3. What tasks are desired?
   - Participants wanted the ability to easily cancel a recurring payment without having to call anyone or go through multiple steps.
   - Participants wanted to be able to see, at a glance, what subscriptions they currently held, when those payments were due, and how much each cost
   - Participants wanted improved alerting:
     - Alerts before payments were due
     - Alerts if a payment amount had changed
     - Control over what alerts participants received
   - Participants wanted to have access to data about their use and financial history in relation to each recurring payments.
   - Participants wanted to be able to change their billing information once and have those changes propagate to all their payments.
   - Participants wanted to be given suggestions on how to save money on their payments and find better deals for services.

4. How are the tasks learned?
   - Participants currently keep track of their recurring subscriptions by scanning their financial statements periodically.
   - Deleting a recurring subscription or updating billing info is learned by exploring options on a service's website, or calling customer service.

5. Where are the tasks performed?
   These tasks are performed wherever the user feels secure online, typically in their home or at work and typically on a laptop (a phone is occasionally used as well).

6. What is the relationship between the person and data?
   The relationship between the person and the data is derived from their purchasing habits and how they behave with subscribed services.

7. What other tools does the person have?
   - Participants used an excel spreadsheet to manually track pay dates and charges.
   - Participants tried to hook all payments into the PayPal platform, but many payments did not integrate with PayPal.
   - Participants used manually created calendar email alerts to remember pay dates.
   - Participants also tried directly consulting the bank statements using an app called Mint to help identify foreign payments they were being charged.

8. How do people communicate with each other?
   In general, the tasks performed by participants are performed independently. There is one exception to this. Some participants have shared subscriptions that they had purchased with another party. They would like a way to both have access to the data concerning their shared subscription. Currently, there are no organized channels of communication for this type of behaviour.

9. How often are the tasks performed?
   The tasks are not performed at any regular interval or in any predictable pattern. Cancelling a recurring payment can happen at any time. Similarly, analysis of one's recurring payments is a task that a user may perform daily, monthly, or yearly. It is entirely dependent on the individual and the services they are using

10. What are the time constraints on the tasks?
    There are a minimal number of general constraints for these tasks. Users must know their credentials for any service in order to interact with it and users must know their banking information in order to view billing information. However, in terms of time constraints, users will need to do any of the tasks at any specific time.

11. What happens when things go wrong?
    - Cancelling: When cancelling a recurring subscription goes wrong, users may be hit with fees for services they never used or had intended to cancel. Sometimes, companies make it really difficult to cancel a subscription
    - Analytics: When users cannot successfully see their recurring payments, they may spend more money than they are budgeted for, pay for services they do not use very often, or be unable to make informed decisions about their purchasing behaviour

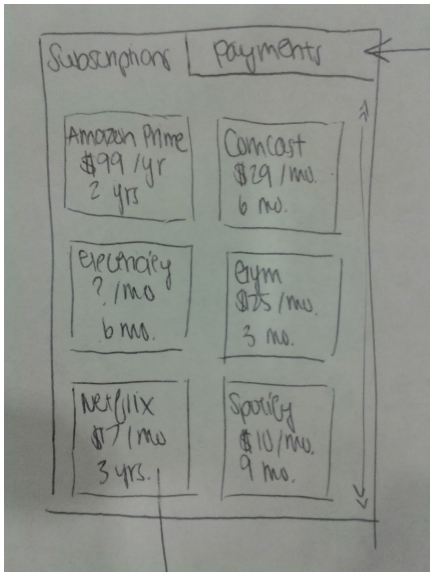
7. **Proposed Design Sketches - “3x4”**: (1 page)

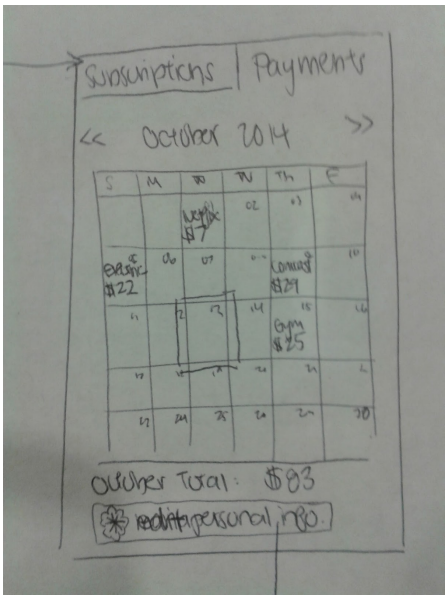
First, a few notes:

1. Our designs are targeted for the tablet, but our product does not have any platform constraints based on what it is trying to accomplish. There is no specific need for it to be mobile. In order for this product to be cohesive, a web version of the application would be necessary as well.
2. While this is not the focus of this project, there is more to our product than the front-end clients. In order for the product we are pitching to exist, there must be a platform that services (such as Netflix) interface with. This platform would allow for services to embed our 1-click subscription buttons in their websites, and allow for us to communicate with each service directly (which enables features such as 1-click unsubscription). For this project we are assuming any business related challenges have been solved. This means that we designing our product with assumptions such as: there will be a critical mass of services using our platform as to make it valuable; or, businesses have been persuaded to make cancellation of their services easier.

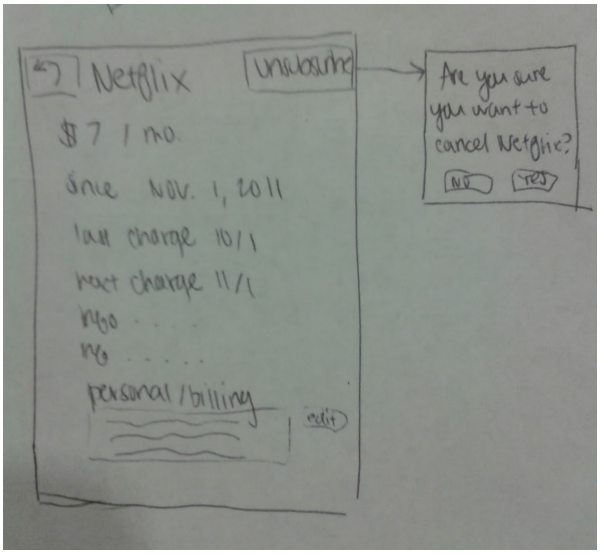
The following are our three initial designs. Each supports four or our original six tasks (Add, delete, update, view, notifications, and data).

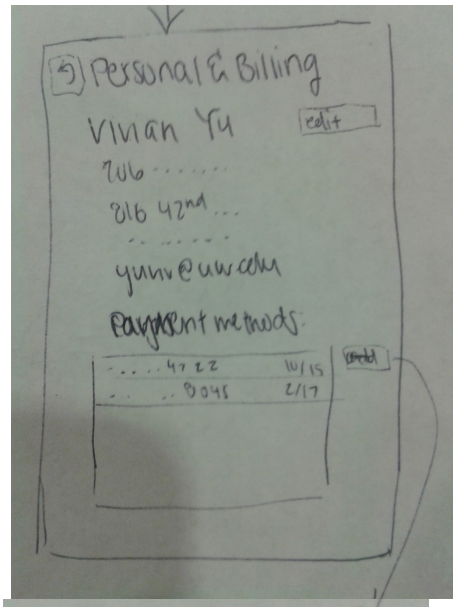
- Design 1: View, Data, Delete, Update (focused on time sensitive view of your payments)

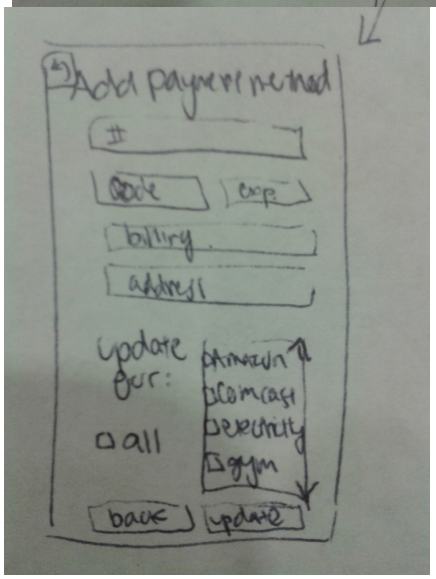




This designed focused on giving users a quick view of, not only what subscriptions they had, but on when payments for those subscriptions was due. This design assumed that your recurring payments would be deduced from your billing history. Once subscriptions were discovered, you could interact with them in various ways. In the left tab of the application, you could view all your subscriptions and also get detailed information for each service. From this detailed view, you could unsubscribe from the service with one click. On the left side of the service, you could view upcoming payments for each service. You could also choose which credit cards to pay each subscription with, and easily manage which cards you had available to pay with.

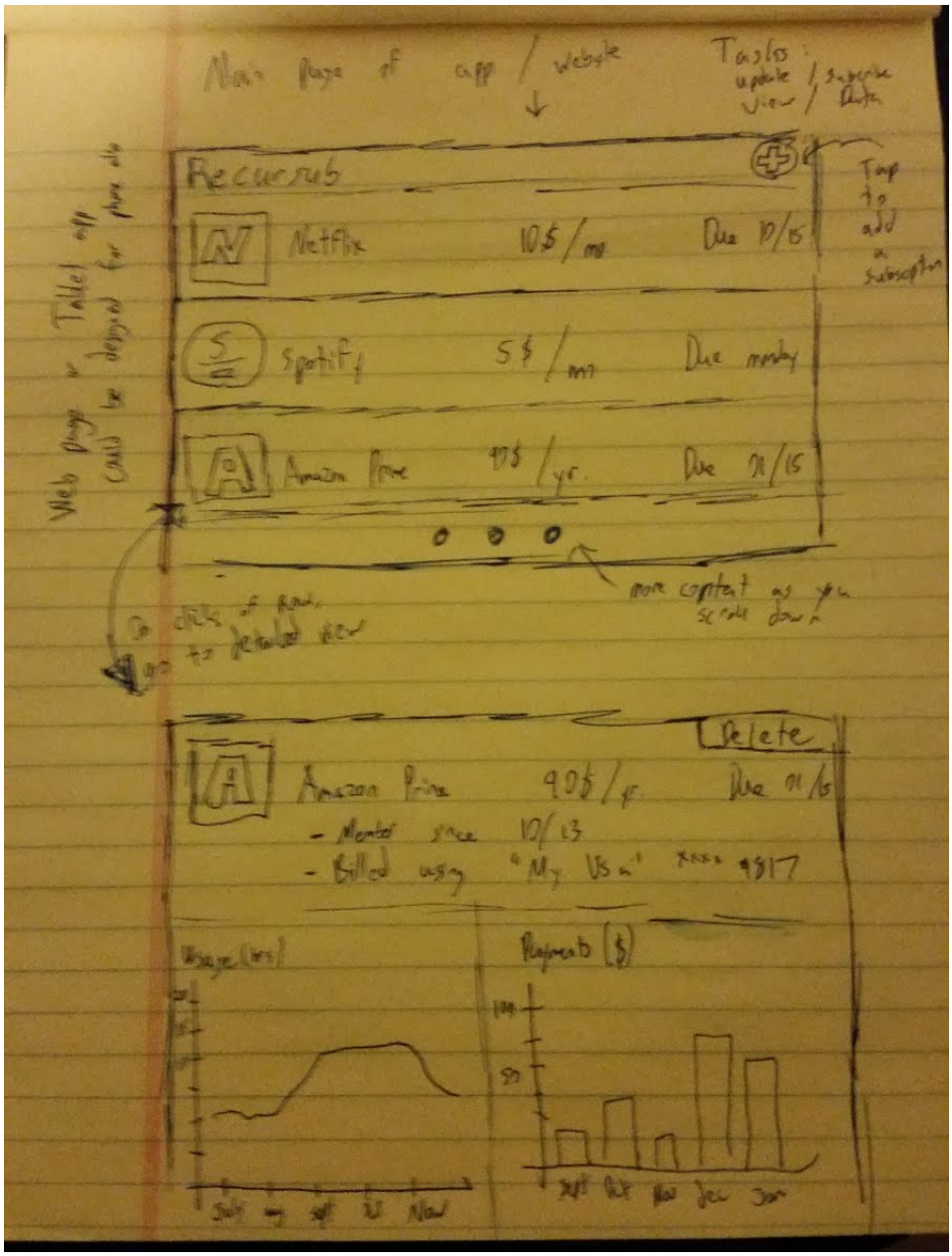






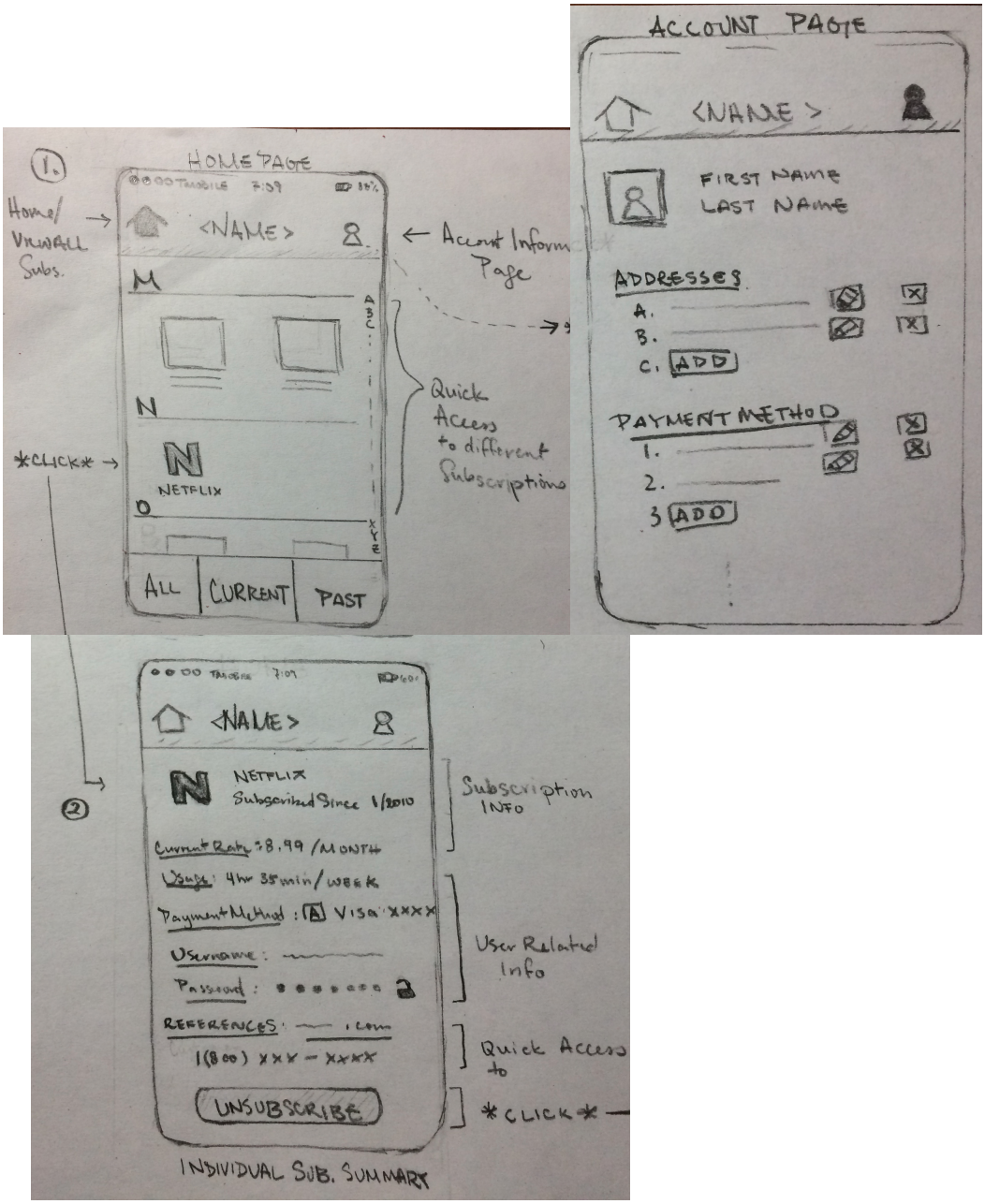
- Design 2: Add, Delete, View, Data (focus on getting data to user)

This design focused on giving users data about how much money they spend on subscriptions and how much they actually use these subscriptions. Adding subscriptions and the 1-click deletion of subscriptions are supported in this design. The focus, however, is quickly showing users which services they are subscribed to (a listing of services, how much they cost, and when they are next due is the main view of the application). Additionally, this design gives users the chance to drill down into a specific subscription and see how much they have used the subscription and how much they have spent on the subscription.



- Design 3: View, Update, Data, Delete (focus on management of subscriptions)

This design focuses on managing recurring subscriptions. The purpose of this design was to make management extremely easy; adding and deleting subscriptions could be a very common and painful task. The home page of this design shows users which services they are currently subscribed to, past and current. The personal account view was used to keep billing and personal information updated across all of their subscriptions. The detailed service view showed pertinent information about each service, such as pricing, how it is being paid for, and more. One-click unsubscribe is available from this view.



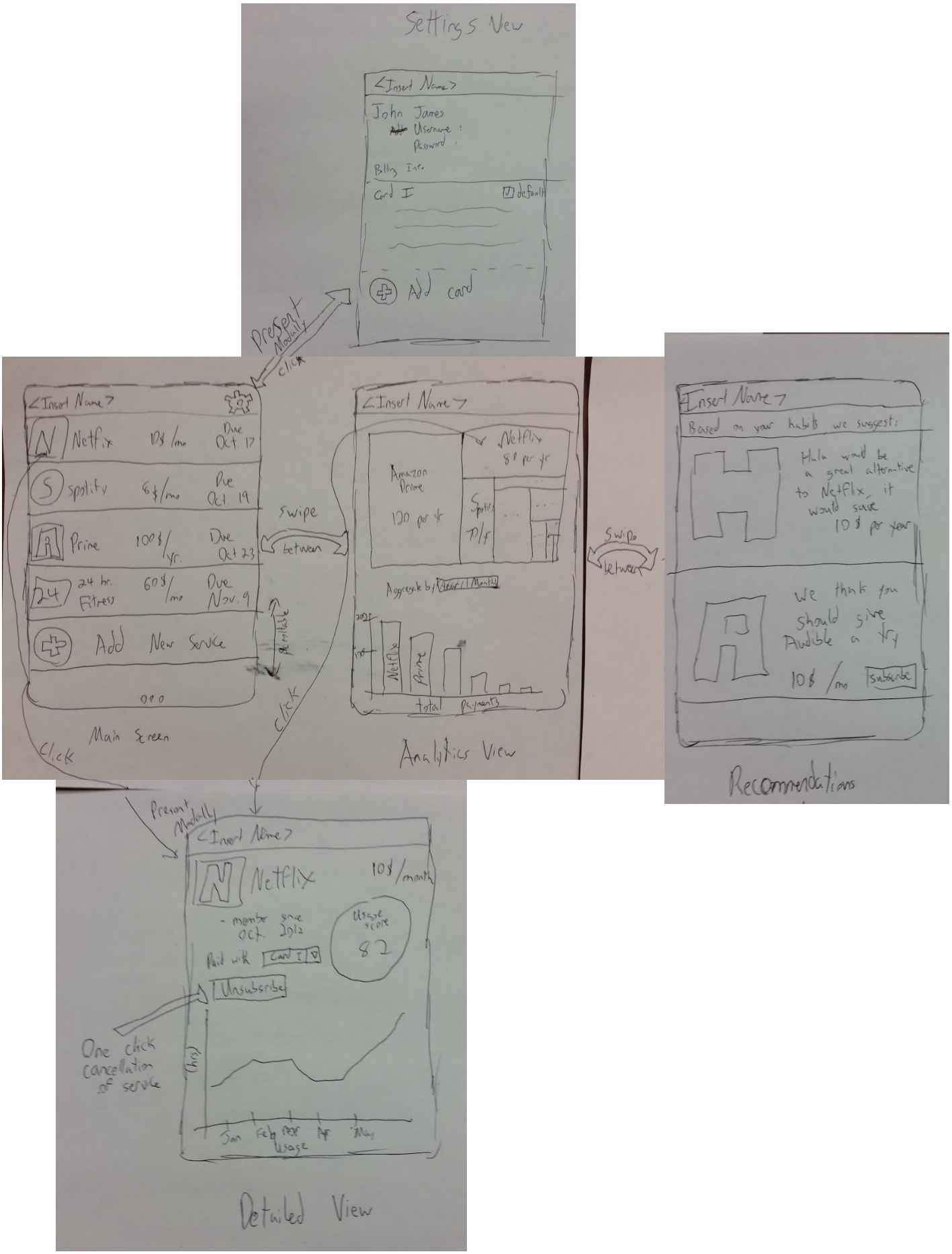
What we learned:

In this portion of the assignment, we felt that we could have done better in differentiating our designs. We focused on too granular of tasks (like adding, or deleting), and thus failed to make any designs without these granular tasks in some form or another. Thus our designs felt like various flavors of the same design rather than different designs looking to accomplish different end-goals. Reflecting on this portion of the assignment, we would of liked to have gone back and made these designs more unique.

After we had made these designs, we decided to reinvent our tasks. We felt that the 6 tasks we had chosen were too granular to make a cohesive and interesting product with just any two of those six tasks. Thus, we went back to the drawing board and came up with two tasks to proceed with that really get at what the user is trying to accomplish. For our design moving forward, we are supporting the following tasks:

1. Recurring Subscription Management. This task will allow users to more efficiently interact with and manage their recurring subscriptions in a unified location. This includes adding subscriptions, deleting subscriptions, and updating information for those subscriptions.
2. Insight and Informed Decisions: This task will solve the core problem of users lacking knowledge about their recurring subscriptions. This task will allow users to make data-driven decisions about what subscriptions are valuable to them.

We decided to draw up one more design to support just these two tasks. This design will be showcased in the last two sections of the document, but we felt it appropriate to include a sketch of it here, as we did not proceed with one of our original “3x4” sketches, but rather created a new sketched based on our pivot around our tasks. The storyboards and written scenarios will detail how this design accomplishes the above tasks.


Settings View
<Insert Name>
John James
Username:
Password:
Billing Info.
Card I
default
Add card
Present Modally
click
<Insert Name>
Netflix
10$/mo
Due Oct. 17
Spotify
6$/mo
Due Oct. 19
Prime
100$/yr.
Due Oct 23
24 hr. Fitness
60$/mo
Due Nov. 9
Add New Service
Main Screen
swipe between
<Insert Name>
Amazon Prime
120 per yr
Netflix
80 per yr
Aggregate by Year / Month
Netflix
Prime
total payments
Analytics View
click
swipe between
<Insert Name>
Based on your habits we suggest:
Hulu would be a great alternative to Netflix, it would save 10$ per year
We think you should give Audible a try
10$/mo
subscribe
Recommendations
Present Modally
<Insert Name>
Netflix
10$/month
- member since Oct. 2012
Paid with Card I
Unsubscribe
Usage score
82
One click cancellation of service
Jan Feb Mar Apr May
Usage
Detailed View

8. **Written Scenarios - “1x2”**: (1 page)
Our first scenario dealt with the task of allowing users a more efficient way to manage their recurring subscriptions in a unified location. This includes adding subscriptions, deleting subscriptions, and updating personal information for those subscriptions. We chose this task because people expressed frustration over there being no easy way to manage subscriptions; every service was isolated and uses their own system. We focused on the task of updating an expired credit card that is the payment method across multiple subscriptions.

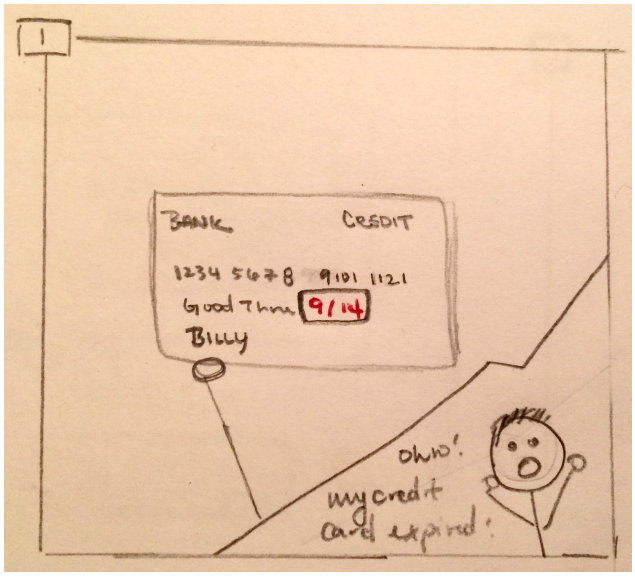
The scenario begins with our user, Billy, finding out that his credit card has expired (Frame #1). Billy goes to our app to see which of his subscriptions uses his expired credit card (Frame #2). Billy quickly sees that 3 of his subscriptions (Netflix, Spotify, and Amazon Prime) uses his expired credit card. Billy clicks on the personal account settings icon in the top right corner (Frame #2) to arrive on his user account page (Frame #3). From there, Billy is able to see all of his payment methods including the card that was expired. Billy clicks on the update button to update his expired card (Frame #3). Going back to the homepage, Billy sees that updating the expired credit card has been applied to all of the subscriptions using said card (Frame #4)

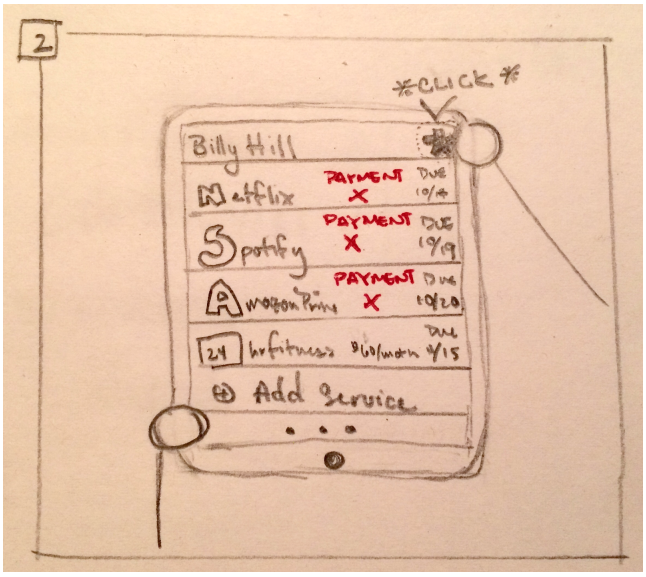
The second scenario involved helping users gain insight into how they use their subscription and from there, make informed decisions. During our contextual inquiries we saw how our participants were discomforted by the lack of insight into their subscriptions. They lacked the means to quantitatively determine which services were worth their money. This task will solve the core problem of users lacking knowledge about their recurring subscriptions and help users make data-driven decisions about what subscriptions are valuable to them.

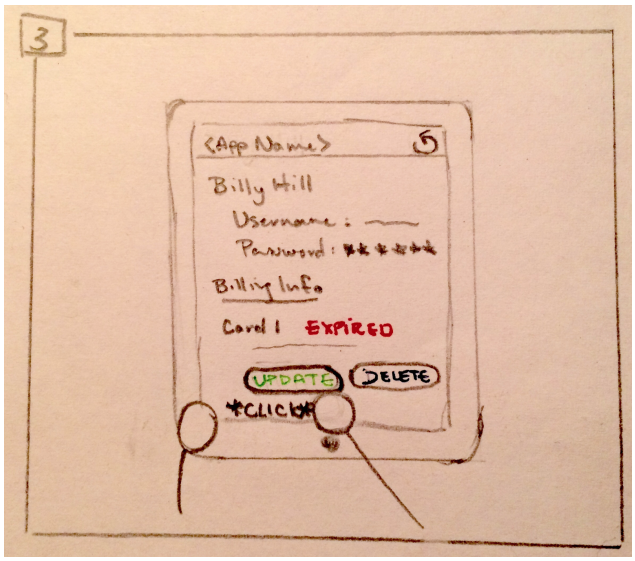
In this scenario, we begin with our user, Jane, deciding to subscribe to Netflix (Frame #1). To do this, we would have our app incorporated with Netflix and other subscriptions (as mentioned in section 7) such that Jane would only need to click on an “Add Subscription” button on the Netflix homepage and all of her personal account information will be applied. During the course of a month, Jane doesn’t use Netflix regularly due to the amount of homework she gets assigned (Frame #2). At the end of the month, Jane is curious to see how much she used Netflix and whether she should keep subscribing or if she should unsubscribe. Jane pulls up our app on her tablet, clicks on Netflix to view a more detailed summary of this subscription (Frame #3). On the more detailed view page on Netflix (Frame #4), Jane sees that her usage score is only a 4 out of a 10! From the usage graph, she saw that through the course of a month her Netflix usage was less than she anticipated. Based on this information, Jane decides to unsubscribe from Netflix (Frame #5).

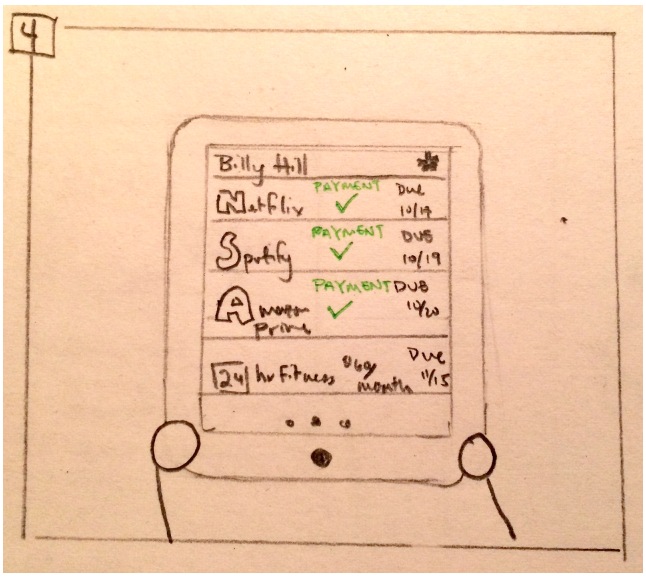
9. **Storyboards of the Selected Design**

Include updated storyboards of your design. Reference these appropriately in your scenarios.

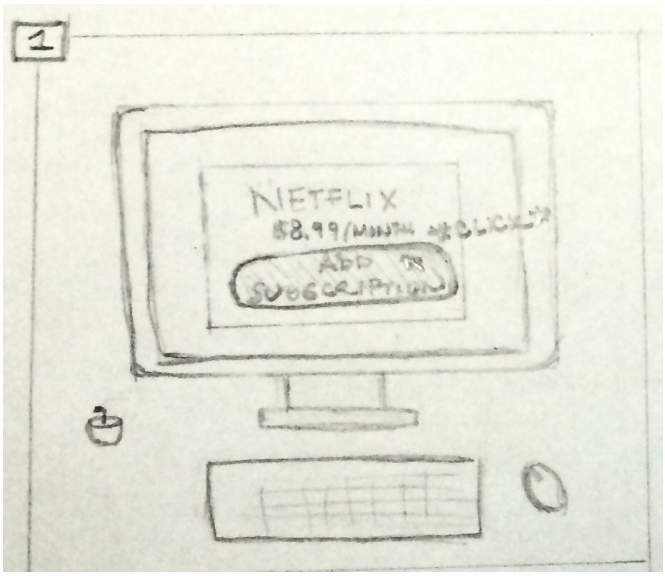


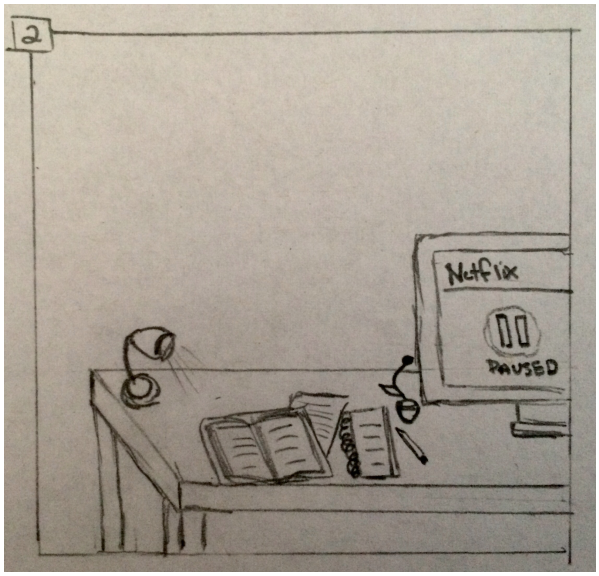


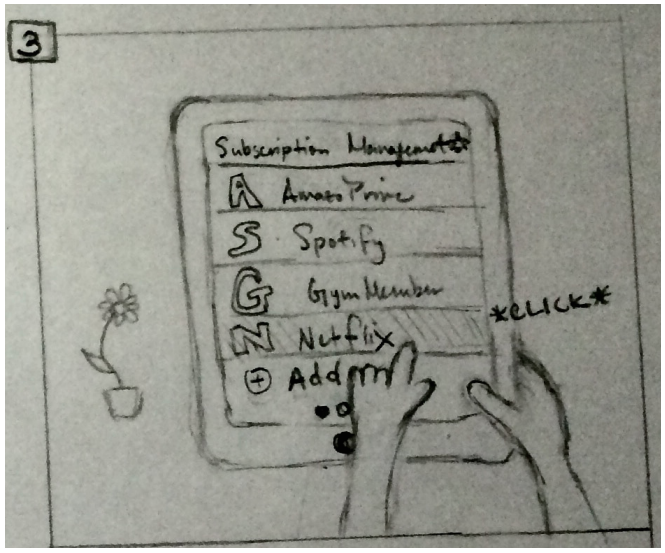


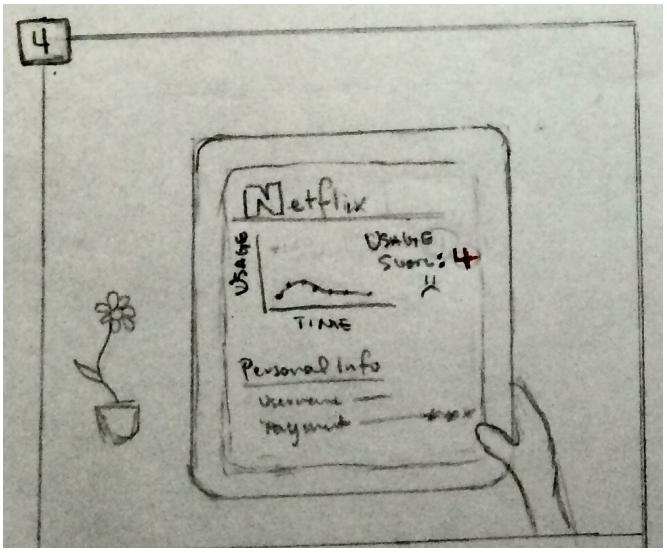


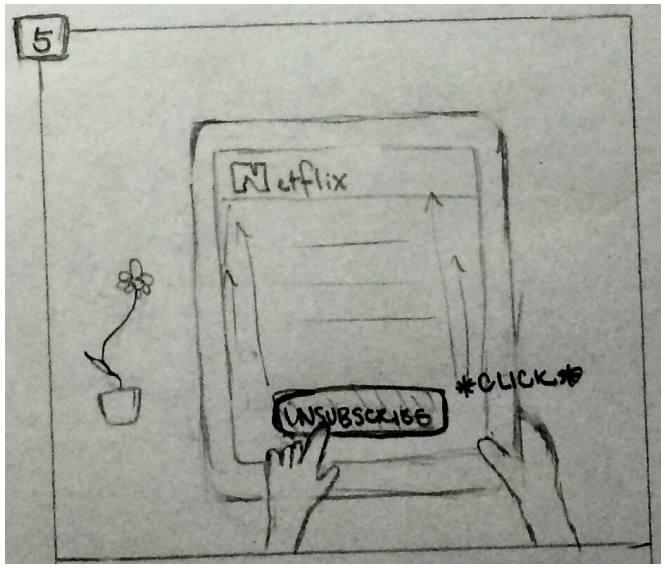
Scenario 2:


1
NETFLIX
$8.99/MONTH
ADD SUBSCRIPTION


2
Netflix
PAUSED


3
Subscription Management
Amazon Prime
Spotify
Gym Member
Netflix
Add
CLICK


4
Netflix
Usage
Usage Score: 4
TIME
Personal Info


5
Netflix
UNSUBSCRIBE
CLICK