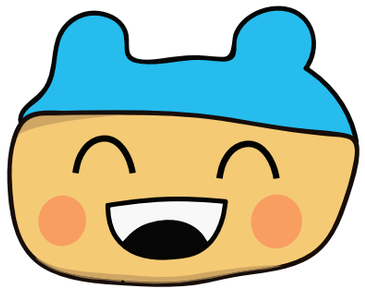

Simon

FUN CHORES FOR KIDS

ACADEMY OF ART UNIVERSITY I GRADUATE SCHOOL OF WEB DESIGN & NEW MEDIA

FINAL THESIS SUMMER 2016 I AREA OF FOCUS: UX/UI DESIGN

PANTIPA MUANGDEE
ID: 03407622

08 . 05 . 2016 I 2 pm

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INTRODUCTION

AUTOBIOGRAPHY

Miss Pantipa Muangdee was born on October 24, 1985 in a rural village called Ban Dong Noi, or to translate it in Thai, the Little Forest Village. Her village, located in Mahasarakham province in Thailand, is not in a forest, but is surrounded by lots of rice paddies. When Pantipa was in grade school, art was the subject she liked the most. She would get excited whenever her teachers assigned an art project, because she would get an opportunity to get creative. Her artistic inspiration mainly came from her grandfather, who was a famous local artist. Her grandfather specialized in pen-and-stroke drawing, and he was also an art collector, collecting antique potteries and regional crafts. When Pantipa was eight years old, her grandfather taught her some pen-and-stroke drawing techniques, which became a powerful art tool for her later in her life.

Pantipa continued to excel in the area of art in secondary school and then later continued her university education at the Faculty of Architecture, Urban Design, and Creative Art in Mahasarakham University. During her university years, Pantipa decided to pursue her study in Graphic Design. Pantipa developed expertise in Adobe Illustrator, which she later applied to the pen-and-stroke techniques to produce unique patterns and designs of her own. In her third year at the university, Pantipa accepted an internship at Chic Channel where she acquired some skills in motion graphics. Later, in her fourth year at the university, Pantipa entered a contest to design a motion graphic advertisement for One2Call cellular company. Although she did not win the contest, her ability to make it to the top 5 finalists out of the thousands of competitors from all over Thailand earned her notoriety among the faculty members at Mahasarakham University.

After Pantipa received her Bachelor of Fine Arts degree, she went to work for Apichard Printing House as a graphic designer. In addition, she was recruited by the faculty at Mahasarakham University to work as a Lecturer Assistant for the Design Fundamental courses. Two years later, Pantipa decided to come the United States to study English and eventually continue her study in Graphic Design. However, during her English education, she discovered a passion for Web Design and decided to attend the Academy of Art University in San Francisco to pursue her Master of Fine Arts in Web Design and New Media.

During her graduate study, Pantipa discovered her new-found passion for UX/UI design. She likes the challenges in designing user experience and user interface in mobile apps. After she completes her masters degree in August 2016, she plans to pursue her career as a UX/UI designer.

RESUME

PANTIPA
UX/UI DESIGNER

Oakland, CA
pantipamd@gmail.com
www.pantipa.com
415.592.4516

EXPERIENCE

UX/ UI Designer
IKEO, Playa Vista, CA
January 2016 – Present

Develop and implement UX Design process, develop scenario and user task flows, develop Lo-Fi and Hi-Fi wireframes, develop interactive prototypes, develop and establish visual design guideline, develop concept video for UX walkthrough and marketing, and develop and design website.

UX/ UI Design Intern
Young & Hungry A Creative Co-Op, San Francisco, CA
September 2015 – May 2016

Manage projects, design graphic contents for advertisement, presentation, and publication, research and develop creative strategies, design App for branded content analyze and redesign websites.

Freelance Web Designer & Graphic Designer
Oakland, CA
2009 – Present

Designed user interfaces for websites and mobile sites, logos, corporate identity, marketing prints and interactive media.
Clients: Dosit Thai Cuisine, Antologia, Burapa School Thailand, Saranya's Wedding

Graphic Designer
Apichart Printing Partnership, Mahasarakham, Thailand
January 2008 – December 2008

Created prints, commercial ads, and developed layouts for children's textbooks.

Motion Graphic Design Intern
Chic Channel, Bangkok, Thailand
March 2007 – May 2007

Developed storyboards for TV ads and worked on small motion graphic skits for proof of concept.

SKILLS

Photoshop	Illustrator	InDesign	After Effects	Premiere Pro	HTML/CSS
UX/UI Design	User Flow	Wireframe	Prototyping	User Testing	Branding/Identity

EDUCATION

Academy of Art University, MFA in Web Design & New Media
2013 - Present

Anticipated graduation date: August 2016

Mahasarakham University, Thailand, BFA in Graphic Design
2004 – 2008

AWARDS

Academy of Art University Spring Show 2015
2015

Selected by directors and faculty of the school of Web Design & New Media to the tech industry and public.

Mahasarakham University Senior, Thesis Scholarship
2008

Received scholarship award for submitting undergraduate thesis selected by the Faculty of Architecture, Urban Design and Creative Art.

ELEVATOR PITCH

The goal of this app is to get kids excited about doing chores so they eventually take ownership of their assigned chores, and grow up with the understanding of responsibility.

THESIS ABSTRACT

According to The Center for Parenting Education, kids around age 4 – 5 are very helpful to their parents, helping parents do simple chores around the house. However, by age 5 – 6, kids are starting to rebel against parents by resisting or refusing to do chores. Parents often struggle to get their kids to perform simple chores such as make the bed or clean up their toys. Sometimes, parents wonder why their kids are so eager to do chores at school, and not at home. The Simon App attempts to stimulate this excitement by making chores fun and interactive for both the parents and their kids.

The name "Simon" comes from the children's game "Simon says". The game usually consist of three players or more, with one player takes over the role as "Simon", and issues the instructions to others with the phrase starting "Simon says…" For example, "Simon says, jump three times," or "Simon says, clap behind your back." The game is well established in popular culture.

The Simon App is an innovative concept that utilizes the smartphone and smartwatch. The parent has all the controls on the smartphone. The parent can set what chores the parent want the kid to do, when to do it, and most importantly, how many points the kid will earn after completing the chores. After the parent assigns a chore, the assignment is sent to their kid's smartwatch.

When it's time for the kid to do a chore, the smartwatch will activate with a notification and the kid will perform the chore. Then kid sends a notification to the parent's smartphone through the smartwatch to indicate completing the chore. The kid is rewarded with points when the parent approves the notification. The kids can use points to spend on smaller rewards, or save up for bigger rewards set by the parent.

This app does not, in any ways, replace parenting. It is merely using the available technology to enhance the quality of parenting. More over, the technology of this app increases interaction between the parents and the kids, building stronger relationship. As a result, the kids becomes more motivated to do chores, and through doing chores, they will learn and understand responsibility.

Make chores fun for kids!

STATEMENT OF INTEREST

There are two influences that became the primary drivers in my thesis. The first was my interest in children education that started early when I was a kid. The other influence was from my curiosity stemmed from conversations I've had with my friends who were going through parenting their young children.

Children's education has always been my interest ever since I was a kid. The early influence in this interest came mostly from my mom, who is a primary school teacher. She would often let me help her with her work on small projects for her school. For example, I would help her design cartoon characters that teach her students good behaviors in class. The cartoon characters I've designed made impact on her students, and eventually the school's principal wanted to use my cartoon characters for the entire school. At that time I felt proud of my accomplishment, and I realized at that time my design skills can make a difference in children's education.

When I first formulated my idea for my thesis, I tried to find a problem that was related to my interest in children education. It was very challenging because there were so app about children education. Then one day, my friend called me to talk about how she has trouble teaching her young 5 year-old son responsibility. As a single mom, my friend was very busy with her work, so only had limited time to look after her son. She said she wanted an app that would keep her son busy. At that moment, an idea popped in my head about doing an app that help parents teach kids responsibility by having their kids do chores. This became the beginning of my journey of the Simon App.

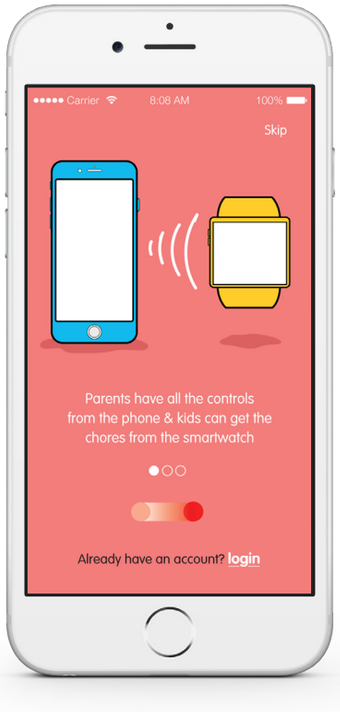
PROOF OF CONCEPT

PROOF OF CONCEPT #1:
PARENT REGISTER/ ADD KID & SET NEW CHORE FOR KID (NEW USER)

INSTRUCTIONS

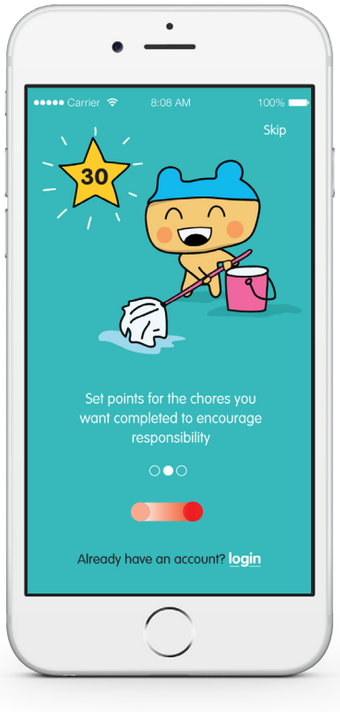
Susan is 34, and a new user. She just downloaded this app and she is ready to start using it for her child, who's name is Grace, whose age is 6. She want to add "Put away the toys" as the first chore for Grace. She want to assign this chore at 3:00pm today, June 10. She is think of giving her 30 points if Grace completes the chore.

1.



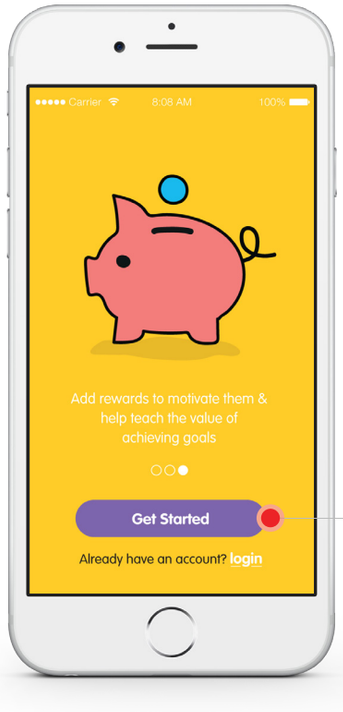
Susan open the Simon App and review introduction page 1

2.



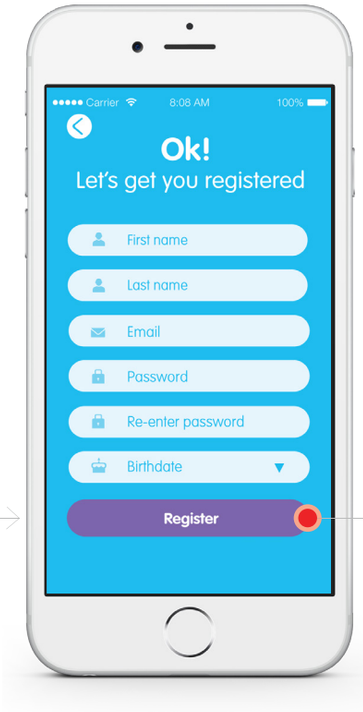
Susan review introduction page 2

3.



Susan review introduction page 3 and taps on "Get Started"

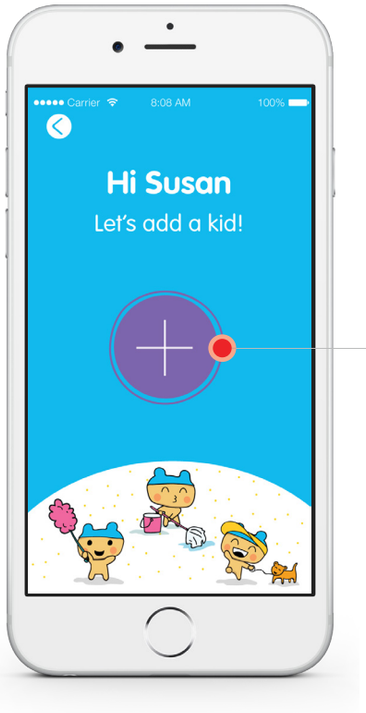
4.



Susan taps in user's name input to type name, email, password and birthday. Then she taps "Register"

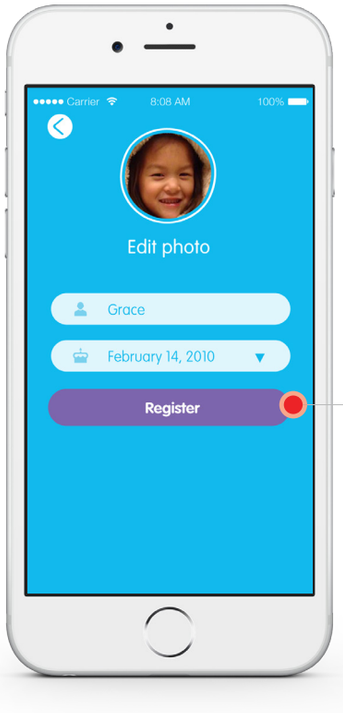
PROOF OF CONCEPT

5.



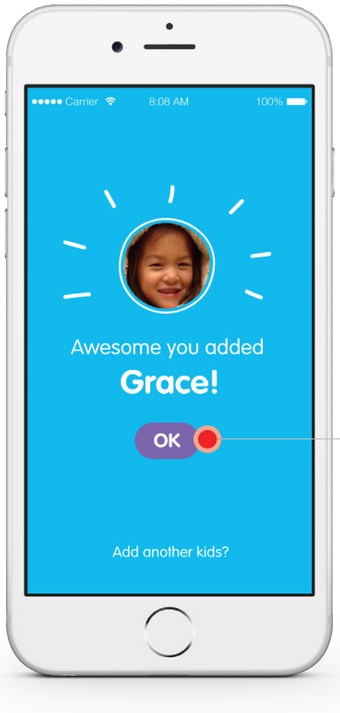
Susan taps plus button to add a child.

6.



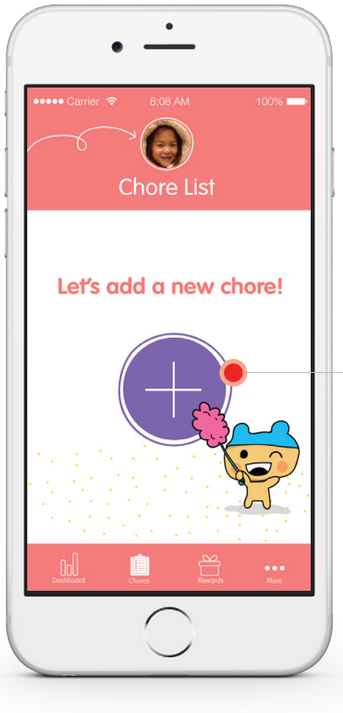
Susan taps in user's name input to type name and birthday. Then she taps "Add photo" to add Grace's photo and taps "Register"

7.



Susan taps "OK".

8.



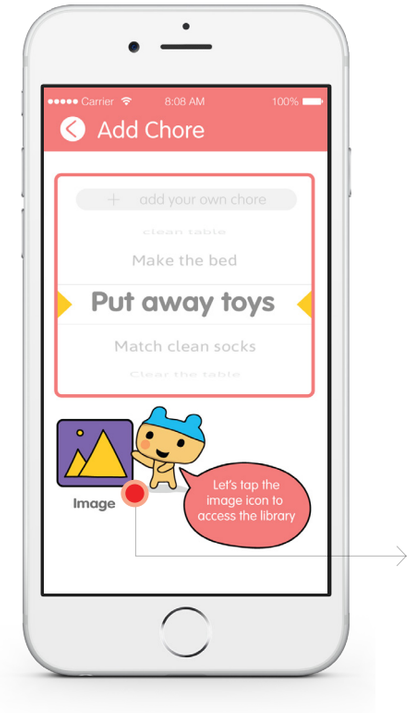
Susan taps on "plus button" to add a chore

9.

Susan see Simon pop-up and give her the direction for the next stept and she scroll to select "Put away toys". Then she taps on "Next" button.

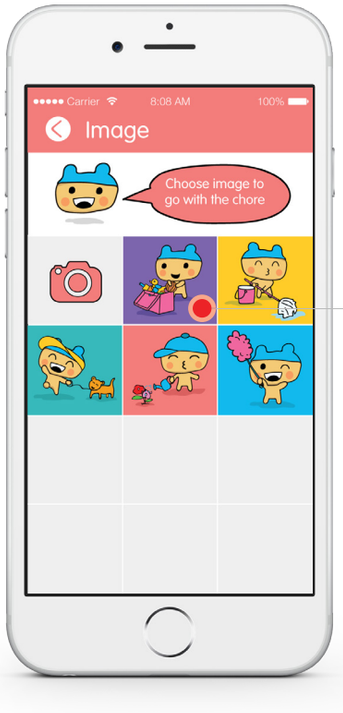
PROOF OF CONCEPT

10.



Susan see Simon pop-up and give her the direction for the next stept and she taps on "Image" icon.

11.

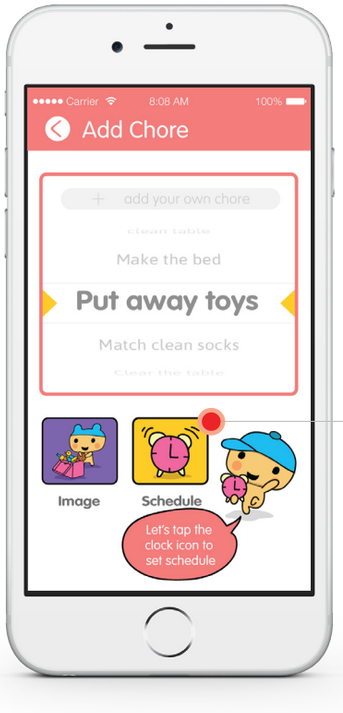


Susan see Simon pop-up and give her the direction for the next stept and she taps on put away toys image.

12.

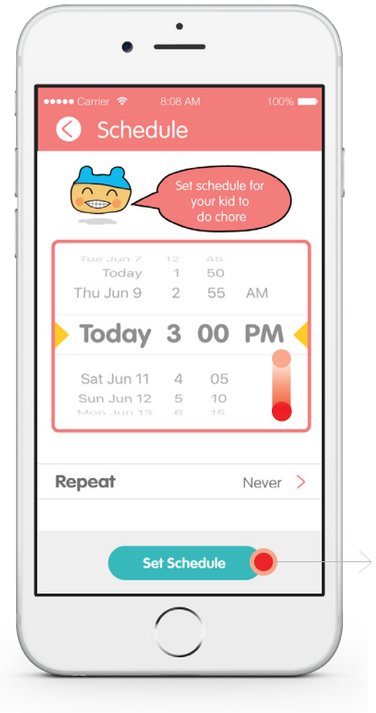
Susan tap on "Set image" button.

13.



Susan see Simon pop-up and give her the direction for the next stept and she taps on "Schedule" icon

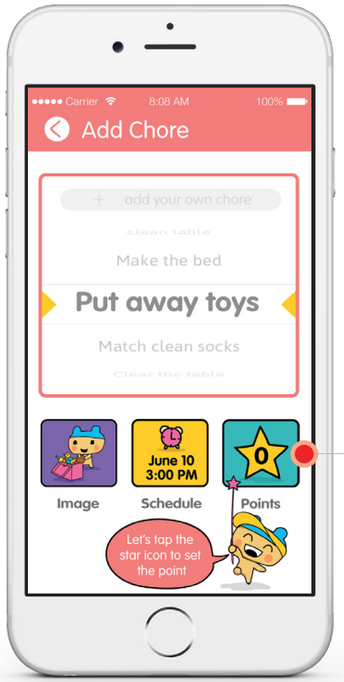
14.



Susan see Simon pop-up and give her the direction for the next stept and she scroll to select "Today's date" and "3 PM"

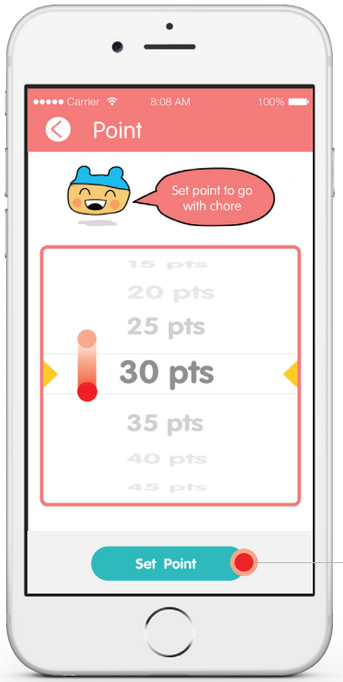
PROOF OF CONCEPT

15.



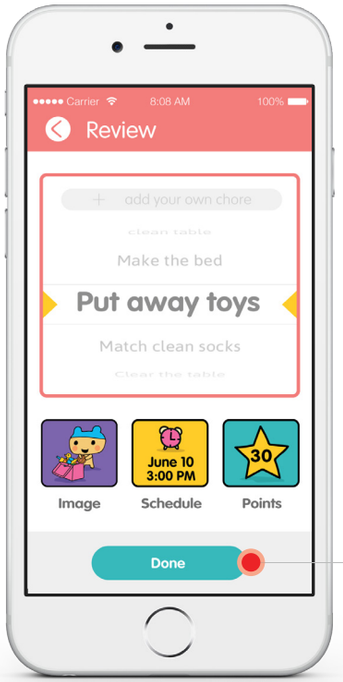
Susan see Simon pop-up and give her the direction for the next stept and she taps on “Points” icon

16.



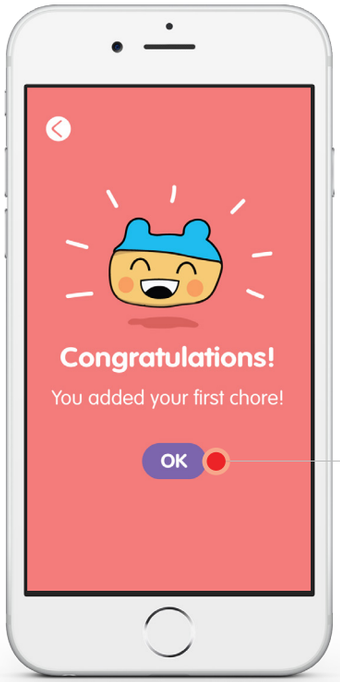
Susan see Simon pop-up and give her the direction for the next stept and she scroll to select points. Then she taps “Set Point”.

17.



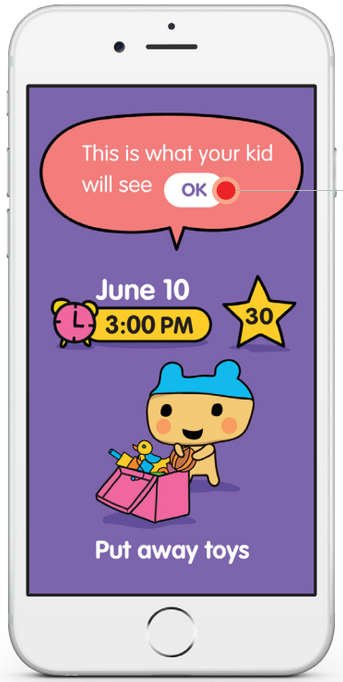
Susan reviews chore details. Then she taps “Done”.

18.



Susan taps “OK” on Congratulation page.

19.



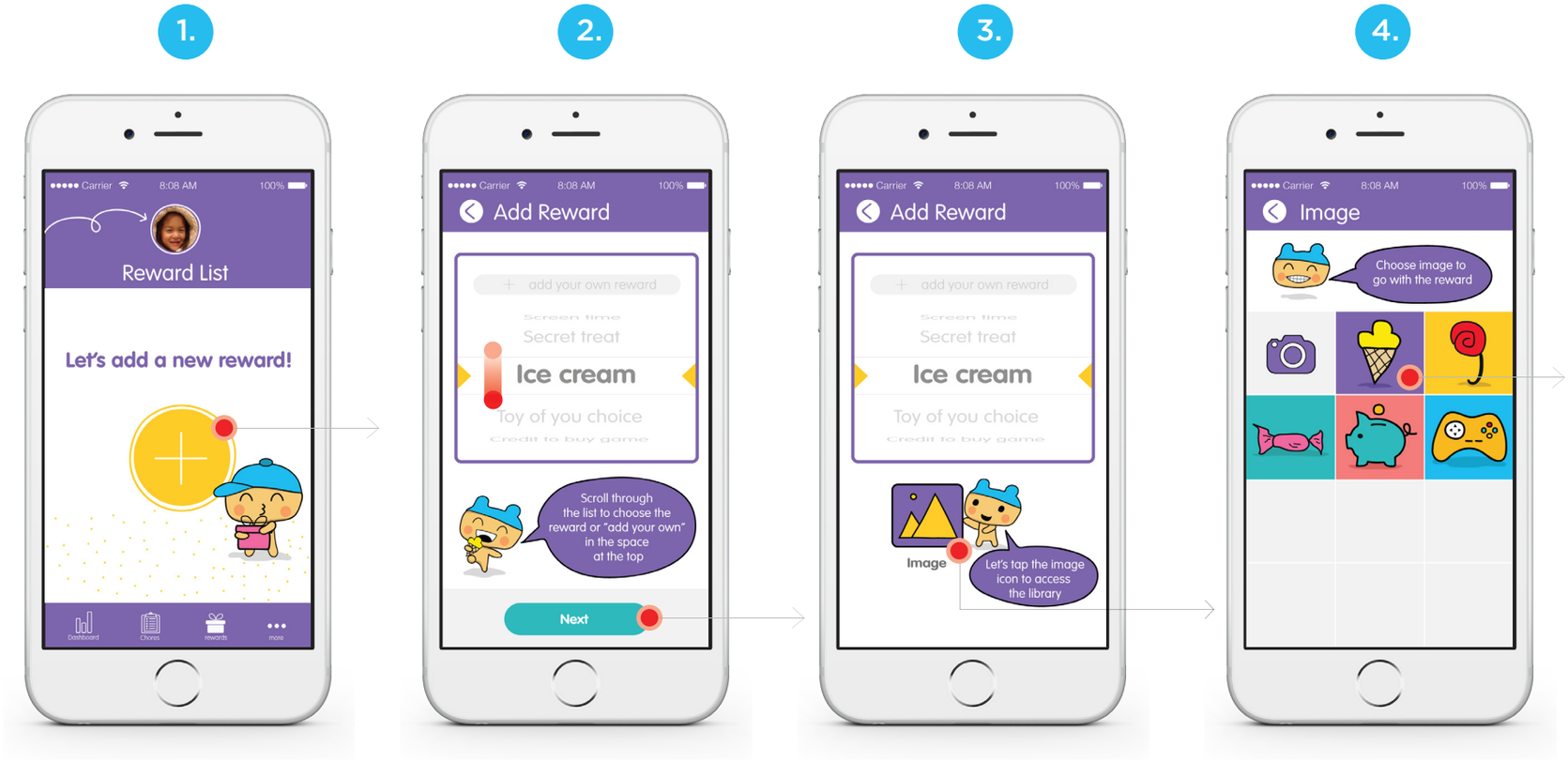
Susan taps “OK” on kid preview page.

PROOF OF CONCEPT

PROOF OF CONCEPT #2:
PARENT SET NEW REWARD FOR KID (NEW USER)

INSTRUCTIONS

Now Susan is done with setting the chore for her kid. Now she want to add “ice cream” as the first reward when Grace gets enough point to earn it. She is thinking of assigning 30 total points for the “ice cream” reward.



Susan taps on “plus” icon.

Susan see Simon pop-up and give her the direction for the next stept and she scroll to selects “Ice cream”.

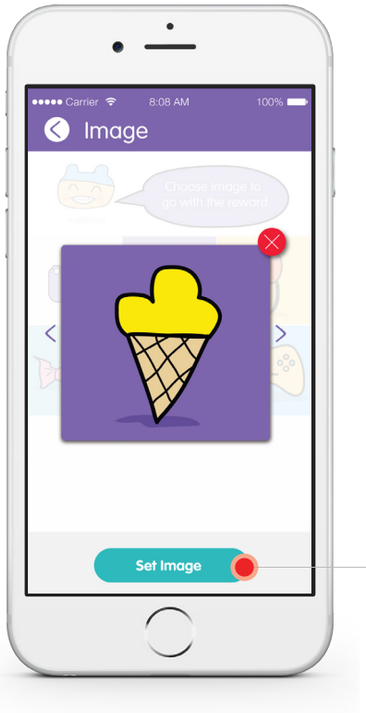
Susan see Simon pop-up and give her the direction for the next stept and she taps on “Image” icon

Susan see Simon pop-up and give her the direction for the next stept and she taps on “Ice cream” image

.

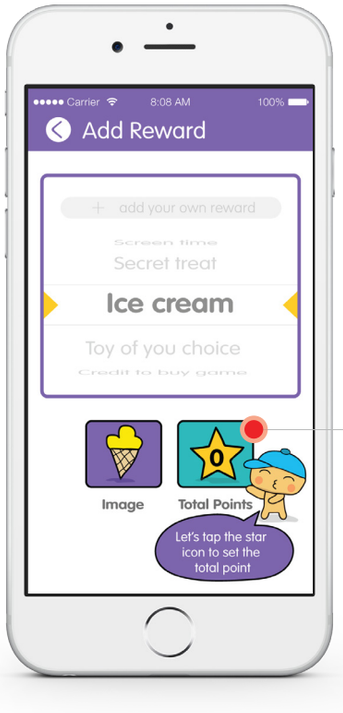
PROOF OF CONCEPT

5.



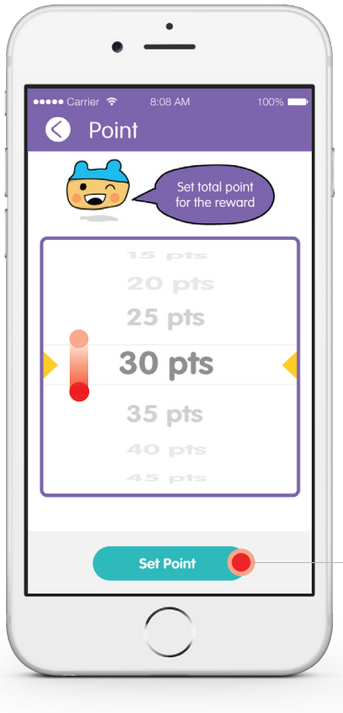
Susan tap on “Set image” icon.

6.



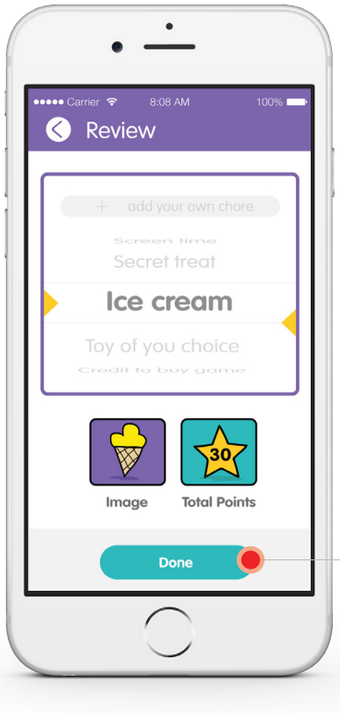
Susan see Simon pop-up and give her the direction for the next stept and she tap on “Total Points” icon.

7.



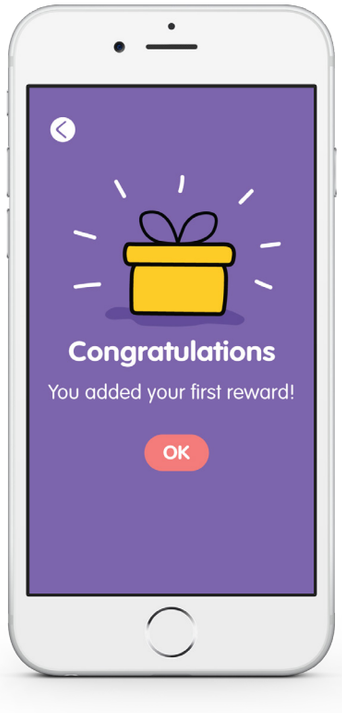
Susan see Simon pop-up and give her the direction for the next stept and she scroll to select “30 pts”. Then she taps “Set Point”.

8.



Susan reviews reward details. Then she taps “Done”.

9.



Susan taps “OK”.

PROOF OF CONCEPT

PROOF OF CONCEPT #3:
KID DO CHORE & GET REWARD

INSTRUCTIONS

Today is June 10, 2016 and right now it is 3:00pm. Now Grace, whose age is 6 receive a chore notification through the smartwatch “Clean up the toys”. After she finish cleaning up the toys, Grace decided she wants to get a reward. She sees she has 30 total points, which is enough to get “ice cream” as her reward.

1.

Grace receive a chore notification and she taps on the screen.

2.

Grace reviews the chore information. Then she taps on “play” button to proceed.

3.

Grace doing chore. During she doing the chore, the hourglass will show. Then she taps on the screen after she finished the put away toys.

4.

Grace taps on the “check” button to confirm that she complete the put away toys.

PROOF OF CONCEPT

5.

Simon showing happy face that Grace complete put away toys and she taps on forward button to proceed.

6.

Grace waits for Susan to approve.

7.

Susan approved and Grace receives 30 points. Then she tap on the screen.

8.

Grace taps on the “Ice cream” image. Then she taps on the “check” button to select the reward.

PROOF OF CONCEPT

9.

Grace wait for Susan to approve. Then taps on the screen.

10.

Susan approved and Grace see reward received.

11.

Grace see point remain and taps on the screen.

STRATEGIC PROCESS

POSITIONING STATEMENT

The Simon App is an innovative concept that utilizes the smartphone and smartwatch. The parent has all the controls on the smartphone. The parent can set what chores the parent want the kid to do, when to do it, and most importantly, how many points the kid will earn after completing the chores. After the parent assigns a chore, the assignment is sent to their kid's smartwatch.

When it's time for the kid to do a chore, the smartwatch will activate with a notification and the kid will perform the chore. Then kid sends a notification to the parent's smartphone through the smartwatch to indicate completing the chore. The kid is rewarded with points when the parent approves the notification. The kids can use points to spend on smaller rewards, or save up for bigger rewards set by the parent.

INSPIRATIONAL PROJECTS

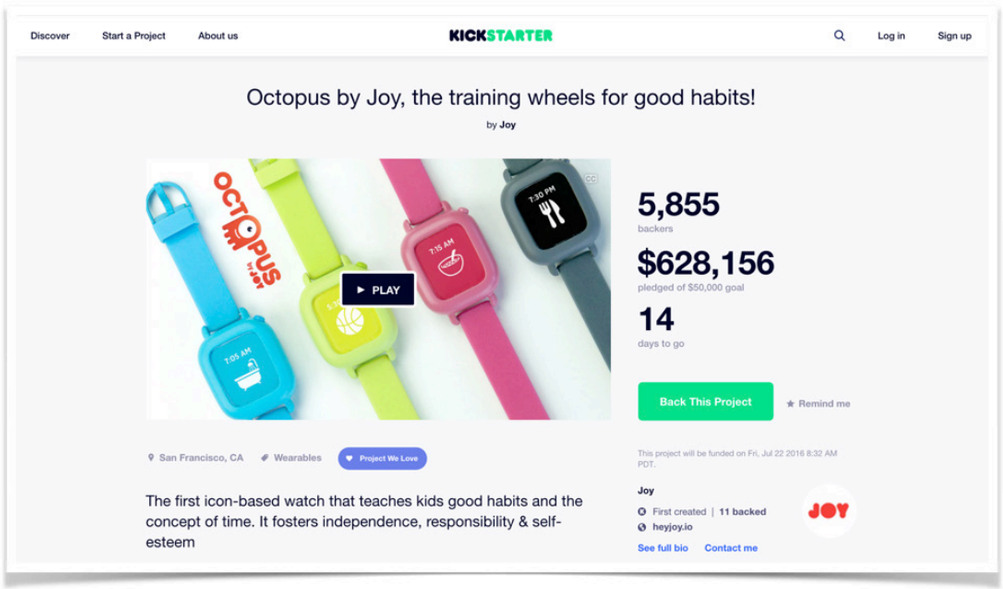
Tamagotchi

I first draw my project inspiration Tamgoctchi, a Japanese-made handheld digital pet. The device was revolutionary at that time because kids were able to own their own personal devices. It also teaches kids responsibility by taking care of their digital pet.

VTech

Vtech is another product with I draw inspiration from. Vtech has it's own smartwatch and the visual design is very appealing.

COMPETITORS



Source: https://www.kickstarter.com/projects/octopusbyjoy/the-icon-based-watch-that-young-kids-can-read-and

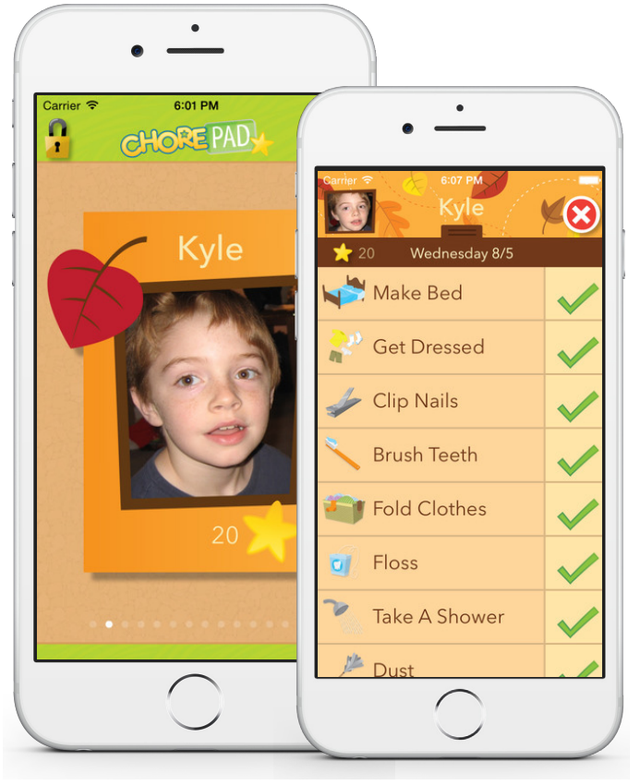
Octopus

Octopus by Joy was the recent competitor I've discovered after a number of my friends and family sent me news of their Kickstarter program that launched late June 2016. Up until this discovery, there hasn't been any competitor that has a smart-watch that is built specifically for kids, and interacts with the parents. After analyzing the competitor matrix, the idea may be similar to my thesis, but the visual approach, the style, and focus is different. Octopus by Joy uses mostly flat designed icons to identify tasks and focus on time management of the kids. In addition, the target age for kids is 3 - 8, which is very wide.

COMPETITORS

Chore Monster

ChoreMonster was my key competitor, until I recently discovered another competitor very similar to my thesis. With the exception of not being available on a wearable device, ChoreMonster has nearly all the features that the Simon app has. ChoreMonster's concept of using monster cartoons and its design are very appealing to kids. However, ChoreMonster app has some issues with some features that are not user-friendly. The app sends notification by email, which may be an issue for kids ages 4 - 8; whether parents would allow their kids to have emails. In addition, ChoreMonster does not record statistics, so parents would not have the metrics that would help them monitor the progress of their kids.



Chore Pad

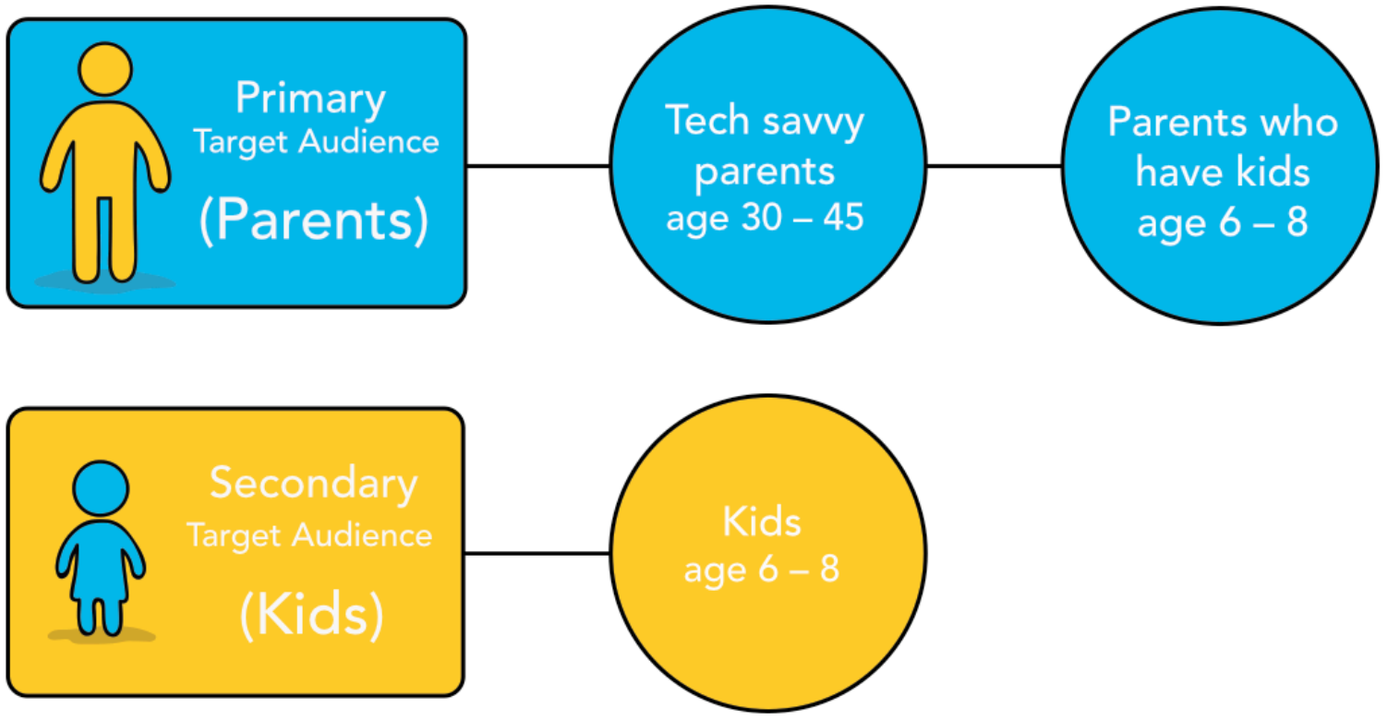
ChorePad is another competitor that is very similar to my thesis, with the exception of not being available on a wearable device. ChorePad has nearly all the features that the Simon app has. In addition, the visuals looks more fun and may be more visually appealing. However, ChorePad does not have a feature that allow the parents to schedule chores specifically by time. Instead, the parent sets a list of chores on certain days. Then, when the chores are completed, the parents can modify the reward points to give more if necessary.

COMPETITIVE MATRIX

Categories	Simon	Octopus by Joy	Chore Monster .com	ChorePad
Kid Age Range	6-8	3-8	6-8	7+
Track Chores	★	★	★	★
Smartphone App	★	★	★	★
Smartwatch for kid	★	★	–	–
Reward System	★	–	★	★
Connection				
Bluetooth	–	★	–	–
Cellular	★	–	★	★
Visual				
Icon	★	★	★	★
Time	★	★	★	★
Number	★	–	★	★
Text	★	–	★	★
Cartoon Character	★	–	–	★
Custom Image	★	–	★	–

UX PROCESS

TARGET AUDIENCE



My **primary target audience** is tech savy parents age 30 - 45 who have kids age 6 - 8. The reason is because the UX functions are focused more on the parents. In addition, the reason why I mentioned "tech savy" is because for parents who are open to new technologies. From the interviews, I found that parents who are concerned with privacy are not open to new technologies. As for my **secondary target audience**, I concluded kids age 6 - 8 based on my research. I think age 5 is a good starting age because it is not too early, and not too late for the kid to start using the Simon App.

PRIMARY PERSONA

"I wish my daughter would learn to clean up after herself"

Susan

Demographics Needs

Age: 35 years
Works: Restaurant Owner
Location: Danville, California
Language(s): English/ Thai
Technology: iPad/ iPhone

Personal Background

Susan works as a restaurant owner with her husband. Although her husband does most of the work running the restaurant, Susan is busy with taking care of the restaurant's finances and accounting. She usually works 10am - 3pm almost everyday. She then goes back to work at the restaurant around 9pm to close the account for the day. This enables her to be able to take Grace to kindergarten in the morning and to come pick her up after work. Although her work schedule is flexible, but she is also busy taking careof the house. She wants to start teaching Grace responsibility, but sometimes she finds it difficult to make time for it.

Needs

- Tools to keep my daughter busy with chores
- Tools to teach my daughter responsibility

Task Flow #1

Set Chores

Loading > Register/ Log in > Start Add Child > Add Child Information > Confirmation Add Child > Add Chore > Select Chore > Select Image Icon > Select Image of Chore >
Set Image > Select Point Icon > Set Point > Select Schedule Icon > Set Schedule > Tap Done > Confirmation Add Chore > Confirmation Kid Preview Page

Task Flow #2

Set Rewards

Start Add Reward > Select Reward > Select Image Icon > Select Image of Reward > Set Image > Select Point Icon > Set Point > Tap Done > Confirmation Add Reward >
Back to Reward List

SECONDARY PERSONA

"Chores are so boring"

Grace

Demographics Needs

Age: 6 years
Works: Student
Location: Danville, California
Language(s): English/ Thai
Technology: Smartwatch

Personal Background

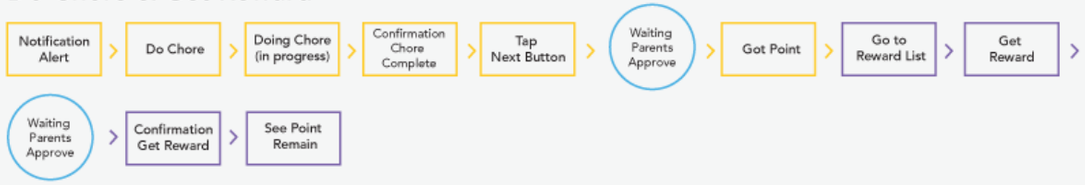
Grace is six years old and is in kindergarten. She likes to play the piano and draw cartoons. She has an iPad that her mom bought for her and she plays child educational games. She likes these games because the pictures are colorful, and thecartoon characters are fun and interactive. She also likes sound and music in the games. She can only read some simple words, mostly three letter words, but she recognizes numbers.

Needs

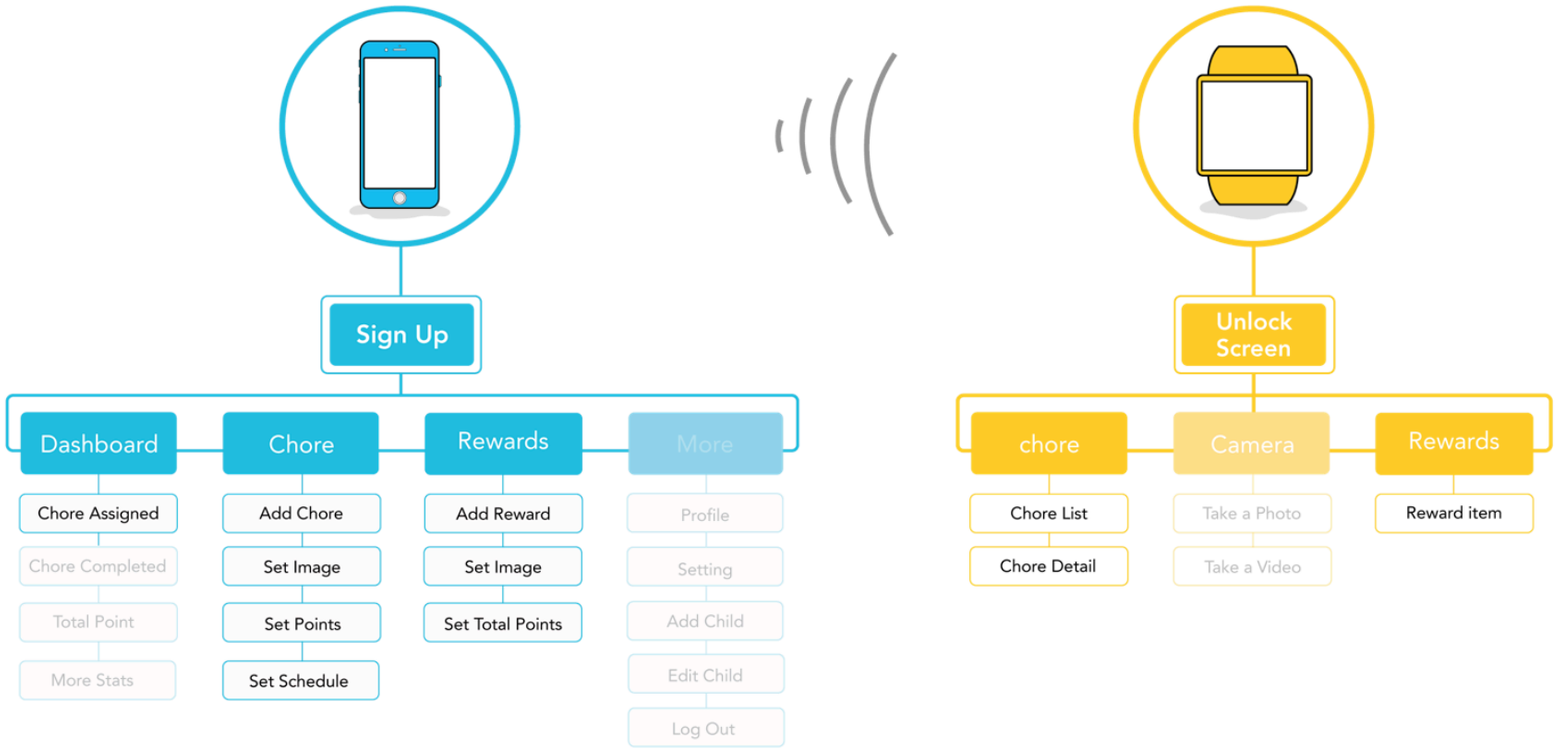
- Encouragement to do chores
- Rewards for doing chores

Task Flow #3

Do Chore & Get Reward

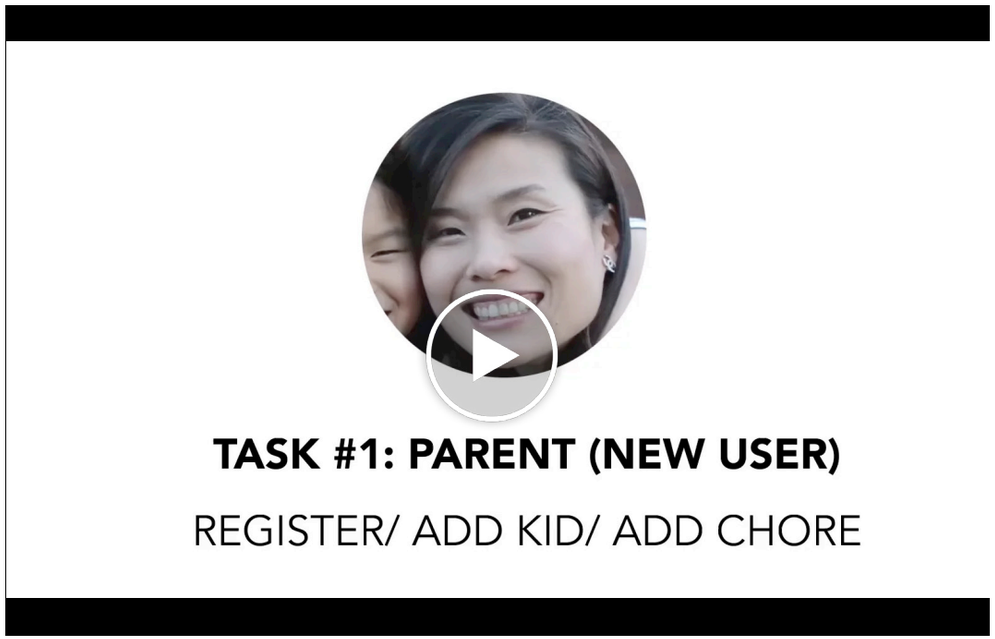


INFORMATION ARCHITECTURE



For the development of the prototype, I focused on the core structure of the information architecture (IA structures that are clearly visible). For the next steps after my thesis, if I have the opportunity to develop further, I hope to expand to the other components (areas that are transparent).

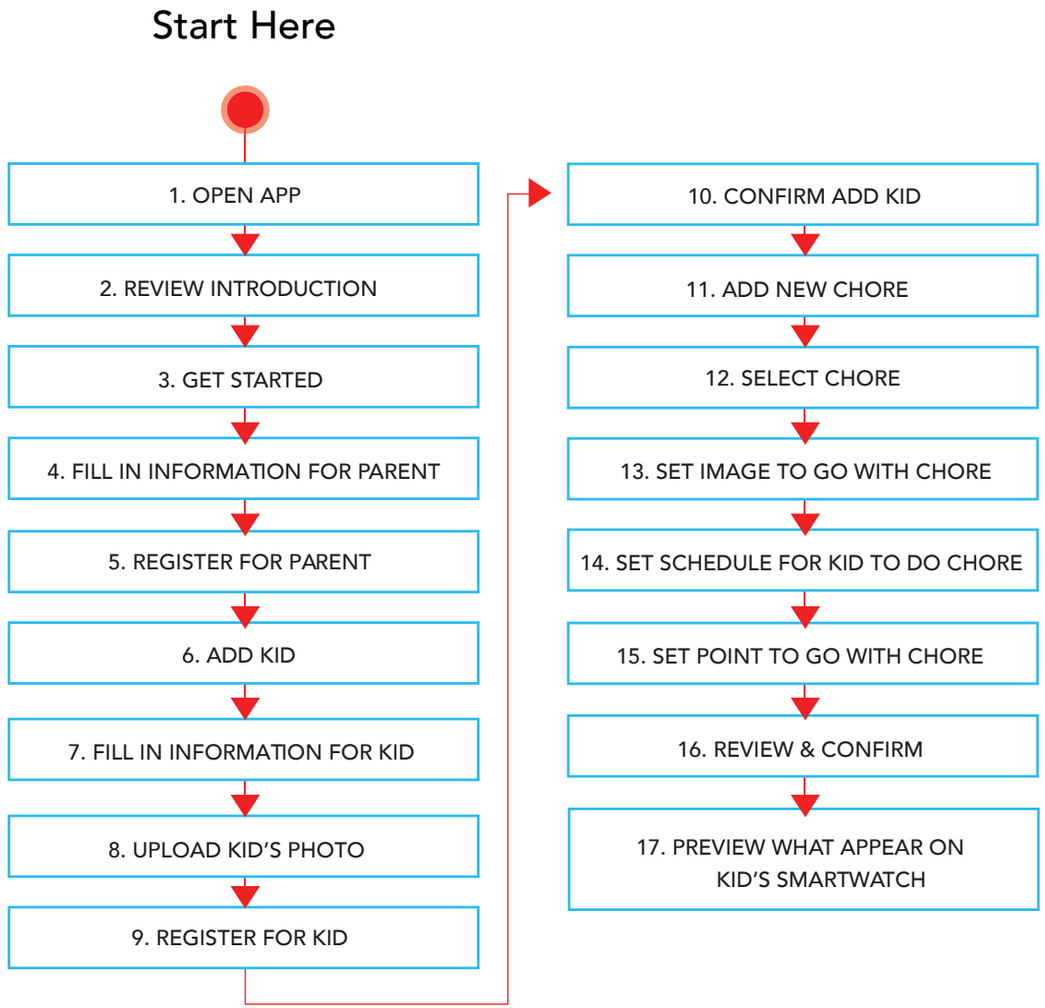
USER TASK FLOWS



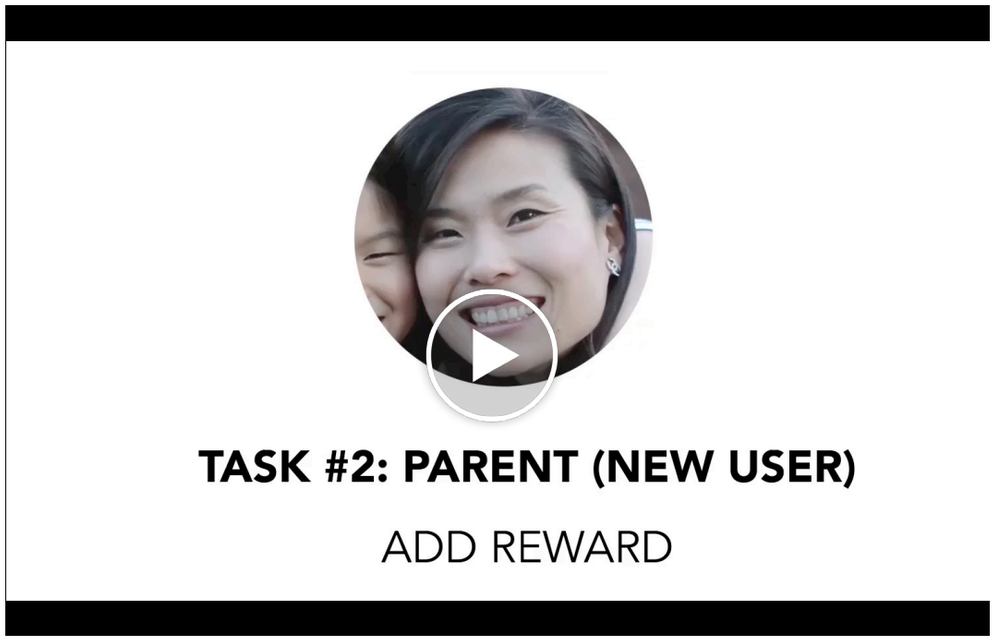
Link to see the video: https://vimeo.com/177243352

Instructions

Susan is 34, and a new user. She just downloaded this app and she is ready to start using it for her child, who's name is Grace, whose age is 6. She want to add "Put away the toys" as the first chore for Grace. She want to assign this chore at 3:00pm today, June 10. She is think of giving her 30 points if Grace completes the chore.



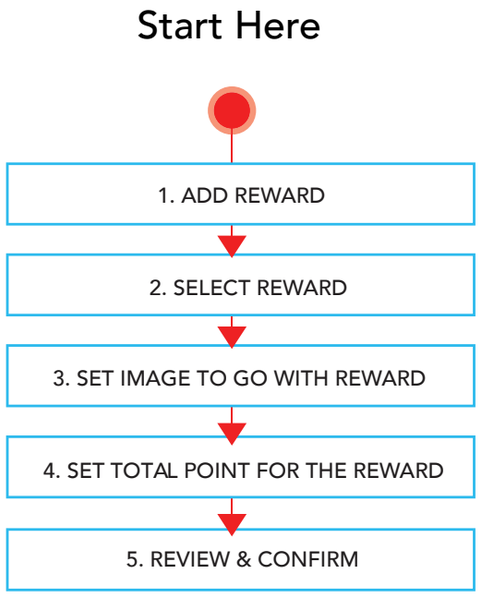
USER TASK FLOWS



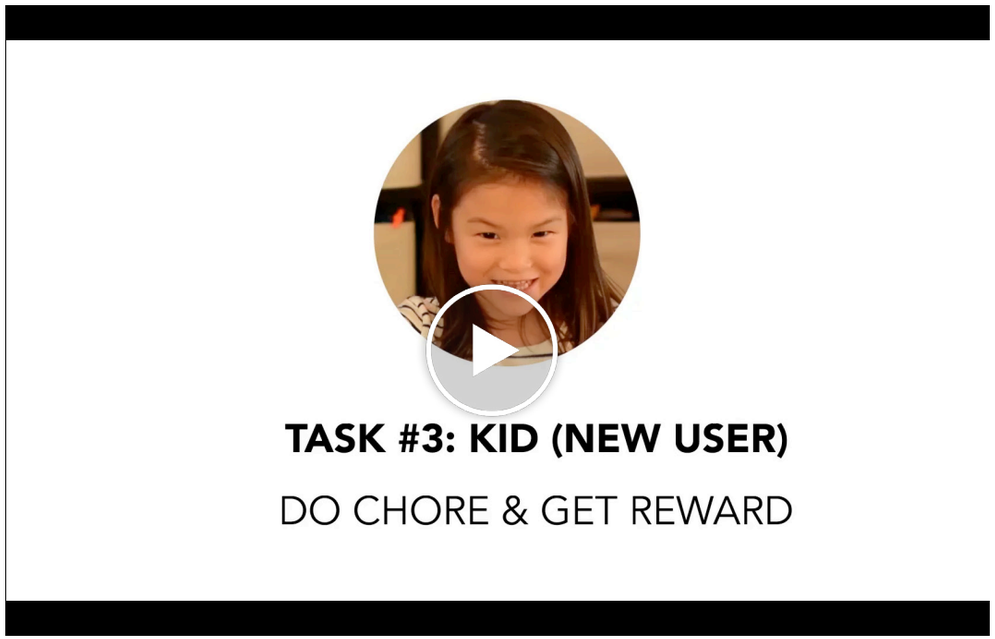
Link to see the video: https://vimeo.com/177244041

Instructions

Now Susan is done with setting the chore for her kid. Now she want to add “ice cream” as the first reward when Grace gets enough point to earn it. She is thinking of assigning 30 total points for the “ice cream” reward.



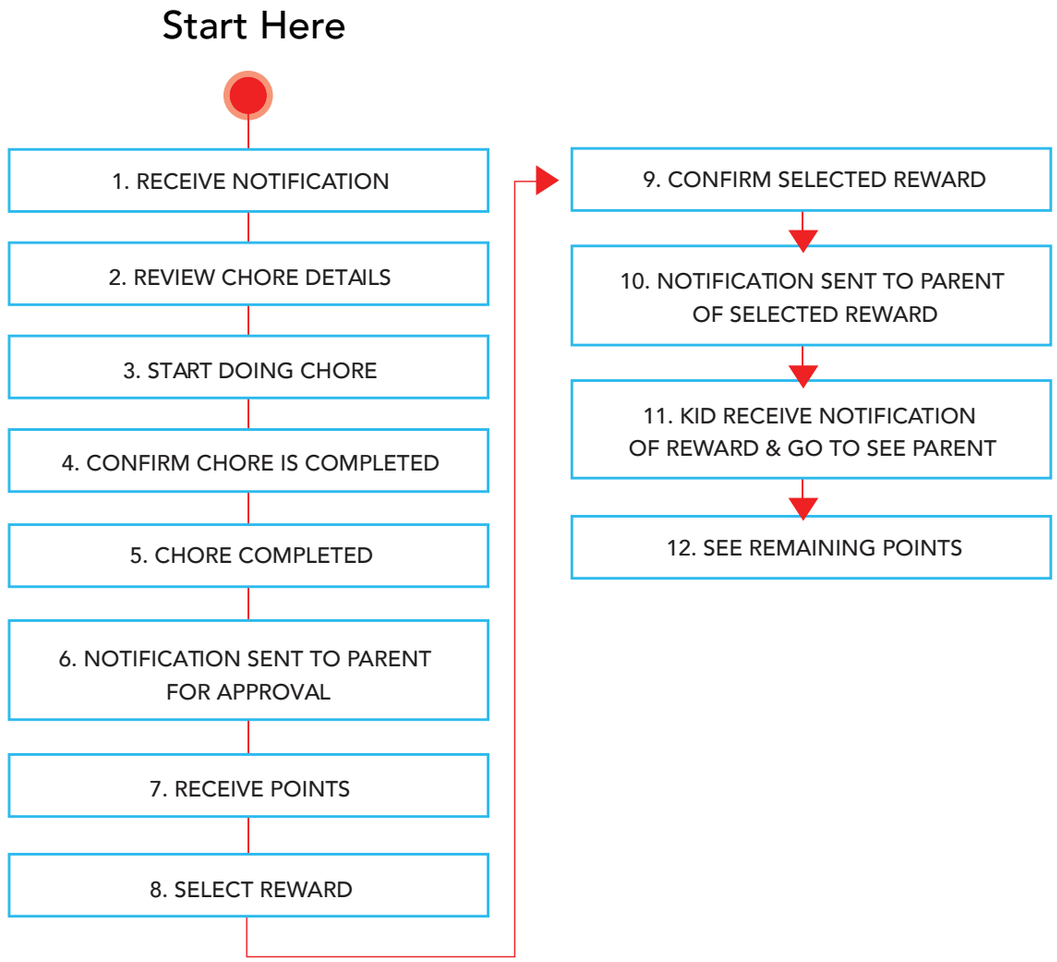
USER TASK FLOWS



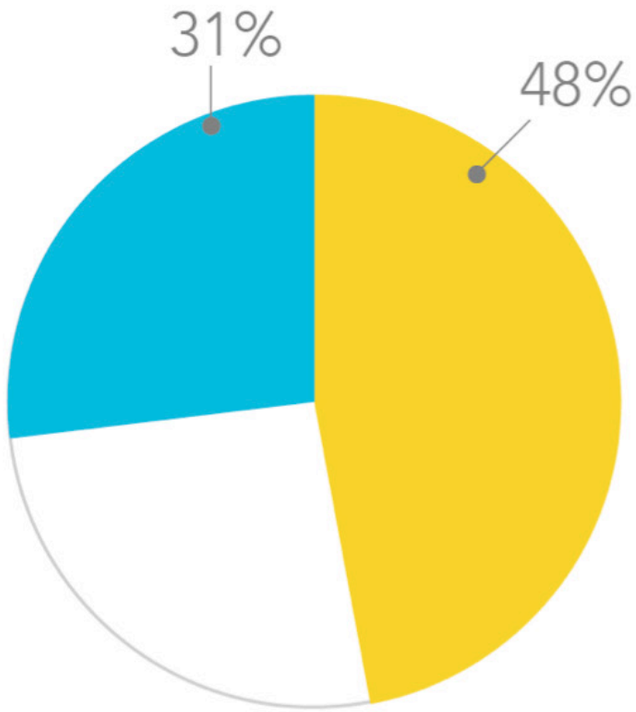
Link to see the video: https://vimeo.com/177244510

Instructions

Today is June 10, 2016 and right now it is 3:00pm. Now Grace, whose age is 6 receive a chore notification through the smartwatch "Clean up the toys". After she finish cleaning up the toys, Grace decided she wants to get a reward. She sees she has 30 total points, which is enough to get "ice cream" as her reward.



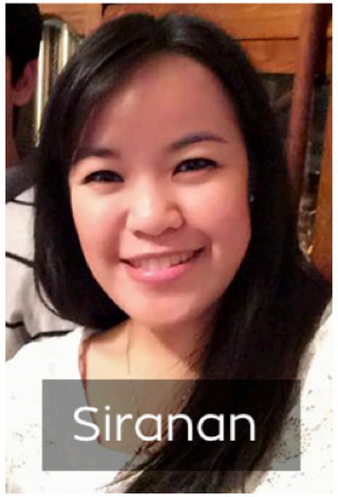
SURVEY



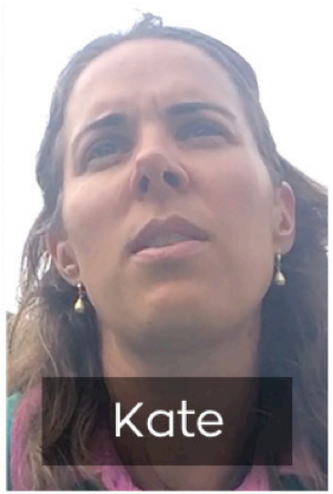
48% survey respondents think that a child should learn responsibility starting **age 4** and **31%** think a child should start at **age 5**

Using Google Forms, I did a survey to find out the starting target age for the kids, and I found that out of 31 survey respondents who have kids, 48% think that a child should learn responsibility starting age 4. This was very surprising.

INTERVIEWS



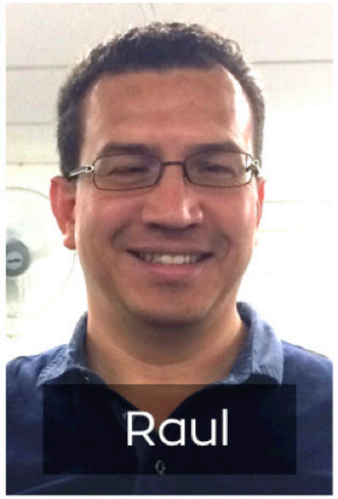
Age: 32
Job: Day Care
Mobile devices: iPhone
Kids: 1 girl, age 3



Age: 38
Job: Stay at home mom
Mobile devices: phone, kindle, and computer
Kids: 2 girls, ages 5 & 8

Age: 30
Job: Secretary
Mobile Devices: iPhone, iPad
Kids: 1 girl, age 5

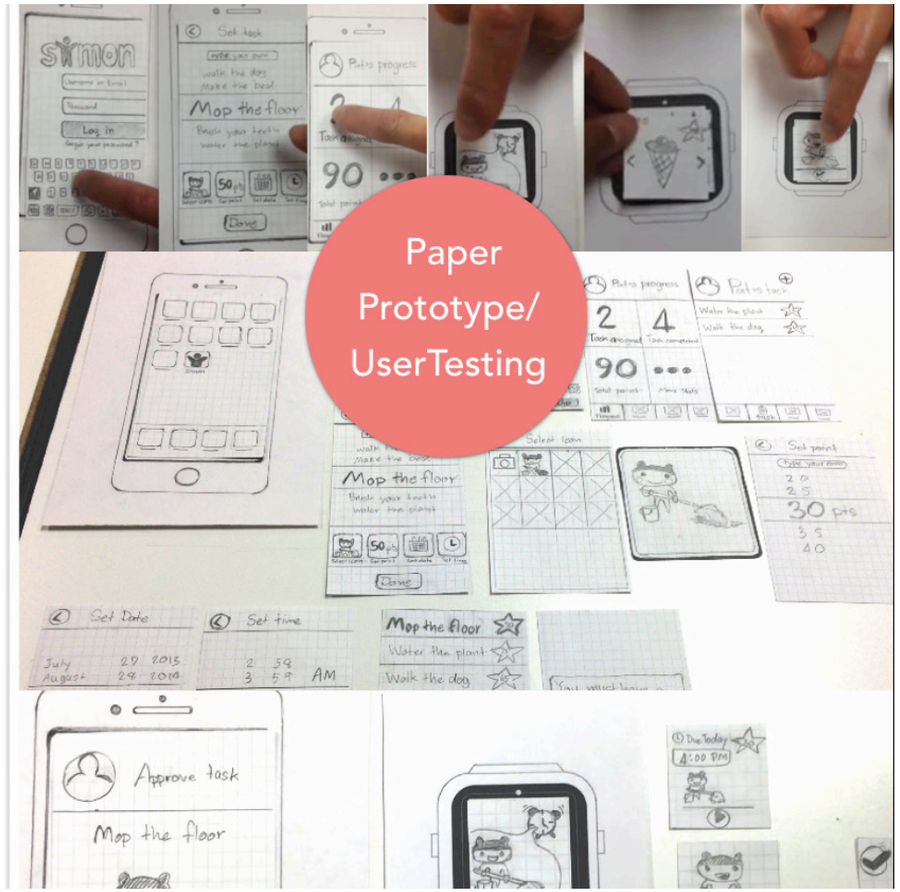
Age: 43
Job: Research Administration
Mobile devices: iPhone
Kids: 21 boy age 16, one girl age 15



Age: 43
Job: Research Administration
Mobile Devices: Samsung
Kids: 1 girl, age 21

I wanted to understand the survey result in depth, so I decided to do one-on-one interviews to understand in detail what parents think. As it turns out, although parents "want" their kids to start learning responsibility at age 4, but in reality, kids start to understand responsibility around age 5 – 6. In addition, I found that parents who were not open to new technologies are very concern about their kids' privacy. They are usually a lot older, as opposed to younger parents who are more tech savvy and does not have as much concern for privacy.

UX DESIGN / TESTING

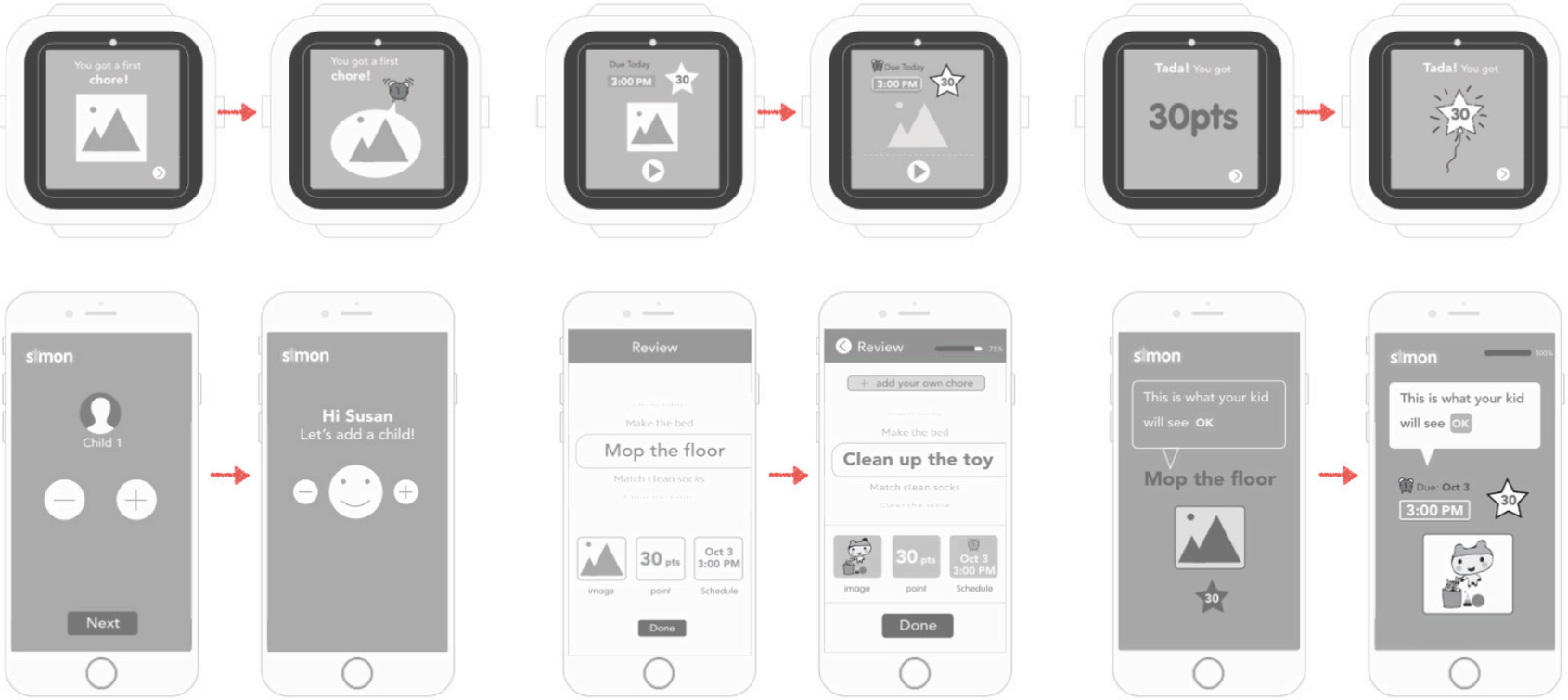


I've used card sorting techniques for informal testing to find out if user understand the task flows with any visual guide. I've also did some informal testing using paper prototype, which was easier than card sorting. But card sorting is the most fundamental technique, and if users can't do card sorting, the user task flows may be too complicated.

MED-FI WIREFRAME (1ST STAGE)

10 User Testing

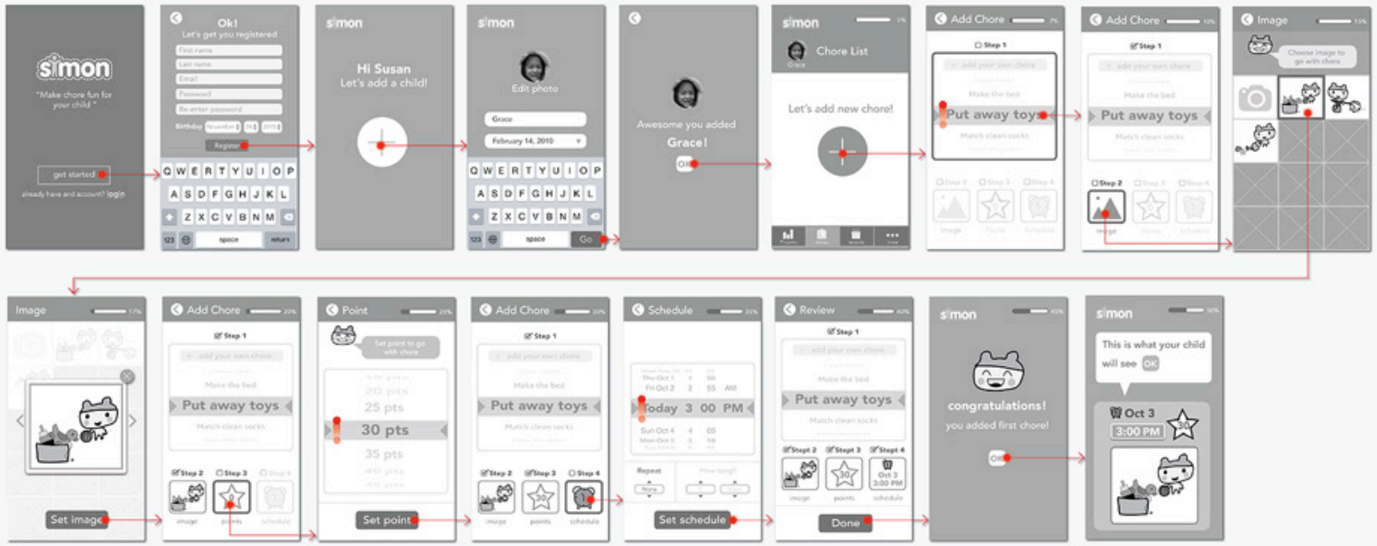
10 Revisions



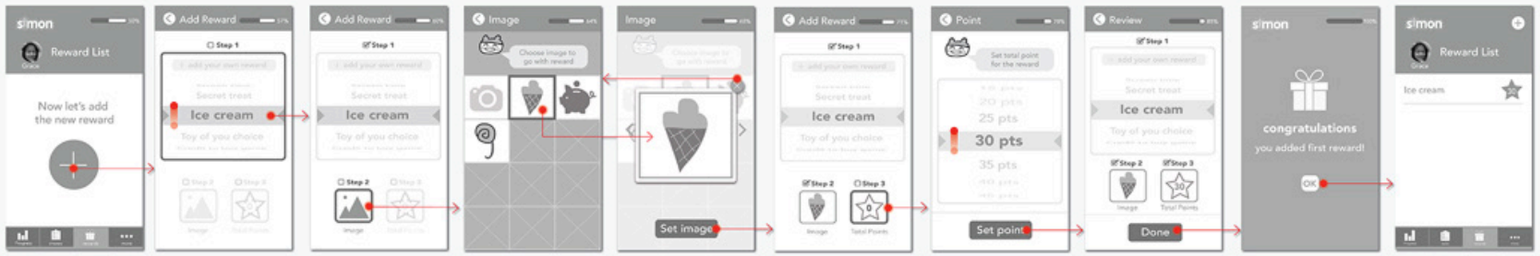
After completing the paper prototype, I move on to do medium-fi wireframe and continue to do informal user testing in class. I did a total of 10 informal user testing and 10 revisions based on the feedback from the user testing.

WIREFRAME

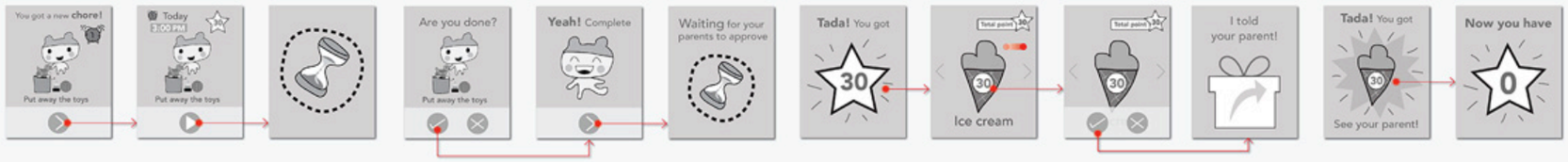
User Flow #1: Parent sets chore for kid (New user)



User Flow #2: Parent sets reward for kid



User Flow #3: Kids do chore & get reward



Then I proceeded to complete the medium-fi wireframe for all 3 user task flows so I can start developing the digital prototype using Marvel App for the formal testing.

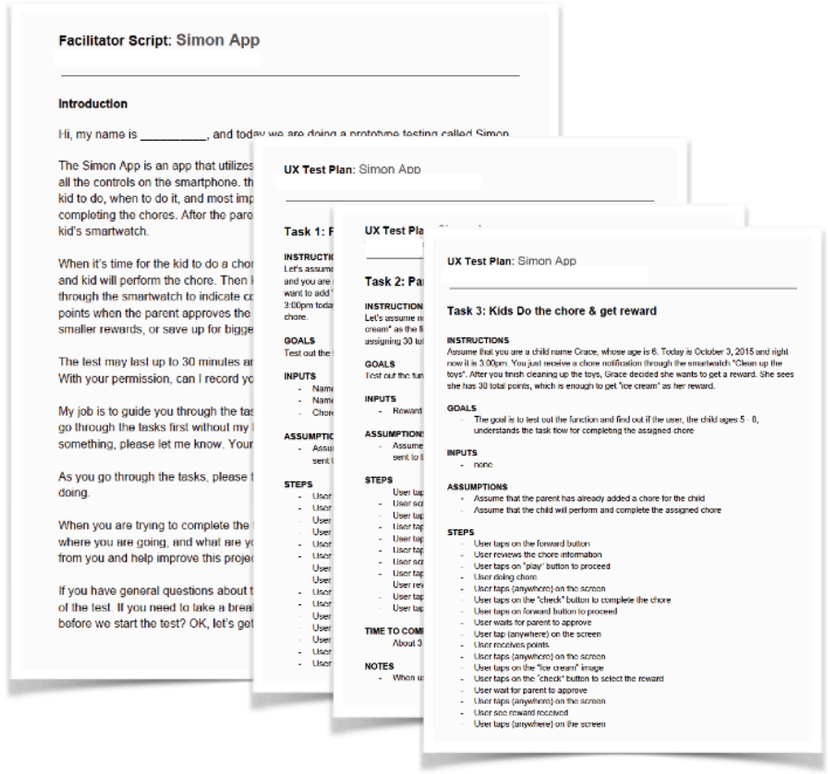
FORMAL USER TESTING

Task #1

Task #2

Task #3

User Tester: Ing | Location: AAU Lab
Facilitator: Alex | Date: 12/08/15



Facilitator Script: Simon App

Introduction

Hi, my name is _____, and today we are doing a prototype testing called Simon.

The Simon App is an app that utilizes
all the controls on the smartphone. th
kid to do, when to do it, and most imp
completing the chores. After the paro
kid's smartwatch.

When it's time for the kid to do a chor
and kid will perform the chore. Then
through the smartwatch to indicate co
points when the parent approves the
smaller rewards, or save up for bigge

The test may last up to 30 minutes ar
With your permission, can I record yo

My job is to guide you through the tas
go through the tasks first without my
something, please let me know. Your

As you go through the tasks, please
doing.

When you are trying to complete the
where you are going, and what are y
from you and help improve this proje

If you have general questions about t
of the test. If you need to take a brea
before we start the test? OK, let's get

UX Test Plan: Simon App

Task 1: F

INSTRUCTI
Let's assum
and you are
want to add
3:00pm toda
chore.

GOALS
Test out the

INPUTS
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- Nam
- Chor

ASSUMPTIO
- Assu
sent t

STEPS
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- User
User
User
- User
User
- User
User
- User
User
- User
User
- User

UX Test Pla

Task 2: Pa

INSTRUCTION
Let's assume
cream" as the
assigning 30 to

GOALS
Test out the fun

INPUTS
- Reward

ASSUMPTION
- Assume
sent to

STEPS
User tap
- User scr
User tap
- User tap
User tap
- User tap
User tap
User rev
User tap
User tap

TIME TO COM
About 3

NOTES
- When u

UX Test Plan: Simon App

Task 3: Kids Do the chore & get reward

INSTRUCTIONS
Assume that you are a child name Grace, whose age is 6. Today is October 3, 2015 and right now it is 3:00pm. You just receive a chore notification through the smartwatch "Clean up the toys". After you finish cleaning up the toys, Grace decided she wants to get a reward. She sees she has 30 total points, which is enough to get "ice cream" as her reward.

GOALS
- The goal is to test out the function and find out if the user, the child ages 5 - 8, understands the task flow for completing the assigned chore

INPUTS
- none

ASSUMPTIONS
- Assume that the parent has already added a chore for the child
- Assume that the child will perform and complete the assigned chore

STEPS
- User taps on the forward button
- User reviews the chore information
- User taps on "play" button to proceed
- User doing chore
- User taps (anywhere) on the screen
- User taps on the "check" button to complete the chore
- User taps on forward button to proceed
- User waits for parent to approve
- User tap (anywhere) on the screen
- User receives points
- User taps (anywhere) on the screen
- User taps on the "ice cream" image
- User taps on the "check" button to select the reward
- User wait for parent to approve
- User taps (anywhere) on the screen
- User see reward received
- User taps (anywhere) on the screen

The Formal User Testing was done at the AAU Lab on 12/08/15 with my instructor, Alex, as the facilitator. A lot of preparation is needed for the formal testing, including developing the UX Test Plan for planning out the test and developing the Facilitator Script to help the facilitator guide the user through the testing. If I do the user testing myself, I might have bias that could influence the test results. So this is why facilitators are important for UX testing.

MED-FI WIREFRAME (FINAL)

5 User Testing

9 Revisions

I continue to work on revising the UX Design based on the feedback from the Formal User Testing and following up with the user tester.

USER TESTING RECORD

Test Date	Test Type	Participants	Test UX Findings
9/15/15	User Interview	GDS UX - 5	In dept understanding of parents expectation and children development
9/22/15	Card Sorting of User Task Flow	GDS UX - 4	user tester struggled with the test because does not have visual aid
9/29/15	Repid Paper Prototyping (V1)	GDS UX - 2	User understands more with the paper protytoping
10/6/15	Paper Prototyping (V2)	GDS UX - 2	Able to understand and plan animations
10/13/15	Hight Fidility Wireframe Task 1	GDS UX - 3	Testing and A/B Testing of 2 screen
10/20/15	Interactive Prototype Task 1	GDS UX - 4	User can start to physically interact with the prototype
10/28/15	Interactive Prototype & A/B Testing	UX Club - 2	User able to compare/contrast between different design choices
10/27/15	High Fidility Wireframe Task 2	GDS UX - 3	Easier for the user to understand and discover areas that needs improvements
11/3/15	Interactive Prototype Task 2	GDS UX - 3	Easier for the user to understand and discover areas that needs improvements
11/10/15	Hight Fidility Wireframe Task 3	GDS UX - 2	Able to use this protytope for kids to understand what kids are thinking
11/17/15	Interactive Prototype Task 3	GDS UX - 2	Refined based on feedback in class
11/24/15	Interactive Prototype Task 1-3 (V1)	GDS UX - 2	Able to see full picture, and refine based on feedback in class
12/1/15	Interactive Prototype Task 1-3 (V2)	GDS UX - 4	Refine further based on feedback in class
11/4/15	Interactive Prototype	Samsung Review - 1	First time informal testing outside of class
12/8/15	Formal User Testing	GDS UX - 2	First time for formal testing
12/11/15	Interactive Prototype Task 1-3 (V3)	Ideate Conference - 1	Recieved feedback from UX Designer
6/15/16	Interactive Prototype Task 1-3 (V4)	Parents & Kids - 4	First UX test with parents and kids. Kids were smarter than first thought
6/16/16	Interactive Prototype Task 1-3 (V5)	Parents & Kids - 3	UX thinking between male parent vs. female parent is different
6/17/16	Interactive Prototype Task 1-3 (V6)	Parents & Kids - 3	Start to understand kids' interaction with electronic devices
6/20/16	Interactive Prototype (Final)	Parents & Kids - 3	Able to conclude starting age for target audience

In addition to informal testing in class and formal testing at the AAU lab, I also went out to do more user testing with parents, and most importantly, with kids. This was the chance for me to learn about how kid interact with my smartwatch UI. From doing user testing on kids, I was able to prove that the starting age that is appropriate for my secondary target audience was indeed kids age 6.

USER TESTING (PARENTS & KIDS)

CHILD DEVELOPMENT RESEARCH

Ages	School grade	Physical	Emotion	Social	Cognitive Skills
3 years old	at home	- climbs well - walks up and down stairs - pedals a tricycle - may push buttons - insert items (like keys) into holes	- Negativistic - Violent emotions, anger - Differentiates facial expression of anger, sorrow, and joy - show wide range of emotions - needy	- likes to make friends - willingly goes toward new adventures - enjoys cooperating - understands idea of "mine" and "his" or "her"	- increase language development - says word like "I," "me," "we," "you" - understand what "two" means - can draw circle
4 years old	Preschool	- hop or stand on one foot - has lots of energy to burn - able to dress and undress - able to pour and mashes own food - able to use scissors	- less stressed, less need for tension outlets - responds well to praise - enjoys doing new things - curious, like to ask "Why"	- prefers to play with other children - can't tell what's real and what's make believe - becoming conversationalist - likes to exaggerate - likes to copy adults	- understands colors and numbers - start to understand time - knows some basic grammar - can sing nursery rhymes - can say first and last name
5 years old	Kindergarten	- able do somersault and swing - able to use fork and spoon - can independently use toilet	- show more independence - likely to rebel, be combative - is restless, hard to sit still	- wants to please friends - shows concern and sympathy for others - is aware of gender	- able to count 10 or more things - able to tell simple story using full sentences - can print some letters and numbers - can draw triangle and other geometric shapes - knows about things used everyday, like money and food
6 years old	1st Grade	- increased motor skills - able to play simple games (hopscotch, monkey bars, kickball)	- show increase in being independent - can be dramatic and loud - may be agressive, affectionate - sees self, not mother as the center of universe	- likes to show off - loves to be flattered and praised - is competitive, needs to be the fastest, best, the winner	- able to read and write simple sentences - 1000s in vocabulary words - able to count money (number up to 100) - able to do single digit math (addition and subtraction) - have difficulty in perception of mass (cannot tell two object of different sizes has same volume)
7 years old	2nd Grade	- increased finite coordination - able to swim - increased physical endurance - plays sport	- less selfish, more forgiving - thoughtful - loves to argue - worries about everything	- wants control and privacy - does not like to be touched or seen without clothes - has increasing control over body thoughts and temper	- 5000s in vocabulary words - start to understand existence of different perspective - able to do digits 2 math (addition and subtraction) - logical thoughts limited to only physical objects - able to read books
8 years old	3rd Grade	- increased finite coordination - increased physical endurance - plays sport	- may be impatient, likes immediate gratification - have rapidly changing emotions	- opinion of friends become increasingly important - peer pressure may become an issue - more likely to follow rules	- increase vocabulary words - increase interest in reading books - able to do 3 digits math and simple word problems - more complex oral speech

Because I don't have kids yet, I wanted to do research in child development to understand what starting age would be appropriate learning responsibility and doing chores. From various research sources, like the Centers for Disease Control and Prevention, the Child Development Institute, and The Center for Parenting Education, I was able to create a table that shows different milestone ages and the development stages a typical child goes through. From this research I was able to come closer to narrowing down the starting age for my secondary target audience between age 5 and age 6.

VISUAL PROCESS

VISUAL INSPIRATION

Neko Atsume

For the smartphone visual design, I got my inspiration from an app called Neko Atsume, a cat collection game that looks cute and fun. This is where I got idea of the cartoon style design and colors.

VTech Smartwatch

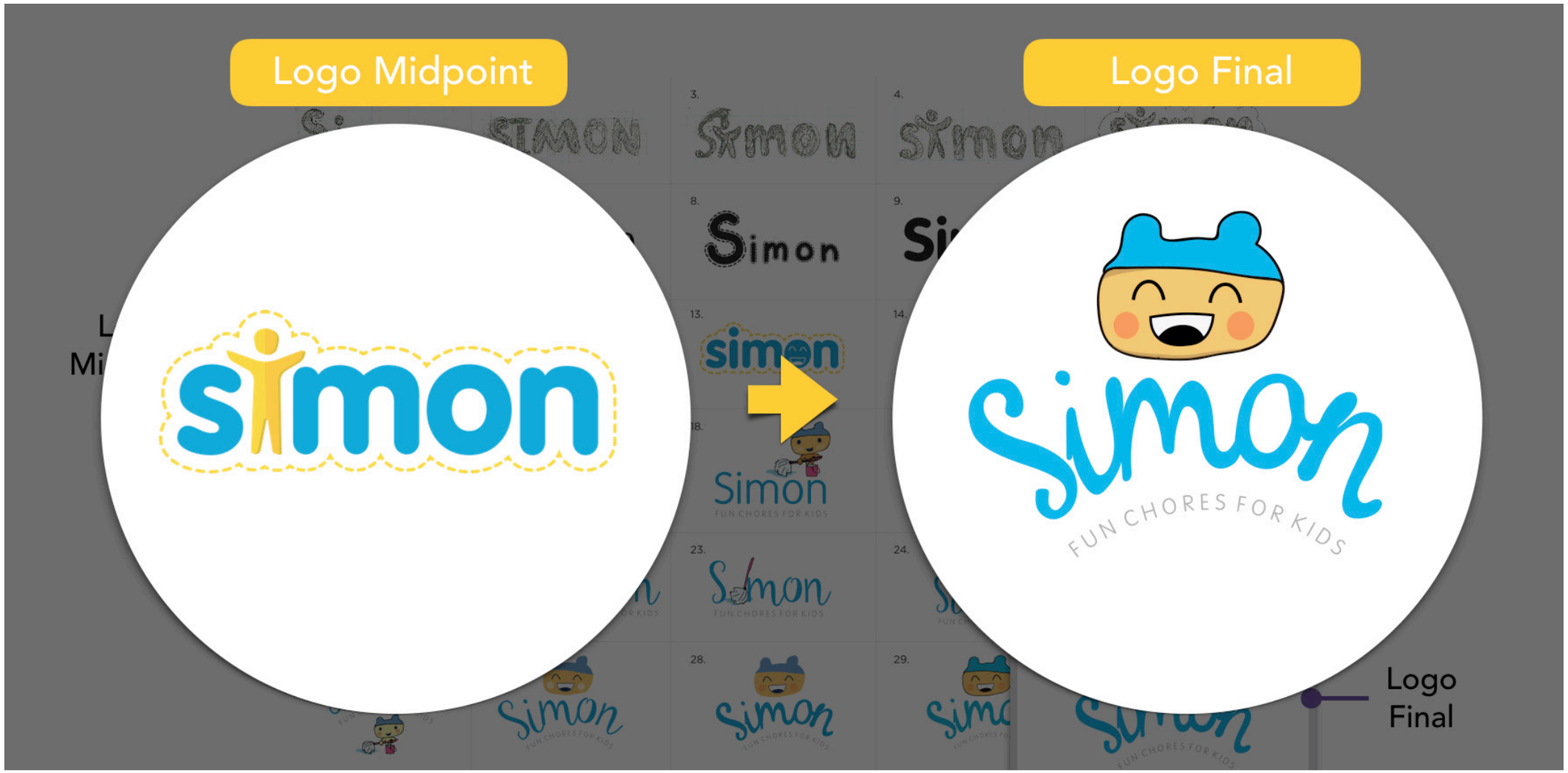
For the smartwatch visual design, I got my inspiration from the Vtech Smartwatch. I was particularly inspired by the simplicity of the design because of the limited screen size .

LOGO MOODBOARD

CHARACTER MOODBOARD

UI MOODBOARD

BRANDING

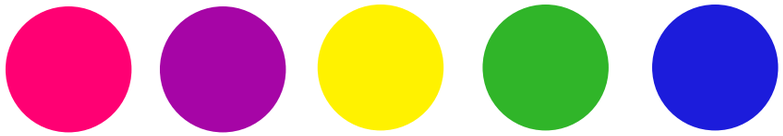


During my midpoint, I wanted to develop a brand works for both the parents and kids. So I was more focused on designing the logo that emphasizes flat design and bold font. However, as I went through the visual design process after my midpoint, I find myself wanting to use hand-drawing style with black outline, and less rigid font for "Simon". This help me create a brand that is now more fun and enjoyable for both parents and kids.

COLOR

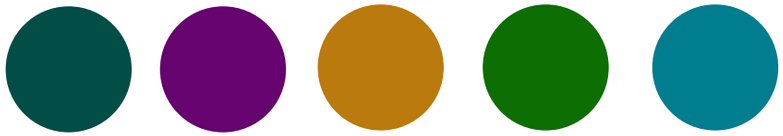
Color Choice

Choice 1



Choice 2

Choice 3



Color Final

Primary Color

HEX CODE: #11baed
HSB: 193 92% 92%
RGB: 17 186 237
CMYK: 38% 4% 0% 0%

HEX CODE: #f4ca76
HSB: 39 51% 95%
RGB: 244 202 118
CMYK: 4% 20% 63% 0%

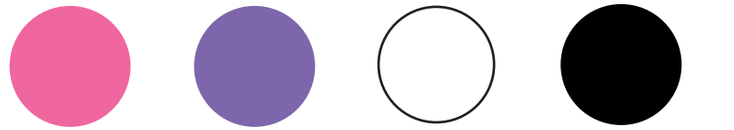
Secondary Color

HEX CODE: #f4ca76
HSB: 39 51% 95%
RGB: 244 202 118
CMYK: 4% 20% 63% 0%

HEX CODE: #f89e61
HSB: 24 60% 97%
RGB: 248 158 97
CMYK: 0% 45% 67% 0%

HEX CODE: #37b9bb
HSB: 180 70% 73%
RGB: 55 185 187
CMYK: 69% 3% 30% 0%

HEX CODE: #f37d7b
HSB: 0 49% 95%
RGB: 243 125 123
CMYK: 0% 64% 42% 0%



HEX CODE: #f0679f
HSB: 334 56% 94%
RGB: 240 103 159
CMYK: 0% 75% 5% 0%

HEX CODE: #7d65ac
HSB: 259 41% 67%
RGB: 125 101 172
CMYK: 58% 68% 0% 0%

HEX CODE: #ffffff
HSB: 259 0% 100%
RGB: 255 255 255
CMYK: 0% 0% 0% 0%

HEX CODE: #000000
HSB: 344 11% 0%
RGB: 0 0 0
CMYK: 75% 68% 67% 90%

After exploring and developing moodboards for the logo, character, and UI, I wanted to explore the various colors that might work for my brand. The first choice had colors that were too bright. The second choice had colors that were too dark. And the third choice was a blend between the first and second choice. And finally I decided to go back to the original color choice from the midpoint, except add some tone and contrast to make the colors more warmer and inviting; representing the warm relationship between the parents and the kids.

FONT

Logo Font

Primary font

Pantipa Regular

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9

Designer: Pantipa
Birthdate: 2016

Secondary Font

VAG Rounded Std Thin

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9

Body Font Final

VAG Rounded Std Light

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9

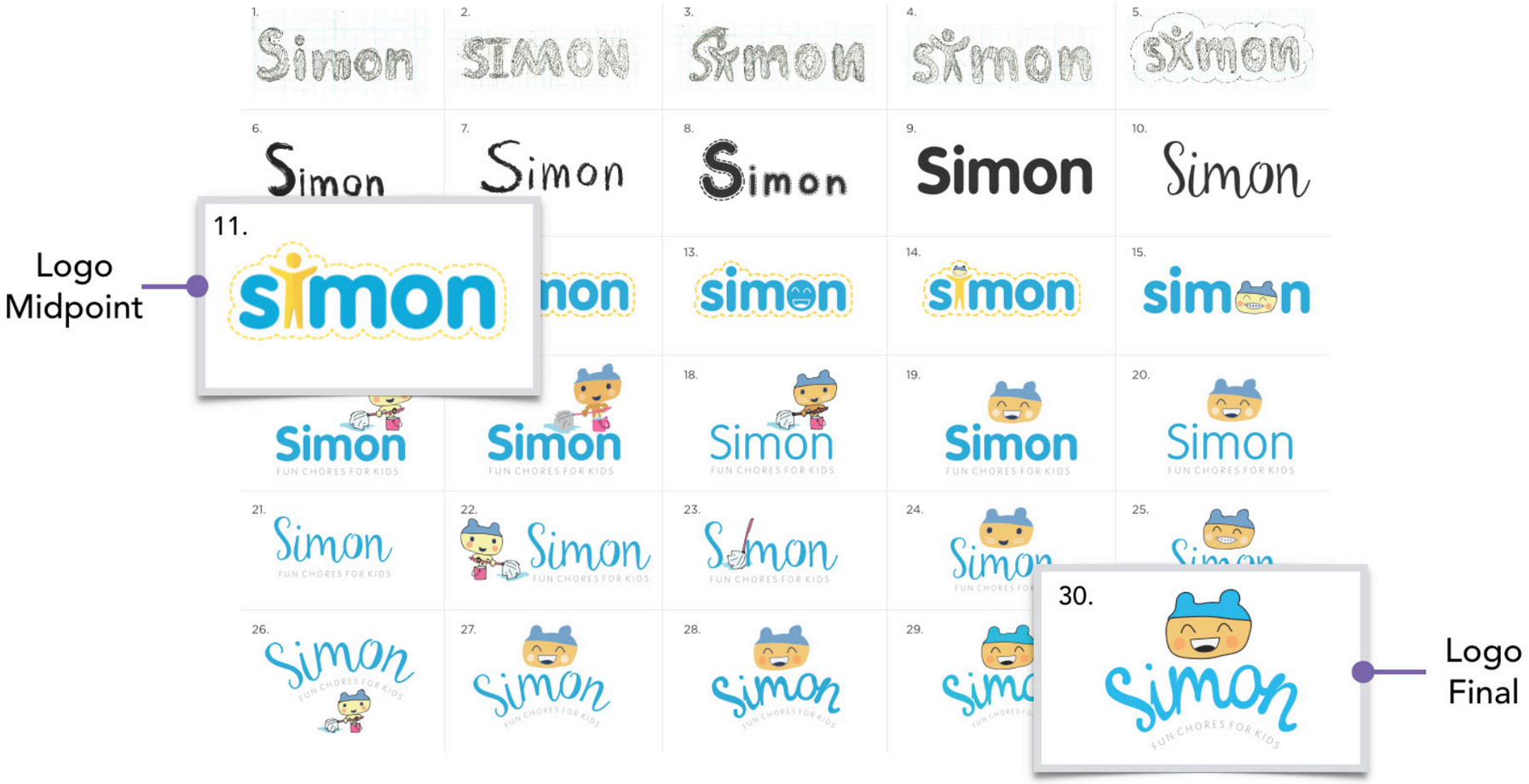
VAG Rounded Std Bold

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9

Designer: Volkswagen AG
Birthdate: 1990s

I explored three different font types for three different places. One is for the primary logo font, one is for the secondary logo font, and one is for the body font that is used for the texts in app for both the smartphone and smartwatch. For the primary logo font, I designed my own font which I called "Pantipa Regular", after my name. The design of the primary logo font uses cursive style to give the brand identity as something involves with kids. The font type for the secondary logo font and body font is called VAG Rounded Std. The font style is uniform, but not to rigid. This is supposed to represent the parent's constructive support for the kids' growth and learning of responsibility.

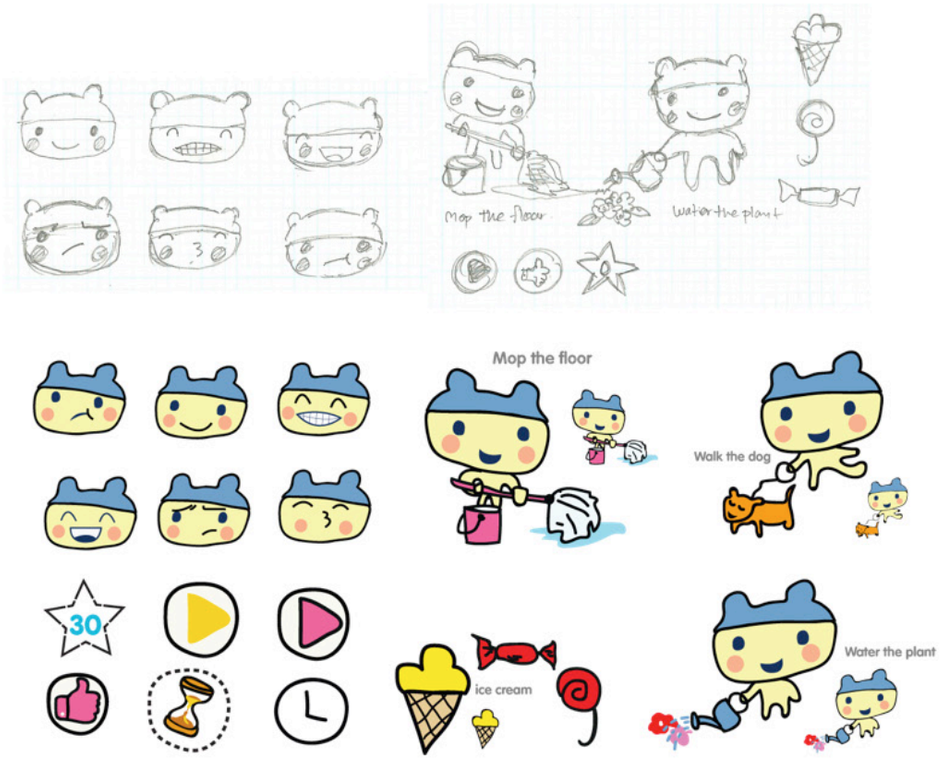
LOGO PROCESS



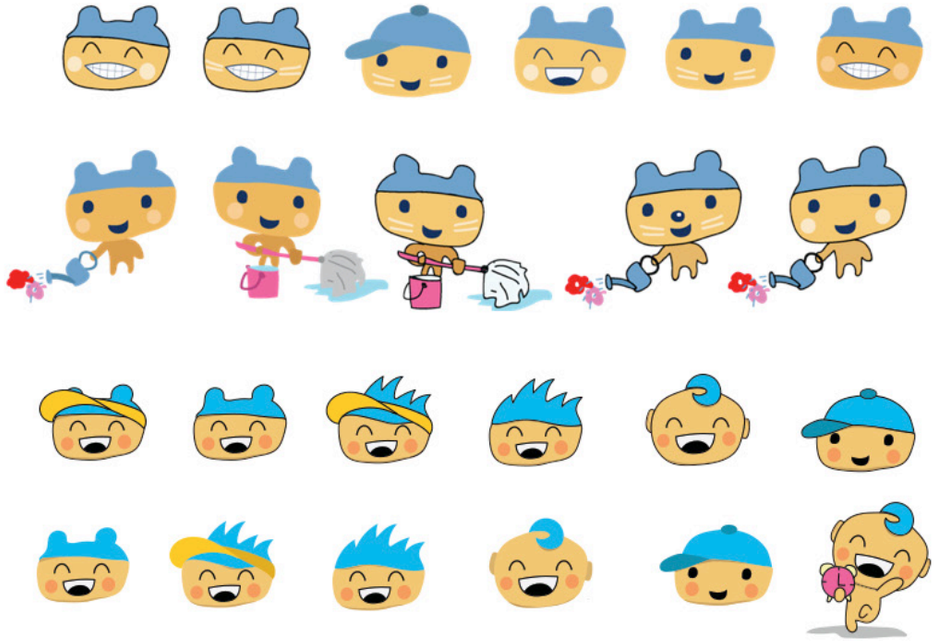
For the development of my logo, I first started with sketching the logo for my thesis. At the time, I start with the word "Simon". Then I try to play with the letters in the word by morphing the "i" in Simon to look like a kid. I tried to explore more with other styles, but by my midpoint, I ended up with the flat design with the "i" as a kid. After the midpoint, I started incorporating the cartoon "Simon" into the logo. After many iteration, I arrived with the final logo with the Simon cartoon, the cursive "Simon", and the tagline that helps give audiences what the brand is all about.

CHARACTER / ICON PROCESS

Midpoint

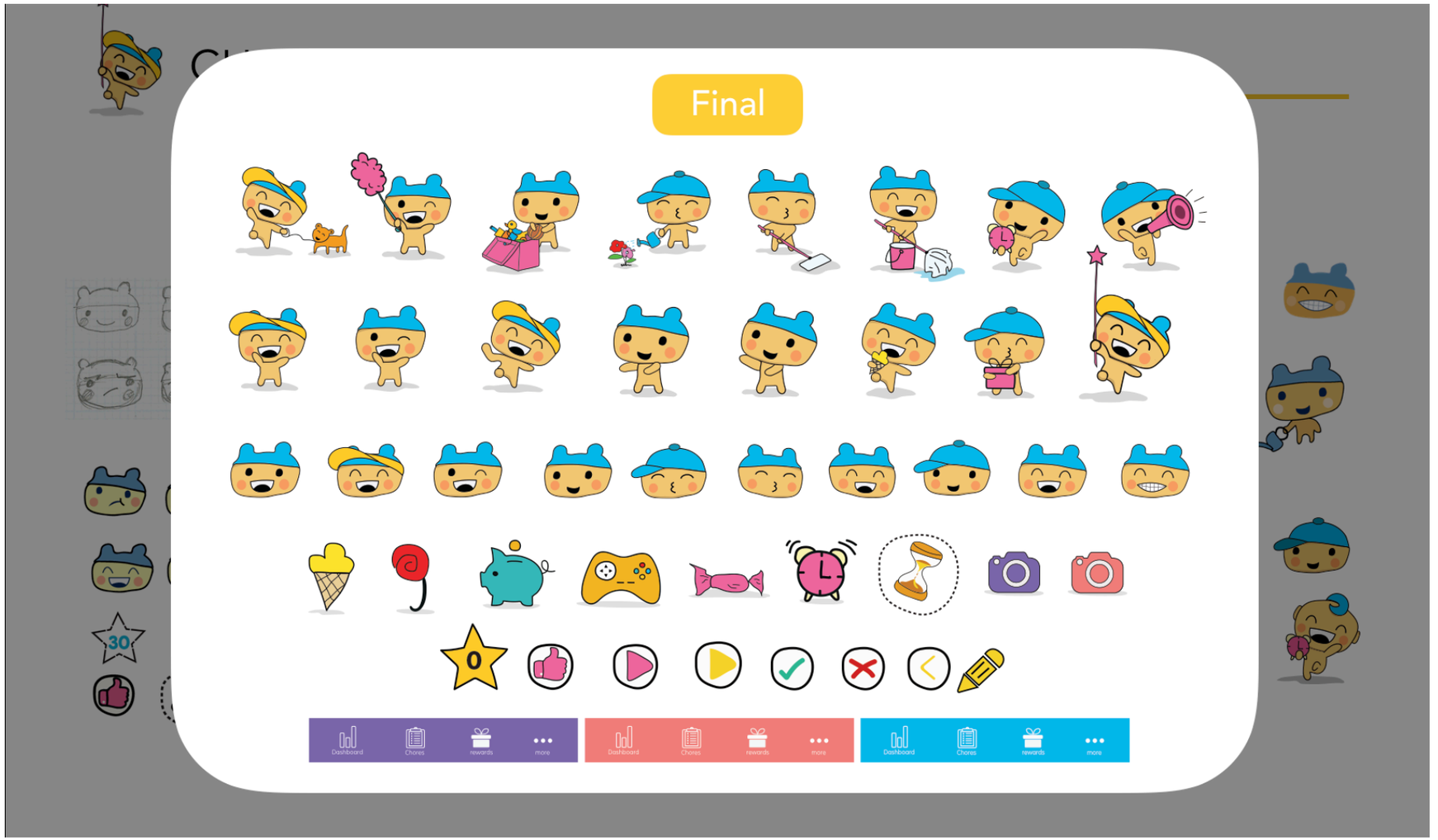


Pre-Final



For the development of the Simon cartoon and the icons, I first started drafting and sketching. I wanted to create a fun cartoon that kids can relate to so they are likely to do chores following Simon's direction. After the midpoint, I wanted to make my character and icon design more solid and clearer. So I used cleaner color tones, and make the lines more solid.

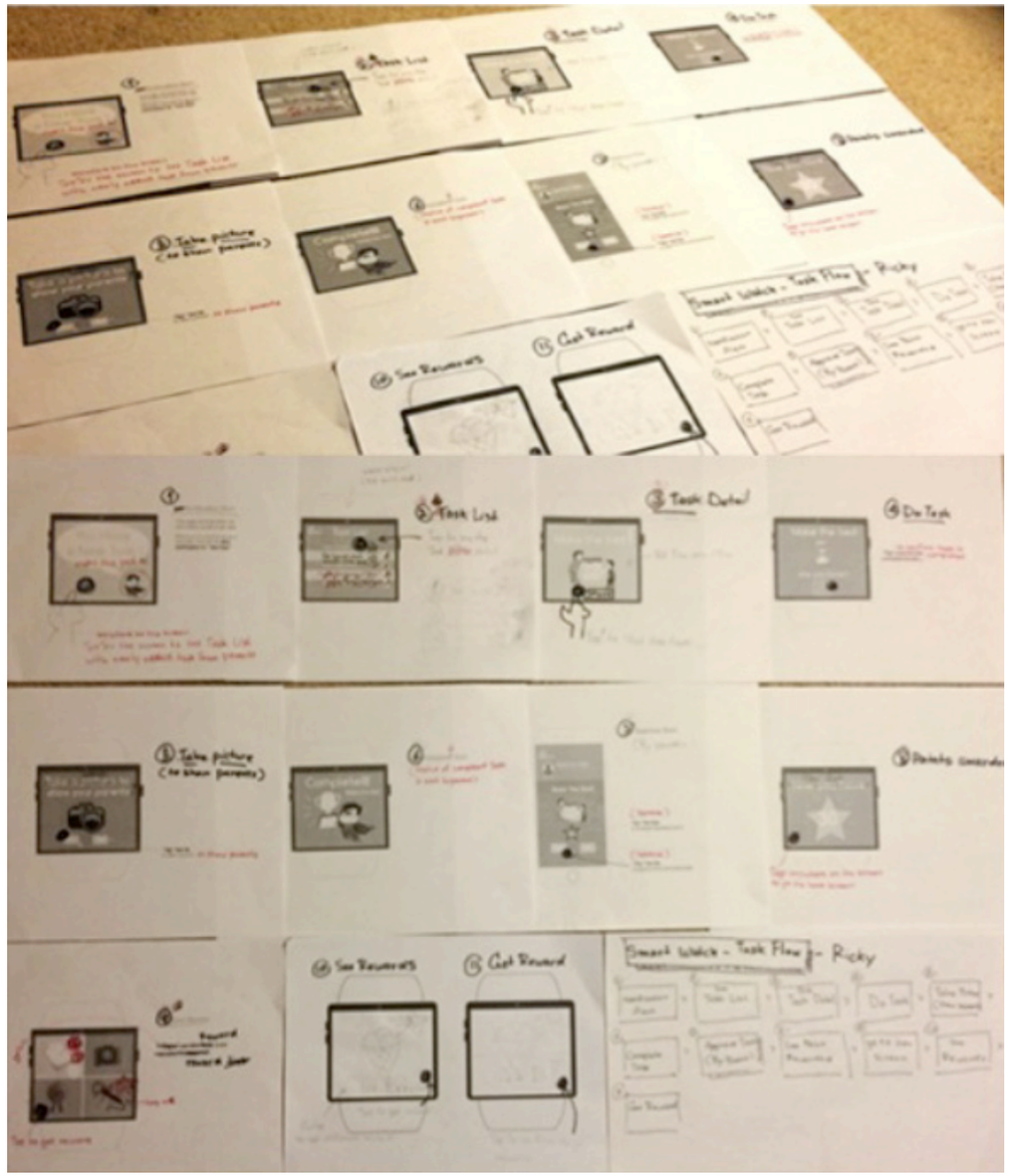
CHARACTER / ICON DESIGN



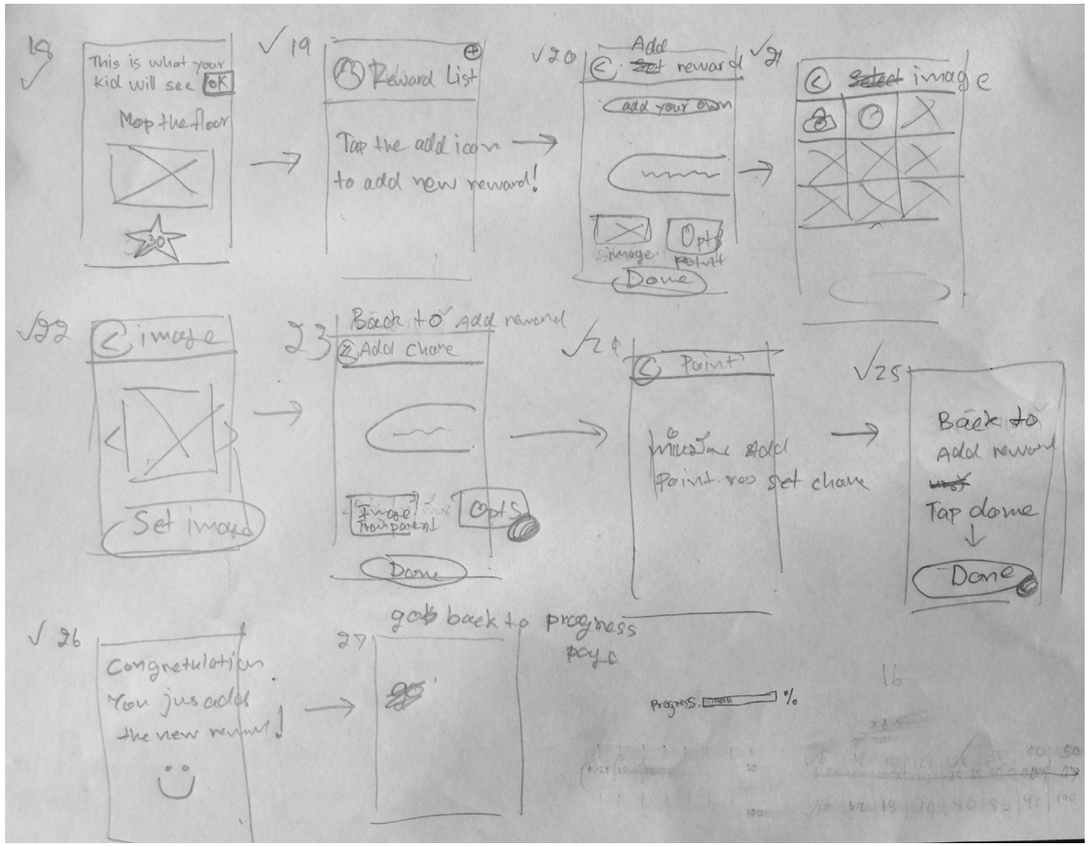
For the final character and icon designs, they look more solid and much cleaner, especially when appearing on the smartphone and smartwatch.

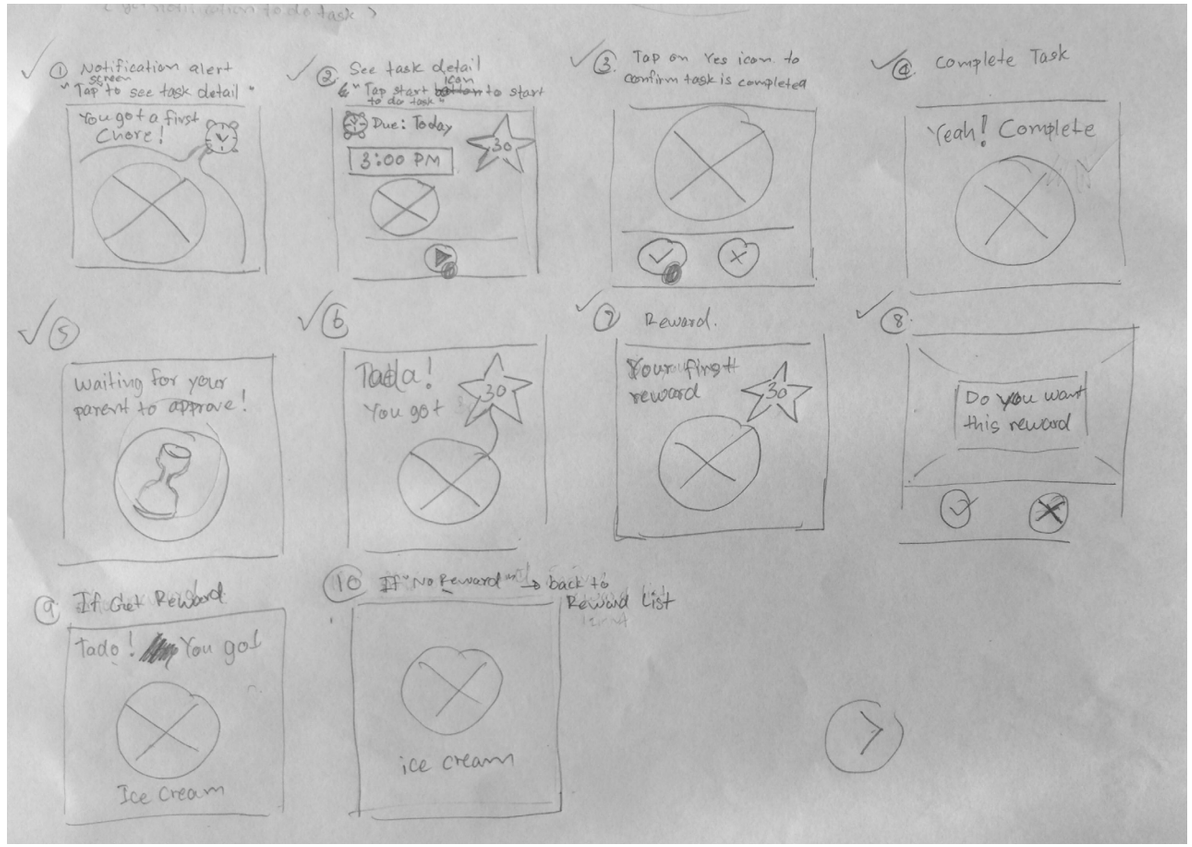
SKETCHES


Back to reward List
Smart Phone – Task
Loading
Task List
Reward List
Set Reward
Set Time


Take picture
Task List
Task Detail
Do Task
See Rewards
Get Reward

SKETCHES

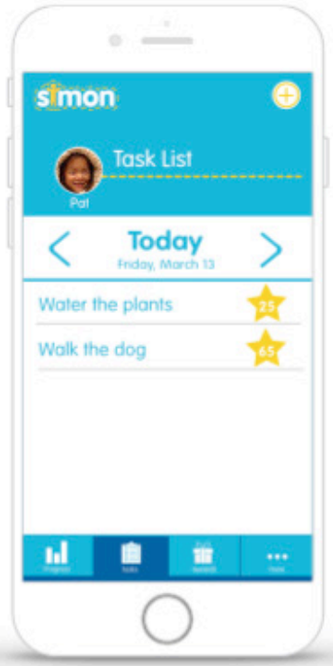

This is what your kid will see
OK
Mop the floor
30
Reward List
Tap the add icon to add new reward!
Add reward
add your own
Image
Point
Done
Select image
Image
Set image
Back to Add reward
Add chore
Image from parent
Opt $
Done
Point
Back to Add reward
Tap done
Done
Congretulation You just added the new reward!
go back to progress page
Progress
%


Notification alert
Tap to see task detail
You got a first Chore!
See task detail
Due: Today
8:00 PM
30
Tap on Yes icon to confirm task is completed
Complete Task
Yeah! Complete
Waiting for your parent to approve!
Tada!
You got
30
Reward.
Your first reward
30
Do you want this reward
If Get Reward
Tado! You got
Ice Cream
If No Reward
back to Reward list
ice cream

UI DESIGN (Smartphone App)

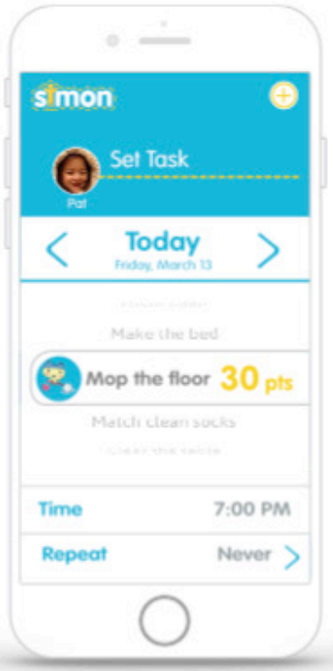
Midpoint

Task List Page



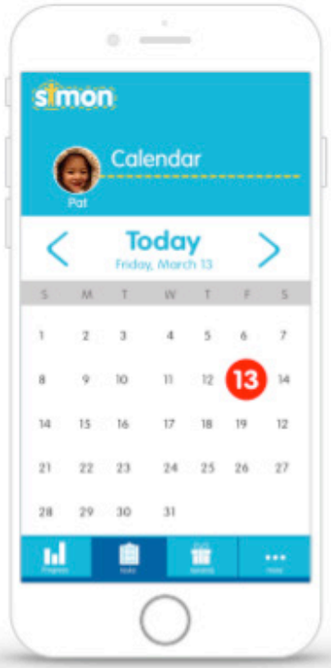
When the user TAP on “Today” to see the Calendar, this feature allows the user to see the task lists for a specific date

Set Chore Page



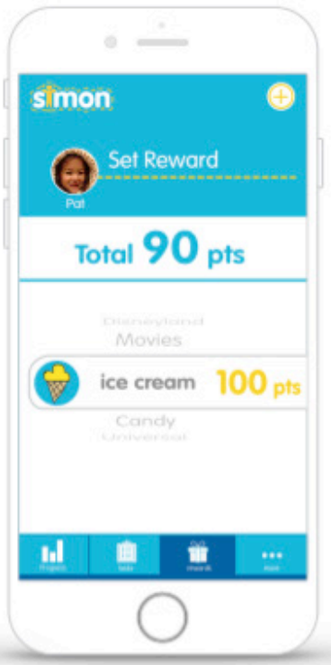
- The user can SCROLL on “task category” to select different chores or TAP to type own chores
- The user can SCROLL on “point category” to select different points (in increments of 5 points)
- The user TAP on “time category” to set time (the scroll bar for time will appear and expand)

Calendar Page



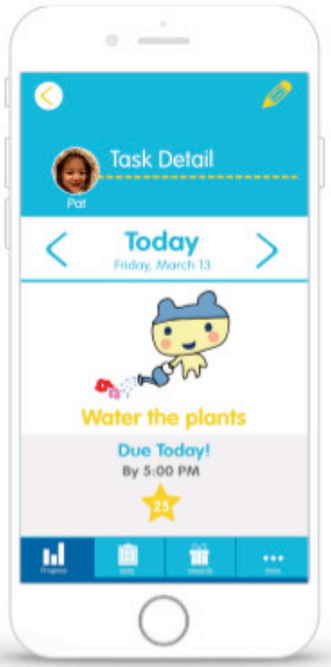
The users can select a specific date to see the task list for that date by TAP on “the day” to see Task List of the day

Set Reward Page



- The user can TAP on “add icon” to add new Reward to the list
- The user can SCROLL on “rewards category” to select different rewards
- The user can SCROLL on “point category” to select different points

Chore Detail Page

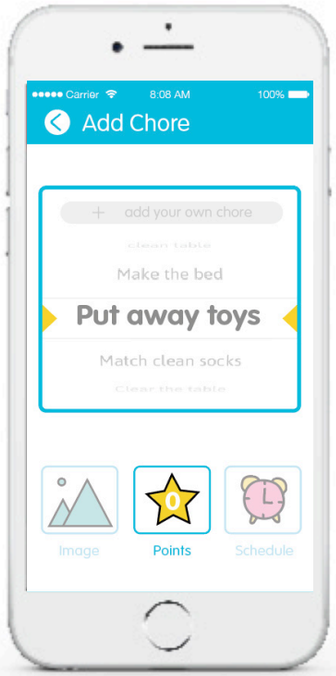
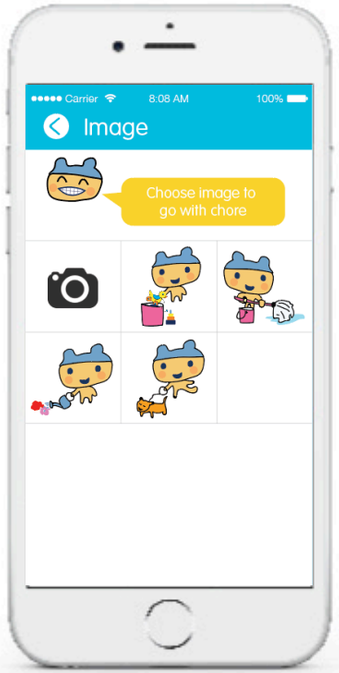
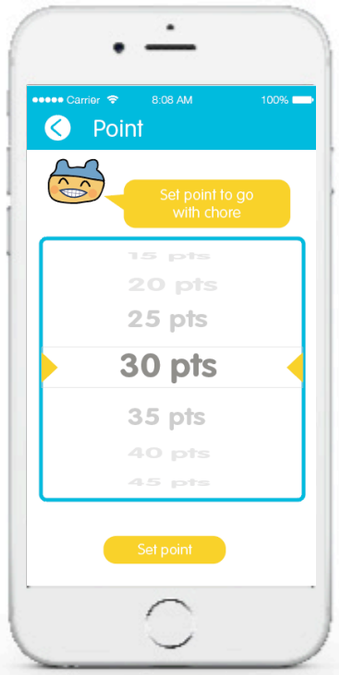
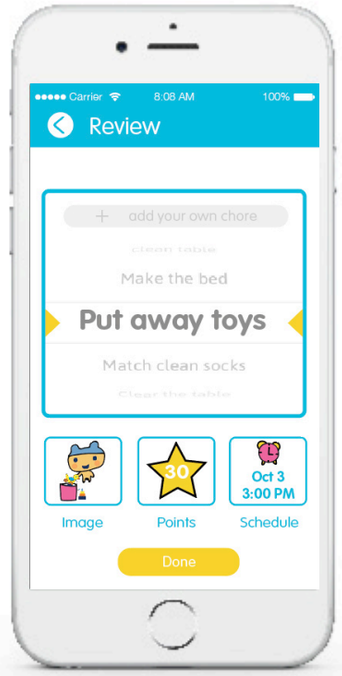
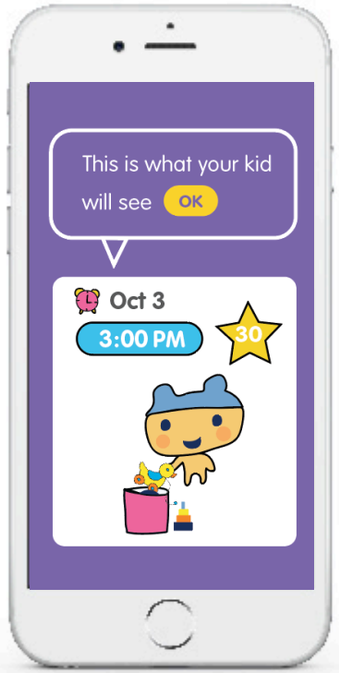


- The user can TAP on “the star icon” to increase/ decrease points for their kid
- The user canTAP on “Yes(No) icon” to approve the completed task for their kid

UI DESIGN (Smartphone App)

Pre-Final

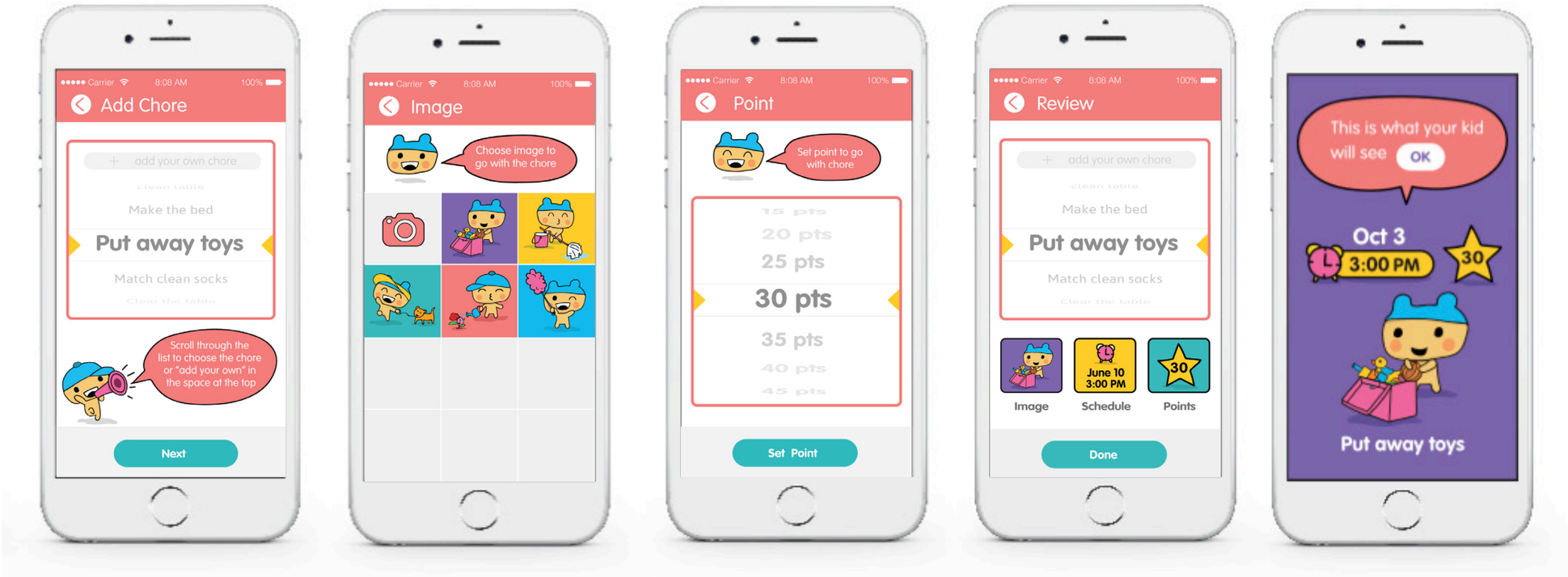
For the pre-final round, I've revamped the UI Design based on the UX design. The layout and arrangement of other elements are significantly different from the midpoint. However, the color choices remains the same from my midpoint.

Select Chore Page	Select Image Page	Set Point Page	Review Page	Preview Page
				
The layout for this page was modified to separate the features into different destination pages so they don't become overwhelming and distracting.	This page was later added to allow the user flexibility to choose the various Simon cartoons doing different activities or take a photo from the smartphone.	This page allow the user to just focus on setting the point for the chore.	This page allow the user to see everything about the chore, including the image, points, and schedule.	This page was added so the user have a chance to see what their kids will see on the smartwatch.

UI DESIGN (Smartphone App)

Final

Select Chore Page | Select Image Page | Set Point Page | Review Page | Preview Page



In the final UI Design, the layouts were slightly modified from the pre-final round. The major changes made were adding the colors and making the outlines of the icons and character more solid.

UI DESIGN (Smartwatch App)

Midpoint

Notification Page	Chore Detail Page	Confirm Complete Chore Page	Chore Completed Page	Recieved Points Page
				
The user can TAP anywhere on the screen to see Task List with newly added task from parents	The user can TAP on “start button” to start the task	The user can TAP on “Yes (no) icon” to confirm task is completed	The user can TAP anywhere on the screen to go to homescreen 30	AFX: “Tada” sound when the task is approved

UI DESIGN (Smartwatch App)

Pre-Final

A lot of improvements has been made to the UI of the smartwatch. Because the target age for kids was narrowed down to age 6 - 8, most of the pages were added with text.

Notification Page

"You got a new chore!" was added to the notification page.

Chore Detail Page

The deadline was removed and is modified month, day, and the time that kids should start to do chore.

Confirm Complete Chore Page

The sand dial icon is removed, and text is added with the question "are you done?" to ensure the kids understand when the chore is completed, they need to confirm with Simon.

Chore Completed Page

The large green checkmark is replaced with the text "Complete!" to make it easier for the kid to understand.

Recieved Points Page

The text "Tada!" is replaced the Simon cartoon to add excitement about the chore being completed. The point with the star is bigger to make it clearer.

UI DESIGN (Smartwatch App)

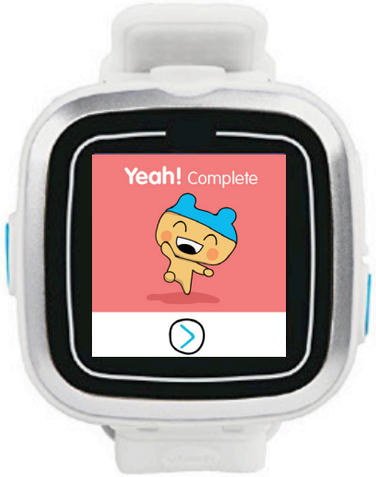
Final

Notification Page

Chore Detail Page

Confirm Complete Chore Page

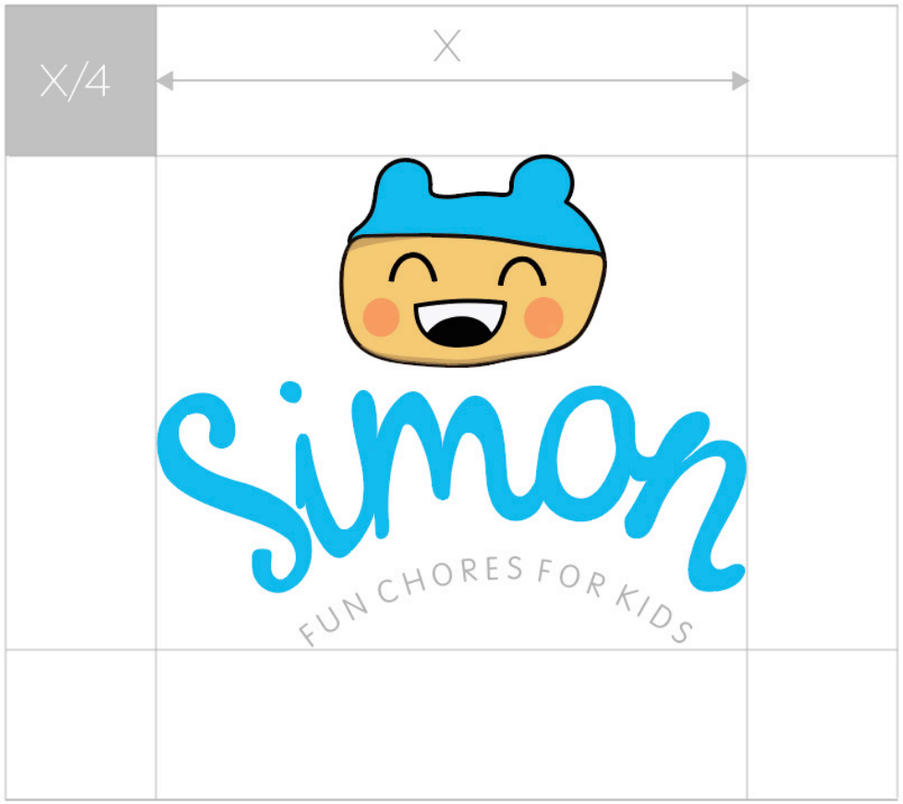
Chore Completed Page



Recieved Points Page

In the final UI Design, the layouts were slightly modified from the pre-final round. The major changes made were adding the colors and making the outlines of the icons and character more solid.

Clear Space



HEX CODE: #11baed
HSB: 193 92% 92%
RGB: 17 186 237
CMYK: 38% 4% 0% 0%

HEX CODE: #f4ca76
HSB: 39 51% 95%
RGB: 244 202 118
CMYK: 4% 20% 63% 0%

HEX CODE: #f89e61
HSB: 24 60% 97%
RGB: 248 158 97
CMYK: 0% 45% 67% 0%

Monochronic

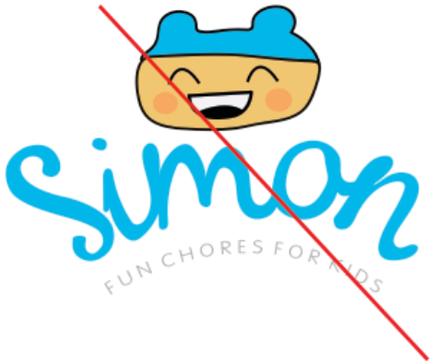
Reverse

Forbidden Usage

Do not add stroke on the logo type.

Do not add the drop shadow or other to the logo type.

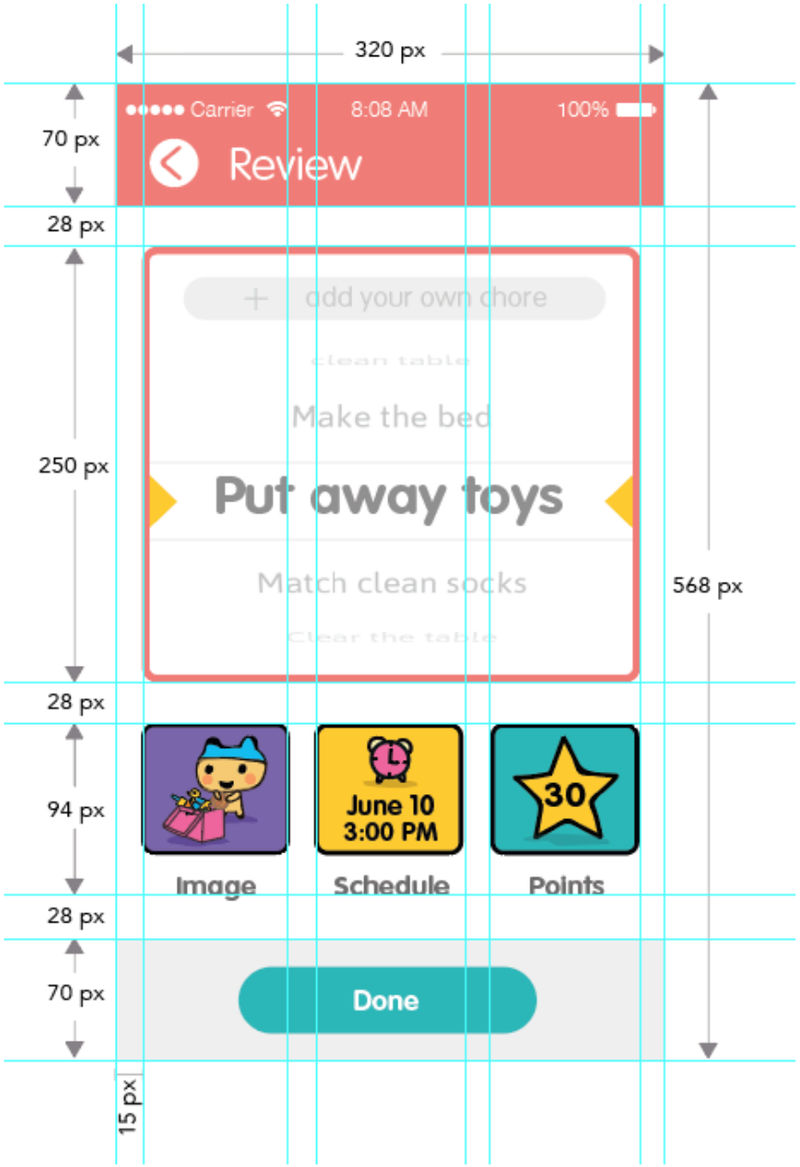
Do not rotate the logo.



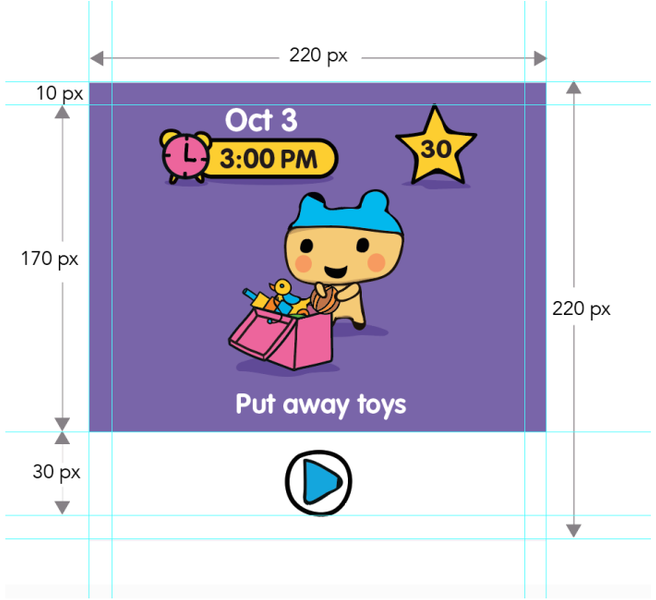
Do not stretch the logo

GRID GUIDELINE

Smartphone App



Smartwatch App



TECHNICAL PROCESS

TECHNOLOGY

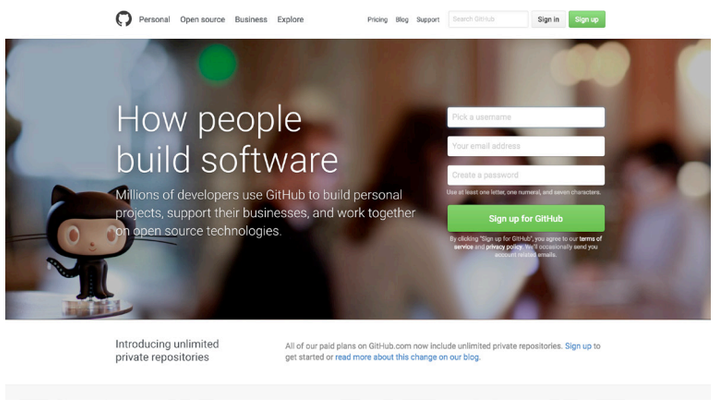
Xcode

Xcode is a software development tool that is very robust in developing the prototype of the Simon App. Xcode features an integrated development environment that allowed me to develop the front-end of the Simon App methodically like wireframes. Xcode Version 7.3 was used for this app.

Swift

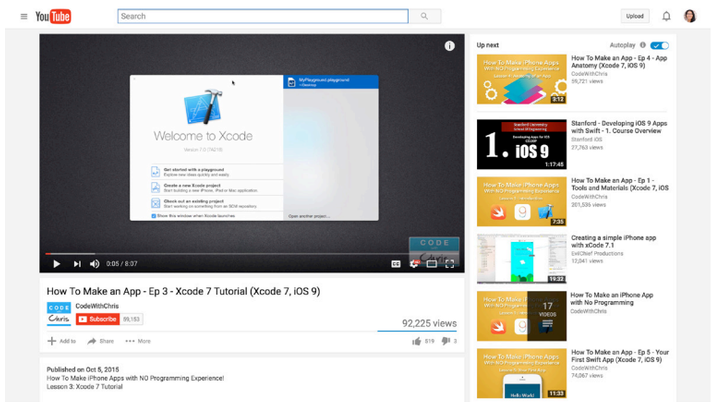
A programming language for Xcode used for programming executable functions in the app. Swift code version 2.2 was used for this development.

OPEN SOURCE TECHNOLOGY



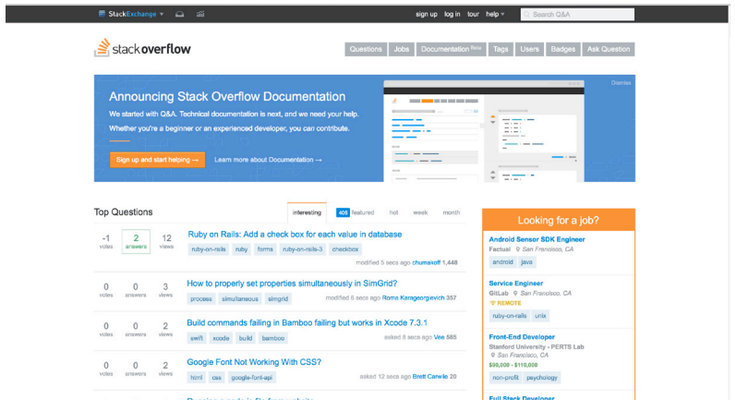
GitHub

GitHub houses many open source codes for various functions.https://github.com/



Youtube

Youtube houses many tutorial videos on Xcode that features open source codes.https://www.youtube.com/



Stack Overflow

Stack Overflow is a web forum for searching solutions for coding issues. There are a number of open source codes that were pulled from this site.http://stackoverflow.com/

DATA FLOW CHART

Although my prototype is currently not at the stage of connecting online, In theory, all data is managed in a cloud by a central server, and is transmitted to devices. For example, when the parent sets the chore, the data is transmitted from the smartphone to the server via wireless cellular communication (4G or 5G) or WiFi. The data is processed and stored in the cloud. Once the data is updated and refreshed, the data is transmitted from the cloud to the kid's smartwatch via wireless cellular communication (4G or 5G) or WiFi. The data transmission from smartwatch is similar like the smartphone, except in reverse.

OPTIMAL USER EXPERIENCE TECHNOLOGY (Devices)

Devices

Smartphone - iPhone 5 or newer
Smartwatch - Vtech watch or similar

Software

iOS 8 or newer

Internet Connection

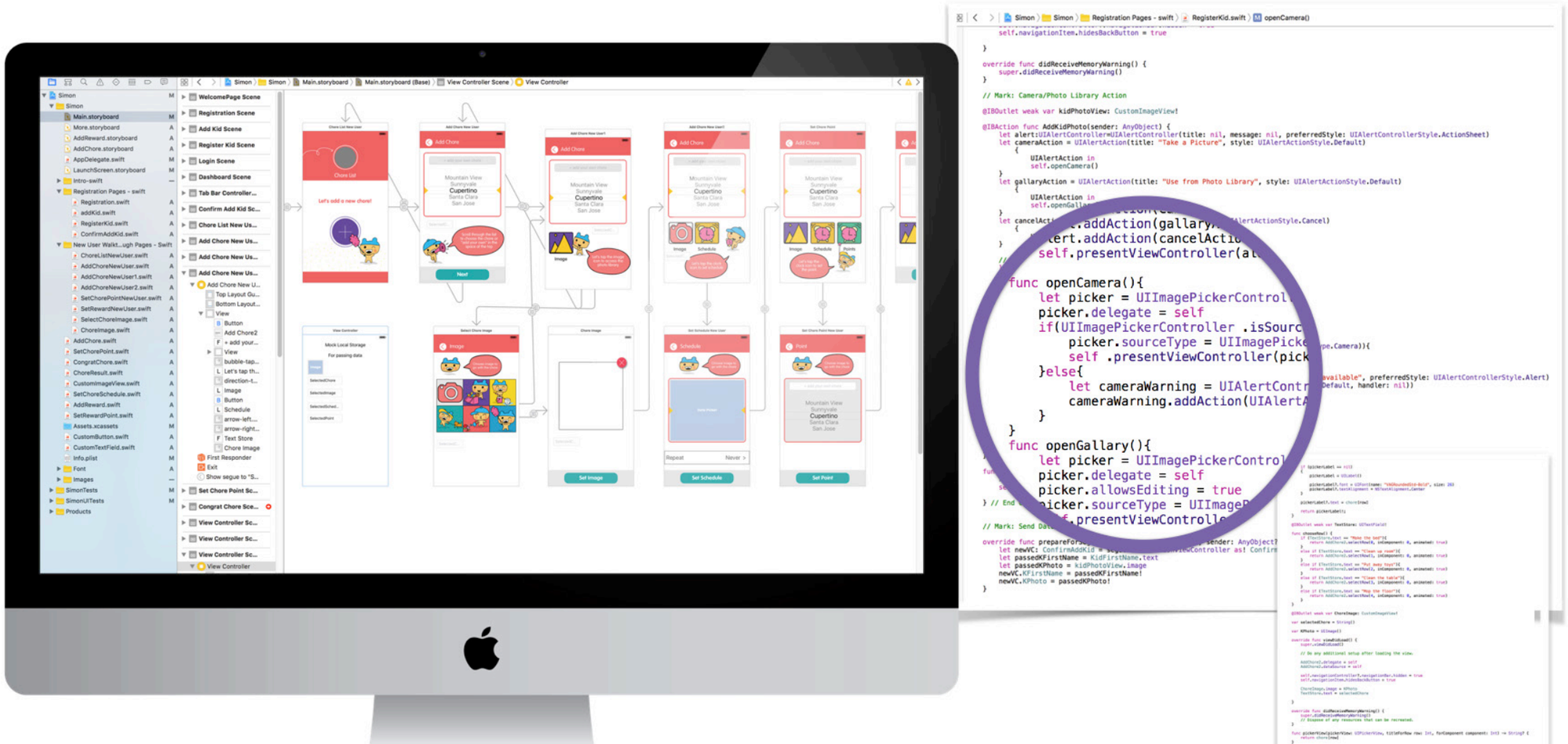
Cellular Wireless 4G LTE or newer

TECHNICAL EXPERIMENTS

After finalizing the UX Design and the Visual Design, I proceed to the technical development of the prototype. In the beginning stages of the technical development, I first started with HTML, CSS, JQuery and JQuery Mobile. However, after consulting with my mentor, Mitch Hudson, for the programming choices, he recommended that I should use Xcode with Swift as the programming language. The reason is that my design was best appropriate for iOS. Most of the icons and buttons were borrowed from standard iOS design. So I decided to switch to Xcode and Swift.

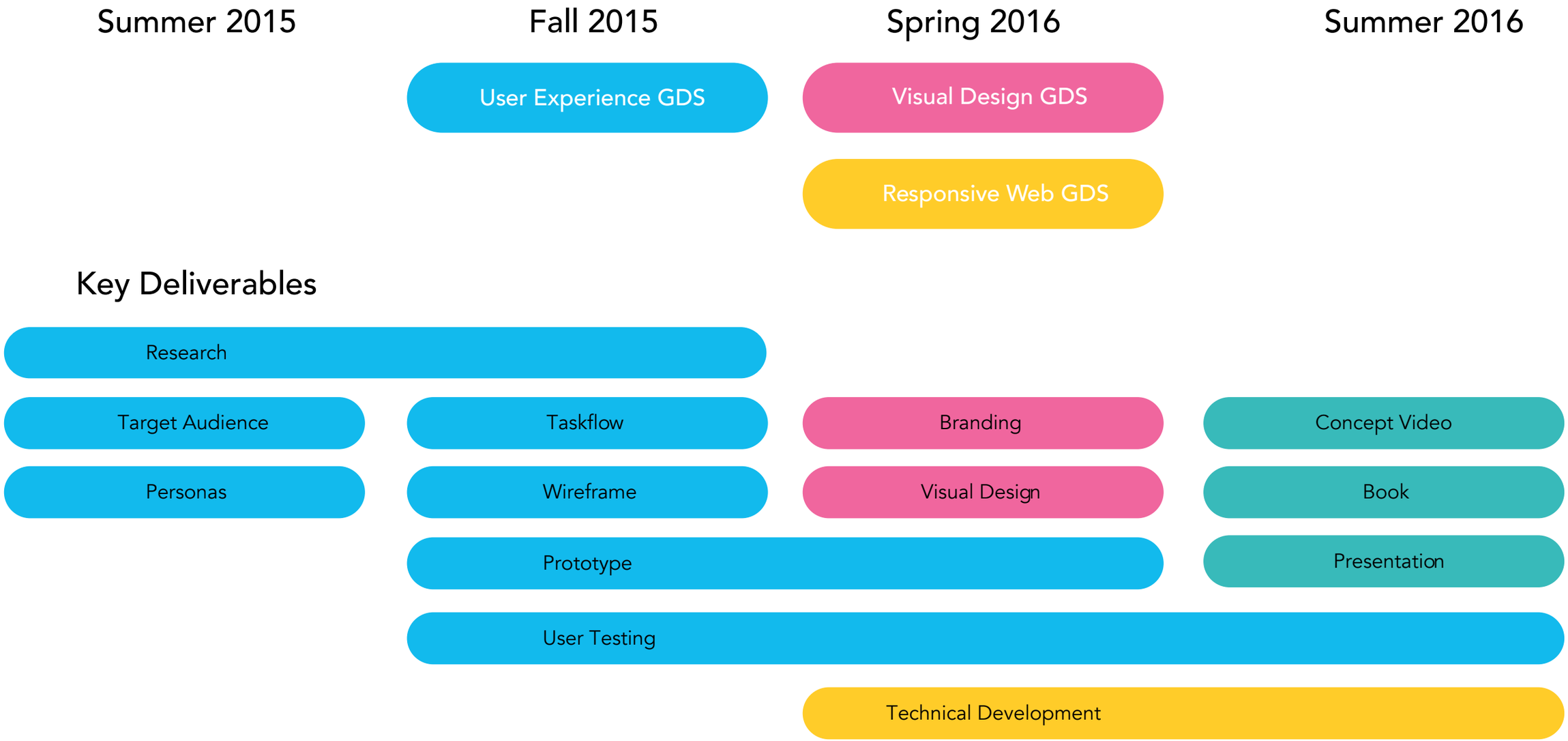
TECHNICAL DEVELOPMENT

I didn't have any background in Xcode and Swift, and have never taken a programming class for it. I had to learn it from scratch. Fortunate, my mentor was very helpful, and he created many video tutorials on youtube for me to learn. I've also got help from my friends for more complicated programming functions and issues. As a result, I was able to develop the prototype of User Task #1 and Task #2 on the iPhone App.

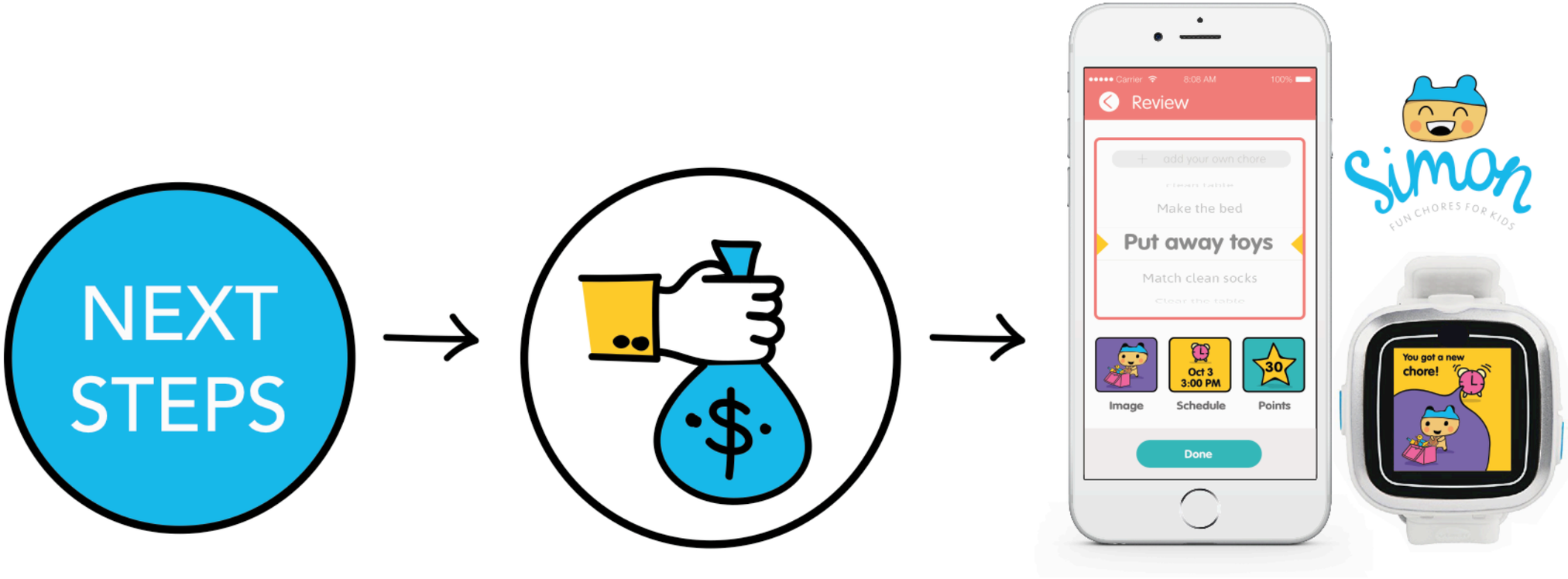


ANALYSIS & CONCLUSION

KEY PROCESS STAGE



NEXT STEPS



For the next steps, I hope to develop my app further adding the features I had planned in my information architecture. In addition, like Octopus by Joy, I hope to do the same by fundraising for my project and develop the Simon smartwatch for kids.

CONCLUSION

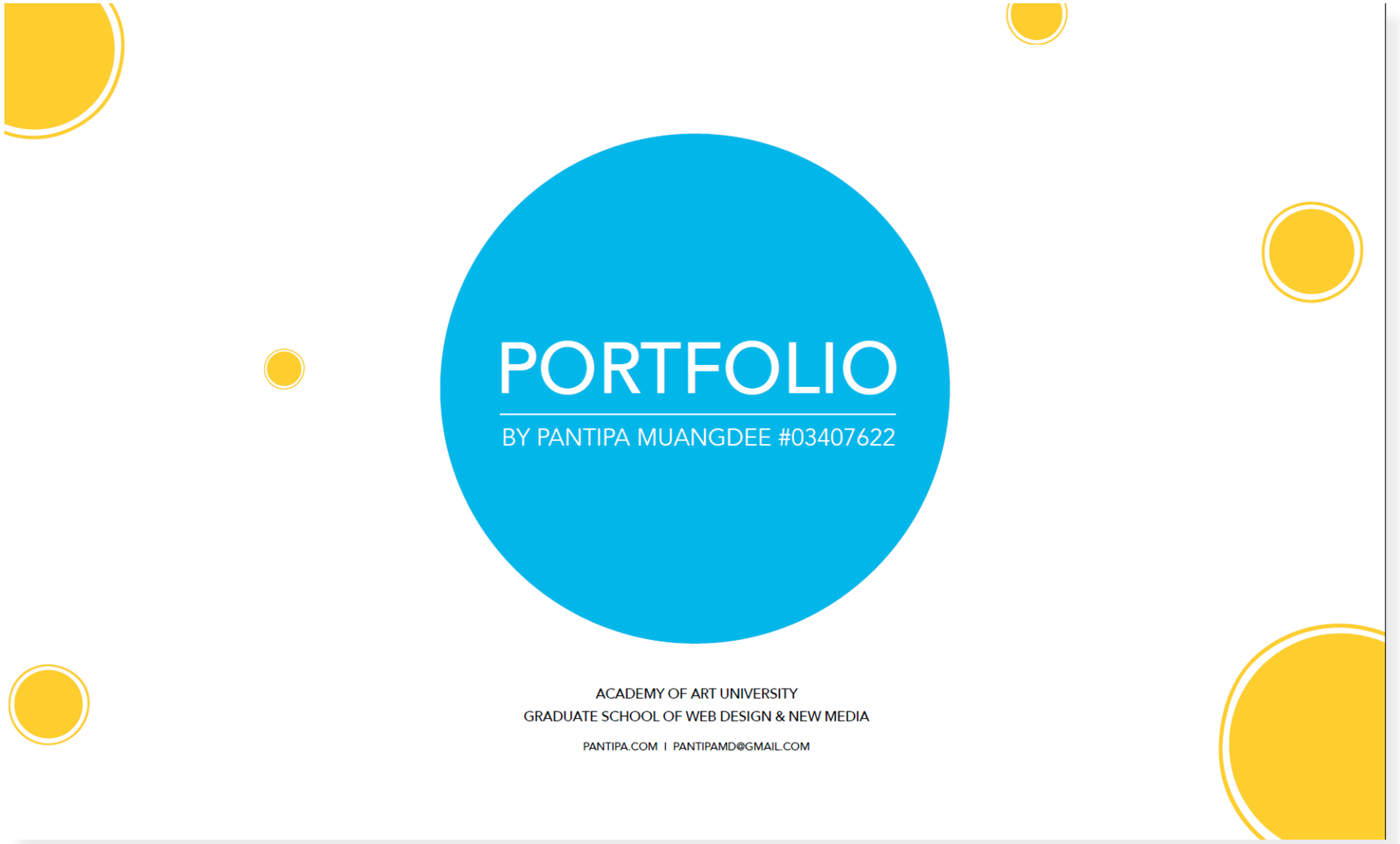
Throughout the course of my thesis project, I was fortunate to be supported my instructors and mentors who helped me overcome the challenges. The UX class I took for my Group Directed Study for Fall 2015 have really opened my in UX Research and Testing. Not only I was able to obtain new skills in visual design, UX/UI design, and coding, I was able to discover my new passion into developing my career as a UX/UI designer.

The other challenges I faced during my project was being able to find user testers, especially kids, to help refine my UX design. However, I was very fortunate that I have friends who were willing to volunteer themselves and their kids as user testers and helped me network with parents who were very interested in my app. I could not have done it without them.

When I first heard the news about Octopus by Joy starting a kickstarter program in early July 2016 to help fund for their launch of their kids smartwatch that was very similar to my thesis, I felt disappointed at the time. I've worked hard on this thesis project for two years. However, after carefully analyzing Octopus by Joy through the competitor matrix, I found hope because even though the idea is very similar, the visual approach, features, and most importantly, the focus, are different. In the end, I feel proud that there's someone who share similar idea, and actually invest money in it.

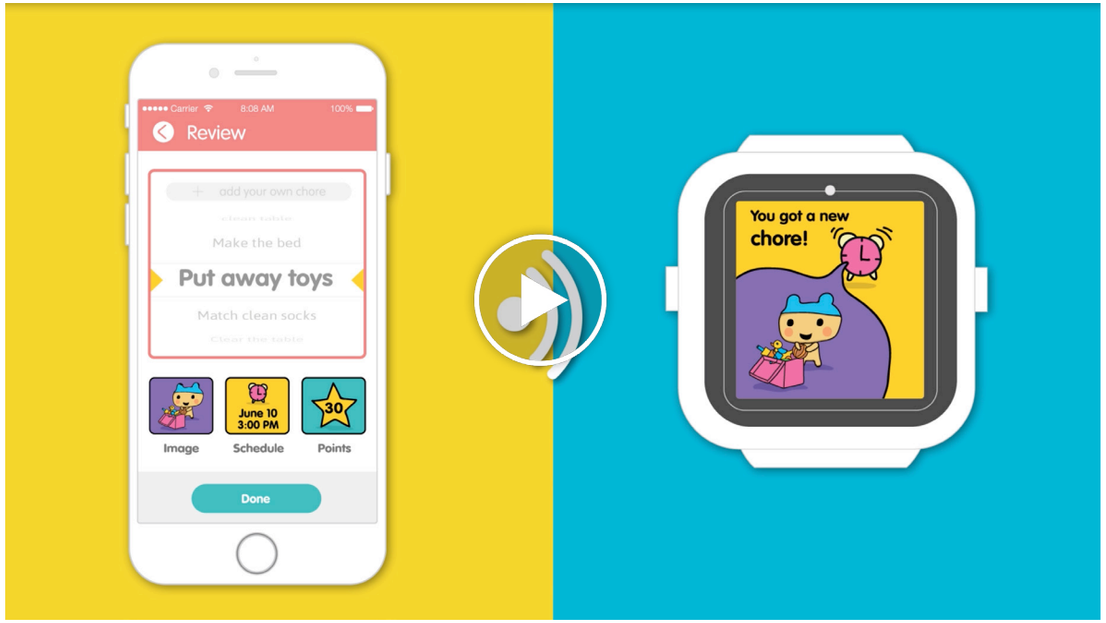
Finally, I wanted to end with a takeaway. My hope for my thesis project is to be able to help parents teach kids responsibility by doing chores. It is not, in any way, replace parenting. It is merely using the available technology to enhance the quality of parenting. Moreover, the technology from this thesis project increases interaction between the parents and the kids, building stronger relationship. As a result, the kids will become more motivated to do chores, and through doing chores, they will grow up to be more mature and responsible.

LINK TO PORTFOLIO



Link to see PDF portfolio: http://www.pantipa.com/content/Muangdee_P_portfolio.pdf

PROJECT LINKS



Simon Project Webpage

Smartphone Prototype

Smartwatch Prototype

Video Walkthrough: Task #1

Video Walkthrough: Task #2

Video Walkthrough: Task #3

Portfolio Website

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"Octopus". Joy. Web. 1 July. 2016. <http://www.octopus.watch/joy/#tour>

THANK YOU

ACADEMY OF ART UNIVERSITY I GRADUATE SCHOOL OF WEB DESIGN & NEW MEDIA

FINAL THESIS SUMMER 2016 I AREA OF FOCUS: UX

PANTIPA MUANGDEE
ID: 03407622

08 . 05 . 2016 I 2 pm