Calculator App

Design the interface for a specialized calculator app that works on a touchscreen smart phone.

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OVERVIEW

PARAMETERS AND GOALS

PARAMETERS

- Design an app for an authentic smart phone screen size.
- Target a specific activity
- Display 5 screens demostrating app functionality

GOALS

- Look for inspiration, style and design.
- Create an user friendly interace.
- Decide the specific requirements of the app.

WHAT ARE CALCULATORS?

One of the most primitive calculators, the abacus is still used in some regions of the Far East. The abacus uses groups of beads to denote numbers. Like the slide rule, the abacus requires no source of power. The beads are positioned in several parallel rows, and can be moved up and down to denote arithmetic operations. It is said that a skilled abacus user can do some calculations just as fast as a person equipped with a battery-powered calculator.

A calculator is a device that performs arithmetic operations on numbers. The simplest calculators can do only addition, subtraction, multiplication, and division. More sophisticated calculators can handle exponent ial operations, roots, logarithm s, trigonometric functions, and hyperbolic functions. Internally, some calculators actually perform all of these functions by repeated processes of addition.

Theoretically, a modern computer is a calculator that works with binary num-bers and has a much larger memory. But in the practical sense, a computer is far more than a mere calculator, because of the wide variety of non-computational tasks it can perform.

RESEARCH

SMARTPHONE AND ITS USES

- Make and receive phone calls text messages.

- Take, show, and store pictures and video.

- Browse the Internet, as well as send and receive e-mail.

- GPS capability for location and navigation.

- Record and play audio and music.

- Display time and date and other functions such as alarm clock, stopwatch, and timer.

- Display weather and temperature information.

- Voice dictation and take notes.

- Virtual assistant using Siri, Google Assistant, or Cortana.

- Access utilities, such as a flashlight, e-book reader, and calculator.

A Smart phone is a cell phone that allows you to do more than make phone calls and send text messages. Smart phones can browse the Internet and run software programs like a computer. Smart phones use a touch screen to allow users to interact with them. There are thousands of Smartphone apps including games, personal-use, and business-use programs that can all run on the phone. The picture is an example of the Apple iPhone, one of the most popular smart phones available today.
Smart phones are loaded with features and capabilities that make them more than a phone.

RESEARCH

APP SEARCH

TAX CALCULATOR

APP: TURBO TAX
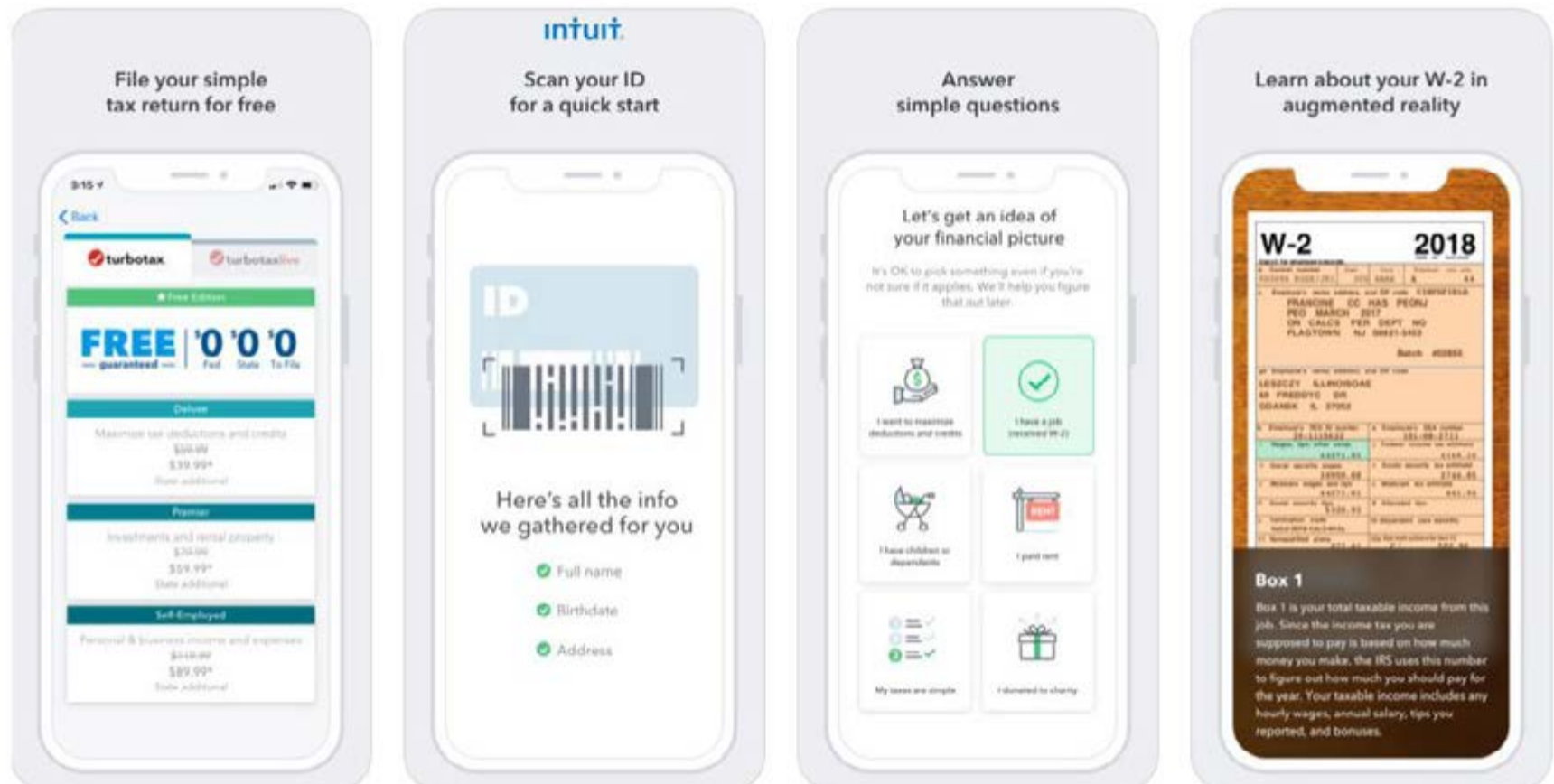
It looks simple to use, snap a photo of your W-2, answer simple questions about your life, and e-file securely from your iPhone or iPad. Simply swipe your way to your maximum tax refund, guaranteed. TurboTax asks coaches you every step of the way and automatically double-checks as you go, so you can be confident your taxes are done right.
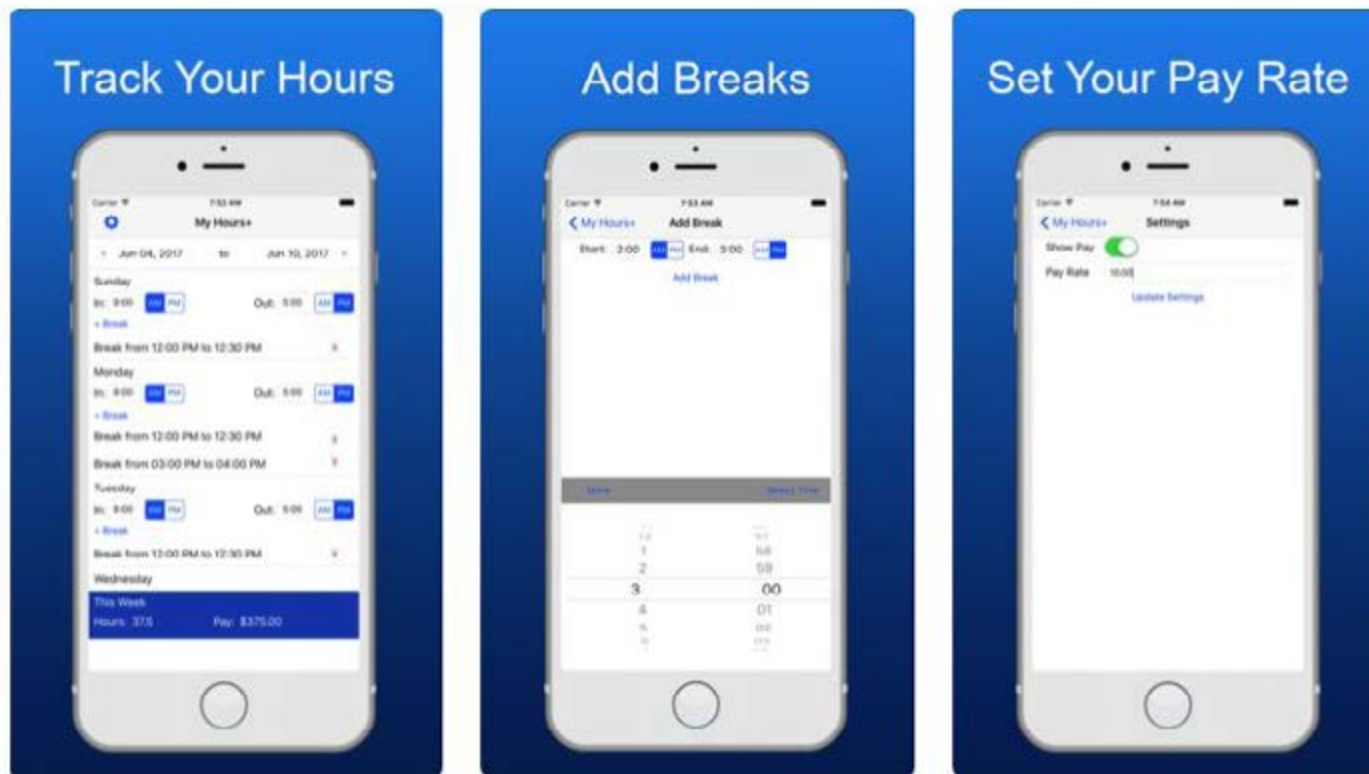
RESEARCH

APP SEARCH
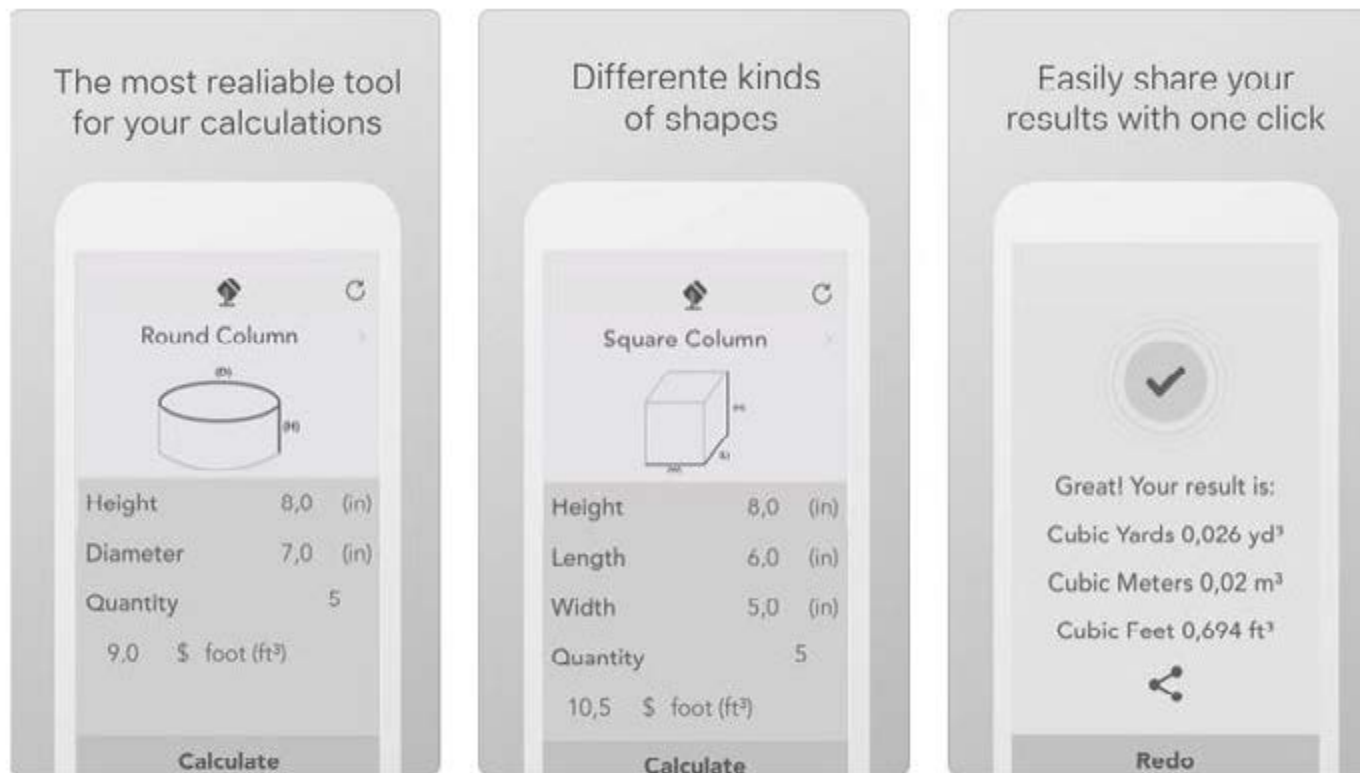
TIME CALCULATOR

APP: MY HOURS PLUS - TIME SHEET

My Hours+ is a simple time sheet app that keeps track of hours for that week. My Hours+ allows you to save hours for each week and calculate pay.

RESEARCH

APP SEARCH

CONCRETE CALCULATOR

APP: CONCRETE CALCULATOR ++

Concrete Calculator is a tool designed to make concrete calculations as simple as possible. This app will help you reduce material waste, increase efficiency and improve accuracy of concrete calculations.
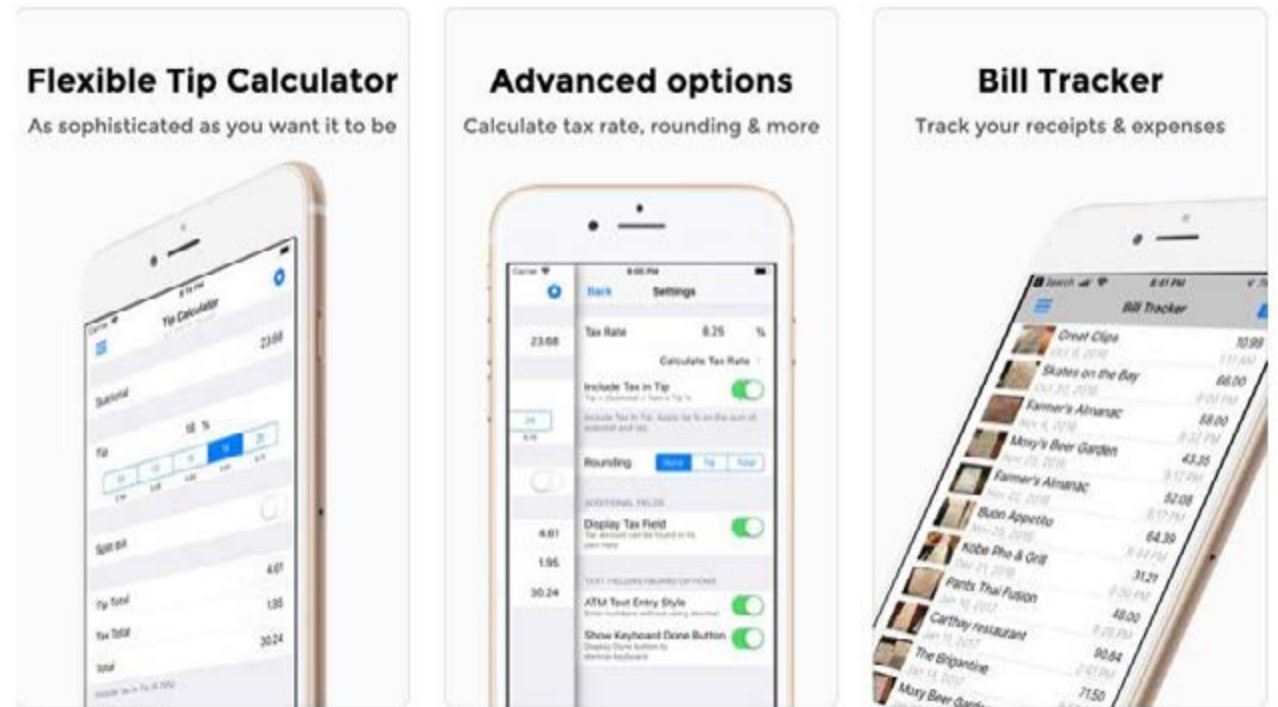
RESEARCH

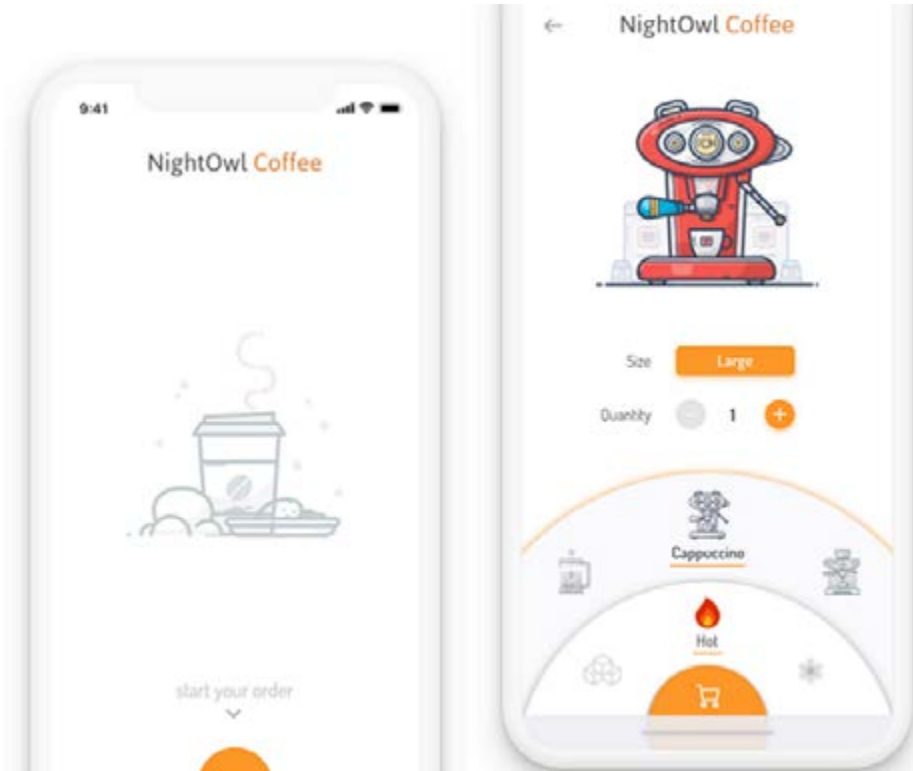**APP SEARCH**

TIP CALCULATOR

APP: TIP CALCULATOR +++

Tip Utility allows for fast and very flexible calculation of tips. This app prioritizes functionality over everything else. If you want a simple, straight-forward, feature-packed tip calculator that gets the job done, you needn't look further.

RESEARCH

UI DESIGNS

Night Owl Coffee - Coffee ordering app

It features for a distinctive illustration style. Its cartoon coffee machine with beautiful colors and geometric graphic elements is really cute and beautiful. Its pure background decorated with simple gray graphics and yellow buttons makes it really clean and neat. So, it is really clean and simple.

Wallet - Financial appt

Its beautiful color contrast and gradients are really distinctive. Simple icons and colorful geometries make all interfaces simple and impressive.

RESEARCH

UI DESIGNS

Watering tracker app - Life app

It is really a great idea to monitor the watering stats of plants and also remind users to water their plants timely. Moreover, its background photos and images of different plants under monitoring are really vivid and fresh to let users have a good mood while using. It also offers many plant details for users to clearly and easily know plant conditions, like humidity, temperature, light and more. Its color scheme, black background with white and green icons buttons can not only echo with the main theme of green plant, but also make this app more acceptable for users.

TIP CALCULATOR
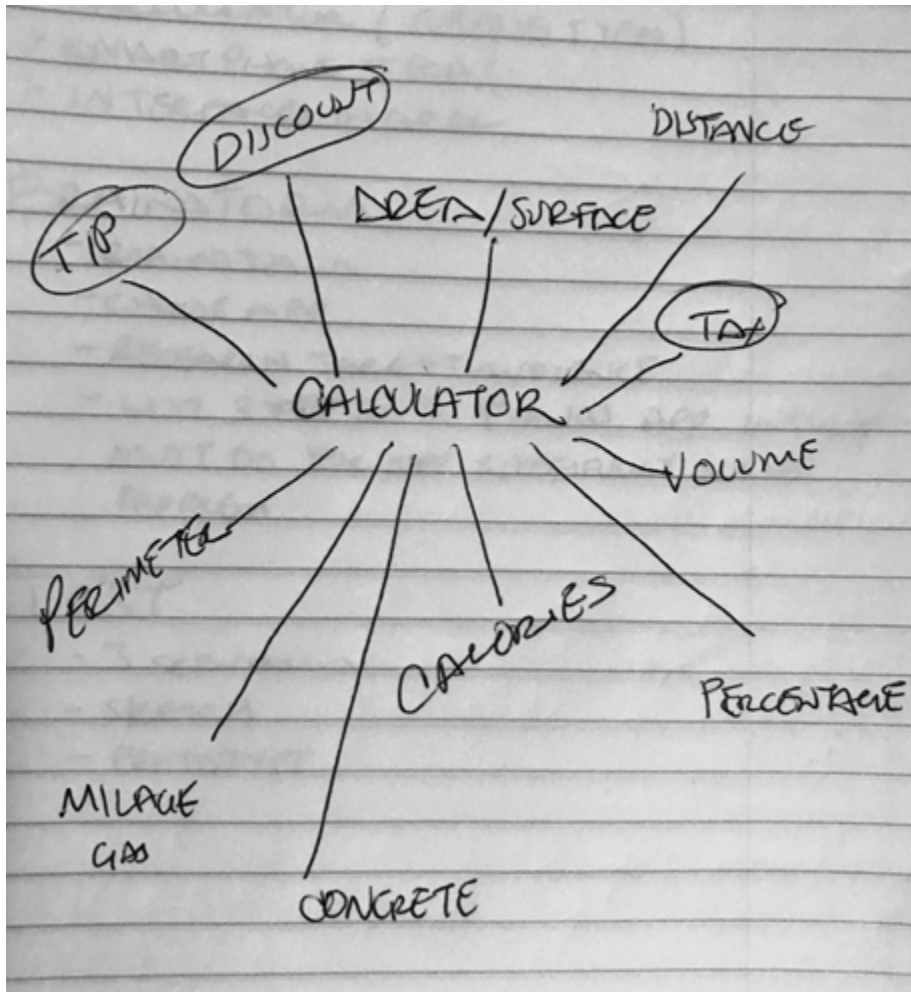
A tip or gratuity is an extra sum of money paid to certain service workers for a provided service. Tip amounts, as well as acceptance, vary in different parts of the world. In some countries in East Asia such as Japan, tips are seen as insulting and can sometimes be interpreted as a bribe. In yet other countries such as the United States, tipping is widely expected, and in many cases, is even factored into a service worker's compensation towards satisfying the minimum wage requirement. This is important to note, since although tipping is entirely voluntary, many servers depend on tips to make a living in countries like the United States. As such, as a tourist, it can be helpful to research the tipping customs in the countries being visited. In the U.S. or any other country where tipping is expected, depending on the restaurant or the number of patrons at a table, gratuity may be automatically applied to the bill amount. As previously mentioned, tipping can be offensive in some countries, so although a citizen of the United States that is visiting another country may want to express their appreciation of the service provided, the gesture may in some cases result in the opposite effect.

THE APP

TIP CALCULATOR
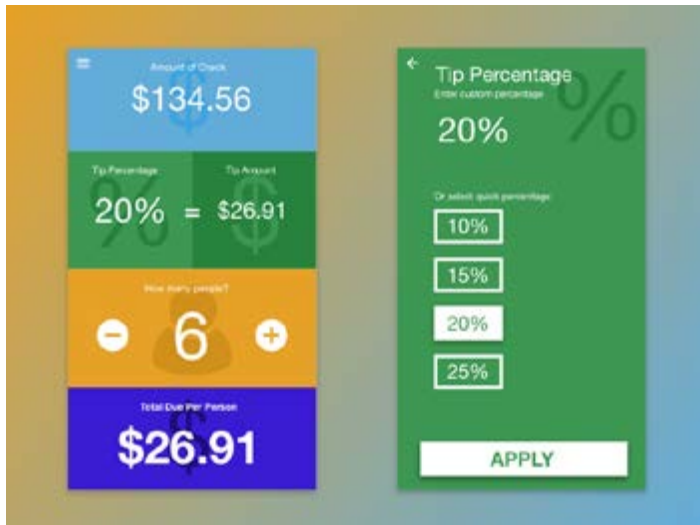
I want the app to do......

1. Enter amount

2. Enter tip percentage

3. Select number of people to split bill

4. Show tip amount

5. Show tax

6. Clear/reset fields

THE USERS

Target audience will be people from 16 to 50.

People who uses their smart phones as an everyday tool.

People like me, who needs a calculator to know what is the percentage of a certain amount.

SCENARIOS

THAT MOVIE/LUNCH DATE

Jhonatan and Paty are a nice couple and Jhonatan decided to take his wife to watch the new Avengers movie and to have lunch. Jhonatan decides to go to the Studio Movie Grill and have lunch while they watch the movie. That is a win-win for both.

The time comes to pay and Jhonatan feel s that they were treated well and he decides to be good his tip. He pulls out his iPhone and opens his Easy Tip app and enters the amount of the check, and decides a 15% tip is good. Obviously, he is paying; it wouldn't look good if he ask his wife to pay for her lunch.

He taps on calculate and now he knows how much he is adding for the tip and what is the total of the check and the tip.

OLD FRIENDS GATHERING DINNER

A group of friends decide to get together for dinner after not seen each other since elementary. They all got reconnected through Facebook. After good laughs, dinner and conversations it's time to leave and they ask the waiter to bring the check. They were so excited to see each other that they forgot to ask for separate checks and it all comes in one big check.

Jhonatan ask if it's ok to split the check between all of them and add the tip to it. All agree and Jhonatan pulls his iPhone and opens Easy Tip app, enters the amount and they all agree to give the 25% for the tip, then he enters the number in which how many will the check be split and then taps calculate.

The app shows how much each one of them has to pay.

SCENARIOS

FAMILY NIGHT OUT WITH A SURPRISE

The Flores family decided to go out for dinner to celebrate dad's birthday. They are having a good time the four of them, taking about school, goals and old stories from dad when he was little. It's time to get the check, the waiter brings it in and his sixteen-year-old asks for it because he wanted to surprise them by paying the check. He worked the previous summer and saved some money for that occasion. Dad tells him to save his money for his mission but his son tells wants to make a deal. He says "I pay for mom's, and pay for my brother's and yours". He agrees but he says that both have to pay the tip.

The son pulls out his iPhone and opens Easy Tip app, enters the amount of the check they decide to give a 20% and the son selects to split the check in two, he then taps calculate and the app shows the total including the tip. But there's another surprise the younger son he says I have some money too, I can pay the tip, he pulls some cash he has in his pockets looks at the app and get the exact amount for the tip.

TEST CONCEPT

SKETCHING

TEST CONCEPT

SKETCHING

TEST CONCEPT

PROTOTYPES

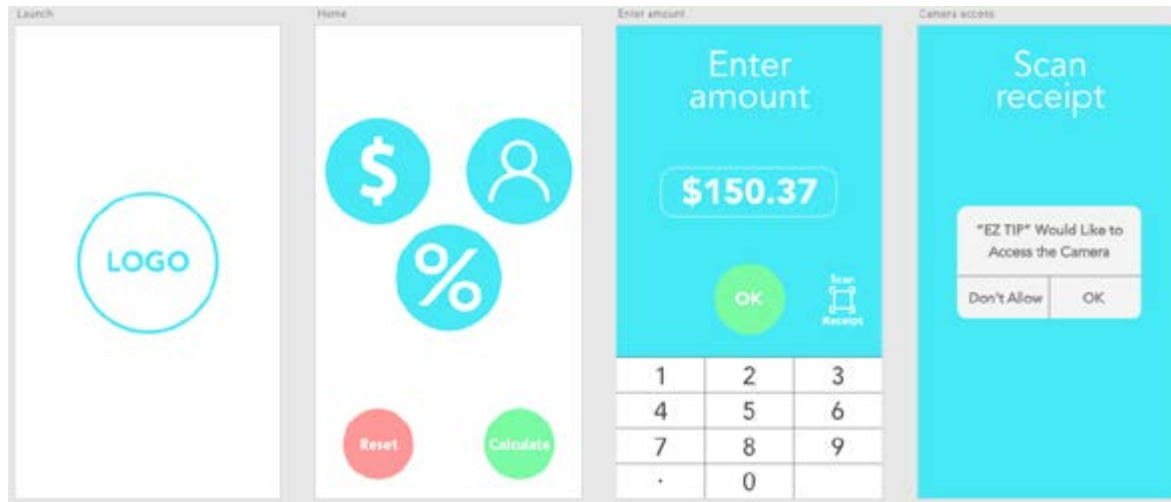# TEST CONCEPT

PROTOTYPES

DEVELOPE AND FORM

INITIAL WIREFRAMES

After looking at other apps I decided to come with something simple and easy to use.
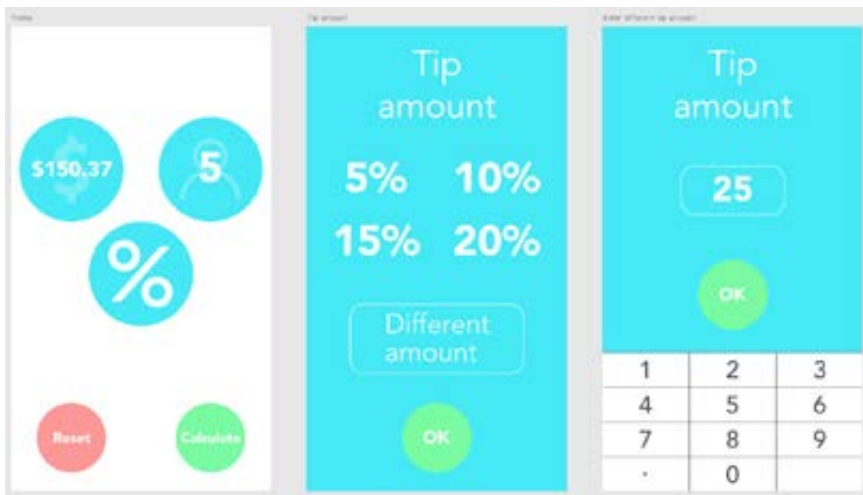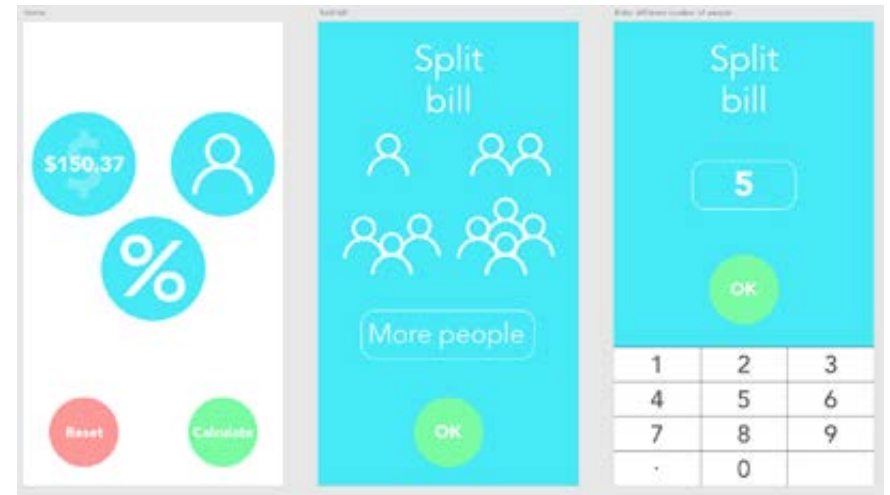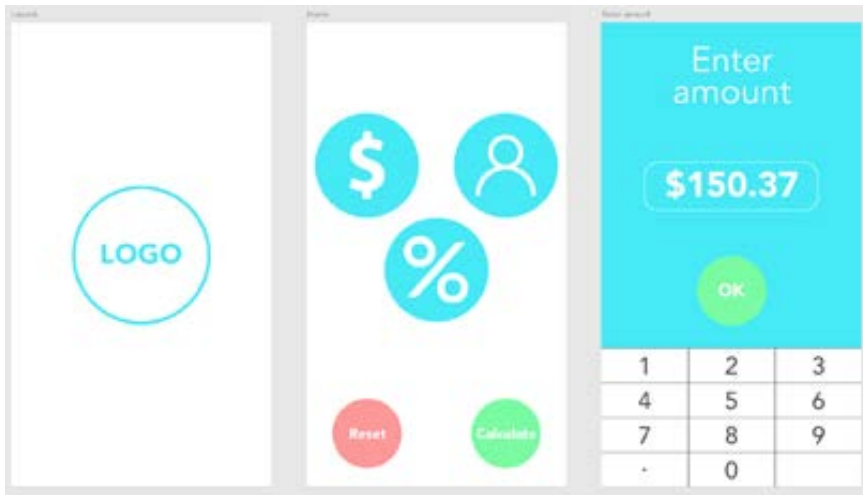
REFINING WIREFRAMES

Initial user test showed that it was too simple to use. So, I had to do more research on what else I could add to the app.


I came with the idea of adding a receipt scanner, and also if for some reason the numbers al burry or they are scan incorrectly you can correct the amount.
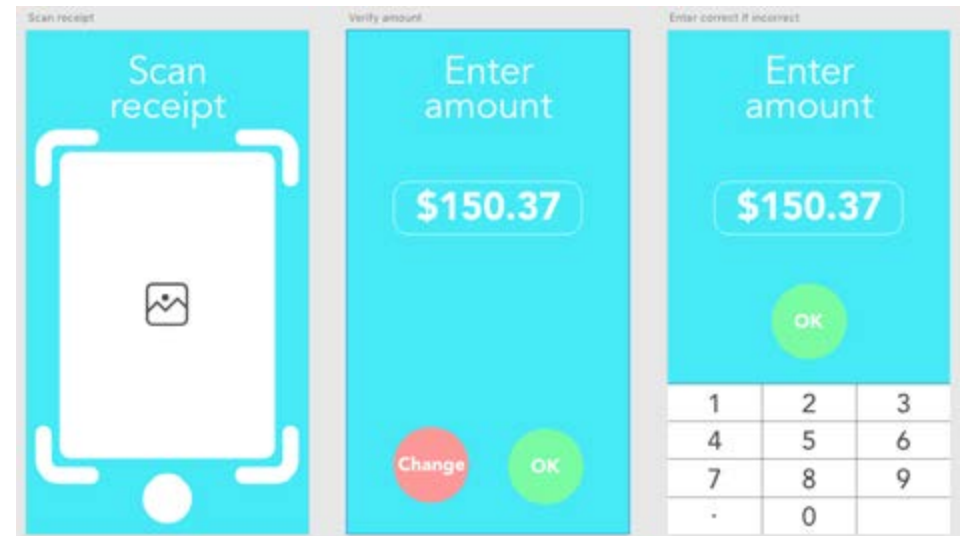
REFINE AND FORM

REFINING WIREFRAMES

Second user test showed better improvement. My testers liked the implementation of the scanner, one of them said that he would prefer to use the scanner all the time, and another gave me the idea of adding a way to send/receive money. When I suggested it to another tester he said that he usually does that, he likes to pay for someone (or all of the group) and then they pay back.
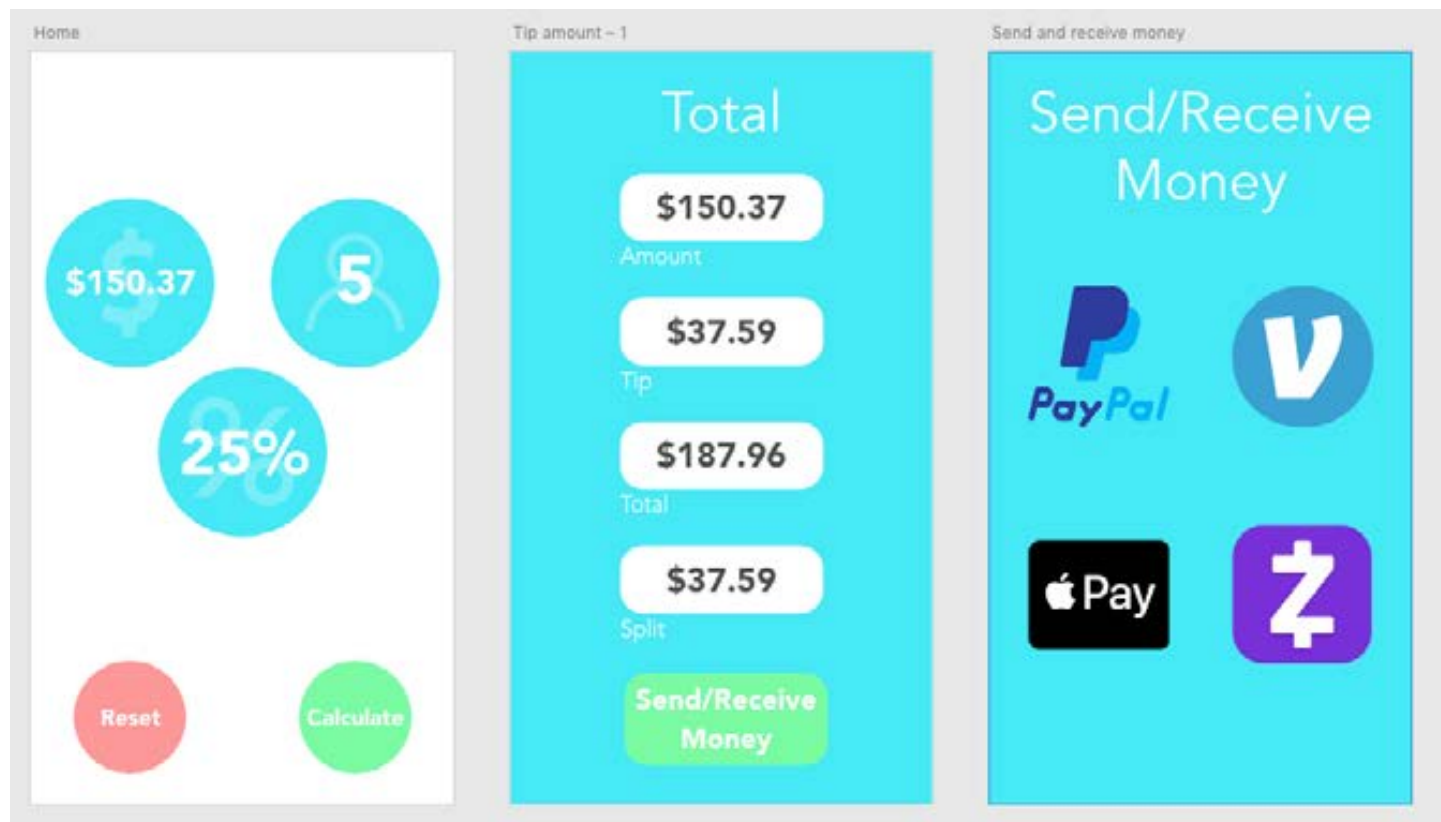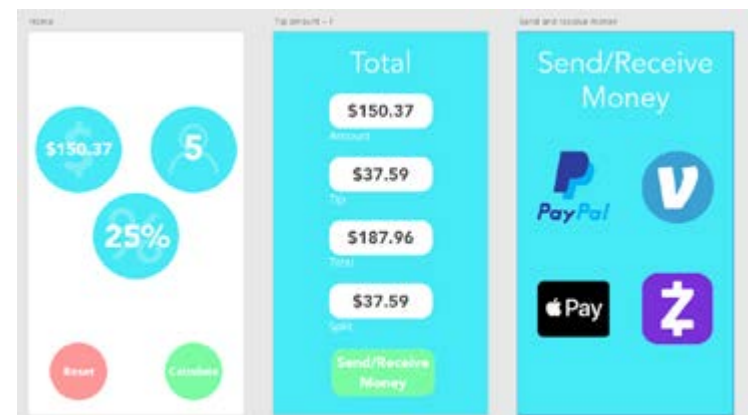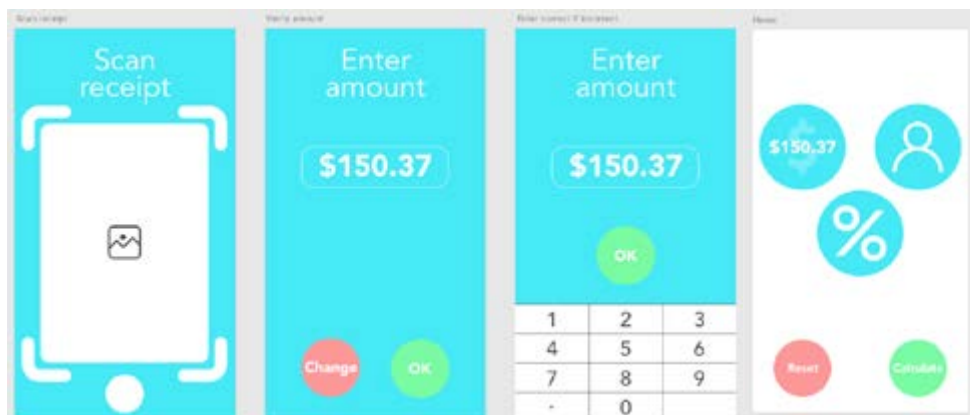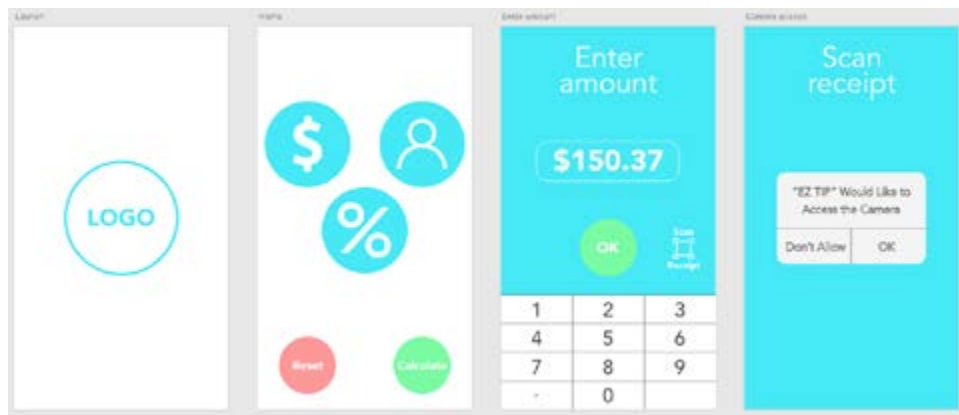

I decided to add this last page that provides links to how you would like to send/receive money. I am using apple pay because I am an apple user but if I would be making this same app for android I would change apple pay for google pay.

REFINE AND FORM
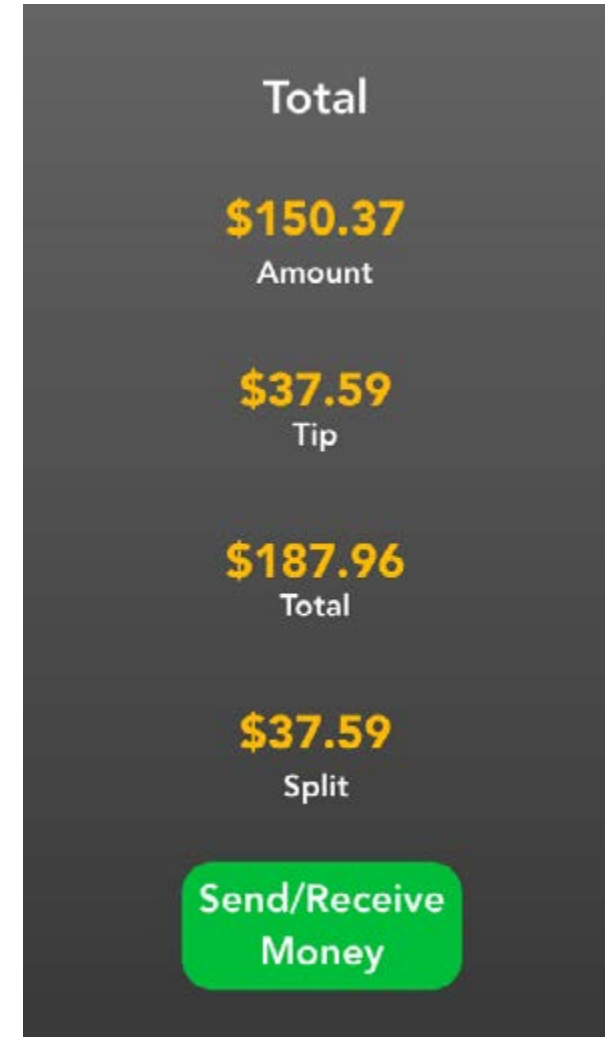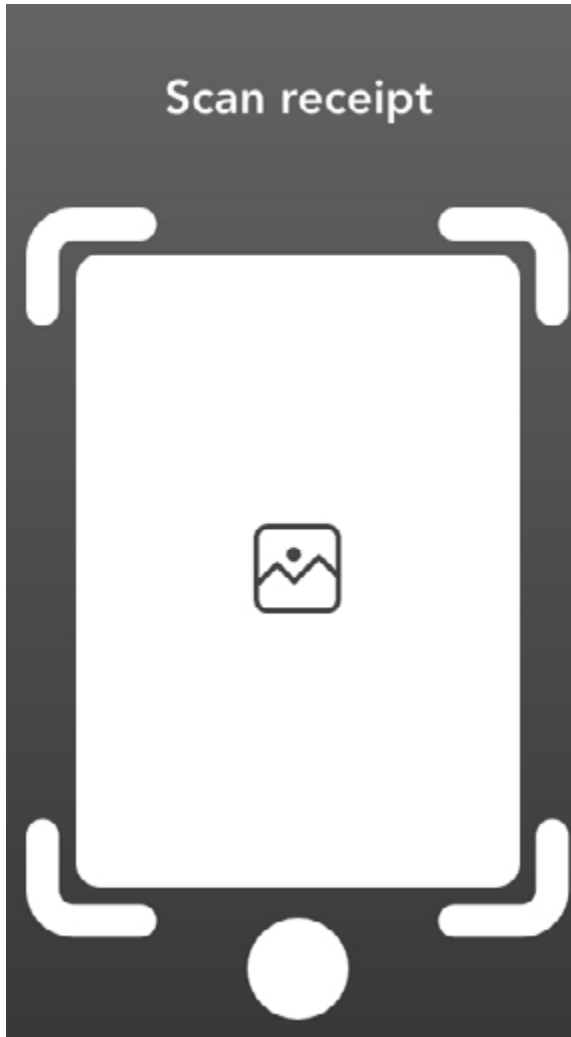
REFINING WIREFRAMES

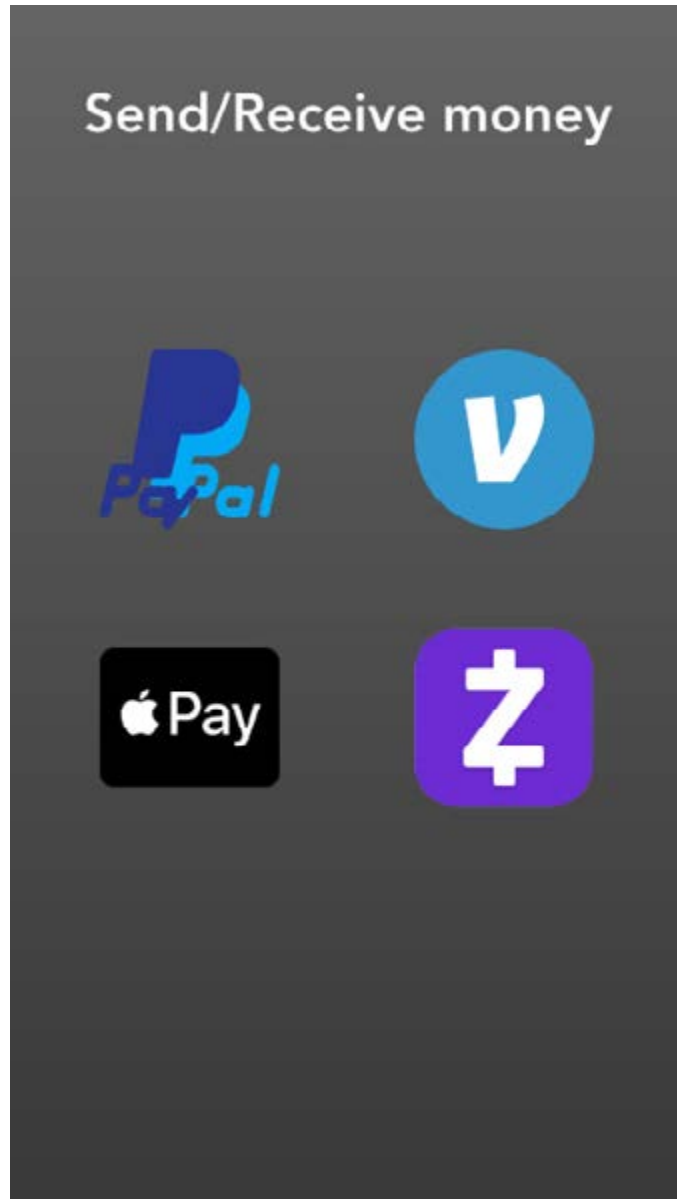This is how the app is looking now.

FINAL DESIGN

After thinking about colors and feedback given by my instructor these are my final refinements.

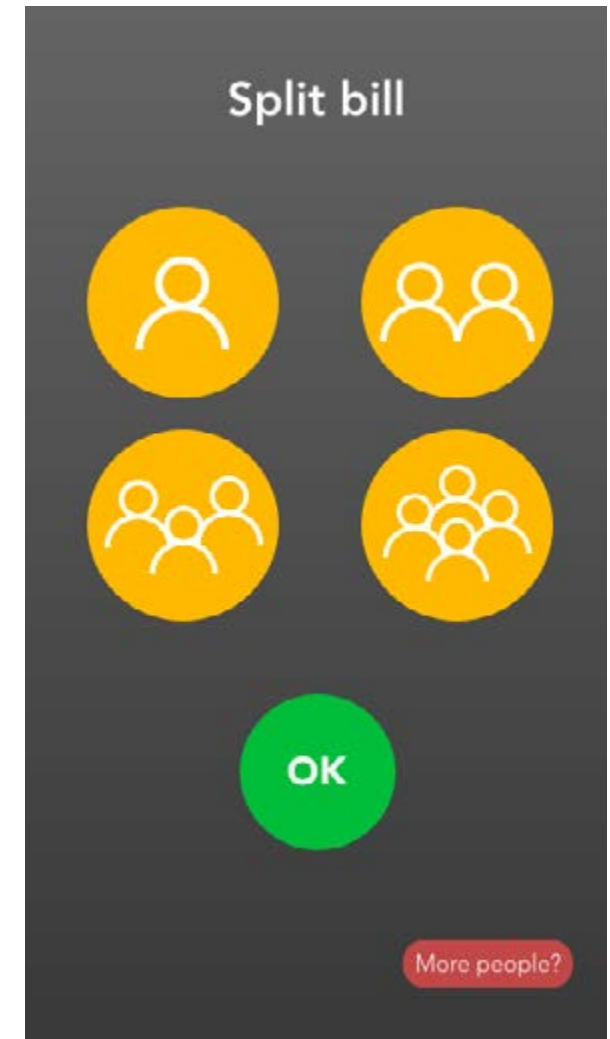I decided to do a gradient background with combination of orange and white.
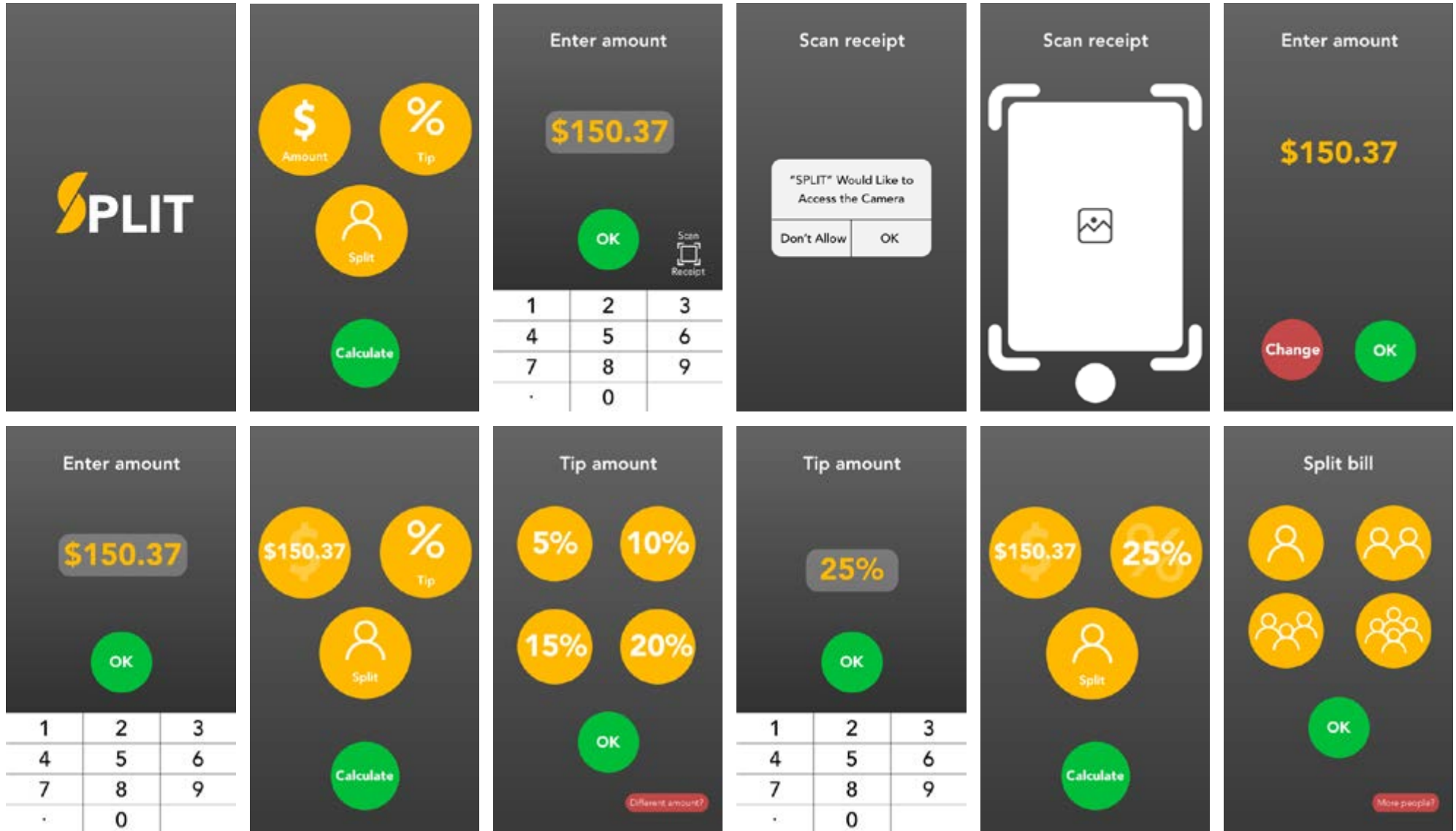
FINAL REFINEMENT

FINAL DESIGN

I got to admit that designing is fun but it takes time to come with good combination of colors, images and ideas.
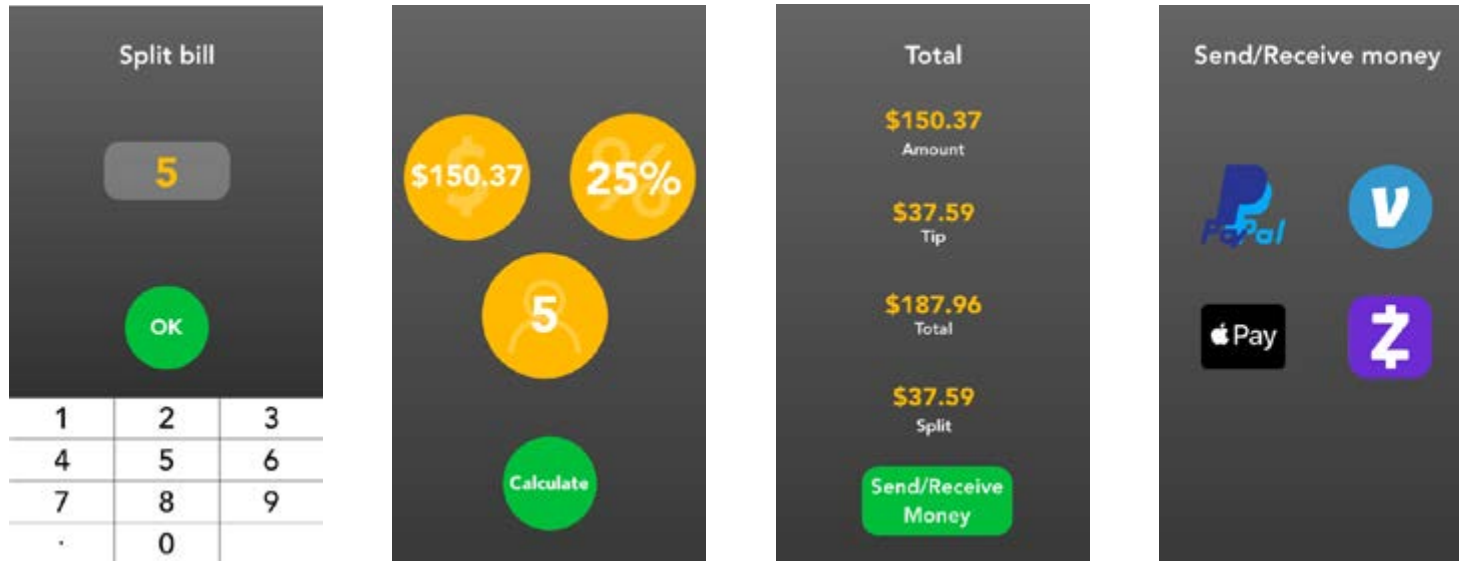
FINAL REFINEMENT

FINAL DESIGN

This is the final final design of the app.

FINAL DESIGN

This is the final final design of the app.

Click on the image to see a video presentation of the app