

RECIPE RESIZER

Recipe Converter App

KATHRYN COLTON | ART 337R WINTER 2018 | PROJECT 1

index

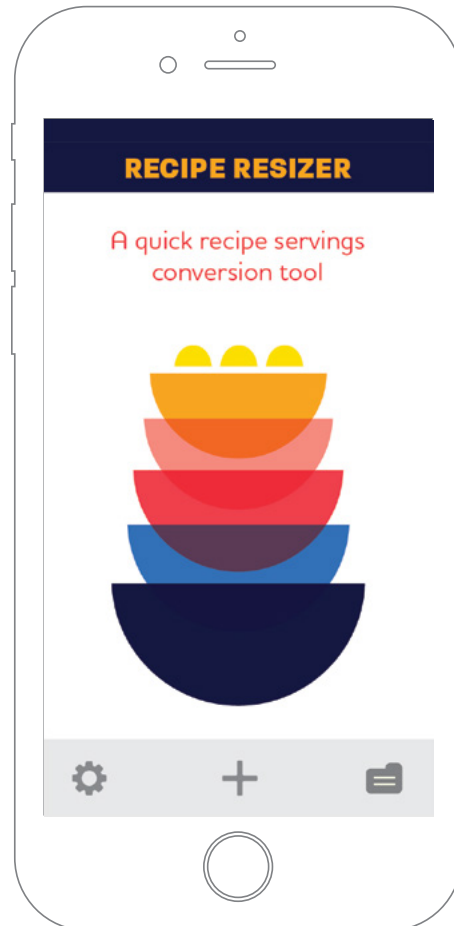
RECIPE RESIZER

01	.....	Introduction and Project Parameters
02	.....	App Types and Exploration
03	.....	Illustrative Inspiration
04	.....	Competitive Research
05	.....	Sketches
06	.....	Target Audience and Scenarios
07	.....	First User Testing
08	.....	Wireframes
09	.....	Second User Testing
10	.....	Final Visual Designs

01 Introduction and Project Parameters

RECIPE RESIZER

A quick recipe conversion tool for singles, families, dinner hosts, or anyone who likes to cook.



For this Interaction Design project, I chose to create a recipe calculator app that helps people accomplish two things:

- Change the ingredient amounts proportionally so the user may cook a number of servings that is different than the original recipe
- Save the recipes in a library so they can refer to them later

MY GOAL:

My goal for this app is to create a process for converting recipes that only requires a few touches of the screen, so figuring out dinner for one or a feast for a crowd can be foolproof.

PROJECT PARAMETERS

These are the requirements for my calculator app:

- Identify a profession or activity that would benefit from a specialized calculator app.
- Identify the functions your calculator must provide.
- Design an appropriate interface using the principles of interaction and user testing.
- Keep your calculator app simple. It should be more like a basic four function calculator than like a complex graphing calculator.

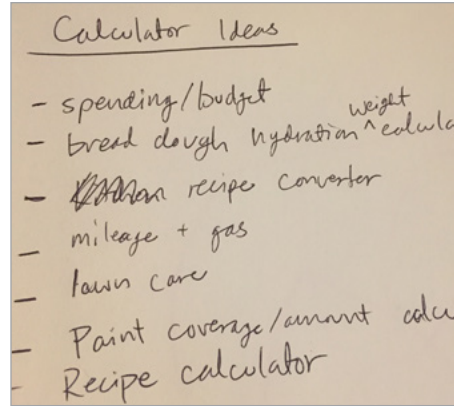
02 App Types and Exploration

What can we calculate?

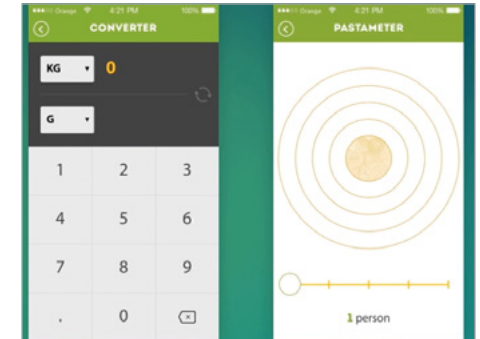
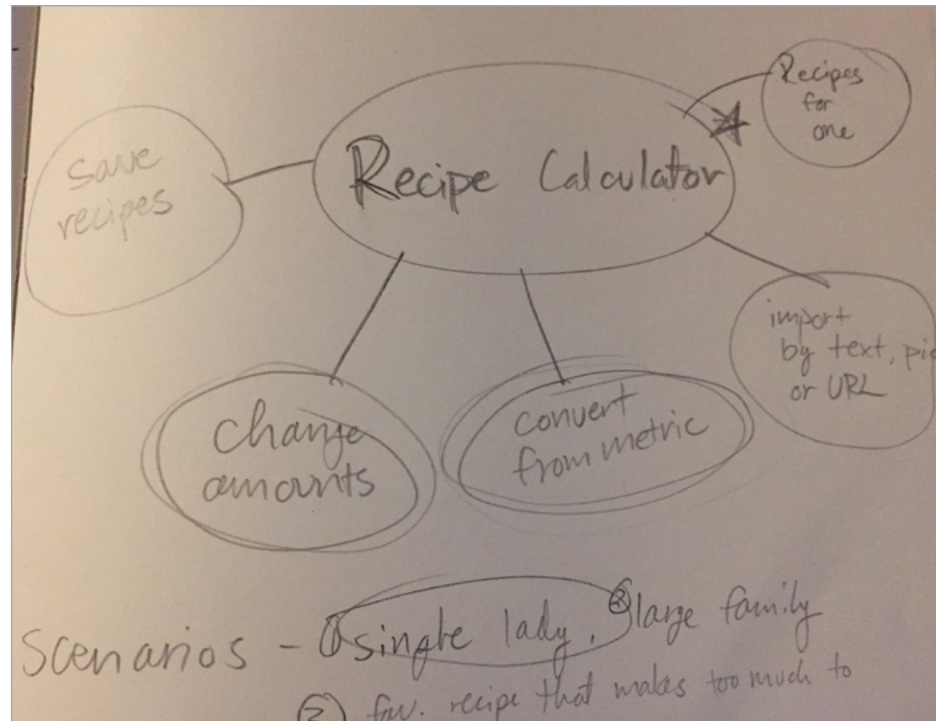
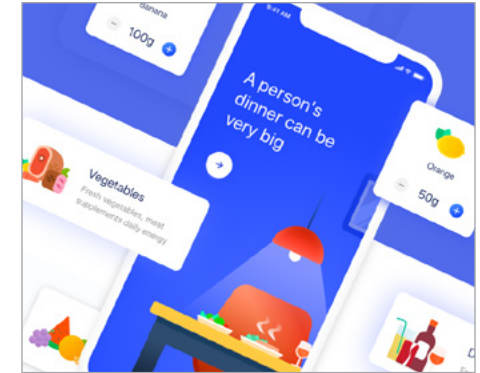
At the beginning of this project, I considered the possibilities for calculator apps. What could a useful app calculate?

Because I enjoy food and cooking, I gravitated towards those subjects. There are countless calorie counting apps, grocery list apps, recipe apps, pantry list apps, and the like.

My idea for a recipe converter was partly influenced by a problem that I've encountered over and over: Any time I have needed to increase the number of servings in a recipe to serve a larger number of people, I inevitably make mistakes in my math. As I am going through the recipe, I sometimes forget that I am changing the servings and one ingredient always ends up being the wrong amount. Especially in recipes with a long list of ingredients.



Examples of recipe/cooking apps



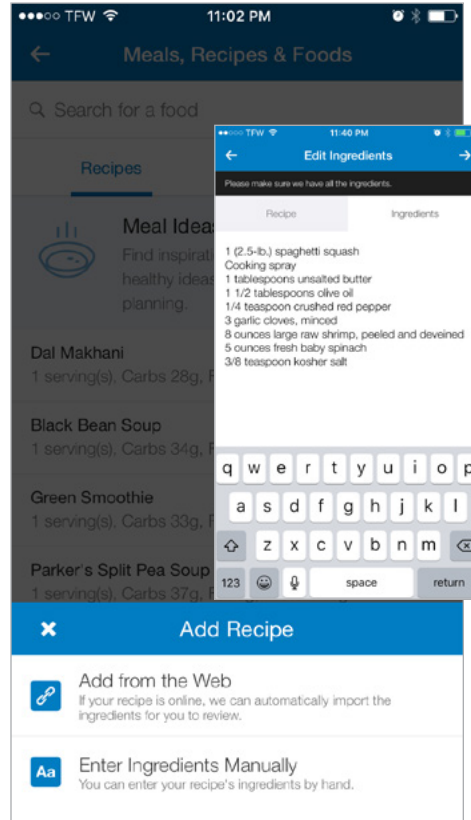
Recipe calculator brainstorming

02 App Types and Exploration

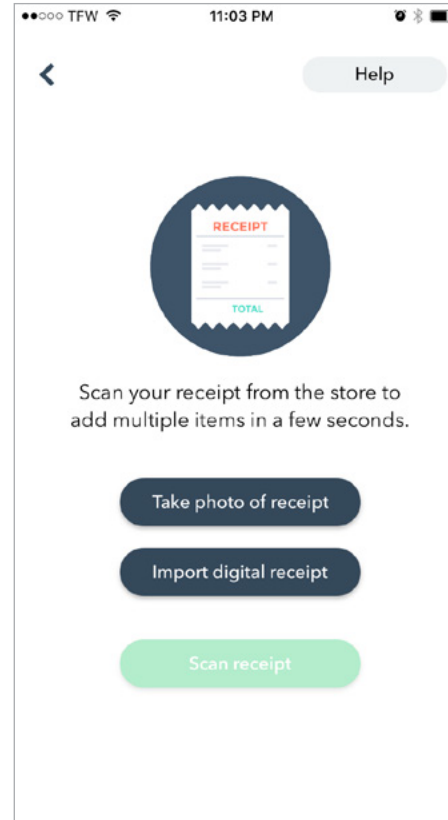
The functions of each of these apps gave me inspiration for how my calculator app could work.



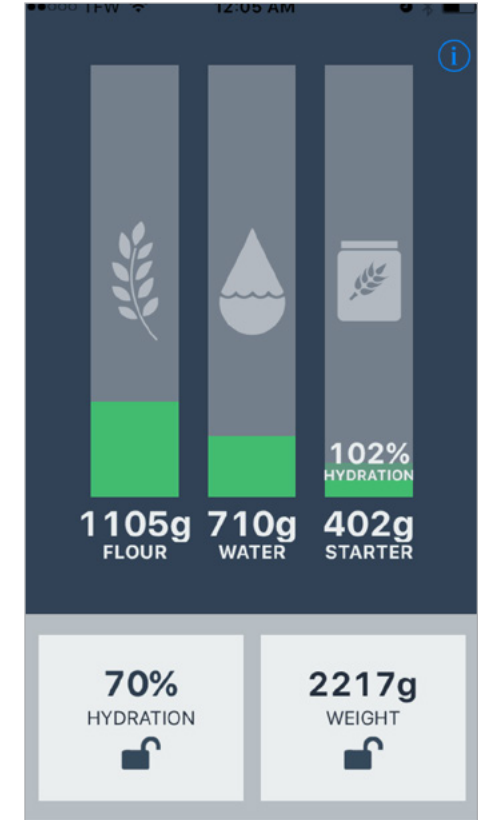
This scanner app recognizes text from a photo so the user can convert it to editable text.



This app allows the user to add recipes from a URL and save it to a database.



This app takes a photo of grocery receipt and converts it to text that can be saved in a pantry database.

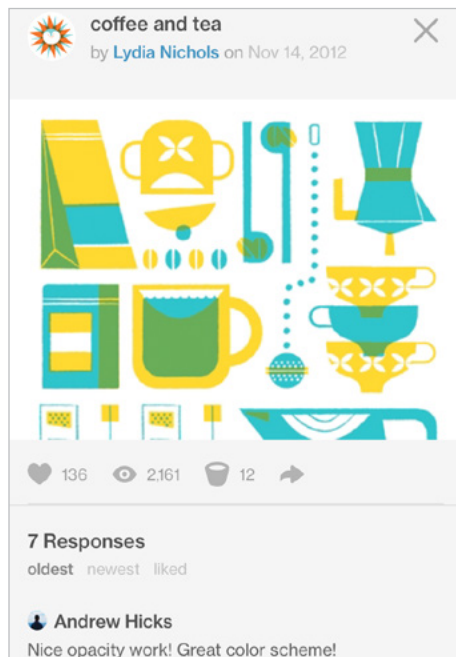


This app is used by sourdough bread bakers to figure out flour/water/starter ratios. Each color bar is a slider that adjusts the other two sliders proportionally.

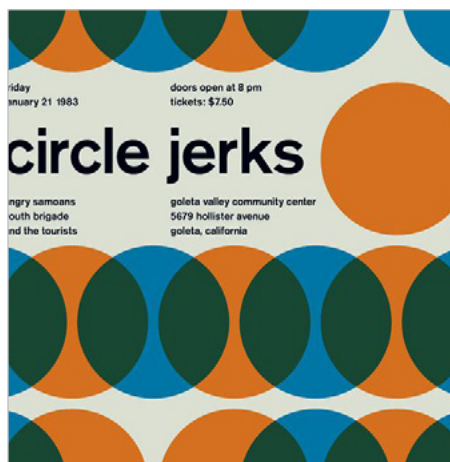
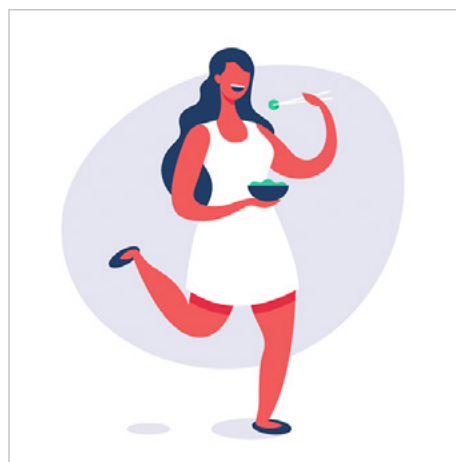
03 Illustrative Inspiration

ICONS AND IMAGES

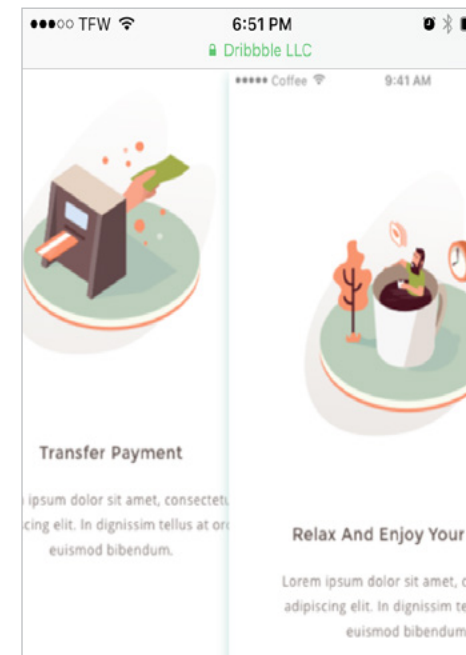
Because I'm a designer who enjoys illustration, I would like to give my app some illustrative flair. I like the look of the flat, overlapping colors on this page, and I think they lend themselves to the "multiply and divide" concept behind my recipe app.



I like the clean look of the white background with overlapping colors



The three-dimensional effect of these illustrations are fun, I could see them as being animated icons on a loading screen



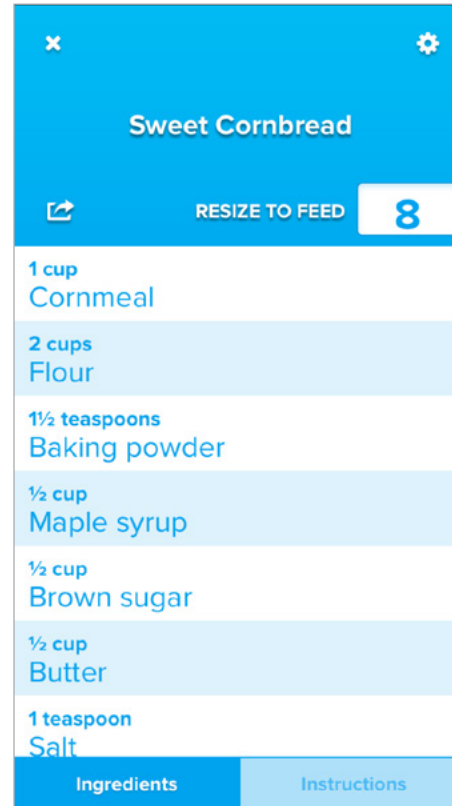
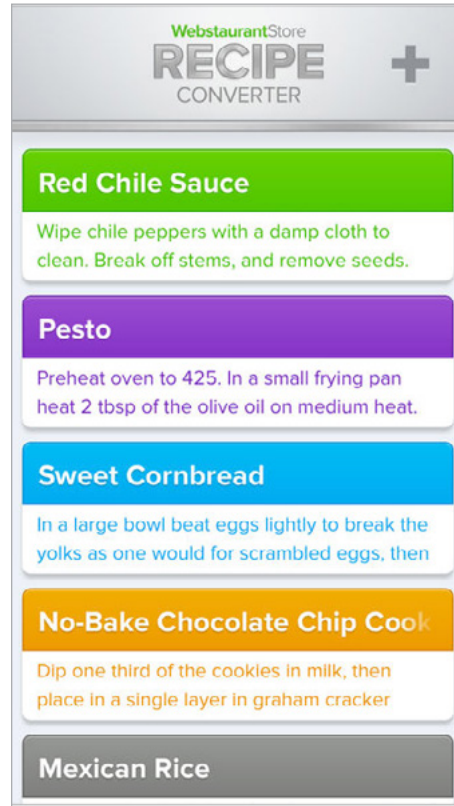
The circles could represent plates or servings of food.

04 Competitive Research

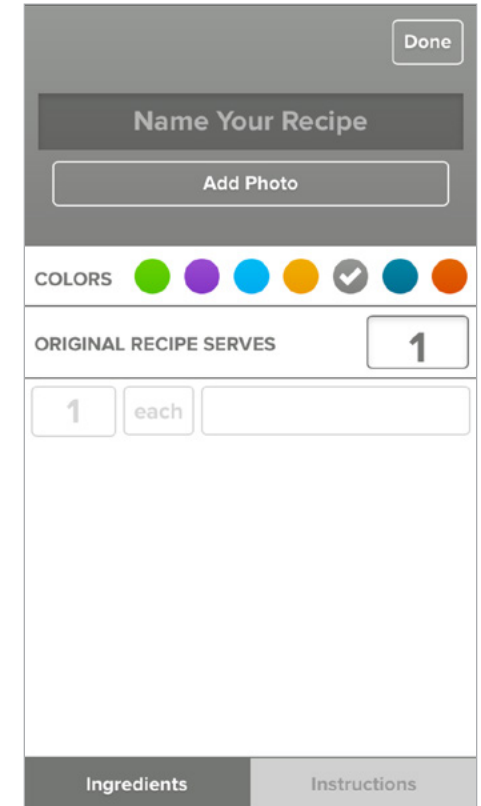
I was surprised to find that there were very few options in the app store for recipe serving converters. This page and the subsequent two pages are the closest examples.

RECIPE CONVERTER

This app converts recipes into different serving amounts. But, the user either has to use the pre-loaded recipes, or has to manually import their recipes into a database.



Changing the serving amount in the box at the top changes the amounts in the recipe below.



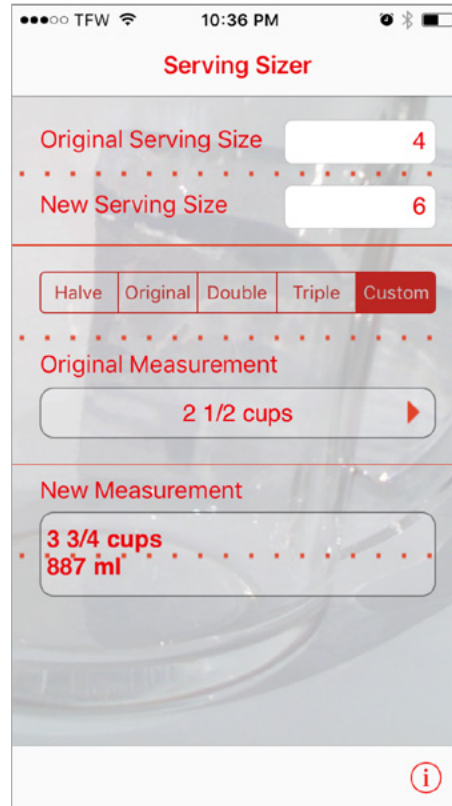
This is the input screen for entering an original recipe

04 Competitive Research

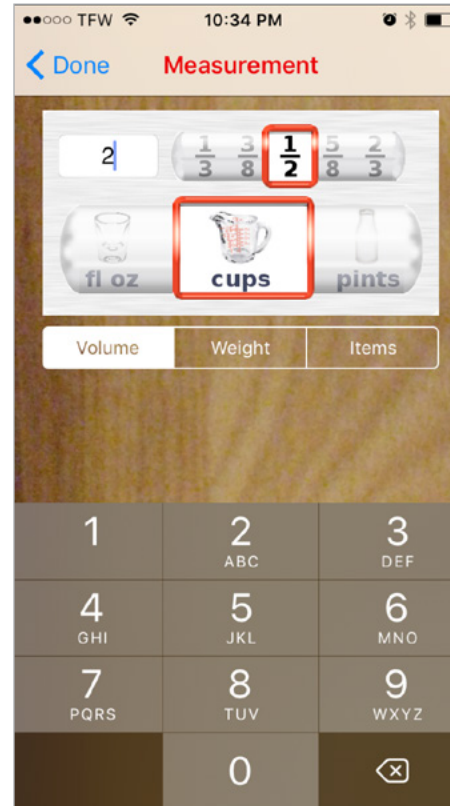
SERVING SIZER

The Serving Sizer app allows the user to convert one measurement at a time. It also converts measurements into different units, like volume and weight.

It doesn't have the option to convert entire recipes at one time, so it's basically just a calculator.



The home screen is where the user enters in the original serving size, as well as the serving size they want.



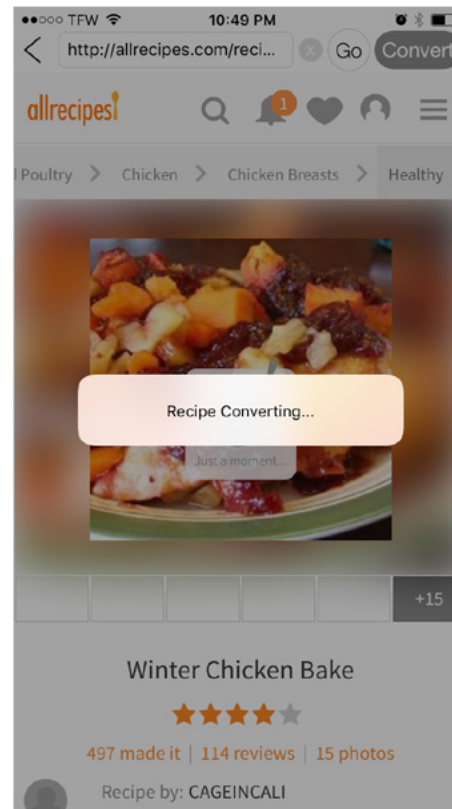
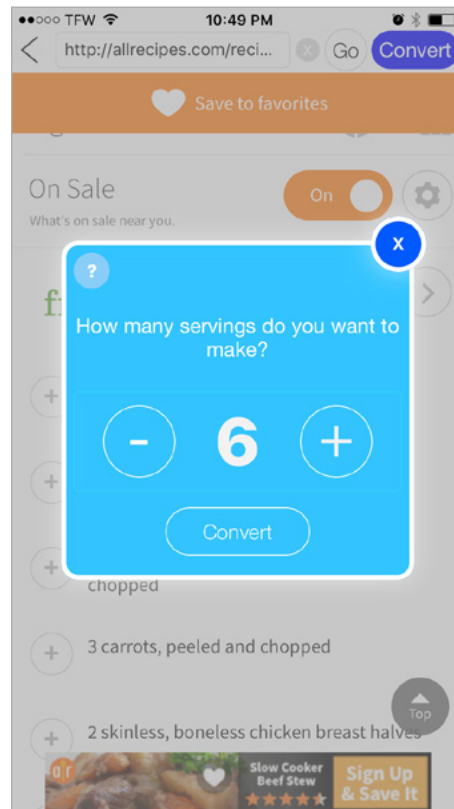
By clicking on the Original Measurement button on the home screen, the user enters in the measurement to be converted on this screen. The user clicks "Done" to go back and see what the resulting measurement is.

04 Competitive Research

RECIPE CONVERT

This app was supposed to be able to import a recipe from a URL and convert it to different serving sizes, but it always froze during the conversion process, so I never got to see the result.

I use a calorie counting app on a regular basis that easily imports recipes from URLs, so I know it's just a bug in this particular app, and not a technological limitation.



05 Sketches

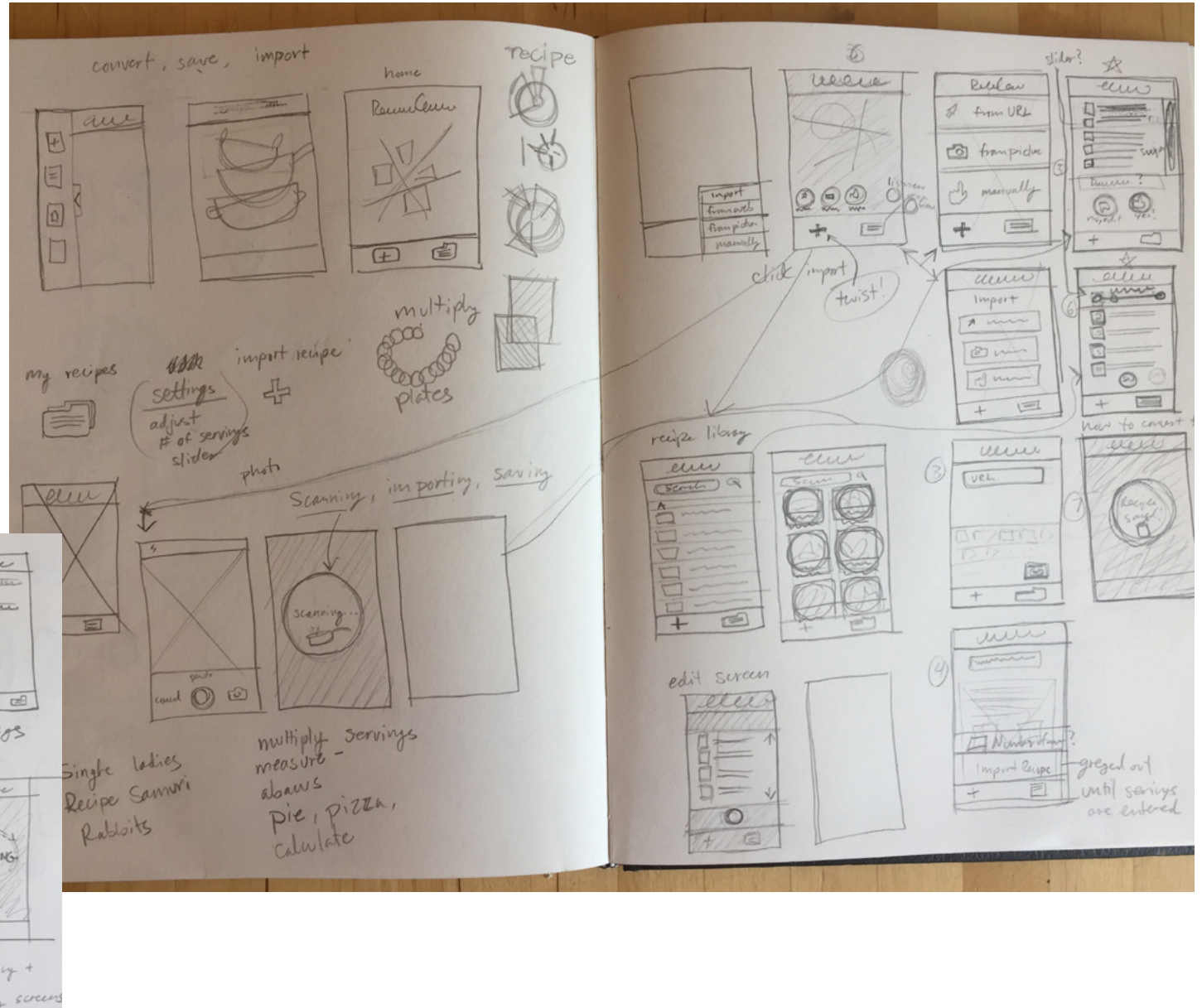
THUMBNAIL SKETCHES

I started out with some smaller, rough sketches to pin down the basic layouts and requirements for each step of the recipe conversion process.

This helped me figure out the flow of each step, and explore a basic look for the buttons, import screens, etc.

Some ideas I had for an app name:

- **Serving Samurai** (images of chopped up items)
- **Single Ladies** (geared towards females)
- **Sue Chef** (illustration of female kitchen assistant)
- **Recipe Resizer**

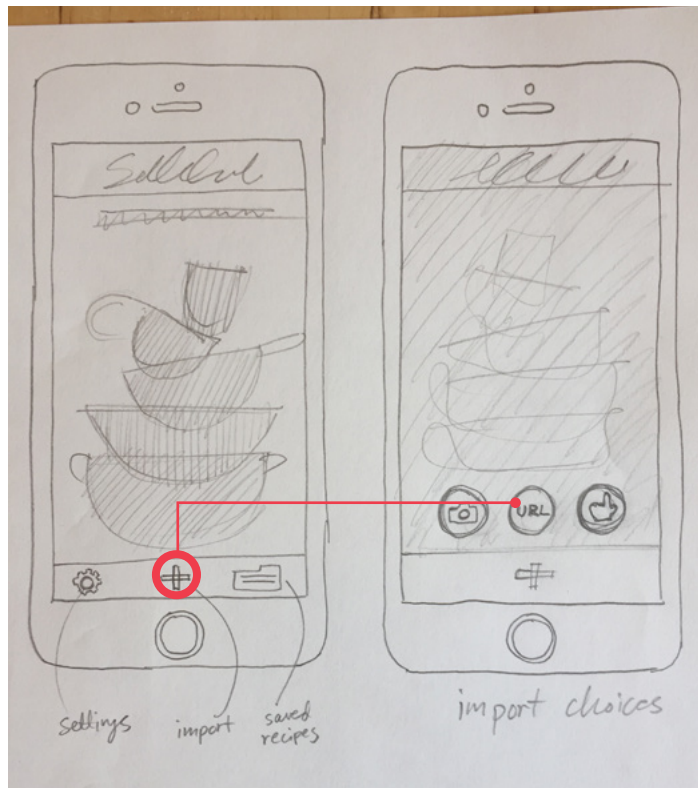


05 Sketches

HOMESCREEN AND IMPORT FROM URL

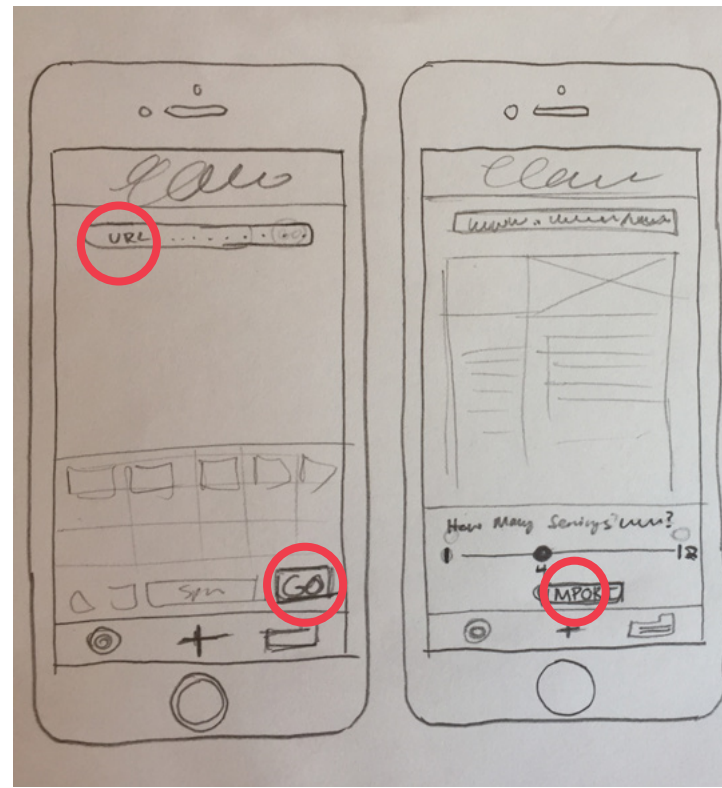
These sketches show the steps for someone to import and save a recipe from a URL.

1



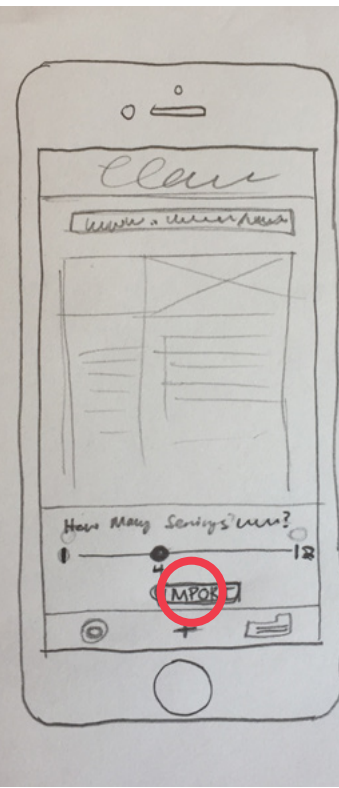
Homescreen with main nav at the bottom: Settings, Import, and Saved Recipes.

2



Pressing the "+" sign brings up three options for importing: URL, Photo, and Manual. The rest of the screen darkens.

3



When the user presses "URL", a search bar appears where the user types or pastes a URL and hits "GO".

4

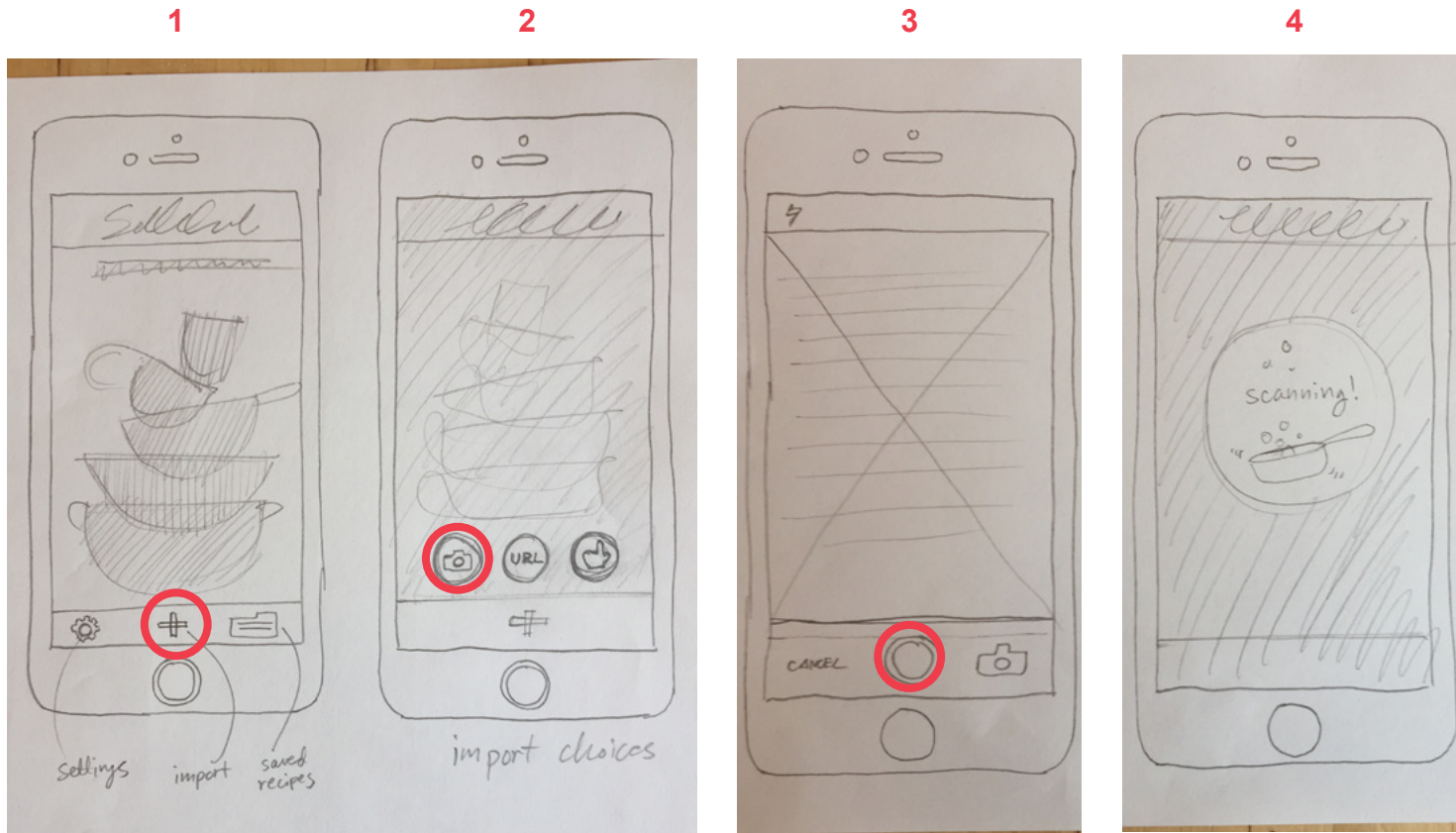


A "Scanning" page with animation while the webpage is being scanned for the recipe.

05 Sketches

IMPORT FROM PHOTO

A recipe may also be imported from a photo.



Homescreen with main nav at the bottom: Settings, Import, and Saved Recipes.

Pressing the “+” sign brings up three options for importing: URL, Photo, and Manual. The rest of the screen darkens.

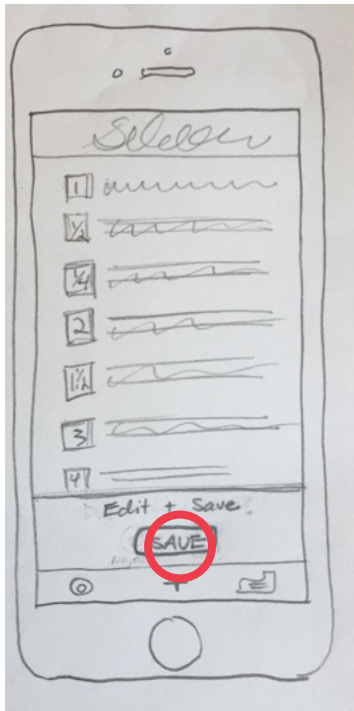
The camera button opens the phone’s camera app and the user takes a photo of the recipe text.

After the photo is taken, a “Scanning” page appears with animation while the photo is being scanned for the recipe.

05 Sketches

EDITING, SAVING, AND ADJUSTING SERVINGS

1



Once the recipe has been scanned, the user can make edits if necessary and save it to the recipe library.

2



The app tells the user that the recipe has been saved. I would like to put a fun illustration/icon with animation on this screen.

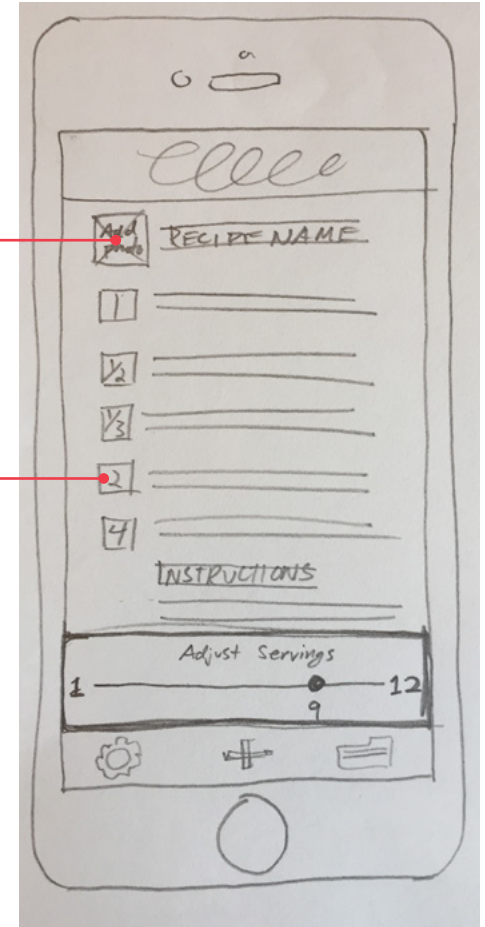
3



Once the recipe has been saved, the servings can be adjusted while the ingredient amounts shift proportionally.

A photo of the recipe may be added here.

The user may also change the amount of just one ingredient and the rest of the ingredients shift automatically. This would be helpful in a case where the user only has a certain amount of one ingredient.



05 Sketches

RECIPE LIBRARY



Every recipe is saved in alphabetical order in the recipe library. The user can search for recipes by keyword.



Any time a recipe is opened, the user may adjust the servings, change the photo, and/or re-save.

06 Target Audience and Scenarios

Examples of people who might like to use Recipe Resizer app:

SINGLE PROFESSIONAL

Kelly likes to watch Food Network and try the recipes on their website, but they often make much more than she can eat. She would like to scale them down to 2-3 servings so she can have enough for dinner, plus leftovers for work the next day.

MOM OF LARGE FAMILY

Sarah has the task of feeding 6 hungry kids and a husband. Most recipes in her favorite family cookbook are for 4-6 servings. She would like to be able to cook enough for her teenagers to have seconds, and for her to have a few leftovers so she can have an easy lunch the next day—without writing all over her cookbook or doing a lot of math in her head.

THE ENTERTAINER

Clayton enjoys barbeques with his friends in the summer, but figuring out how much of his famous BBQ chicken he needs to feed a crowd is a pain depending on how many people are coming over. He would like to save his favorite recipes to his phone and adjust the quantities quickly so he doesn't have to do any math while he's shopping for ingredients for his next party.

07 First User Testing

USER 1 - WEB IMPORT

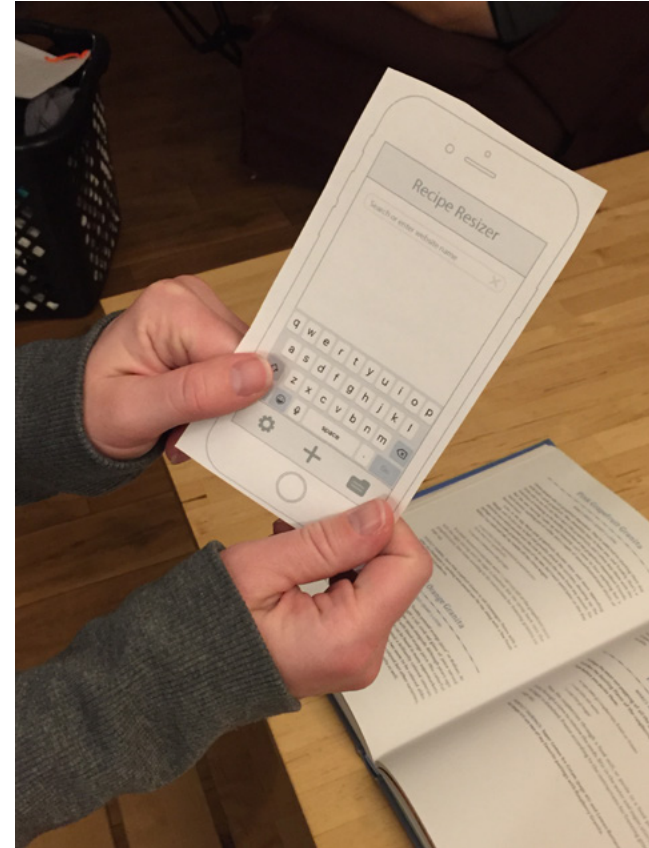
My first user had the task of trying to import a recipe from a webpage and adjust the number of servings. He seemed to have no trouble until he arrived at the “Edit and Save” screen, at which point he didn’t seem to know what to do. I think this was partly because I didn’t have actual recipe text in the wireframe. For the next user tests, I will be sure to use an actual recipe and text so that the tester won’t have to guess what they are doing.

USER 2 - PHOTO IMPORT

The second user tried to import from a photographed recipe. When she got to the camera screen, she wondered what would happen if she took a bad photo, or wanted to cancel the photo. So, I added the option to “cancel” on my revised wireframes.

I realized during this test that I had neglected to add a screen that asks the user to specify a number of servings for the original recipe. This is a crucial part of the calculator.

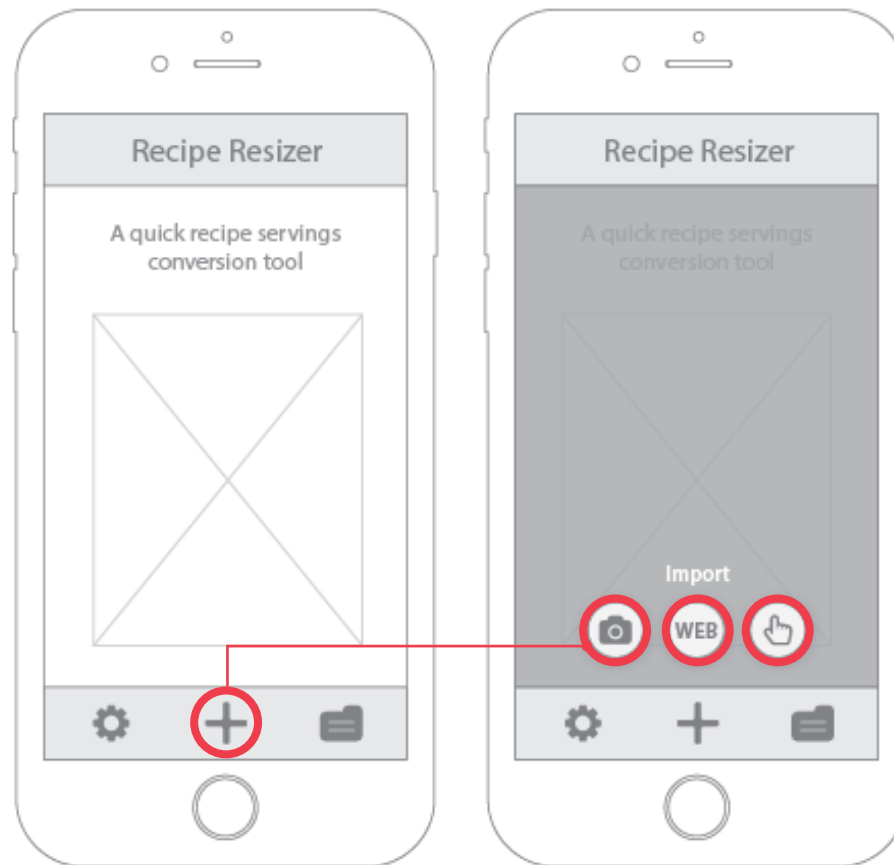
User 2 also felt like the “Import” and “Save” buttons were a little too small, so I made a slight adjustment to those.



08 Wireframes - Home Screen and Import Options

My wireframes are closely matched to my sketches, with a few modifications based on my user testing.

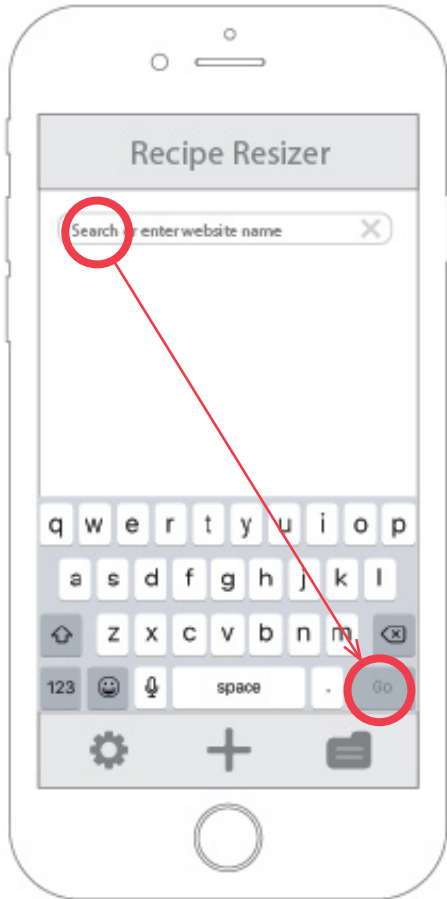
- Larger “Save” and “Import” buttons
- The option to “Cancel” a photo or recipe scan/save
- The option to re-take a photo



Touching the “+” in the nav bar brings up three import options: photo, web, and manual

08 Wireframes - Import from Web

1



When the user presses "URL", a search bar appears where the user types or pastes a URL and hits "GO".

An important requirement of the app is that each recipe must specify an original number of servings in order to make accurate calculations.

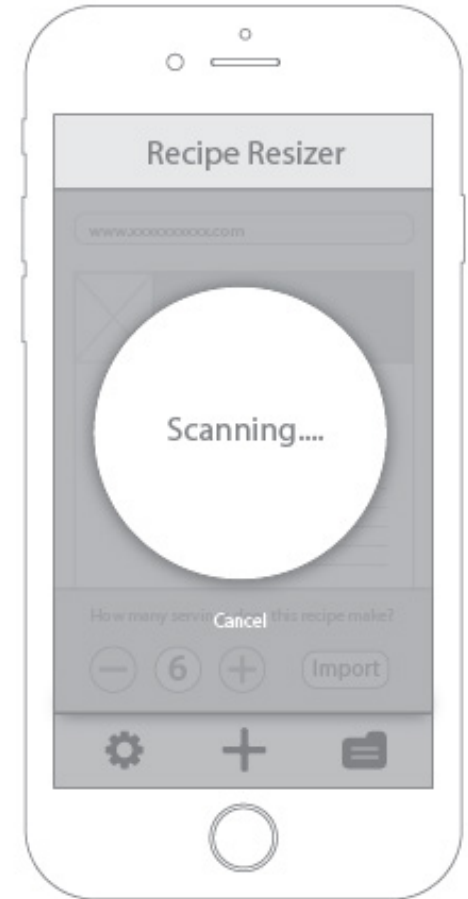
My solution for this was to create a constraint in the import box: The user **MUST** enter a servings amount before the "Import" button can be pressed.

2



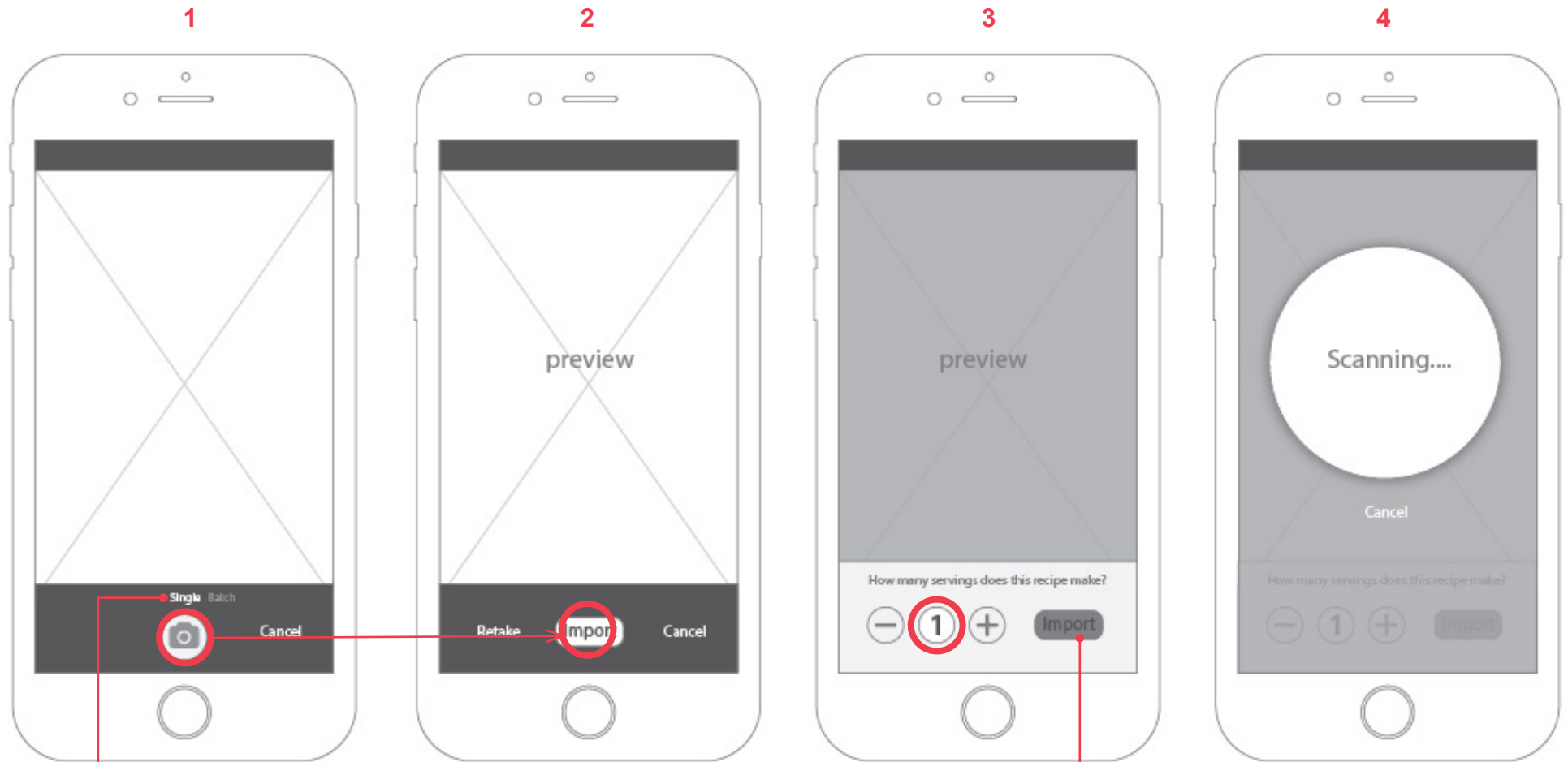
"Import" button is greyed out until the user enters an original servings amount with the "+" button.

3



Website is scanned for the recipe.

08 Wireframes - Import from Photo



User has option to take one photo or a batch of photos (in case the recipe can't be photographed in a single photo)

"Import" button is greyed out until the user enters an original servings amount with the "+" button.

Photo is scanned for the recipe.

08 Wireframes - Editing, Saving, and Adjusting Recipe Servings

Once the recipe has been scanned, the user may edit and/or save the recipe.

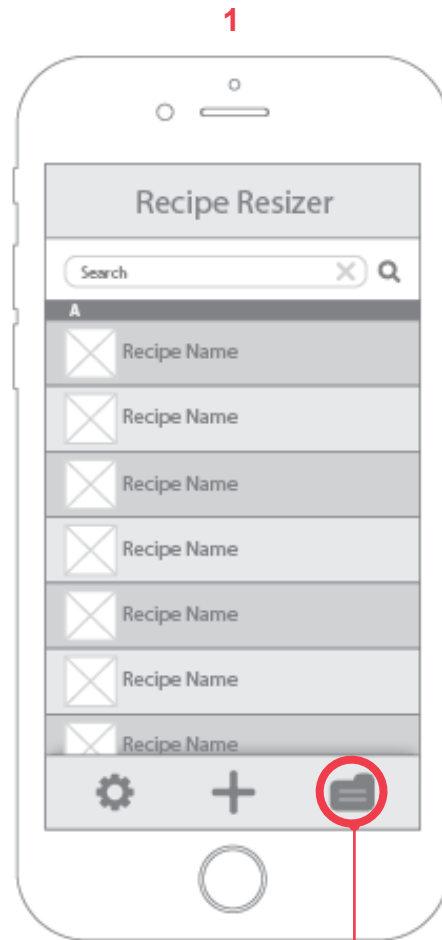
The recipe is now ready to be re-sized and re-saved if desired.



Boxes are for ingredient amounts. User can make edits to amounts and recipe text if needed before saving.

08 Wireframes - Recipe Library

All saved recipes are listed in a library, and sorted alphabetically.



User enters library by pressing the recipe card icon in the main nav



When a recipe is opened, the user always has the option of adjusting the number of servings and re-saving.

09 Second User Testing

With the second round of user tests, I applied visual design. I was able to hone in on a few items that weren't intuitive enough.

MAIN NAVIGATION

All of the users I tested weren't sure what button they should press to import a recipe. Most of them wanted to press the folder icon for the recipe library first. Although I liked the clean look of the icons without any labels, I decided it was necessary to use a word label for each one.

RECIPE IMPORT

Most users weren't sure what "import" button meant once they got to the import screen. I changed the button to "Scan". I also decided to create a clear distinction between parts of the app:

- Import Recipe
- Edit and Save

I added headers at the top of the screen to indicate to the user what part of the recipe creation process they are currently in.

TYPOGRAPHY AND OTHER DETAILS

The text on the import screens was a little too small for the users to see right away, so I enlarged it. I also simplified the "+" and "-" buttons to make the design more clean and clear.



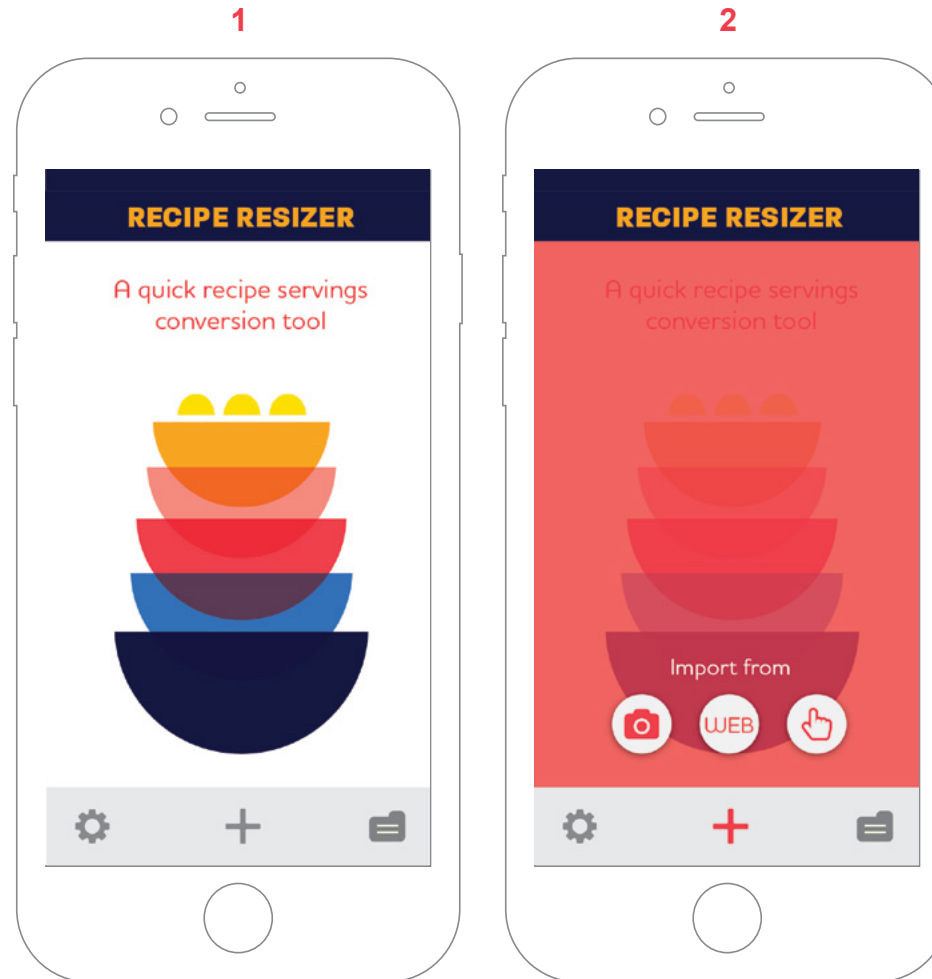
10 Visual Designs - Illustration Exploration

I explored three different illustration directions before selecting a final direction.



10 Final Visual Designs - Home and Main Import Screens

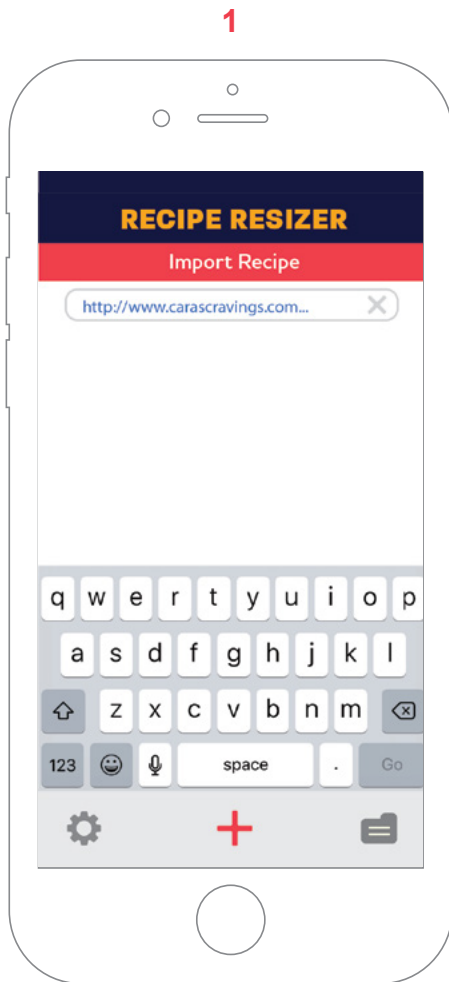
This is the direction I decided to proceed with. I used it in my second round of user tests, and these visuals are the final result of those tests and feedback from my peers.



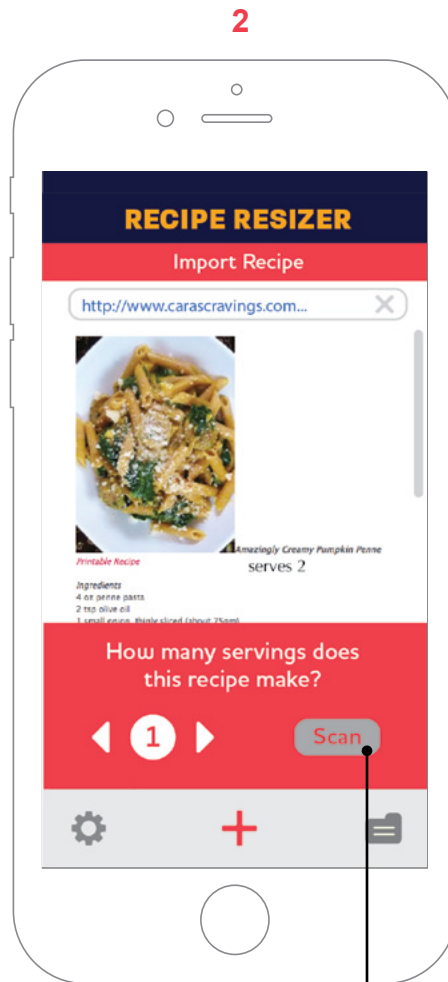
The homescreen illustration is animated when the user first opens the app.

Touching the “+” in the nav bar brings up three import options: photo, web, and manual

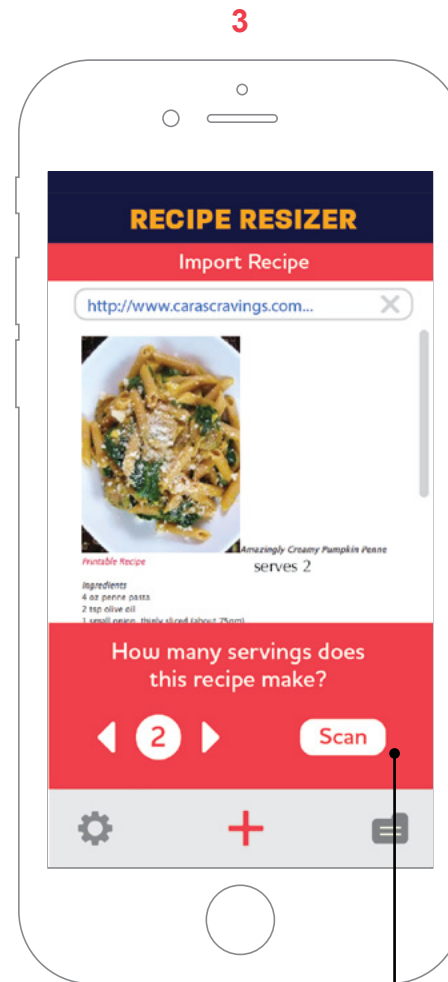
10 Final Visual Designs - Import from Web



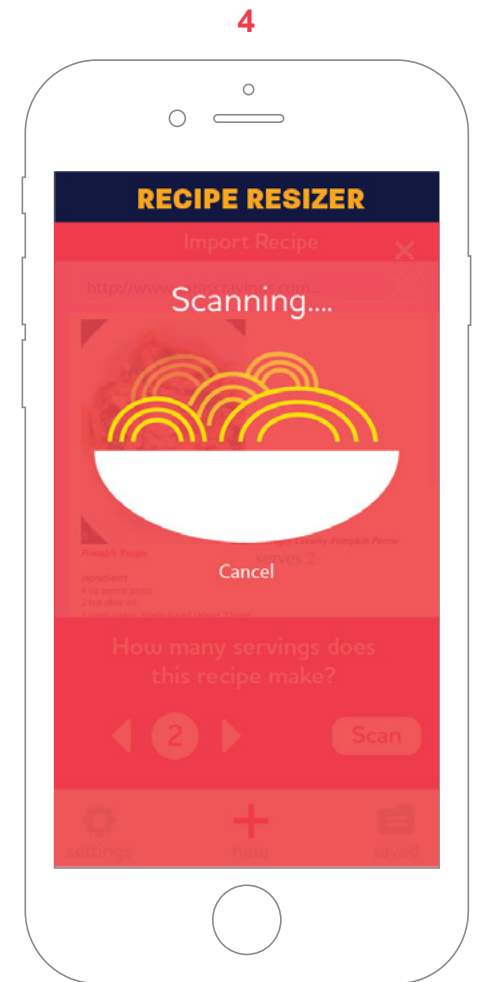
User enters URL and presses "Go".



"Import" button is greyed out until the user enters an original servings amount with the "+" button.

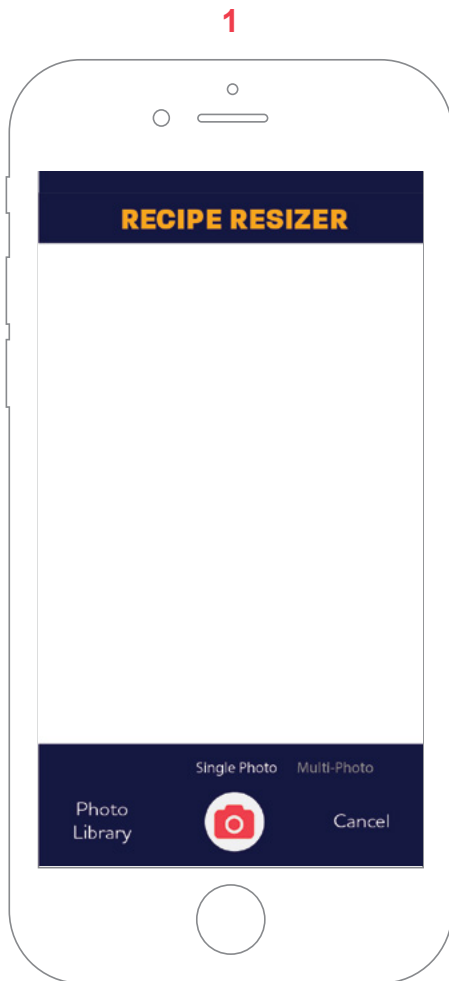


The user has used the arrow buttons to indicate an original serving amount of two. Now the scan button is activated.



Animations of food increasing and decreasing on saving/scanning screens.

10 Final Visual Designs - Import from Photo

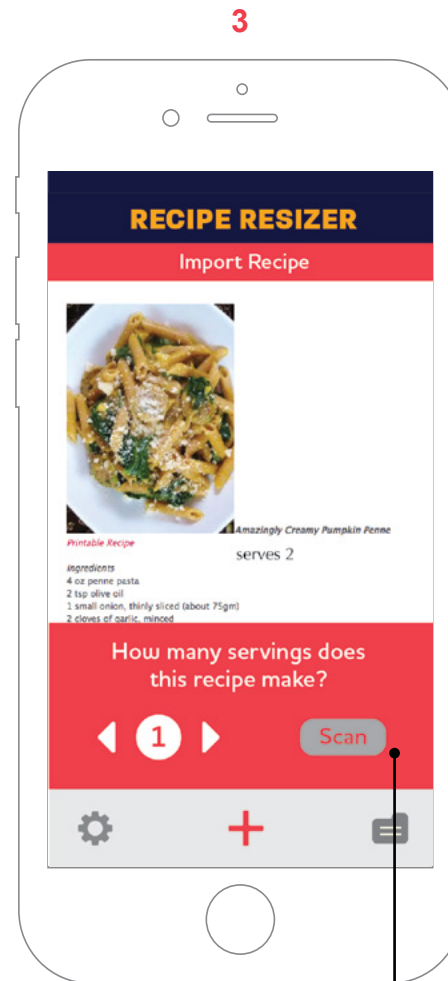


The user may take a photo, or use an existing photo from their phone's photo library.

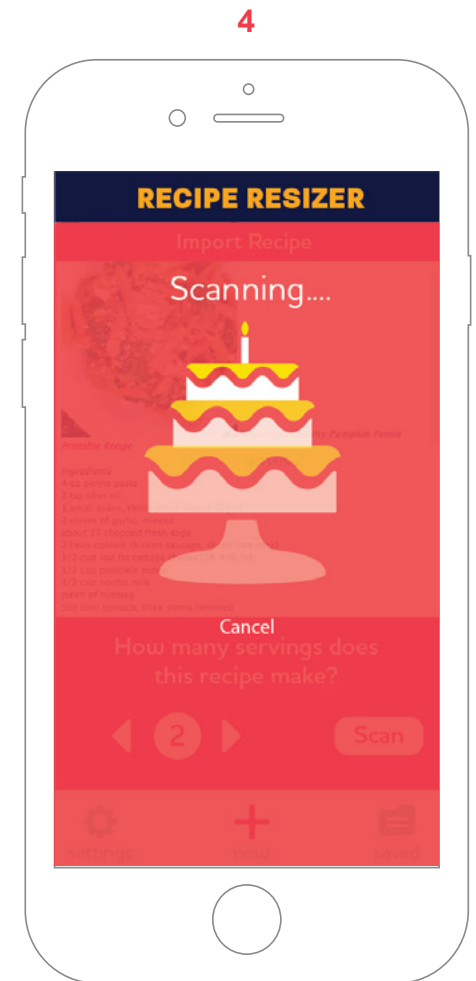
There is an option to take a single photo, or multiple photos.



Once the photo is taken, the user has the option of re-taking it if they are not satisfied with the results.



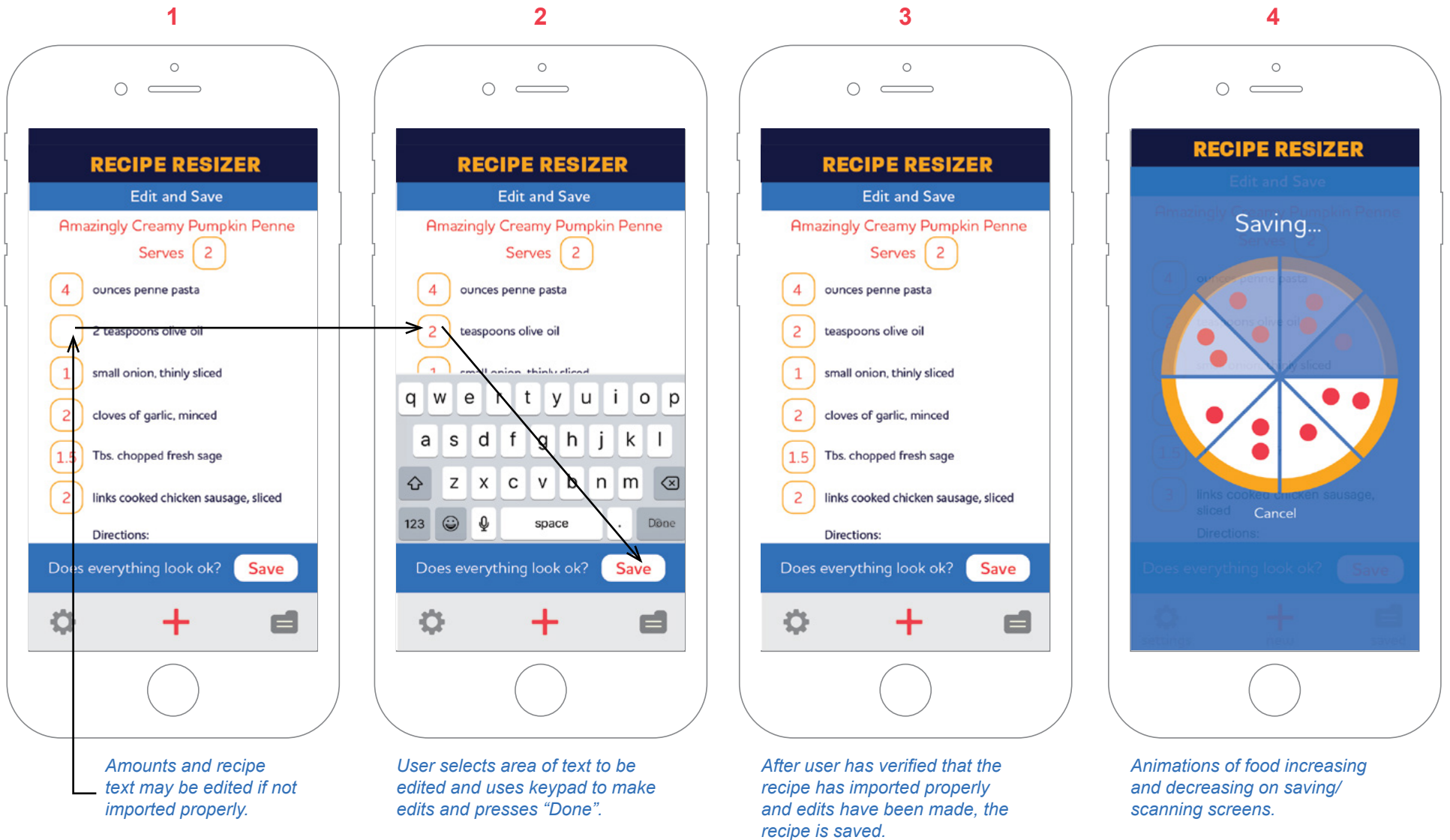
The user has used the arrow buttons to indicate an original serving amount of two. Now the scan button is activated. (greyed-out version of button not shown.)



Animations of food increasing and decreasing on saving/ scanning screens.

10 Final Visual Designs - Editing and Saving Recipes

Once the recipe has been scanned, the user may edit if necessary and save the recipe.



10 Final Visual Designs - Recipe Screen and Resizing Recipes.

Now that the recipe has been imported and saved, the user may change the number of servings with the arrow buttons, and re-save.

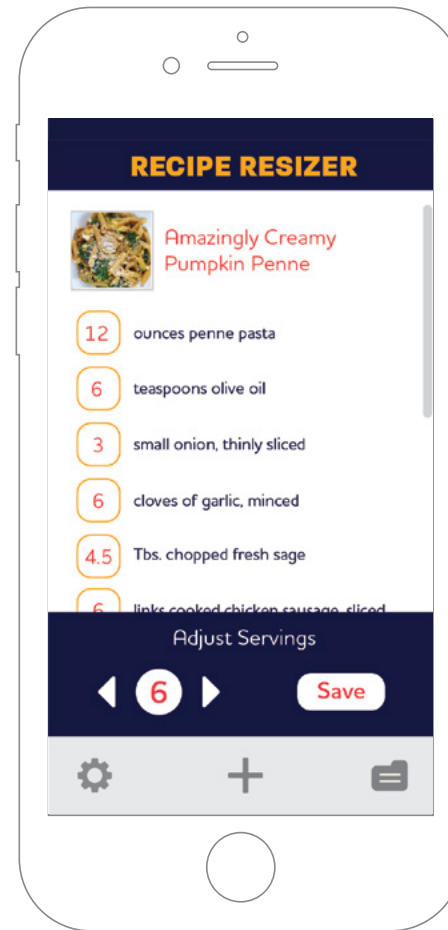


In this example, the user has resized the number of servings from 2 to 6.

10 Final Visual Designs - Recipe Library



Every saved recipe is stored in the app's library, accessed by pressing the folder icon.



The user is always given the option to re-size the recipe on the recipe screen.