

Team A Project
Interactive Cookbook
Stage Three: Create Something!

Parker Siroishka Hardeep Kaler Chris Selinger Richard Chow Abigayle LeFranc



Project Description: Updated Project Idea

Our mobile/web cookbook application will be a new tool that will help users in all aspects of the kitchen. Be it, the user is a beginner or highly advanced cook, this application will have all the resources anyone needs.

Users can search for new recipes in a higher-level search function that will personalize the filter when avoiding certain ingredients, different diets and various allergies. In choosing a recipe, serving sizes can be changed, substitutes for ingredients will be given as well as easy step by step video guidance for any recipe.

This application will also come with tools needed in the kitchen such as a timer, translator and encyclopedia of unknown cooking terms and instructions as well as a unit converter for ingredient amounts.

Finally, one unique feature will include two functions that will help users keep track of ingredients and items they have at home. The pantry function allows users to log and search for food items they have. This function will also notify the user when the expiry date is near, and users can quickly add these items to the applications shopping list. Using the shopping function, users can keep track of what they need and what they should buy later, as well as share this list with others. Anybody can use this application to make things simpler and more organized when in the kitchen.

Updated User Tasks

Must be included

- Searching for and filter through recipes
- Be able to open and easily navigate a recipe in either standard or an expanded mode
 - Standard mode: Previewing a recipe
 - Expanded mode: Cooking with the recipe

Important

- Utilize as a virtual pantry list and shopping list
- Manage, create, save, edit and share recipes

Could be included

- Utilize included tools such as unit converter, cooking timer, instructional videos, and cooking definitions.

Storyboard

Feature: User, Searching For Recipe

The storyboard consists of six panels arranged in a 2x3 grid, illustrating a user's search for a recipe. Each panel includes a stick figure character and a thought bubble or a smartphone screen showing the app's interface.

- Panel 1:** The user is sad and thinking about food. The thought bubble shows a fork and knife with a question mark.
- Panel 2:** The user is searching for a recipe. The smartphone screen shows a search bar with 'Chocolate Cake' and a list of filters: 'Easy', 'Dessert', 'Dinner', 'Breakfast', 'Lunch', 'Snack', 'Drink', 'Beverage', 'Dessert', 'Dinner', 'Breakfast', 'Lunch', 'Snack', 'Drink', 'Beverage'.
- Panel 3:** The user is filtering the search results. The smartphone screen shows a list of filters: 'Easy', 'Dessert', 'Dinner', 'Breakfast', 'Lunch', 'Snack', 'Drink', 'Beverage', 'Dessert', 'Dinner', 'Breakfast', 'Lunch', 'Snack', 'Drink', 'Beverage'.
- Panel 4:** The user has found a recipe. The smartphone screen shows a recipe for 'Chocolate Cake with Frosting' with ingredients like 'Cocoa Powder', 'Sugar', 'Butter', and 'Eggs'.
- Panel 5:** The user is looking at the recipe details. The smartphone screen shows a list of ingredients: 'Cocoa Powder', 'Sugar', 'Butter', 'Eggs', 'Vanilla', 'Salt', 'Baking Powder', 'Baking Soda'.
- Panel 6:** The user has decided to use the recipe. The thought bubble shows a cake with a smiley face.

Discussion of Task Centered System Cognitive Walkthrough

The process that was taken during the task centered system cognitive walkthrough was to break up our user tasks into different steps, then evaluate them based on the questions in the task centered walkthrough template, asking ourselves whether the user would have the training or knowledge to do the task step, whether it's believable they would do it and are they motivated to do it. Afterwards, depending on our answers to those questions, we would comment on the reason why the users would respond to those questions the way that they do. Throughout this process, we found that our user tasks fit the use cases very effectively, with all the responses being yes to the questions. It is also important to note that the answers to the questions are based on the notion that the user has experience with a smartphone. If a user has never used a smartphone before there will be an unfamiliarity with the functionality we made.

Reflection

What went well

The Brainstorming went well, as everyone was involved in creating ideas and were willing to edit and refine other people's ideas as well see how our idea mesh together. This all came together and formed the skeleton for our prototype. Having done the structure in this step the idea polishing step and creating a storyboard went very well and lead to the prototyping step going smoothly.

What went poorly

The Affinity Diagram part went poorly: there was issue with understanding what exactly an affinity diagram was as well as how it would interpret about our ideas. This costed time as we created multiple attempts at what the affinity diagram could and should be but we received clarification later which helped us with our understanding.

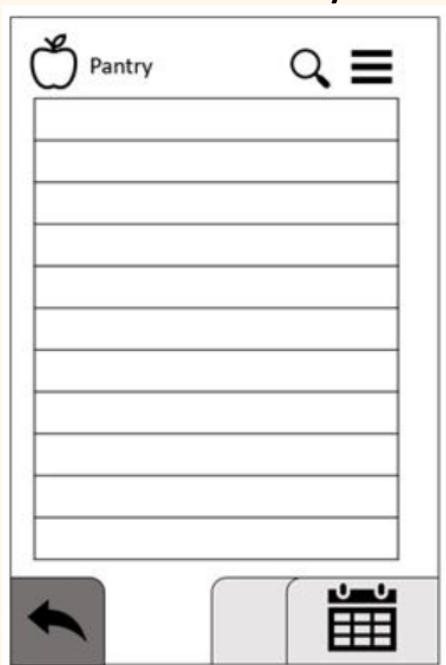
What would we do differently

What we would do differently if we did this again would be to define properly what an affinity diagram should be earlier on and work within that definition. For brainstorming, we'd like either more time or maybe a tool to help facilitate more unique ideas for the brainstorming step.

Appendix

Sample of Sketches

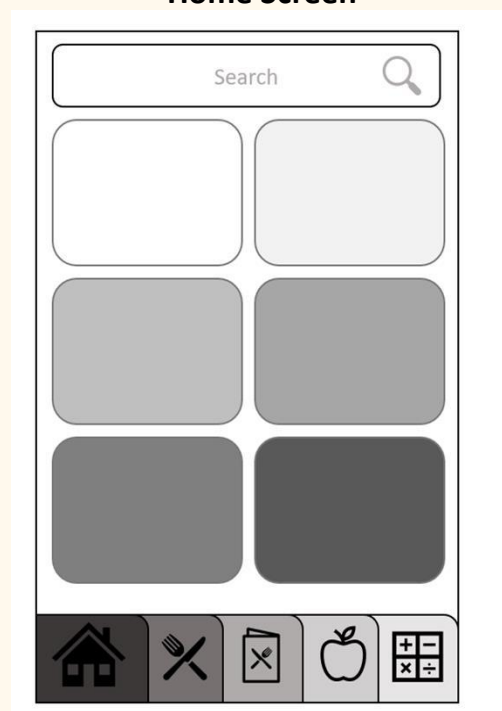
Calendar Pantry



Gesture Control



Home Screen



Menu

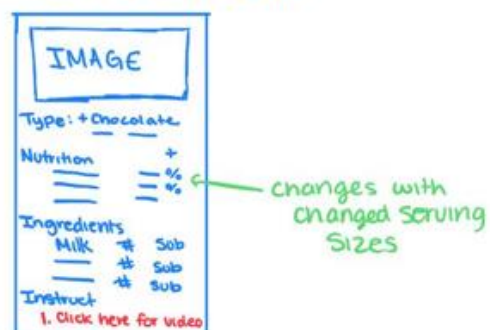


Pantry List



Recipe Start Page

Nutrition/Instructions



Recipe Step

STEP 4

While

- Water is boiling
- Oven is preheating

Do

- Dice Tomatoes
- Dice Mushrooms



4/10



Search Filtering

Searching for recipes that include rice

Recipe Title 1, INCLUDES rice.
Required Ingredients: ...

Sample picture

Recipe Title 2, includes Rice.
Required ingredients:

Sample picture

Search Landing Page

Search

Current Tags:

Recently Searched:

Shopping List

Gesture Control

Shopping List

sugar

Quantity:

Alternatives: ...

In Cart

In Pantry

ListPantryCart

Technique Model

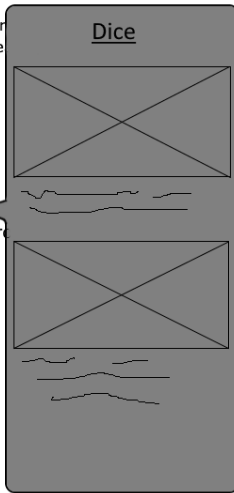
STEP 4

While

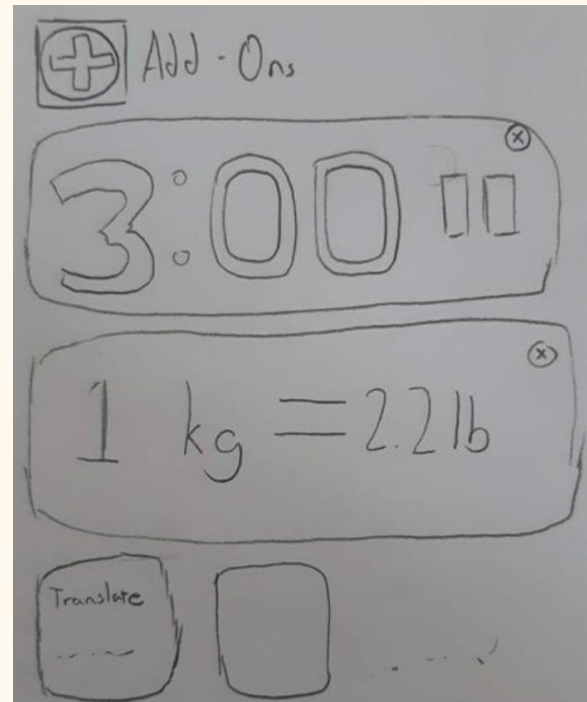
- Water is boiling
- Oven is preheated

Do

- Dice Tomatoes
- Dice Mushrooms



Tools



Affinity Diagrams

Knowledgebase of Recipes

Omnibar Search

Savable Search Preferences

Related Results to Search

Display Recipe image on search result

Multi-dimensional Search Filtres

Multi-dimensional Search Filtres can be added and removed dynamically

Cooking Assistant

Conventional Cooking Tools Included

Display each recipe step incrementally on their own page

Cooking tools integrated into each step if needed

Modal pops up to explain unknown cooking terms

Brief overview of recipe before step-by-step instructions

Gesture / Voice control for going to next recipe step

Inventory Management

List all ingredients you have currently in your house (Pantry List)

Search recipes that include ingredient in pantry

Section owned ingredients into an expired section if unusable

Calendar to indicate expiry dates more intuitively

In a recipe, indicate which ingredients you already own in your pantry

Add recipe to shopping list

Change needed amounts based of serving size choice

Cognitive Walkthrough

CPSC 481 – Fall 2019

University of Calgary

Task Centered Design Walkthrough Template

Modify the design to suit your report formatting style if needed. Add as many pages as you need (you probably will need few pages for each task).

Task: Navigating Recipe from Recipe Page

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
Open recipe	Yes	Yes	Yes	
Change serving size	Yes	Yes	Yes	(Amount of people it feeds)
Add substitutions	Yes	Yes	Yes	Button saying substitutes for high risk items
Start recipe navigation	Yes	Yes	Yes	Big red button saying "Start"
Navigate through recipe	Yes	Yes	Yes	Arrows navigating each step
Rate recipe	Yes	Yes	Yes	At end of recipe (After all of the steps)

Task: Searching for a Given Recipe

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
From home, go to search page	Yes	Yes	Yes	Would be a magnifying glass on the home page
Add a saved preference	Yes	Yes	Yes	Will be able to hit a green check mark to make it easy to add a preference that will be saved the next time you search
Add to search (filter)	Yes	Yes	Yes	A prompt in the placeholder text
Add another filter to existing search	Yes	Yes	Yes	Will be a "Related Searches" section that adds filters onto the search related to initial search
Remove existing filter on current search	Yes	Yes	Yes	Will be a red "X" next to the filter that allows users to easily remove a filter
Select recipe	Yes	Yes	Yes	Select the name of the recipe that matches your search

Task: Using a Tool

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
From home click "Wrench Button"	Yes	Yes	Yes	
Select Tool you want to use	Yes	Yes	Yes	Will have Unit Converter, Timer, Language Preference, Encyclopedia

Task: Using Unit Converter Tool

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
From home click "Wrench Button"	Yes	Yes	Yes	At bottom right of the home screen
Click on "Unit Converter"	Yes	Yes	Yes	Under Tools Menu
Submit initial measurement	Yes	Yes	Yes	Will have ex. Cups. Will be a drop-down menu
Submit the expected measurement	Yes	Yes	Yes	Will have Convert to (ex. milliliters), Will be a drop-down menu
Submit the value you want to be converted	Yes	Yes	Yes	Will have "Value to convert" (The value required)
Set a rounding for decimal numbers	Yes	Yes	Yes	Will have 4 buttons, one for each number of decimal places
Click Convert Button	Yes	Yes	Yes	Big button

Task: Using Timer Tool

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
From home click "Wrench Button"	Yes	Yes	Yes	At bottom right of home menu
Select time you want to countdown from	Yes	Yes	Yes	Will be a dropdown menu that goes up to 2 hours (120 minutes)
Click start timer	Yes	Yes	Yes	Red button at bottom of the tool "Start"
Click on "Timer"	Yes	Yes	Yes	Under Tools Menu

Task: Using Language Preference Tool

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
From home click "Wrench Button"	Yes	Yes	Yes	At bottom right of home menu
Click on "Language Preference"	Yes	Yes	Yes	Under tools menu
Select preferred language	Yes	Yes	Yes	On drop-down menu that holds popular languages (ex. English, French, Spanish)

Task: Using Encyclopedia Tool

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
From home click “Wrench Button”	Yes	Yes	Yes	At bottom right of home menu
Click on “Encyclopedia”	Yes	Yes	Yes	Will be under tools menu
Search term you are looking for	Yes	Yes	Yes	Search bar at top of the page that will parse through the terms
Select term	Yes	Yes	Yes	Click on term that is listed
Read the explanation of term	Yes	Yes	Yes	A textbox containing the definition of the term
Possibly watch video associated with it	Yes	Yes	Yes	Will have a video after the explanation further explaining the term

Task: Using Recipe Manager to Create a Recipe

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
Click recipe manager button	Yes	Yes	Yes	Fork and knife button
Click on create button at bottom	Yes	Yes	Yes	Big button
Enter Title	Yes	Yes	Yes	Textbox to add title
Add ingredients	Yes	Yes	Yes	Dropdowns for each ingredient and serving sizes
Add steps	Yes	Yes	Yes	Adding steps to given recipe
Add pictures	Yes	Yes	Yes	Will prompt for pictures of recipe
Preview	Yes	Yes	Yes	Big button at end saying “Preview”
Save	Yes	Yes	Yes	Big button saying “Save”

Task: Using Recipe Manager to Create a Recipe (Continued)

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
Publish	Yes	Yes	Yes	Big button with “Publish” on it

Task: Adding to the Shopping List

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
Click on "Cart" icon	Yes	Yes	Yes	Button at bottom of the screen
Search for items already in your shopping list	Yes	Yes	Yes	Search bar
Add item to shopping list	Yes	Yes	Yes	Will be in the search as well as how many you want to add
Cross out items on shopping list	Yes	Yes	Yes	Click Line button to cross out the item
Remove items from shopping list	Yes	Yes	Yes	Big red "X" next to item
Share shopping list	Yes	Yes	Yes	Button at bottom of list sharing to other users
Substitute item from list	Yes	Yes	Yes	If it has run out at the store

Task: Adding to the Pantry List

Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
Click on "Cart" icon	Yes	Yes	Yes	Button at bottom of the screen
From shopping list, click on "Pantry List"	Yes	Yes	Yes	Button at top of the page with "Pantry" on it
Re-add expired items	Yes	Yes	Yes	Green checkmark next to item
Delete items from pantry list	Yes	Yes	Yes	Red "X" next to item
Add items to pantry	Yes	Yes	Yes	Button on the side "+" to add an item to the list

Portfolio

<https://the-a-team-d0122b.webflow.io/>