

Lo-Fig Prototyping & Usability Testing



Overview



Team Foodies



Andy H.
'23



Dax D.
'22



Star D.
'23



Kyle N.
'23



Needfinding
Agency,
Ownership, &
Social Identity



Research & Values
More personalizable
and fostering
inclusion



Sketching
Solidified mobile
design interface



POV & Experience
Managing uncertainty
to having a companion

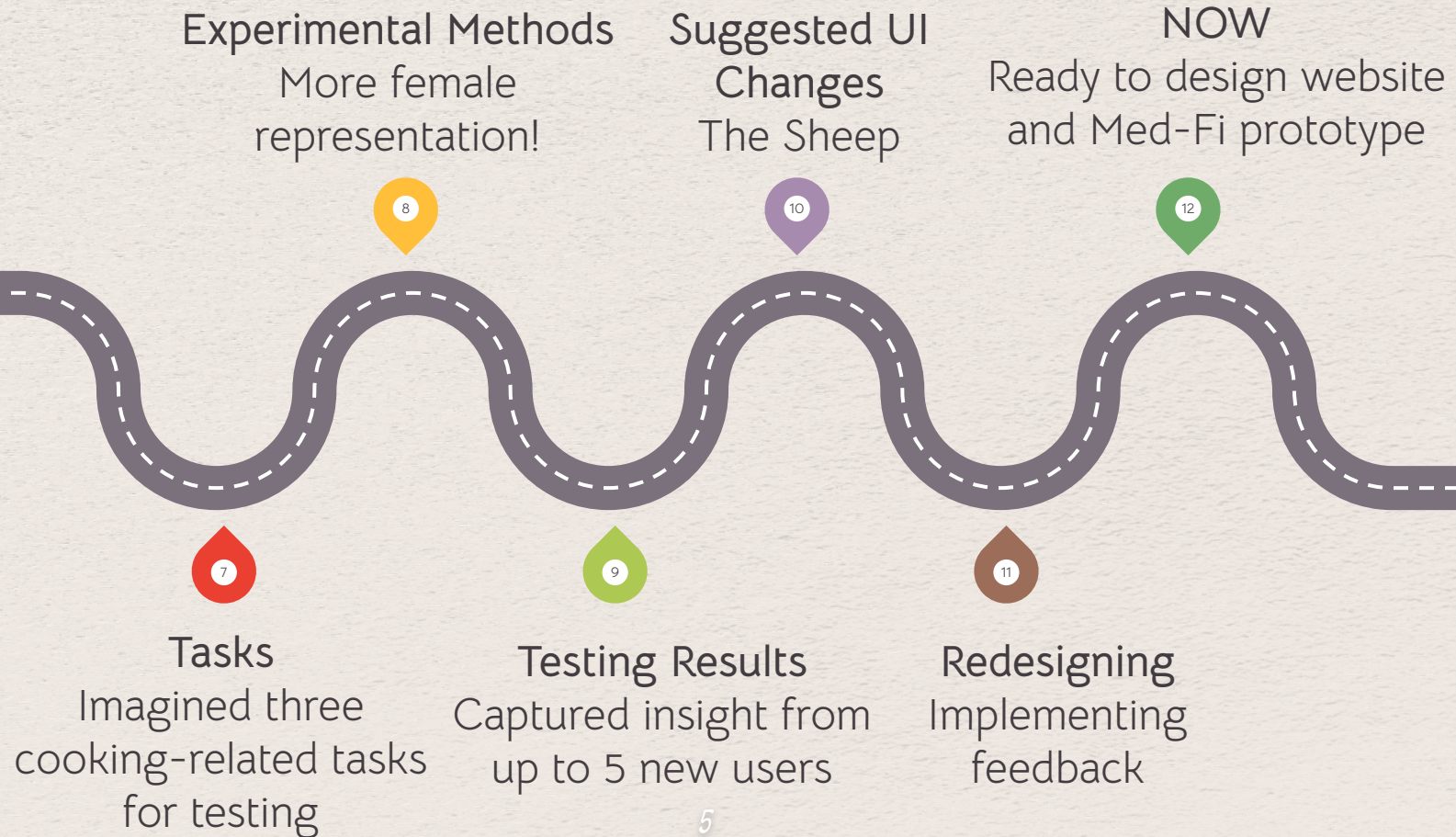


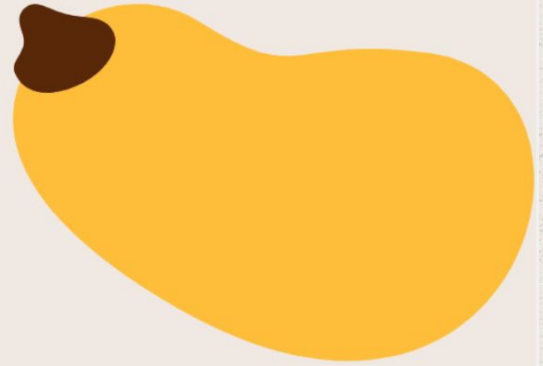
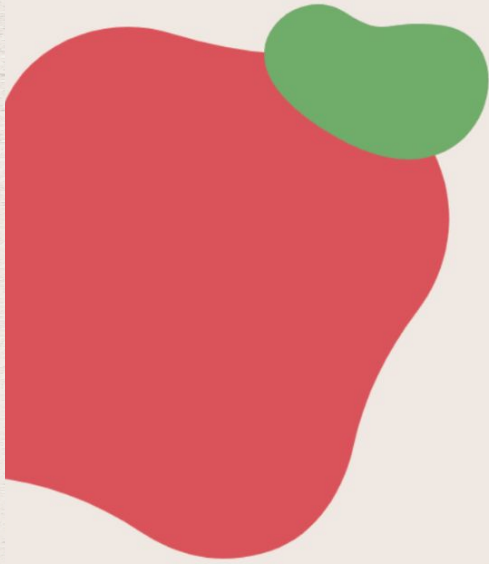
Concept Video
Visualizing our
companion and tasks



Lo-Fi Prototype
Constructed & digitized
the best mobile UI







Cher Shepherd

Guiding you to your goals in the kitchen





Recipal



Chef Shepherd



Recipal



Team Mission Statement



Value Proposition

Helping you cook recipes *your way*



Mission Statement

Recipal aims to help users overcome uncertainty about the recipes they are making by helping them understand nutritional value, make modifications, and learn cooking techniques. By making cooking fun and informed, Recipal creates a more welcoming and approachable cooking environment.

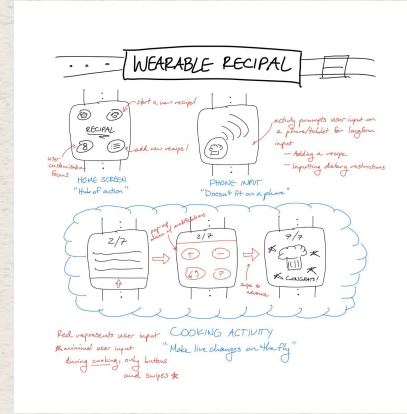
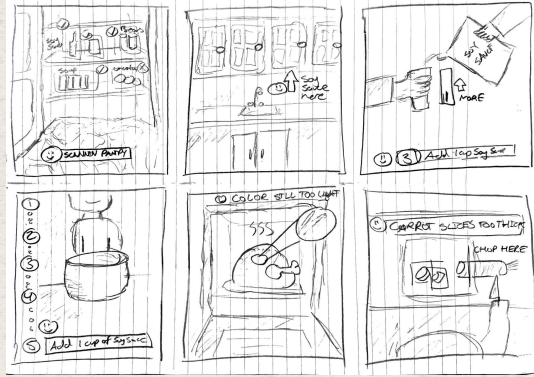
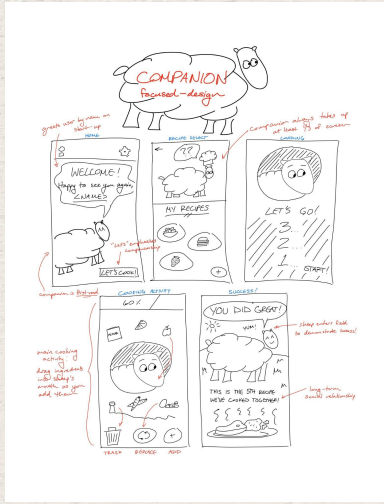


Selected Interface



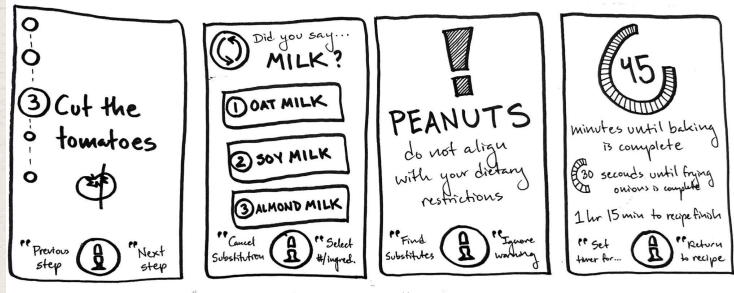
augmented reality

companion-based

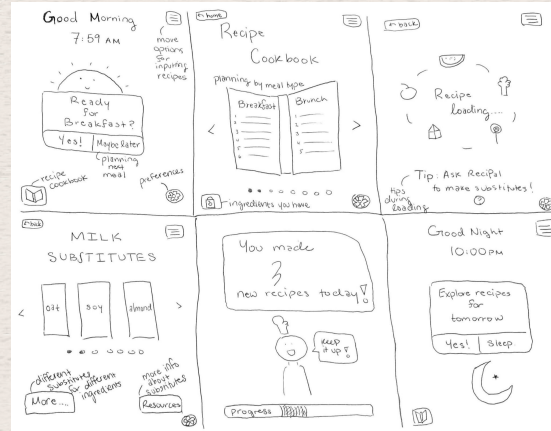


wearable

5 Interfaces



hands-free



context-based

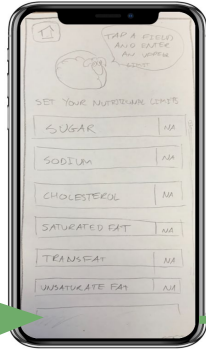
Lo-Fi Prototype



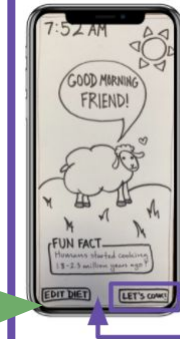
EDIT DIET



SELECT DIETARY NEEDS



SET NUTRITIONAL LIMITS



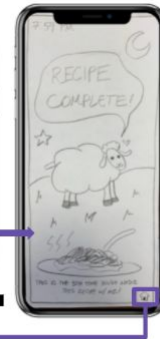
HOME



CHOOSE RECIPE



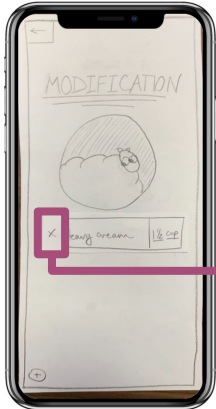
LIVE STEP-BY-STEP



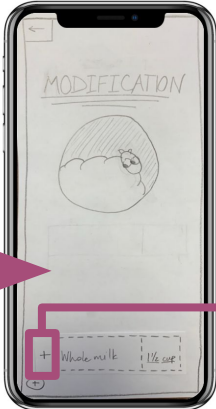
COMPLETION & PROGRESS

CHOOSE/MAKE RECIPE

MAKE MODIFICATION



DELETE INGREDIENT



ADD INGREDIENT

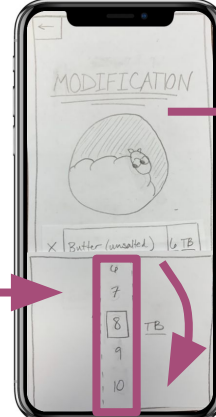


BACK TO RECIPE

MAKE MODIFICATION W/ CUSTOM DIET



CHOOSE INGREDIENT



CHANGE MEASUREMENT



CUSTOM DIET NOTIFICATION

Tasks



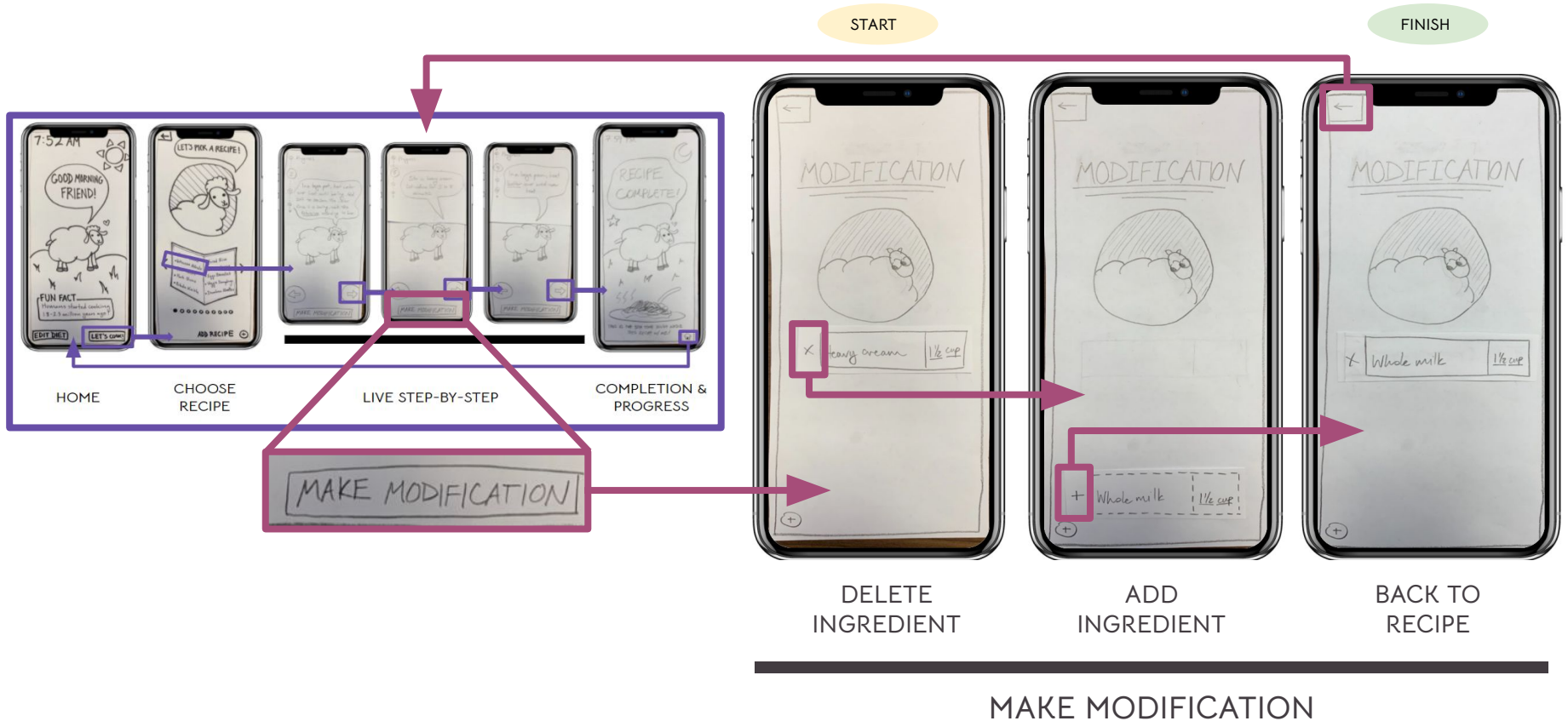
Task #1

Select a specified recipe from the database and navigate through the steps to recipe completion (with no modifications)



Task #2

Navigate through the steps of a recipe to completion, performing a basic modification



Task #3 (pt. 1)

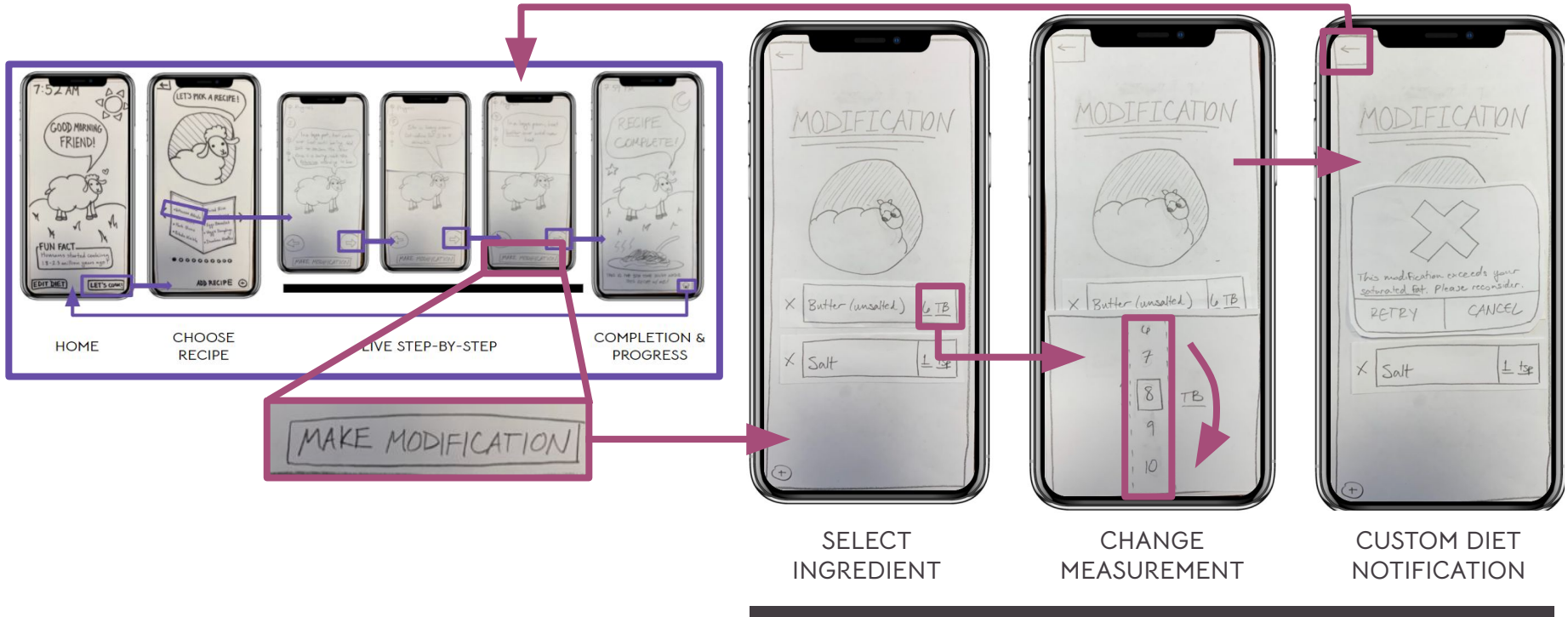
Input nutritional limits and navigate through the steps of a specified recipe, performing modifications that are accepted/rejected intelligently based on their dietary restrictions.



Task #3 (pt. 2)

Input nutritional limits and navigate through the steps of a specified recipe, performing modifications that are accepted/rejected intelligently based on their dietary restrictions.

FINISH



MAKE MODIFICATION W/ CUSTOM DIET

Experimental Method



5 new testing participants 

More female-identifying participants 

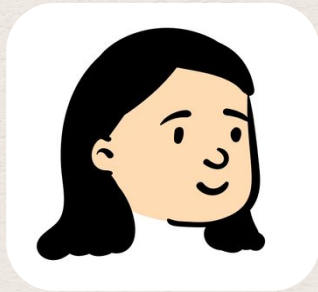
Diversifying the age-range 

Learnability and flexibility 

Testing Methodology



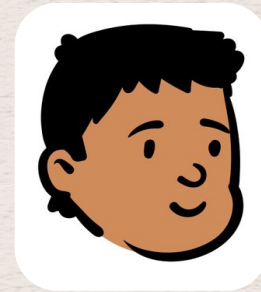
5



4



3



2



1

Measurement

We were all notetakers and facilitators at some point!

Timing



Aesthetics



Feedback



Movement



Companionship



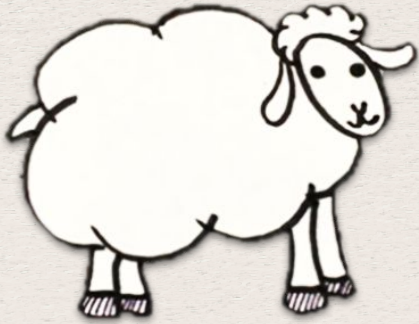
Accessibility



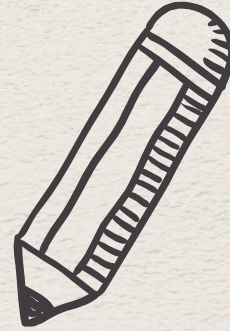
Experimental Results



✓ Things That Worked



- ◆ Enjoyed cooking w/sheep
- ◆ “Friendly,” “fun,” “cute,” “positive,” “motivational”



Generally, users were able to make modifications to the recipe successfully

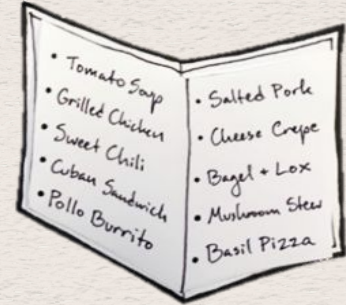


✗ Things That Didn't Work



Hierarchy of Scale

- ◆ Sheep too big, buttons too small
- ◆ Sheep too big, menu too small

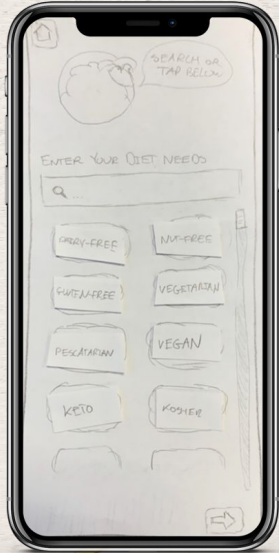


Menu

Needs organization



✗ Things That Didn't Work



Edit Limits Unclear

- ◆ Got lost on first page of Edit Diet
- ◆ Nutritional Limits Options hidden on second page



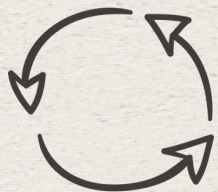
Substitution Confusion

- ◆ Unsure if substitution went through
- ◆ Ingredient text didn't change
- ◆ No msg/confirmation





Things That Participants Wanted



Substitutions

Substitution effects

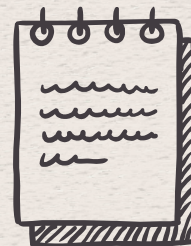
Substitute at beginning of recipe



Ingredients + Steps

Ingredient information

Images of ingredients/ steps



Additional Features

Notepad

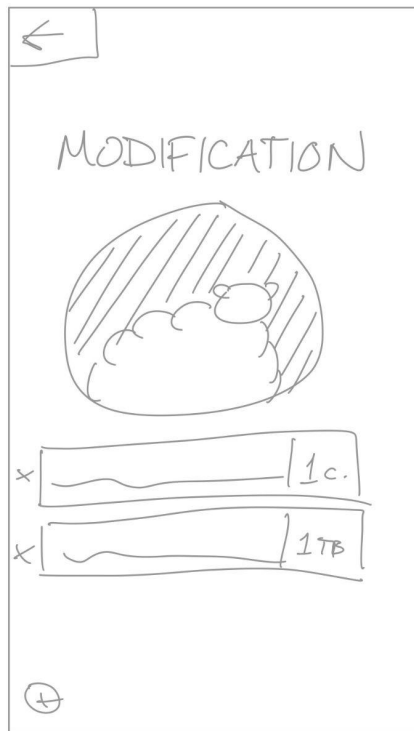
Estimated calorie counts for ingredients/recipe



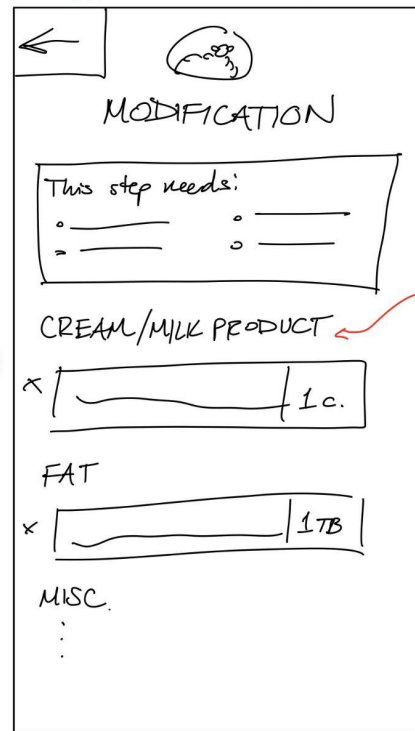
Suggested UI Changes



Improving Substitutions



REPLACEMENT SCREEN



guidance

Summary



Key Takeaways

We learn more from people!

"Fun & motivational!"

People enjoy
Cooking Companions

and find it very entertaining.

People want more information about

Ingredients

And how to make substitutions and additions

Hierarchy Of Scale

People want more

Confirmation

from the UI after doing certain tasks

"Easy to use"



Thanks!

