



Value Proposition Helping you cook recipes *your* way

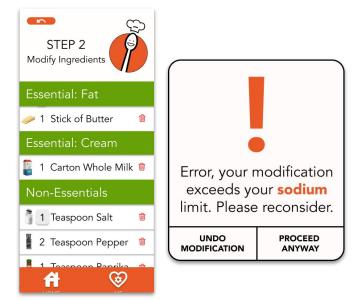
Problem/Solution Overview

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.

Values Encoded

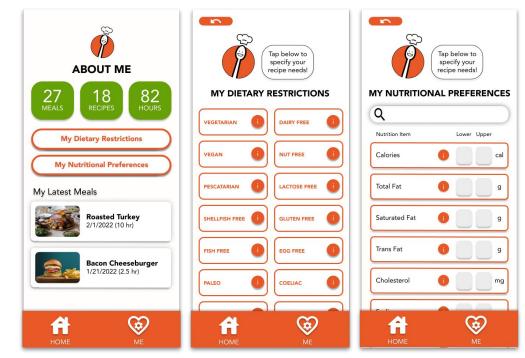
We are designing Recipal with the guiding values of **health**, **inclusion**, **wellness**.

Recipal promotes health by helping people cook meals that meet their individual nutrition goals.



Users are alerted when making a recipe modification that conflicts with their defined goals.

We promote **inclusion** by recognizing that everyone eats uniquely and therefore can customize Recipal to their diet.



On our Profile Hub, each user can input their specific dietary restrictions and nutritional preferences.

We also recognize that wellbeing is holistic and extends beyond nutrition. Therefore, we promote **wellness** via the social companionship that Recipal offers.



Spoonie, our friendly mascot, remembers your name and how many times you've cooked together.

Values Conflicts

Health might conflict with **inclusion**. It is difficult for a truly inclusive cooking app to adopt universal standards for what is "healthy" for all people. Health needs vary, and if we want to include all users, we have to take special care to consider what we promote as "healthy" or "unhealthy" to our users.



Even with this many diet categories, it's difficult to capture everyone's diet needs. What if someone is allergic to only red apples?

Values Conflicts

Health may also conflict with **wellness**. It might be appropriate for a person to occasionally cook meals that would be considered unhealthy if it contributes to their wellbeing. What if, for example, a person wants to make a meal that impresses their friends and family (wellness) but in the process might sacrifice taste for nutrition (health)?



It's difficult to make diet suggestions without knowing the context of users' decisions.

Usability Goals & Key Measurements

Usability Goal Key Metric

Learnability

Flexibility

- → Is it faster to make a modification to a recipe the 2nd time?
- → Do users learn from the nutritional advice Recipal gives (i.e. don't make the same mistake twice?)

- → When a user goes to enter a diet preference, is it there?
- → When the user wants to make a modification to a recipe, are they able to?

Representative Tasks

Simple

Browse a database of recipes and select one.

Moderate

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

Complex

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

We changed one!

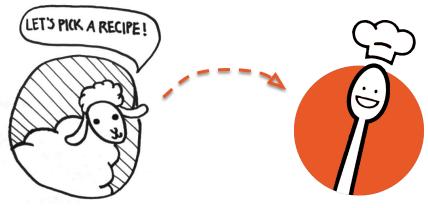
Based on studio feedback, we decided to simplify our most basic task.

Simple (Old)

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

Simple (New!)

Browse a database of recipes and select one.



We've changed our mascot based on studio feedback!

UI Changes

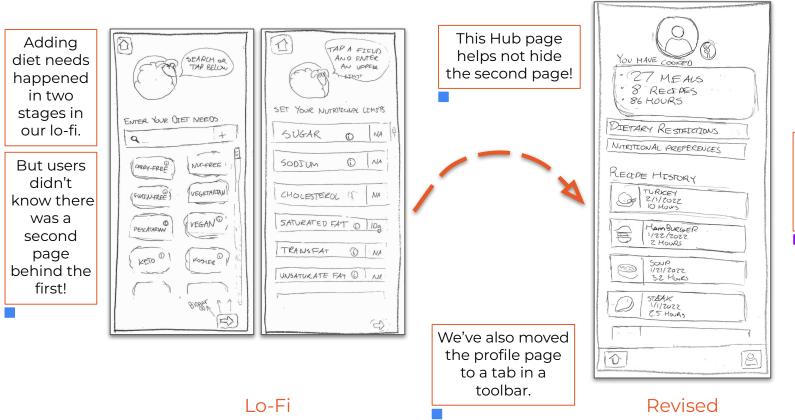
User Feedback

Studio Feedback

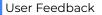
Learnability Goals

1. Refining Personalization

We've added a Hub page to make personzalitions easier.



With a new recipe history, we're striving towards our *learnability* goal.



Studio Feedback

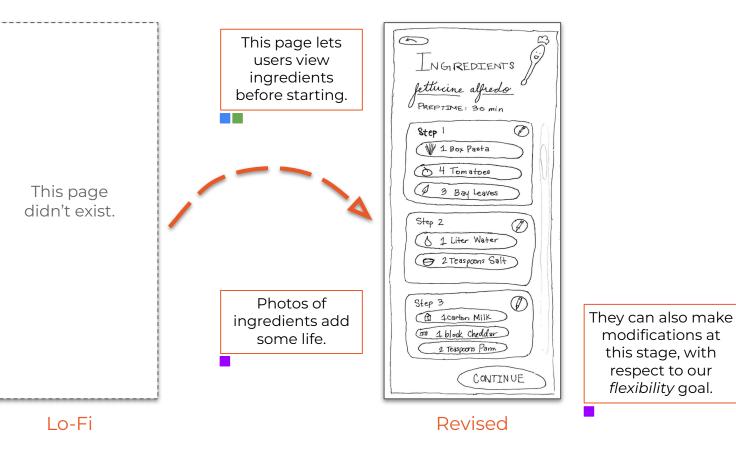
Learnability Goals

2. Adding an Ingredients Page

We've added a new page based on user/studio feedback.

We didn't have an ingredients page before!

Several users requested to see the ingredients before they started a recipe.



User Feedback

Studio Feedback

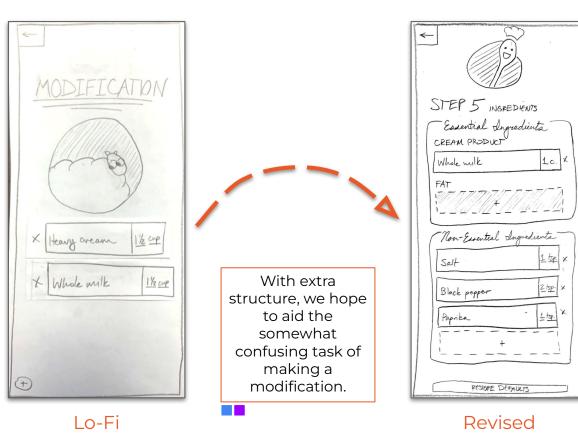
Learnability Goals

3. Restructuring Modifications

Modifications are the core of Recipal, so we want to get it right.

Users who were less familiar with technology found the modifications page confusing.

Users found that there was too little structure, and didn't know what changes to make.



We're debuting our new spoon mascot!

The mascot is also much smaller, based on user and studio feedback.

We sacrifice some *flexibility* for *learnability* here.

Usability Goal Grade

Learnability

Flexibility



With the addition of info bubbles and more structure on the modifications page, we've made Recipal a lot easier to learn since the lo-fi.



We've digitized, which means we can enumerate a lot more modifications than we could on paper. It's still not code-level, but Recipal is a lot better at making modifications a user wants now.



Simple Browse a database of recipes and select one.



Home

Category Select

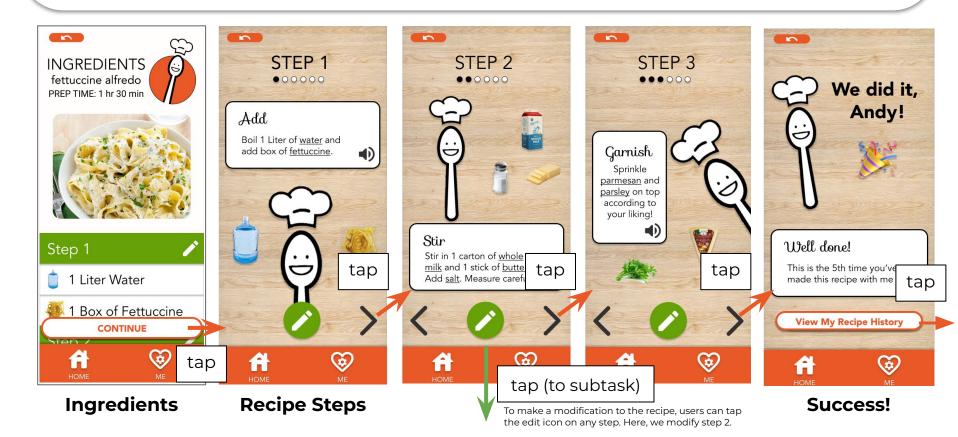
Category Select

Recipe Select

Ingredients

Moderate

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



Subtask: making a modification This is part of the moderate task flow. Here, users modify the second step of the recipe. 5 n 5 5 2 -Tap (exit subtask) STEP 2 STEP 2 MODIFY MODIFY 0 Modify Ingredients Modify Ingredients 1 Carton Whole Milk 1 Carton Whole Milk Essential: Fat **Q** Milk Essential: Fat 0 1 Stick of Butter 1 Stick Butter 睮 1 Carton Almond Milk 凬 1 Carton Cocond tap Essential: Cream Essential: Cream **ARE YOU SURE?** 1 Carton Almond Milk 🋍 24 1 Carton Whole Milk 節 SIL 1 Carton Oat Milk Stir Changes: tap Non-Essentials Non-Essentials Silk 1 Carton Soy Milk Stir in 1 carton of whole Whole Milk \rightarrow Almond Milk milk and 1 stick of butte Add <u>salt</u>. Measure care ully! 📔 1 Teaspoon Salt YES NO 1 Teaspoon Salt 圃 圃 2 Toscoon Poppor 🏛 tap 2 Teaspoon Pepper 🋍 **RESTORE DEFAULTS** tap 1 Toochoon Poprika 1 Toppoon Paprika Ś Ì A A Ś A A Ċ 9

Step 2

Step 2 Details S

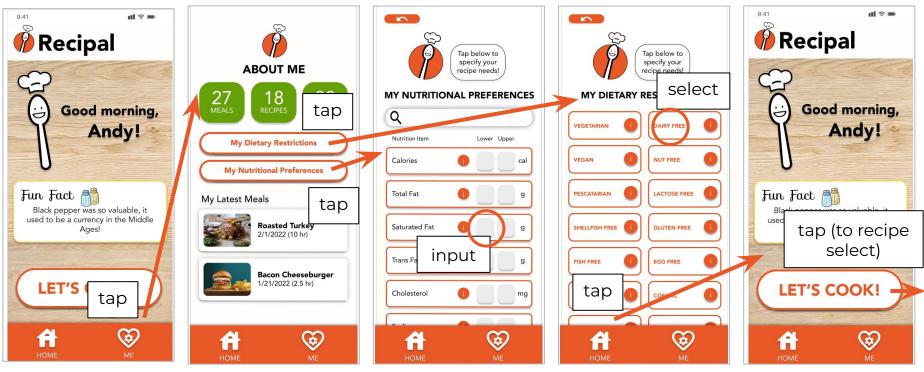
Select Modif.

Confirm

Step 2 Details

Complex

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



Home

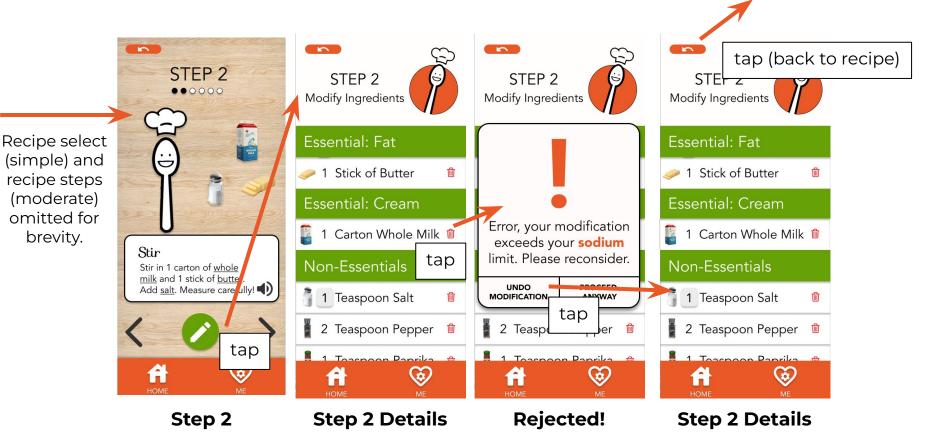
Profile Page

Nutrition Limits

Recipe select and navigating through the recipe are included in the complex task, but we've omitted them for brevity.

Later: users' modifications are evaluated against their specified goals.

Here, a user tries to add too much salt, which exceeds their sodium limit.



Tools & Tradeoffs

Tools – What Worked



wireframing, graphic design

We used Figma for 80% of our med-fi graphic design, and only had to design a few elements outside of the app.



PowerPoint was a surprisingly strong graphic design tool. We made our spoon mascot with it!



Figma Community icons, UI kits, inspiration

We used community UI kits to standardize classic components like pop-ups and search bars.

Tools – What Didn't Work



Ultimately, PowerPoint and Figma had enough power for our med-fi, so we forwent Photoshop altogether.



Adobe Color color picking tools were less useful

We found the color theory tools to be less effective in practice, so we picked colors that worked for our cooking theme.

What was left out of this prototype?

Hardcoded/Wizard of Oz techniques 💽 🚿

- Rejecting modifications based on nutritional goals isn't "smart" yet
 - We simply reject when the user inputs too much sodium. This was a necessary choice, since intelligent rejection would require managing the state of wireframe.
- Recipe history is hardcoded
 - Our recipe history doesn't work yet, since it would require a data store, which wireframing doesn't support!
- Search is hardcoded
 - Ingredient search doesn't allow user input, since this would require a whole database of ingredients, which wireframing doesn't support!

What was left out of this prototype?

Limitations 😶

- Only 1 recipe is shown end-to-end
 - Ultimately, all recipes follow the same structure, so we only show one recipe from start to finish. Other recipes are on the UI, just aren't clickable!
- Only showed 3 steps of recipe
 - We're focusing on the core modifications interaction, so we decided to only show 3 steps out of the recipe.
- Not all modifications can be made yet
 - We only allow the user to modify the milk type and salt amount of a step.
 Combining different modifications would require a *lot* of different wireframes, one for each permutation, so it wasn't feasible.



Appendix

Test the prototype or view the full storyboard <u>on Figma</u>.

Appendix: All Major Changes from Lo-Fi Feedback

Major Changes

• Hierarchy of scale

- Smaller sheep, bigger buttons, bigger menu etc.
 - Maybe half a page of a book instead of the whole book(?)
- Add search bar to search for keywords in menus

• Enhanced substitutions

- Which ingredients to substitute/redesign page to give it more structure
- More feedback/confirmation
 - Updating modifications
 - Updating diet preferences
- Effects of substitution?
- Ingredients list
- Change sheep mascot (to inanimate object?)

Appendix: All Minor Changes from Lo-Fi Feedback

Minor Changes

- Change wording of "edit diet"
- Show graphics of step
- More clarity with/revisions to edit diet section
- Information about different diets
- Automatically filter recipes that exceed nutrition limits/don't align with diet(?)
- And automatically modify recipes
- Min AND max amount instead of just max
- Recipe history (of recipes you've made)