ChefRef

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Overview

The Problem
Cooking a meal often means preparing multiple dishes at once. For the novice chef, this means figuring out a way to integrate multiple serial recipes into one easy and efficient process. Having to do this manually can lead to mishaps in the kitchen and in scheduling, resulting in headaches and frustration (not to mention cold food!)

The Solution
We recognized the need for an application that would intelligently combine multiple recipes into one task list. A schedule-optimizing algorithm can create a personal, comprehensive plan to help the user multitask in the kitchen.

ChefRef creates this plan, acting as a referee between the various dishes being prepared. It also acts as a reference, allowing users to view important facts, tips, and videos embedded in each task step.

Design Process

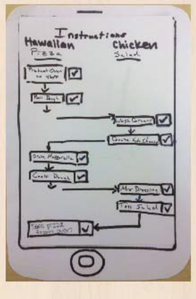
STORYBOARD

Creating storyboards helped us identify our users, the usage situation, and how our user would use our application to complete multiple meals efficiently.

PAPER PROTOTYPE

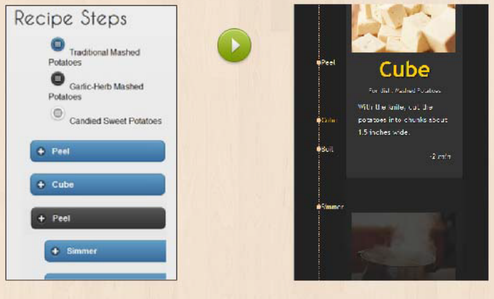
We continued with rapid paper prototyping of two designs. Through heuristic evaluations, we successfully combined the best features from each prototype.

This is the task display page from our first prototype. We were inspired by sequence diagrams for this design.



FUNCTIONAL PROTOTYPE

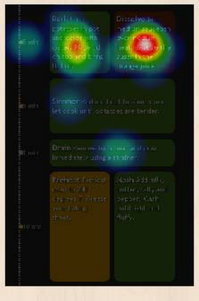
Once we began functional implementations of our application, we continued this iterative process by constantly seeking feedback from peers and refining our design, focusing primarily on our display page.



User Testing

Once we had completed multiple iterations of a functional implementation, we began our user testing phase with an in-person session involving three users. Through interview questions, think-aloud protocols, and thought experiments, we grasped the successes and limitations of two designs of the display page.

We then utilized UsabilityHub's Clicktest and Fivesecondtest to launch four online studies.



These experiments focused on the search results page and the task display page, as these two components have the most significant implications for the usability of our application.

This plasma map shows responses from 30 participants in a task designed to test the user's understanding of two column ordering.

Our other tests collected feedback about additional aspects of the user's comprehension of the recipe display screen, such as size and color of tasks. We also assessed the user's preference for selecting individual dishes versus pre-combined meals from the search results.