

Dynamic Recipe: Prototype

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1. INTRODUCTION

The dynamic recipe prototype was developed to create an efficient and organized user interface that functions as an all inclusive cooking application. While multi-featured, our application is intuitive and designed for easy navigation and simplicity.

2. PROBLEM DESCRIPTION AND TARGETED USER

Our prototype is meant for users who cook frequently, but who are inexperienced with our app. Users would ideally want a digital setting to store recipes and our app aims to provide that for the most basic of users. One of our main problems to solve will be to turn the more complicated features of our app into easily navigable and intuitive tools used for cooking. The basic user is expected to be somewhat familiar with computers or mobile devices, though we designed our user interface to be as intuitive as possible. Our app was designed to provide a dynamic and all inclusive cooking interface for any user.

3. DESIGN DECISIONS

Design decisions were based on analysing user feedback collected during our research evaluations and class interactive discussion posts. Decisions were also based on our main project goal; to create an efficient and organized user interface that functions as an all inclusive cooking application. Ease of navigation, simplicity, and intuitiveness played a large role in all design decisions.

3.1 HOME PAGE

The homepage for the dynamic recipe is the first page encountered by a user when accessing our app. It provides to the user a sort of blueprint of the main modules of the dynamic recipe. This first UI is designed to provide paths to others interfaces and foreshadows how the app looks like, linked in a unique way those interfaces. Each link from the homepage, gives access to a unique place access is the efficient and effective fashion to have our users work through a simple, easy path to accomplish their tasks..

The homepage layout is introduced with a top bar panel in which is embedded : a recognizable home (providing to the user that confident feeling of having landed at the main page of the dynamic recipe software) icon and the padlock icon to bring the user of the app. One of primary goals for the homepage was to create an uncrowded yet fully navigable map of our interface. Based on our user feedback and recognizing that our app wasn't fully navigable, we changed the buttons and their arrangement on the page, making the most used features visible first, with features of lesser priority appearing towards the bottom of the list. We added a feedback option here, to make obvious to the user that their input is welcomed and appreciated.

3.2 SETTINGS

We chose to limit the number of options allowed in settings, as 'font size' and 'theme' seemed adjustable on the user's device and superfluous, respectively. The scrolling menu was then unnecessary, as only two options were made available in Settings. Units of measurement was important to retain here, as this would make the application open to an international audience and also circumvent the user from having to change each recipe manually to their preferred units of measurement. Settings was also added to the bottom tab menu, so that a user could easily enable and disable voice commands and change units of measurement at any point in the application. Some of our users liked the voice command feature, while others thought that voice commands were frustrating and hard to use, so we adjusted options to make this feature easy to turn off or on.

3.3 CONVERSION TOOLS

We initially decided to simplify our Homepage by adding Tools as a bottom menu option. Because our Homepage did not include key features necessary for basic navigation, we needed to add buttons to the page and also remove some. Without sacrificing features of our app, we decided to move four of our app's less integral features to this area. This allowed us to both visually simplify our Homepage, as

well as make these features available to the user at any point in navigation. After feedback about these changes, we realized that the title “tools” was not indicative about the special features located here. One feedback responder mentioned changing ‘tools’ to ‘conversion tools’, and we ran with that. The name is not only more indicative about the features involved, but it also creates a scent for the user to follow. Because we decided to still feature the newly named ‘conversion tools’ on the bottom menu bar, we kept the name as ‘tools’ here for both space and simplicity. A user would likely notice the main home buttons before the bottom menu options, and would quickly see that tools and conversion tools are one in the same. Conversion Tools includes: Measurement converter, Substitution Converter, Image to text converter, and Nutritional Calculator.

3.4 MY RECIPE PICTURES

My Recipe Pictures was familiar to users because it was modeled after a mobile devices ‘My Pictures’ design format. This was added to the Homepage because it had previously been overlooked in navigation, and was thus inaccessible to users. No major decision changes needed to take place, as a user could recognize and recall how to use this feature because it so closely resembled a mobile device’s familiar ‘pictures’ layout.

3.5 SUBSTITUTION GENERATOR

The Substitution Generator was redesigned because users found the navigation of this page less than intuitive. Instead of listing the second search option, which allows a user to search for substitution based on dietary restriction, a button for ‘more options’ was listed. In this way, the user could click on this button to reveal the second search option, without it appearing on the initial navigation to the substitution generator page. Now the main substitution page lists ‘search by an ingredient’ as the primary option, and a user may click on ‘more options’ to open up the secondary search option. The search bars were also reformatted on this page. Instead of having both a search box and a separate button, we chose to use a search box with attached button that reads ‘Go!’. This more similarly matches modern mobile devices and simplifies the page visually for the user. Because the button is attached to the search bar, the user is more likely to recognize that this button must be pushed in order for the search to execute. The search results of the substitution generator remained the same, as users easily understood and recognized search results.

3.6 MYRECIPES

We chose to add a page for “My Recipes”, as it was previously absent from our initial prototype design. This was integral to the user, as one could not navigate to search for a recipe, edit a recipe, or view a recipe’ steps without it. We designed the page with a basic search bar, so that the user could search for recipe by name without having to scroll through the entire list. We also listed below the search bar an option to sort, which when selected reveals a pop-up menu where the user can select alphabetically, most recently used, most used, or by recipe type. When a user chooses a sorting option, saved recipes are then sorted and displayed by the user specified sorting option. On each recipe listing, there is an option to ‘View’ recipe, which then takes the user to the actual recipe. From here the user can edit, navigate recipe steps, and use other features of the application. We also added “Add a recipe” at the top of “My Recipes”, so the user could navigate to search for a recipe if they accidentally navigated here. “Add a Recipe” was removed from the Homepage, and replaced with “Search for a Recipe”, as users did not easily intuit that adding a recipe would lead to a search page. Thus, adding a recipe was made a subfeature accessible through the search page. It functions as in-between page for the user to navigate to search for a recipe or convert an image to text. It also simplifies our Home and Search pages. Feedback respondents noted a simple design change to improve the recognition and ease of navigation on this page. By centering the sort option, it makes this feature more visible to the user and allows for more meaningful searches.

3.7 NUTRITIONAL CALCULATOR

We chose to simplify this feature by reformatting our search bars. Instead of having a search box and a separate button, we chose to use a search box with attached button that reads ‘Go!’. This more similarly matches mobile devices and simplifies the page visually for the user. Because the button is attached to the search bar, the user is more likely to recognize that this button must be pushed in order for the search to execute. Because users did not think that they would use this feature very much, we decided to remove it from the Homepage and instead to nest it within “Conversion Tools”. While the feature is still accessible within a recipe, a user will also have an option to reveal helpful tips by clicking on the bottom menu ‘help’ option.

3.8 SEARCH FOR A RECIPE

This feature was previously named “Add a Recipe” on our Homepage, but was not apparent to users that it functioned

as a searching tool. Thus, it was renamed to reveal its true function and remained on the Homepage. Feedback respondents noted that this feature was important and needed to be placed higher on the home page, so we made it the 2nd option there. Respondents also noted that the search results were including non-recipe items, so we changed the prototype results to show that indeed only recipes were being returned from searches. We also added a more descriptive header to the main search bar, indicating that it was for searching the web for recipes, rather than one's own saved recipes. When the user went to add the recipe after viewing (both buttons located beside each search result), a pop up message appears indicating that the recipe has been saved and also lets the user click a button to go straight to the saved recipe. This saves the user from having to go back to the main homepage and navigate to their newly saved recipe again.

3.9 RECIPE STEPS

Recipe steps is the page that a user can use to look at a recipe and follow its steps. At the top right, there's a print button to let the user print the recipe if they want to follow it with a paper instead of their device because some of our users preferred printed recipes. The ingredients of the recipe are listed at the top in a scrollable list box. The user can select a set of the ingredients to add to a list, convert their measurements, find substitutions or calculate their nutritional info. Each ingredient is in a box to indicate whether it's selected or not and there's a select all button at the top to allow the user to select all the ingredients similar to how email clients let users select emails to make it look familiar to the user.

When ingredients are selected a sub menu will appear below the ingredients list to show the options the user can use for the selected ingredients. The user can make this submenu disappear if they click on the instructions area or deselect the ingredients with the top box.

Each ingredient has a quantity and the user can click on a listed quantity to convert the used unit. When the user clicks on a quantity, a list of possible units to convert to will be displayed and the user can select one to convert the original quantity to allow the user to instantly convert the measurements without moving to another page. The ability to convert the ingredients of recipe instantly without needing to use another app or medium was one of the things that our users wanted to see in the app they will use. The instructions are also displayed in a scrollable list box below the ingredients list box. Both the ingredients and the instructions are in scrollable list boxes so that both ingredients and instructions can be displayed to the user no

matter how long each list was to make it easy for the user to look at both ingredients and instructions without needing to scroll for a long time to switch between ingredients and instructions..

The user can play instructions, which would display each instruction in one page in a clear large font and the app can read out the instruction for each page. The user can navigate between steps by clicking a next/previous buttons or by saying next and previous. Playing instructions is designed to help users follow recipe steps while cooking easily. From our user study, most users put their devices on the counter, so displaying each instruction in a large text will help them read it. Voice commands are also used so that the user can follow steps without needing to hold their device to avoid a mess.

3.10 SHOPPING LISTS

Shopping list generator Is a page to display shopping lists and add new shopping lists from the ingredients of some recipes.

At the top there's an Add button to add a new list that lets users name a new list and select recipes from their saved recipes to create a shopping list. The add button is placed at the top because the first time the user opens the lists page, they will want to add a new list. Also, the button is placed in a clear place and easy to spot the moment the page is opened because it's one of creating a new list is one of the main features of the shopping list generator.

When a user selects a list, the list's contents are displayed in the middle of the screen because it's the focus of the page. Each ingredient in the list has a quantity listed next to it. Within the list at the top there's an edit and a print button so the user can easily edit the list to add more ingredients from other recipes or print the list. The find a store button will make the app search for the nearest stores that have the items in the list to make the shopping process for the user easy because one of our users' problems where not finding the items they wanted in the store they visit.

3.11 PLACES TO SHOP NEAR ME

The main purpose of this page is to display a map with the nearest stores to the user based on a selected shopping list so a map is displayed in the middle of the page. One of the problems our users faced while shopping was not finding specific items that they needed so they had to visit another store. So giving them the ability to search for stores based on the items they need would solve that problem. The selected lists' are displayed at the bottom to let the user know which lists the app is considering while searching for stores. They can also add more lists if they wanted right

from the same page instead of going back to the shopping lists to search for the ingredients in another list.

3.12 CONVERT MEASUREMENTS

Convert measurements will allow the user to select an input and output unit from a list of common cooking measuring units. There are two lists that display units, the input one is at the top and the output units list is under it. Right below the unit lists the user can enter an input value and an output value. This tool is available in the app as a general conversion tool, for example if a user printed a recipe and needed to convert a measurement after printing it, then they can easily find a conversion tool within the cooking app they were using instead of possibly wasting time looking for a conversion tool or waste time looking for the recipe they printed within the app to convert the measurement and print it again.

3.14 HELP

The help page includes information about how to use the app. We decided to include a help page to make the user aware of all the features the app offers and how to use them since there are a lot of features. Users can access the help page from anywhere in the app from the lower navigation bar so that they can easily find answers if they were unsure about anything. Within the main help page, there are sections that organize help information for each feature in its own page, to avoid having long text that the user has to scroll through to find what they want. Dividing the help page into sections will help the user find exactly what they were looking for easily. Also, each help page contain a short description of how to use the feature so that when a users open it, they don't feel that the feature is complicated

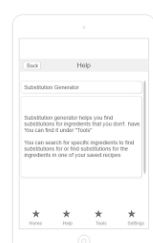
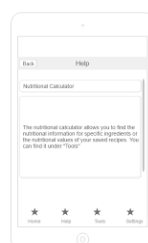
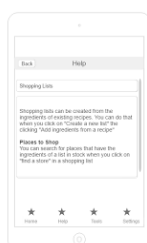
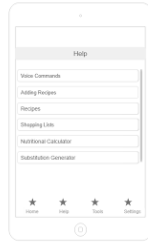
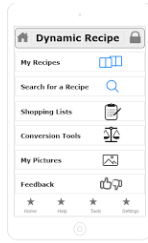
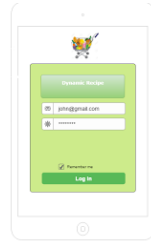
and feel overwhelmed with a lot of information which might cause them to not use the app again.

4 BRIEF LIST OF CHANGES SINCE INTERACTIVE DESIGN GALLERY #2

1. Fill in gaps in storyboard for all pages for cohesiveness.
2. Image to text file made clearer and more descriptive of its purpose.
3. Search for a recipe - add back button so users do not need to redo searches. Center sort by button for visibility. a back button is useful for error correction. Place Search for a recipe higher on homepage, as this is a main feature.
4. Added amounts to shopping lists.
5. Added help pages for the more complicated features and pop ups.
6. Added recipe name to recipe page for clarity.
7. Swapped "Places to Shop" with the "Conversion Tools" function.Places to shop isn't a main feature of our app and most users know where to shop, while conversion tools contains main features.
8. Redesigned homepage with primary features at the top and added Feedback option as well.

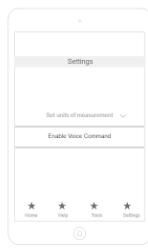
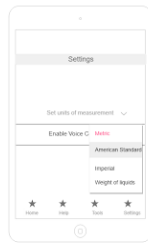
5 STORYBOARD

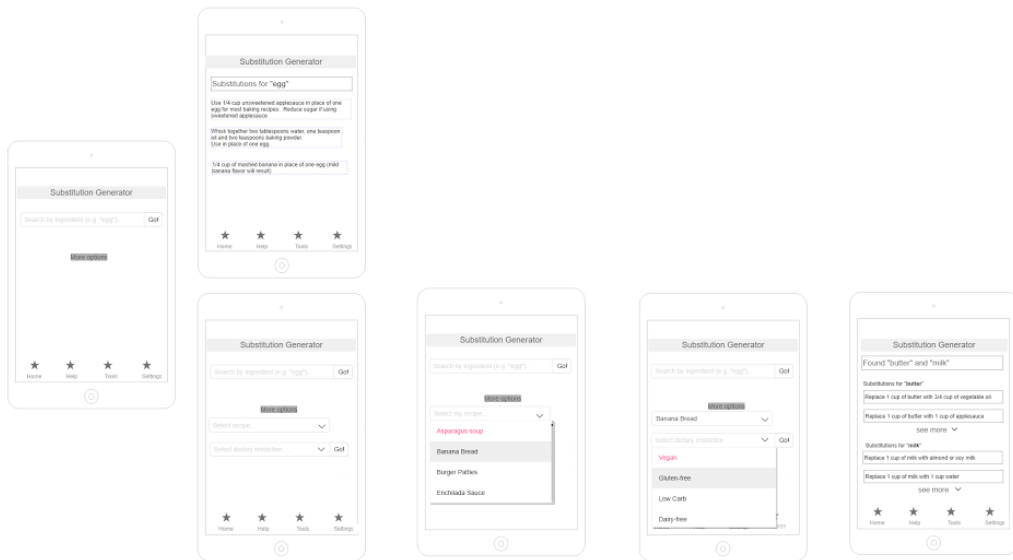
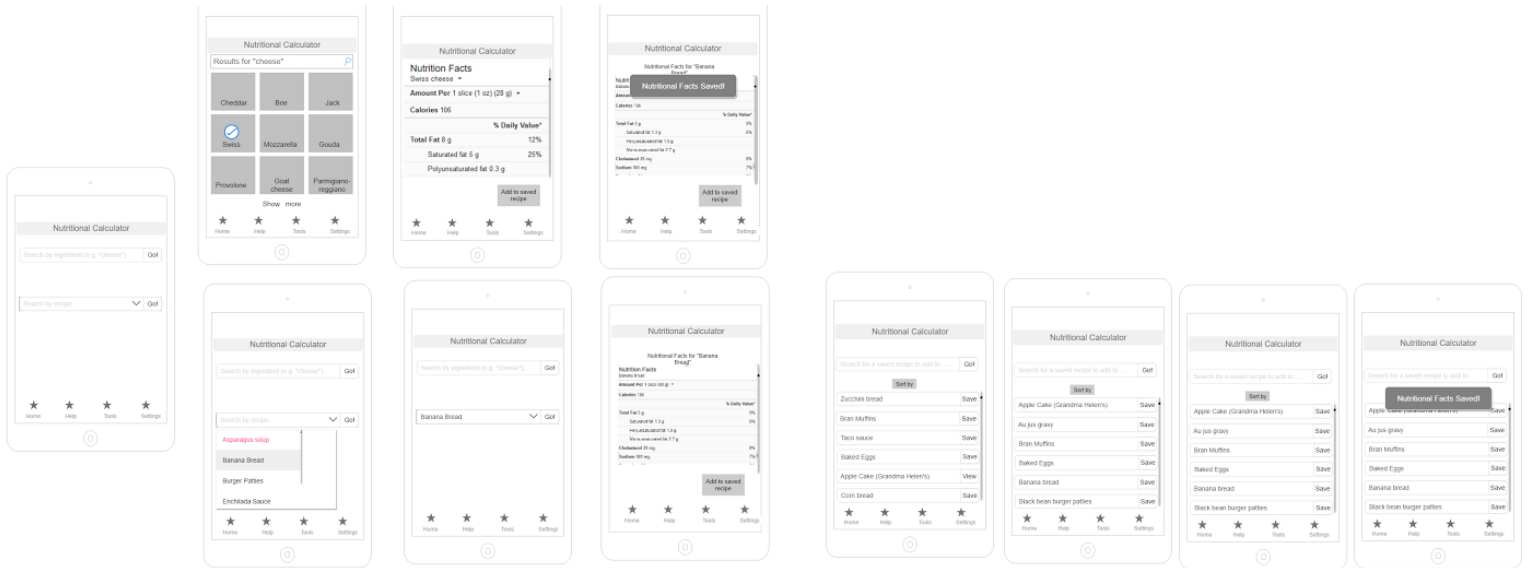
LOGIN
&
HOME



BOTTOM
MENU

CONVERSION
TOOLS
|
|
|
V





HOMEPAGE PAGES

