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Wake Tech CC

User Interface/User Experience (2021SP.GRD.240.0001)

13 April 2021

Mobile Application Project

Mobile App Description

This mobile application project is based on a Mobile App called “The Home Cooking Assistant,” that tracks what food you buy, sends notifications when the “Best by” of the perishable food is about to be reached, and provides recipe recommendations based on what food you have available in the kitchen.

User Persona #1

Based on a relatively quick Google search, my design team agreed that the first “Home Cooking Assistant” user persona is best described by a fictional character by the name of Allison, who: is a working professional in her mid-30s, lacks creativity when it comes to culinary skills, easy to please herself - however tries to be very accommodating when cooking for others, and prefers preparing meals with a quick prep time since she has a busy schedule and is always on the go.

Allison needs an easier way of planning meals for herself and her family, as she often becomes overwhelmed trying to make the best use of the food she buys at the store. Her primary goals are to quickly prepare meals for herself and her family, using recipes that will make everyone happy and keep everyone healthy, while not having to think too hard in the process.

Allison has been cooking for years, and while she does not mind looking for new recipes by referring to recipes online and in cookbooks, she finds these methodologies to be time-consuming by trying to find meals with flavor and ingredients that will work for everyone. As a result, she usually winds up “Just picking one,” which usually results in at least one of her family members not finishing his or her meal or having a dietary side-effect. Allison has been talking with some friends, and has heard about how mobile apps have helped them meet their dietary goals, and was wondering if there was an app that could help her with her meal-planning goals.

User Persona #2

Based on a relatively quick Google search, my design team agreed that the second “Home Cooking Assistant” user persona is best described by a fictional character by the name of Paige, who: is a college student in her early-20s, who works and attends school full time, usually snacks on whatever she can find and rarely eats prepared meals herself - however she has a boyfriend who she likes to surprise with a home-cooked meal from time to time, but she is inexperienced at cooking and seldom pays attention to what food or ingredients that she has stored away in the kitchen.

Paige needs access to a self-help resource which will help guide her through what to make for herself and her boyfriend, since she just does not know where to begin. Her primary goals are to be able to prepare meals for herself and her boyfriend using recipes that will magically appear upon wishing for them, in a “Genie-like” fashion. Paige already does a lot of reading at school, and is strongly opposed to looking for new recipes by referring to recipes online and she cannot afford good cookbooks since she uses all of the money she earns towards school. As a result, she usually winds up eating whatever she can find, which usually results in a

lot of food that she does not know what to do with - spoiling, and going to waste. Paige has been talking with her dad's girlfriend, and found out about a mobile app that has helped her with similar meal-planning challenges, and thinks it may be worthwhile trying as well.

What the Mobile App Will Do

The "The Home Cooking Assistant's" answers the question "What's for breakfast/lunch/dinner," in a time and cost-efficient manner. The purpose of the app will be to help the user reduce spoilage of perishable foods, and reduce the need to come up with making food plans and preparing meals on the fly each day, in a quick and stress-free manner, increasing quality of life by saving users time, money, and stress - which the user would not be able to achieve by other means.

How the App Will Work

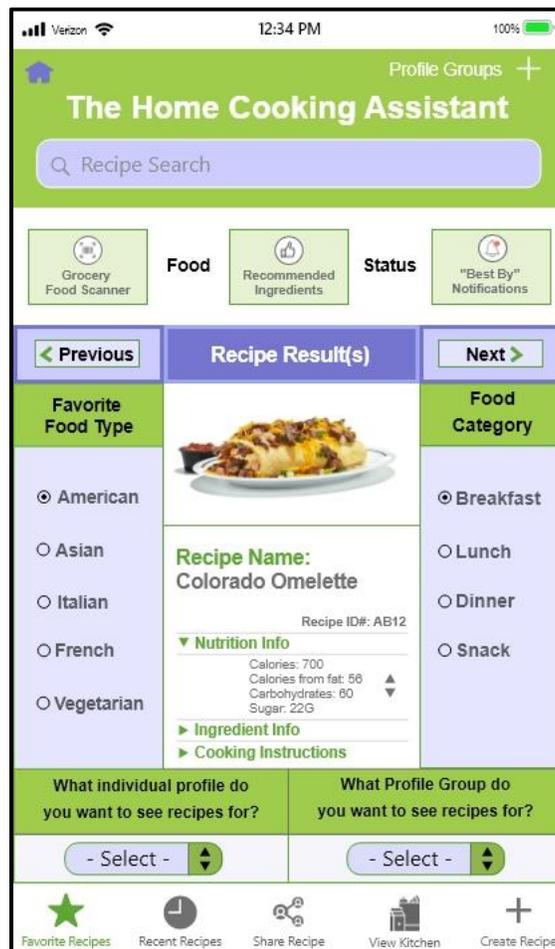
After downloading the app from either the Android or iPhone app store, the user will need to configure the app by providing it with all of the user's existing food-related details before being able to use the app, which "The Home Cooking Assistant's" setup wizard will guide him/her through. The setup wizard will first prompt the user to create an account, then add one or more user profiles to the account, asking the user to enter all of his/her favorite types of food (including favorite restaurants, recipe websites, etc.), and daily dietary goals / restrictions for each profile. The Home Cooking Assistant will later use this information when it automatically crawls the web – and provide recommendations, accordingly. The setup wizard will include recommendation settings, including what types of recommendations the user would like to receive, and how often he/she would like to receive them. Next, the user will be prompted to enter all of their existing food into the app after doing an inventory of his/her kitchen, which will

include a request for details such as the brand, “Best By” date, and the amount remaining for each food item.

Once the app’s setup wizard has been completed, the app’s guided tour wizard will automatically open, providing the user with a guided tour of the app’s navigation, features, and workflow - which the user can walk through right away, or have the option to view it at another time.

Main Features

After the app’s guided tour wizard is completed and/or closed, the user will have full access to the app’s user dashboard, similar to the following (home page is available by clicking [here](#)):



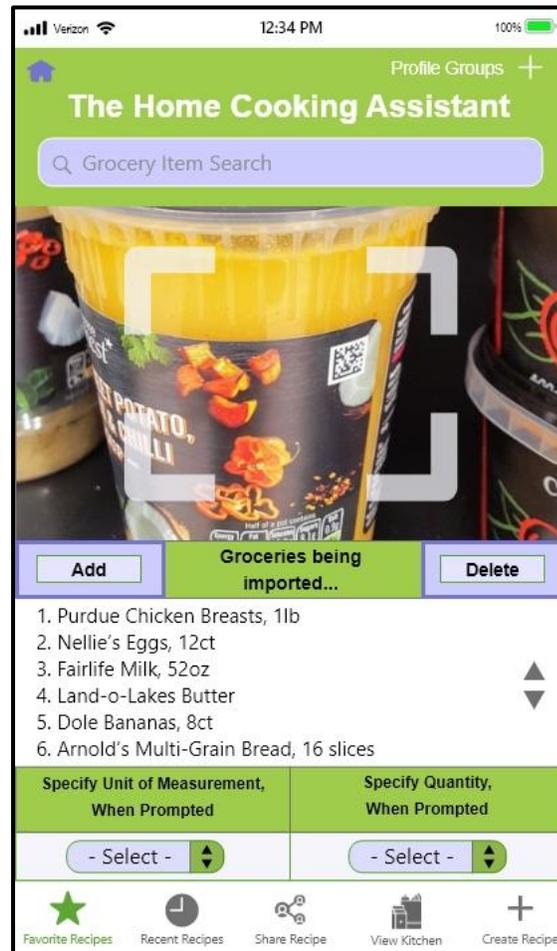
...which will include the following main features:

- A quick access profile creator and recipe search field in the header
- A food status toolbar beneath the header, which includes: a grocery food scanner tool, a recommended ingredients tool, and a “Best By” notification tool.
- A recipe results field in the center
- A profile-specific recipe results query tool with: favorite food filter on the left, and a profile-specific food category filter on the right
- Profile selector tools beneath the recipe results field, with: an individual profile selector on the left, and a group profile selector tool beneath the recipe results field, on the right
- A toolbar at the bottom, which includes: access to favorite recipes saved by the user, recipes recently accessed by the user, a recipe sharing tool, a view kitchen tool which shows the user what foods and/or ingredients he/she currently has available in the kitchen of his/her home, and a create recipe tool which allows the user to create custom recipes and save them to his/her list of favorite recipes.

Description of Design Choices

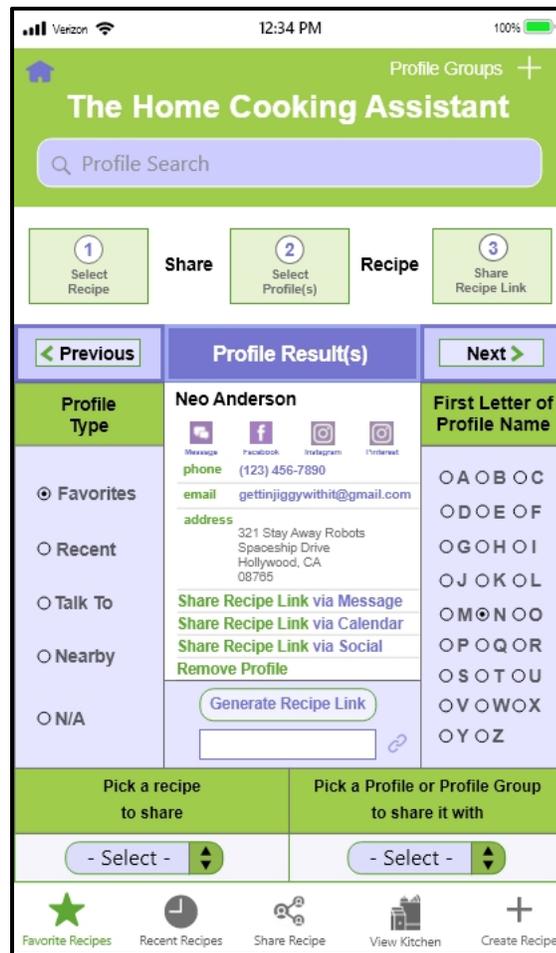
“The Home Cooking Assistant” mobile app features an interface with a center stage design, which places the most important part of the UI – in this case, the recipe results, into the largest subsection of the mobile app’s view pane, using a visual hierarchy with the “Center Stage” dominating everything else, while grouping the app’s functional tools and content around it in smaller panels, such as:

- The app's grocery food scanner tool, which – when launched (a simulation of launching the app's grocery food scanner tool is available by clicking [here](#)), opens a user interface which will appear similar to the following:



...which features a grocery item search bar, which allows the user to quickly confirm if he/she has shopped for and/or scanned a particular grocery item.

- The app's recipe sharing tool, located in the bottom toolbar, which – when launched (a simulation of launching the app's recipe sharing tool is available by clicking [here](#)), opens a user interface which will appear similar to the following:



...which features a profile search bar, which allows the user to quickly locate a particular profile, which he/she would like to filter his/her recipe results by.

- The app's view kitchen tool, located in the bottom toolbar, which – when launched (a simulation of launching the app's view kitchen tool is available by clicking [here](#)), opens a user interface which will appear similar to the following:



...which features a kitchen food search bar, which provides the user with a quick way to locate a particular kitchen food/ingredient, which he/she would like to see an inventory status on, as well as adjust after a meal is prepared (fields are editable).

- o Note: Whereas the other tools resembled the same center stage design as the home dashboard layout, for a consistent user experience, the view kitchen tool is designed with a unique card stack layout - featuring the same header and toolbar, to allow the user to quickly view his/her: favorite, missing, expiring, and expired food/ingredients.

Explanation of Sample Font

“The Home Cooking Assistant” mobile app interface features a simple Arial font to appeal to users whose primary goal is to navigate an app in an intuitive manner, without any unnecessary and confusing styling that might distract them from accessing their recipe content.

Explanation of Color Scheme

With our persona characteristics, which included: young feminine working students and young working professionals who are health-conscious, in mind, our design team agreed on a design color choice similar to Adobe’s “[Berengena Eggplant](#)” color theme, which included an olive-looking green and plum-looking purple color, as shown in the image, below.



Our design team elected to make slight modifications to the green and purple hues, by making them slightly brighter – since the lighter colors translated better in a digital display for mobile.

Competitive Analysis

Dieting mobile apps have been ruled out as direct competitor products, since “The Home Cooking Assistant” mobile app is not a dieting planner app. The main competitors for the “The Home Cooking Assistant” mobile app include other meal planner mobile apps such as:

Food Planner

This app answers the question “What’s for dinner?” by enabling a user to: easily import recipes from all of a user’s favorite websites to all of a user’s favorite devices using the app’s cloud sync feature, automatically create grocery lists, calculate nutritional data, as well as create

and save customized meal plans, share recipes, grocery lists and meal plans in real-time (“Meal Plans, Recipes, Grocery Lists, and Inventory Management”).

Competitive Differentiators

The Food Planner mobile meal-planner app features a cloud sync feature which provides a real-time sharing capability, which I have not seen emphasized with other meal planner mobile apps.

How will The Home Cooking Assistant Compete?

Cloud synchronization requires back-end database operational costs (OPEX), which Food Planner will charge the user for in order for the MiniMobileSoftware Corp. to make a profit. The Home Cooking Assistant will include a hyperlink generator widget, which the user can share to his/her friends and family members, which will significantly lower the product’s price point.

Mealime

When you first sign up with Mealime, you have a chance to input your type of diet, allergies, food restrictions, and dislikes. It even asks you how many meals you would like to get out of each recipe. Mealime suggests meals and plans for you, or you can choose to go the more advanced route and build your own plan. Grocery lists are automatically categorized, and any meal can be tagged as a favorite to save for later. [Mealime also features a cooking mode which] displays recipe instructions without letting your phone lock. When you want to go to the next step, [the user] just hover[s] [their] hand over the screen (Kelson).

Competitive Differentiators

The Mealime mobile meal-planner app's cooking mode, which locks the screen and hovering capability while cooking, is a feature that I have only seen emphasized by one other meal planner mobile app (Pepperplate – referenced, below).

How will The Home Cooking Assistant Compete?

While screen locking and touchless hovering capability are nice user-friendly features, these features require more expensive phones which have these capabilities built into the phone's O/S. One of the persona's which The Home Cooking Assistant targets is a college student ("Paige") who is putting money towards her college expenses, and has a higher priority for meal-planning apps which can generate suitable recipe ideas / recommendations for herself and a boyfriend and/or friends, in a way that meets everyone's respective meal requirements and manages her kitchen's food inventory – without requiring the use of the latest mobile technologies.

Yummly

Your profile includes likes/dislikes, allergies, diet, cuisines, and even your skill level.

You can search for recipes based on course, prep time or what's trending, or you can use the sliders to narrow down the results by calorie, carb, fat, or cholesterol levels. While there is no calendar for meal planning, you can make collections of recipes. I tested it out, making a collection for one week, and saved all of my meals right there. It actually gave me a bit of freedom to mix it up if I needed to (Kelson).

Competitive Differentiators

The Yummly mobile meal-planner app's skill level profile setting, and prep time and "What's trending" search capabilities are features which I have not seen emphasized with other meal planner mobile apps.

How will The Home Cooking Assistant Compete?

The skill level profile setting can easily be added to The Home Cooking Assistant's list of setup wizard options. While the "What's trending" filtered search capability is interesting, it does not meet the core requirements of The Home Cooking Assistant's user personas since The Home Cooking Assistance is not competing on what is trendy. The "Prep time" filtered search capability would not be necessary since a desired cook time can be added to The Home Cooking Assistant's user profile, and the app would adjust it's recommendations, accordingly.

FoodPrint

Nutrition is integrated into every part of the app from scanning bar codes to inputting your meals to tracking the health content of your own recipes. Not only are there recipe suggestions, but you can also find recommendations for what to eat at restaurants to stick to your FoodPrint plan. You can even connect the app to another health app or even your Fitbit to make sure all aspects of your health are being accounted for. If that is not enough, there is also a mode for those with diabetes who can connect their glucose monitoring device for seamless meal planning (Kelson).

Competitive Differentiators

The FoodPrint mobile meal-planner app's integration capability is a feature which I have not seen emphasized with other meal planner mobile apps.

How will The Home Cooking Assistant Compete?

While it makes complete sense to make sure "...all aspects of your health are being accounted for," The Home Cooking Assistant is designed to attend to the cooking needs of an entire family and/or set of friends, and not just one individual.

Pepperplate

If you choose to use this app, you will be using the website quite a bit, too. That being said, the two sync automatically for a smooth and easy user experience. Search for recipes within the app or add your own to the site. From there, you can put together as many dishes as you would like (we are talking feasts) to develop cohesive menus. Import them into the app, and you are all set. Add the ingredients in your menus to your shopping list, and then add the entire menu to a certain day in your meal planner. The "cook now" mode features a hands-free interface as well as a built-in timer (Kelson).

Competitive Differentiators

The Pepperplate mobile meal-planner app features a cooking mode with a hands-free interface, and Mealime is the only other meal planner mobile app which I have seen it emphasized.

How will The Home Cooking Assistant Compete?

The Home Cooking Assistant will make recommendations for what the shopping list should be, based on the user profile settings, and the user's grocery shopping experience will not require anything to be manually entered by the user. The Home Cooking Assistant will also not require logging into a website to set up or configure anything, since it will feature native user-friendly wizards that will automate most, if not all of the user's assistance needs (Note: see

Mealime competitive analysis, above, regarding the competitive response to Pepperplate's cooking mode feature).

Spoonacular

The "recipe of the day" feature is just too thrilling to pass up. My fellow planners will appreciate the app's ability to sync your menus with a Google Calendar. This way, you can send out the dinner party menu to all your friends ahead of time so they can get pumped. The layout is straightforward and lets you drag dishes to change the order around within each day. You can search for recipes within your already saved favorites or look for new ones in their database (Kelson).

Competitive Differentiators

The Spoonacular mobile meal-planner app's Google Calendar syncing and "Recipe of the day" capabilities are features which I have not seen emphasized with other meal planner mobile apps.

How will The Home Cooking Assistant Compete?

If desired, The Home Cooking Assistant can easily include a "New recipe" meal recommendation field when a meal recommendation is based off of a new recipe, with a simple line of JavaScript code. The Google Calendar syncing feature is an interesting integration choice, however, The Home Cooking Assistant is intended to be easy to use on mobile, and the Google Calendar interface can be cumbersome to use on mobile (to date). The Home Cooking Assistant's hyperlink generator is intended to simplify the user experience by removing complexity and reducing app load time, since it easily allows for meal plans to be shared with family/friends across other open platforms – i.e.: via text, or social media, with a simple platform-independent link.

Sources

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