

Unified Grocery App
 Test Plan
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Test ID	Functionality	Scenario	Steps to be Included	Actual Result	Pass/Fail iPhone 14 Pro	Comments
1	Startup	App opens	On tapping the app icon, items load within 3 seconds	App loads in <1 second	Pass	n/a
2	Startup - Functionality	On open, the recommendations are displayed	On tapping the app icon, recommendations load within 5 seconds	Recommendations load in <2 seconds on WPI-Wireless network	Pass	n/a
3	Home View - Functionality	Recommendations meet criteria of less than 3 ingredients missing	All displayed recommendations have less than three ingredients missing	All recipes displayed have less than three ingredients missing	Pass	n/a
4	Home View - Interface	Can click into recipe subpage, correct recipe shown	From the home page, click on one of the recommended recipes. A view with directions for the recipe should appear	A view appears with the correct recipe information and directions	Pass	n/a
5	Home View - Interface	Header/bottom stays when click into recipe page from recommendations list	From the home page, click on one of the recommended recipes. The bottom navigation bar and top header should remain present	The header and bottom navigation bar do not change when entering the sub-page	Pass	n/a
6	Home View - Interface	Recommendations displayed by category	On the home page, recommendations are displayed according to their category	Recipe recommendations are grouped into categories of Appetizers, Main Dishes, Soups, Salads, and Desserts	Pass	n/a
7	Home View - Functionality	Expiring ingredients successfully queried	At the bottom of the home page, expiring ingredients that meet criteria are displayed in the appropriate section	Expiring ingredients appear at the bottom of the home page	Pass	n/a
8	Home View - Functionality	Expiring ingredients are all less than 1 week from expiration	All displayed expiring ingredients have an expiration date	Expiring ingredients all have an expiration date no more than one week into the future	Pass	n/a
9	Home View - Interface	Expiring ingredients date displayed	All displayed expiring ingredients on the home page have their expiration dates displayed	The corresponding expirations dates for expiring ingredients are displayed in "Month DD, YYYY" format	Pass	n/a
10	Home View - Usability	Can scroll on Home page	The home page is scrollable up and down via the touchscreen	The user can scroll up and down the home page without issues	Pass	n/a
11	Home View - Functionality	Recommendations update when pulled up to refresh	If applicable, recommendations are updated when the user pulls to refresh the home page	Recommendations are updated when the home page is refreshed	Pass	n/a
12	Home View - Interface	Formatting same for dark and light mode on home page	Text color and formatting should remain the same regardless of being in light or dark mode	Text formatting and colors are the same in both dark and light mode	Pass	n/a
13	Home View - Interface	Navigation bar does not change color when scrolling	When scrolling up and down across all pages, the navigation bar stays a constant color	When the user scrolls to the bottom, the navigation bar turns a lighter shade of red	Fail	This is due to the scrollbar still being translucent -- several attempts were made to resolve this bug and will be retried in a future version
14	Recipe View - Usability	Can scroll on recipe page	User can scroll up and down on the recipe Page without troubles	The user can scroll up and down the recipe page without issues	Pass	n/a
15	Recipe View - Interface	All recipes displayed successfully with correct names	When loading into the recipe page, all recipe names are properly displayed with a fork/knife logo to the left	All recipes are displayed with the correct titles	Pass	n/a
16	Recipe View - Interface	Title of recipes page does not interfere with listed recipes	The title at the top of the recipe page, saying "All Recipes" does not interfere with the scroll function and acts as part of the scrolled content, disappearing when the user scrolls down	The title says "All Recipes," and does scroll with the rest of the recipe list (i.e. it does not remain stuck at the top while scrolling down)	Pass	n/a
17	Recipe View - Usability	Can click into a specific recipe from the main recipe page	All recipes on the recipe page can be clicked into and will display directions on how to make the recipe	When a recipe on the main recipe page is clicked, it will display a subpage with the correct information and directions about that recipe	Pass	n/a
18	Recipe View - Usability	Back button works from specific recipe view	Once in the recipe-specific view, clicking the back button will bring the user back to the main recipe page	The back button successfully redirects to the main recipe page	Pass	n/a
19	Fridge View - Interface	All ingredients successfully displayed in fridge view	Upon clicking the fridge view in the navigation bar, all ingredients are displayed to the user correctly	All ingredients are displayed in the fridge view	Pass	n/a
20	Fridge View - Interface	All ingredients sorted by category	In the fridge view, all of the ingredients are sorted by what category they belong to	All ingredients are sorted by the categories "Fruits, Vegetables, Protein, Dairy, Condiments, Grains, and Other"	Pass	n/a
21	Fridge View - Interface	Category does not appear if no ingredients are present	In the fridge view, ingredient categories should not appear if no ingredient of that category is not present	If a category has no ingredients, such as Dairy in an example, the category title is not displayed	Pass	n/a
22	Fridge View - Usability	Fridge view is scrollable	The fridge view, when overflowed, provides the user with the ability to scroll	The user can scroll up and down the fridge view without issues	Pass	n/a
23	Fridge View - Interface	Each ingredient has correct amount, unit, and expiration date displayed	In the fridge view, each ingredient displays the correct fields, matching Firebase	Each displayed ingredient has an amount, unit, and expiration date. If the field is blank, the ingredient is still displayed with a blank spot there	Pass	n/a
24	Update View - Interface	Successfully navigates to update view when ingredient clicked	When the pencil is clicked on each ingredient the app subsequently redirects the user to the current update view	Clicking the pencil for any ingredients successfully navigates to the update view	Pass	n/a

25	Update View - Functionality	Update view is pre-filled with fields from the ingredient	Upon loading the update view, all of the current data for the ingredient is displayed	The update view is pre-filled with the ingredient name, amount, category, amount unit, and expiration date	Pass	n/a
26	Update View - Usability	Name field is editable in the update view	In the update view, the name of the ingredient can be changed	The name (ingredient) field is editable in the update view	Pass	n/a
27	Update View - Usability	Category dropdown is selectable in the update view	In the update view, the category dropdown menu works correctly and all fields are visible	The category can be selected from a dropdown in the update view	Pass	n/a
28	Update View - Usability	Amount is editable (restricted to numbers) in the update view	In the update view, the ingredient amount is able to be changed and is restricted to numbers	A numerical keypad appears, only allowing the user to enter numbers for the amount field	Pass	n/a
29	Update View - Usability	Unit names are editable in the update view	In the update view, unit names are able to be changed	Unit names are editable with a keyboard	Pass	n/a
30	Update View - Usability	Expiration dates are editable in the update view	In the update view, expiration dates are able to be changed	Expiration dates are editable with a datepicker	Pass	n/a
31	Update View - Functionality	Update button successfully updates the ingredient in the database	The update button, when clicked, will change the fields specified by the user and upload the new data to Firebase	The ingredient is successfully updated in the database. Only new fields are change, unchanged fields are kept the same	Pass	n/a
32	Fridge View - Functionality	Updates automatically appear when returning to the fridge page	When updating ingredients, no refresh is needed upon returning to the fridge view page to see the changes made to the ingredient	When returning to the fridge view, the updated ingredient still has the old information present	Fail	A refresh is still needed to update ingredients as the fridge view page does not constantly refresh itself. Future solutions could include some sort of socket software that automatically listens to the database and updates
33	Fridge View - Functionality	Delete button works as intended	The delete button works and removes the ingredient from Firebase	Pressing the delete button next to an ingredient deletes the ingredient	Pass	n/a
34	Fridge View - Functionality	Deleted ingredients automatically update in the fridge page	When ingredients are deleted, the action is automatically visible in the fridge view page	Deleted ingredients automatically disappear without needing a page refresh	Pass	n/a
35	Add View - Functionality	Add view successfully opens	Upon clicking the add view button, the add view screen subsequently opens	Add view opens when clicking the plus icon on the bottom navigation bar	Pass	n/a
36	Add View - Interface	Add view has header and bottom navigation bar displaying	In the add view, the header with the title and the navigation bar are both visible and functional	The header and bottom navigation bar are still present on this add view	Pass	n/a
37	Add View - Functionality	Add view has blank fields in the beginning	Upon opening add view for the first time, all fields that will be entered in by the user are blank in the beginning	All form fields are set to be blank by default	Pass	n/a
38	Add View - Usability	Entering ingredient name in add view works	An ingredient can be entered into the add view field and the text will show up in the correct place	A keyboard appears allowing for ingredient name input. The input is successfully saved when exiting editing mode by tapping elsewhere on the screen	Pass	n/a
39	Add View - Interface	All categories present in dropdown for add view	All categories can be seen and clicked on in the dropdown menu in the add view	The correct categories are displayed, being "Fruits, Vegetables, Dairy, Protein, Grains, Condiments, and Other"	Pass	n/a
40	Add View - Usability	Category selection works in dropdown for add view	The dropdown menu works in the add view	A dropdown option appears for the category, with the appropriate category being saved	Pass	n/a
41	Add View - Usability	Numerical number entry works in add view	When trying to type in the amount of ingredient category in add view, the number shows up in the correct place	A numerical keypad appears, only allowing the user to enter numbers for the amount field	Pass	n/a
42	Add View - Usability	Entering amount unit works in add view	When trying to type in the amount unit category in add view, the text shows up in the correct place	A keyboard appears, allowing for an amount unit to be added. This input is saved when the user exists editing mode by clicking on another part of the screen	Pass	n/a
43	Add View - Usability	Date selector for expiration date works in add view	The date selector opens in the add view	A date picker opens when the expiration date is clicked	Pass	n/a
44	Add View - Functionality	Only future dates can be selected in date selector	In the date selector, users should not be able to choose expiration dates in the past	Past dates are grayed out, user may only pick dates into the future	Pass	n/a
45	Add View - Functionality	Add ingredient button successfully adds ingredient to the database	Ingredients can be added by tapping the "Add Ingredient" button	Ingredient is added to database when user clicks the "Add Ingredient" button	Pass	n/a
46	Add View - Functionality	Fields reset to blanks after an ingredient is submitted	After an ingredient is added, the form should turn blank for the next ingredient	All fields are automatically reset to blanks after an ingredient is submitted	Pass	n/a
47	Add View - Functionality	Ingredient cannot be added if there is no name and category	Only ingredients with names and categories should be allowed to be added	Submission button will not work if the category or ingredient name fields are blank	Pass	n/a
48	Add View - Interface	Notification of issue when user tries adding ingredient without name/category	A notification will appear below the submission button reminding the user to add ingredient and name/category fields	No alert is given to the user of the problem that needs to be fixed	Fail	This is a bug that can be fixed relatively easily in a future version
49	Add View - Usability	Tapping anywhere on the add view screen causes keyboard/dropdown to hide	The keyboard should not be permanently present after being opened the first time	The keyboard disappears when the user clicks on another part of the screen, ending the editing mode	Pass	n/a
50	Home View - Functionality	Recipes are recommended regardless of pluralized ingredients	Plurals should not affect the app's ability to recommend recipes	A given recipe is still recommended regardless of if the ingredient is pluralized in the fridge view	Pass	n/a
51	Home View - Functionality	Recipes are recommended regardless of whitespace after names	Extra spaces should not affect the app's ability to recommend recipes	A given recipe is still recommended regardless of if the ingredient has whitespaces as it appears in the fridge view	Pass	n/a
52	Home View - Functionality	Recommended recipes are sorted by number of ingredients missing	Order of the recommendations are sorted by how many ingredients the user has	Recommended recipes are only grouped by category, and have no apparent sub-organization within these sections	Fail	The algorithm does not do this yet, it only sorts by whether or not ingredients (no more than 3) are missing, not by how many ingredients are missing
53	Home View - Functionality	Recommended recipes are sorted by ingredient expiration urgency	App should prioritize ingredients that are about to expire sooner, not just that they are about to expire	The app does not prioritize ingredients that are about to expire sooner	Fail	The algorithm does not do this yet, it only sorts by whether or not ingredients are about to expire in the next week, not by the sooner date

54	General - Usability	App is functional without WiFi	The app should open without WiFi	The app opens and is semi-functionable without an internet connection	Pass	n/a
55	General - Usability	App can update without WiFi	The app should be able to update ingredients without WiFi	The app is unable to update without an internet connection	Fail	It is impossible to update to Firebase without an internet connection
56	General - Usability	App still loads while on a call	Joining a call should not cause the app to crash	An incoming call does not affect the performance of the app	Pass	n/a
57	General - Usability	Can type in fields while on a call	A call should not affect the ability to type in the app	When called while using the app, typing can still be done without interruption	Pass	n/a
58	Home View - Usability	Local state of home page (scroll position, text, etc.) is saved when moving to other pages and back	When switching views, local state should be saved	When switching views within the app, data (text fields) are saved	Pass	n/a
59	Fridge View - Usability	Local state of fridge page (scroll position, text, etc.) is saved when moving to other pages and back	When switching views, local state should be saved	When switching views within the app, data (text fields) are saved	Pass	n/a
60	Recipe View - Usability	Local state of all recipes page (scroll position, text, etc.) is saved when moving to other pages and back	When switching views, local state should be saved	When switching views within the app, data (text fields) are saved	Pass	n/a
61	Add View - Usability	Local state of add view page (scroll position, text, etc.) is saved when moving to other pages and back	When switching views, local state should be saved	When switching views within the app, data (text fields) are saved	Pass	n/a
62	General - Usability	Local state of app (correct page) is saved when moving to another app and back	When switching apps in the app switcher, the local state (text) should be saved	When switching apps, data (text fields) are saved	Pass	n/a
63	General - Usability	Music can be played from another app	A music player should be able to play music while the app is open	A music player (Spotify) is able to play music while the Unified Grocery App is open, the dynamic island displays the music soundwaves correctly	Pass	n/a
64	General - Usability	App can still be used with picture in picture functionality	Picture in picture should work with the app	Picture in picture can be launched from another app (YouTube) and work with the Unified Grocery App	Pass	n/a
65	General - Interface	Picture in picture does not cover bottom navigation bar	Picture in picture should be able to be used without covering the navigation bar so that the user can still use the app while watching videos	When picture in picture is in use and moved to the bottom of the screen, it stops right before it hits the navigation bar and does not cover it	Pass	n/a
66	Home View - Interface	Title does not interfere with time and control center	The iOS overlay of the time, cellular connection, battery percentage, and WiFi connection are still visible while using the app	The title and top bar does not interfere at all with the time or control center of the iPhone, everything is visible and usable	Pass	n/a
67	Home View - Functionality	Home page title changes according to time	User is greeted with good morning/afternoon/evening depending on the time of day	The app changes the greeting for the user according to the time (midnight, noon, and 6pm)	Pass	n/a

Test Cases PASSED: 61 (91.04%)

Test Cases FAILED: 6 (8.96%)