

University of California, San Diego
CSE 110 Spring 2020

Use Cases



Team GOcery

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Legend: Priority

1	Must have: Essential components to the application's functionality and purpose.
2	Should have: Features that will enhance the application and better fulfill our purpose, but is not necessary to the core functionality.
3	Could have: Additional features that do not affect the core functionality.

Legend: Status

Done
Work in Progress
Not Started
Removed

Glossary

Pantry - A digital representation of the grocery items the user has at home. The pantry is tied to a specific account and is stored remotely.

Recipe - A list of ingredients and instructions for a dish (instructions are optional).

Item - A singular food item. Also synonymous with the term “Ingredient.”

Store - A shop that sells items.

Barcode - A unique identification for each item in each different store.

Value - Nutritional information for a specific item.

Shopping List - A list of items to be purchased at a store.

Spending History - Price totals of previous items bought in a store.

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Introduction

Grocery shopping, meal preparing, and organization are all routine activities that can often become quite a hassle. Some common struggles include: figuring out what ingredients to buy, keeping track of what a user already owns, and spending too much time on these activities. Our app, “RecipEz”, pronounced “Recipes”, alleviates and resolves most of these problems. What is something new you can make from your leftover spinach? For people who are looking to save time and want to have variety in their meals, our application “RecipEz” has got you covered. **Our Android application utilizes a receipt scanning system to quickly record ingredients, lists those ingredients in our storage system for personal inventory management, and suggests simple recipes that could be made from the ingredients in a user’s inventory.** The app is made to be easy and efficient to use, saving user’s time and stress.

RecipEz allows you to take a picture of your receipt from the grocery store, reading each text line to match to a grocery item. The app accesses your camera to take a picture of your receipt. The picture, then, is run into a parser that will read the text. If our system does not recognize the word, then you can manually match the word with an item name and the application will remember that setting. For example, if you purchased an onion that is labeled “ON193”, the application will ask what the item “ON193” is and then save it as an “onion” anytime it appears again in the future. If the item you bought is not meant to be an ingredient, you have the option to not match it with anything. The above processes will also make matching items faster the more frequently the application is used. Matched items will be confirmed and placed in your pantry, where ingredients are stored, making the process simple and easy for anybody to use.

After inputting your ingredients with RecipEz, the items are then put into your pantry to keep inventory. Any ingredients that you haven’t scanned previously can be manually inputted in the pantry. Additionally, if an ingredient was accidentally matched or you ran out of an ingredient, then you can remove that item from the pantry. The system allows for easy use and clear instruction on what ingredients you currently have sitting in storage. Additionally, RecipEz will also suggest ingredients to buy based on factors like how often an ingredient is bought, if it has been used, or if having certain ingredients can add more variety to a user’s meals. There are also options to have multiple pantries for people who commute between multiple households. This allows for a more organized and consistent inventory to look at rather than your own memory.

With RecipEz, users can explore new dishes to make whether you may have leftover ingredients or want more variety. A recipe that users planned for can be inputted into the system using our recipes tab. After listing information about the recipe, they have the ability to use that recipe anytime they want within the application. A recipe that was used to cook food will remove

any ingredients that were used in the recipe and update the pantry to leave the leftover ingredients. These ingredients can be selected from a list of given ingredients to find a recipe that can be made. Additionally, if you change your mind about making your own recipe, then you can use this feature to find many new options to add to your cookbook.

RecipEz helps the user save time by simplifying ingredient storage. In this time of quarantine, we might be adjusting to a different lifestyle than we're used to. This app serves to assist with that adjustment. Many people bulk buy food to avoid going out as often, this application will allow users to bulk buy food wisely, keeping track of what is currently owned and suggesting other uses for different ingredients. This makes efficiency one of the most important benefits of using RecipEz, resulting in saved time and reduced stress.

RecipEz is an application that can be consistently used to lessen the burden of grocery shopping and cooking food. Our application will be created with the user's experience as the primary focus, so the efficiency of using the application will be one of the most important benefits of using our application. Our app can save time and reduce stress through a receipt scanning system, personal pantry tracking, and recipe recommendation. Altogether, shopping and cooking is made *easy* with RecipEz.

UC-L1 Register Account

Priority	1
Status	Not started
Description	The user can register an account by submitting an email and password.
User Goal	To create an account to use the application.
Desired Outcome	To set up an account to contain all your settings and data.
Actor	The user
Dependent Use Cases	None
Requirements	
Pre-Condition	The user must have installed the application on their smartphone. The user must not have an account yet.
Post-Condition	The user's email and password are registered.
Trigger	The user would like to be able to access the application.
Workflow	<ol style="list-style-type: none"> 1. The user shall launch the application. 2. The system shall bring the user to the login screen. 3. The user shall click on the register button on the bottom of the screen. 4. The system shall pull up a window, prompting an email and password. 5. The user shall enter in their email and desired password to complete registration. 6. The system shall bring the user back to the login screen to login.
Alternative Workflow	<p>In the event the email is not real:</p> <ol style="list-style-type: none"> 6. The system shall have a pop-up that tells the user to input a valid email address. <p>In the event the email is already registered:</p> <ol style="list-style-type: none"> 6. The system shall have a pop-up that tells the user the email inputted is already registered.

UC-L2 Login

Priority	1
Status	Not Started
Description	The user can log into their account using email and password.
User Goal	To log into the user's account.
Desired Outcome	Successfully and quickly logging into the account and accessing all inventory/recipes related to the user.
Actor	The user
Dependent Use Cases	UC-L1
Requirements	The user must already have an account.
Pre-Condition	The user must have the app and an account already created.
Post-Condition	None
Trigger	User wants to access the app.
Workflow	<ol style="list-style-type: none">1. The user shall launch the application while not logged in.2. The system shall bring the user to the login screen.3. The user shall input their email and password to login.4. The user is successfully logged into their account.
Alternative Workflow	<p>If user puts in a wrong password</p> <ol style="list-style-type: none">4. Asks for password again.5. If the password is consistently incorrect UC-L5. <p>If user input an unregistered email</p> <ol style="list-style-type: none">4. Ask the user if they would like to register their email.5. If yes, UC-L1.

UC-L3 Log Out

Priority	1
Status	Not Started
Description	The user can log out of their currently logged in account.
User Goal	To log out of their account.
Desired Outcome	To be logged out and brought back to the log-in screen.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2
Requirements	
Pre-Condition	The user must be logged in to the application.
Post-Condition	The user will not be logged in.
Trigger	The user wants to change accounts, register a new account or completely exit the app.
Workflow	<ol style="list-style-type: none">1. The user shall press the logout button on the dashboard.2. The system shall present a dialog asking for confirmation.3. The user shall click “confirm.”4. The system shall bring the user to the login screen.
Alternative Workflow	In the event the user wants to cancel the logout: <ol style="list-style-type: none">3. The user shall click “cancel.” End.

UC-L4 Request Password Reset

Priority	1
Status	Not Started
Description	The user can request a password reset link to be sent to them by email.
User Goal	To regain access to an existing account whose email is known.
Desired Outcome	To receive a reset password email at the known email address, allowing resetting the password through UC-L5.
Actor	The user
Dependent Use Cases	UC-L1
Requirements	
Pre-Condition	The user must have the application and not be currently logged in.
Post-Condition	If the inputted email address is valid, an email will be sent to the specified address allowing resetting the password.
Trigger	The user has forgotten the password to their account.
Workflow	<ol style="list-style-type: none">1. The user shall launch the application.2. The system shall bring the user to the login screen.3. The user shall input an email into the login screen.4. The system shall display a “Forgot password?” link.5. The user shall click the “Forgot password?” Link.6. The system shall display a message informing the user to check their email.7. The system shall send an email to the specified address containing a “reset password” link and a “not me” link.
Alternative Workflow	<p>In the event the inputted email is not associated with an existing account:</p> <ol style="list-style-type: none">6. The system shall display a message informing the user to check their email. End.

UC-L5 Reset Password

Priority	1
Status	Not Started
Description	The user can reset their password from an email sent to their account's email address.
User Goal	To regain access to an existing account whose email is known.
Desired Outcome	To change the password of the user's account to a new password.
Actor	The user
Dependent Use Cases	UC-L1, UC-L4
Requirements	
Pre-Condition	UC-L4 must have been performed first.
Post-Condition	If the reset password link is still valid, the password of the account associated with the email address will be changed to the specified new password.
Trigger	The user has forgotten the password to their account.
Workflow	<ol style="list-style-type: none">1. The user shall click the "reset password" link from the email.2. The system shall prompt for a new password.3. The user shall enter and confirm their new password.4. The system shall set the account associated with the email's password to the specified password.
Alternative Workflow	<p>In the event the "not me" link has been clicked in the email, or 24 hours has passed since the email was sent:</p> <ol style="list-style-type: none">2. The system shall redirect to a 404 Not Found.

UC-S1 Scan Receipt

Priority	2
Status	Not Started
Description	The user can scan a grocery receipt to automatically add items from their receipt to their pantry.
User Goal	The user's grocery logging process is simplified by automating the process of adding grocery items to their pantry.
Desired Outcome	The items from the user's grocery receipt are added to the user's pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2
Requirements	
Pre-Condition	The user is logged into the application and has the dashboard open.
Post-Condition	The items in the user's grocery receipt are added to their pantry.
Trigger	The user wants to add their purchased grocery items to their pantry.
Workflow	<ol style="list-style-type: none">1. The user shall press the "Scan Receipt" button on the application dashboard.2. The system shall open the camera of the user's device.3. The user shall position the camera on the grocery receipt to be scanned.4. The system shall read the contents of the receipt.5. The system shall match the contents of the receipt to generic food items in the database of the application.6. The system shall retrieve the details of the matching items.7. The system shall display a list of the items from the receipt that were not present in the database with 2 options: "Add Item" and "Ignore".8. The user shall press "Add Item" or "Ignore" for all unrecognized items.9. The system shall add the items and their quantity scanned from the receipt to the pantry database of the user.10. The system shall display the updated pantry to the user.

Alternative Workflow	<p>The user wants to cancel the receipt scanning process:</p> <ol style="list-style-type: none">1. The user shall press the “Cancel” button.2. The system shall close the camera and take the user back to the dashboard.
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UC-S2 Add Unrecognized Item

Priority	2
Status	Not Started
Description	The user can manually add grocery items from their receipt that were not recognized during the scanning process.
User Goal	The next time the user scans a receipt that contains the previously unrecognized grocery items, the application will automatically add the items to the user's pantry.
Desired Outcome	The unrecognized grocery items will be added to the user's pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-S1
Requirements	
Pre-Condition	The user has already scanned a receipt and is now being prompted to fill in items that were not recognized. The user has clicked the "Add Item" button.
Post-Condition	The unrecognized items from the user's grocery list will be added to the user's pantry.
Trigger	The user wants to add unrecognized items from their grocery list to their pantry.
Workflow	<ol style="list-style-type: none">1. The system shall display each unrecognized grocery item and prompt a user to provide a text input for the name of the unrecognized item.2. The user shall enter the name of the unrecognized grocery item.3. The system shall query the database and provide a dropdown list of generic food items that match the user input.4. The user shall select an option from the dropdown list.5. The system shall map the name of the unrecognized item on the receipt to the name of the item selected from the dropdown list by the user.6. The system shall add the item and its quantity scanned from the receipt to the pantry database of the user.

	<p>7. The system shall display a list of the items from the receipt that were not present in the database with 2 options: “Add Item” and “Ignore”.</p>
Alternative Workflow	<p>The user does not want to add the unrecognized items to pantry:</p> <ol style="list-style-type: none"> 1. The user shall press the “Cancel” button. 2. The system shall display a list of the items from the receipt that were not present in the database with 2 options: “Add Item” and “Ignore”.

UC-S3 Choose Item From Suggestions

Priority	3
Status	Not Started
Description	For items that were unrecognized during receipt scanning, the user can pick an item from a list of suggestions.
User Goal	To make the process of adding unrecognized items to the user's pantry easier and quicker.
Desired Outcome	The unrecognized items from the user's scanned grocery receipt will be added to the user's pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-S1
Requirements	
Pre-Condition	The user has already scanned a receipt and is now being prompted to fill in items that were not recognized. The user has clicked the "Add Item" button.
Post-Condition	The unrecognized items from the user's grocery list will be added to the user's pantry.
Trigger	The user wants to add unrecognized items from their grocery list to their pantry.
Workflow	<ol style="list-style-type: none">1. The system shall display each unrecognized grocery item to the user along with a list of item suggestions from the database.2. The user shall select an option from the list of suggestions.3. The system shall map the name of the unrecognized item on the receipt to the name of the item selected from the suggestions list.4. The system shall add the item and its quantity scanned from the receipt to the pantry database of the user.5. The system shall display a list of the items from the receipt that were not present in the database with 2 options: "Add Item" and "Ignore".
Alternative Workflow	The user does not want to pick an item from the list of suggestions:

	<ol style="list-style-type: none">1. The user shall press the “Choose something else” button.2. The system shall execute UC-S2 (manual enter). <p>The user wants to abort the process of adding unrecognized items:</p> <ol style="list-style-type: none">1. The user shall press the “Cancel” button.
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UC-S4 Select Store

Priority	3
Status	Not Started
Description	The user can select the store that the receipt to be scanned is from.
User Goal	The receipt scanning process will be made quicker and easier for the user by recognizing store specific items present in the user's receipt.
Desired Outcome	The user can scan their grocery receipt.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2
Requirements	
Pre-Condition	The user is logged into the application and has the dashboard open.
Post-Condition	The camera of the user's device is opened and ready for receipt scanning.
Trigger	The user wants to scan the grocery receipt of a particular store.
Workflow	<ol style="list-style-type: none">1. The user shall press the "Scan Receipt" button on the application dashboard.2. The system shall display a search bar.3. The system shall prompt the user to enter a store.4. The user shall enter a store name.5. The system shall display a dropdown list of available stores matching the entered store name.6. The user shall select a store from the dropdown list.7. The system shall open the camera of the user's device for receipt scanning.
Alternative Workflow	<p>The user wants to abort the receipt scanning process:</p> <ol style="list-style-type: none">1. The user shall press the "Cancel" button.2. The system shall take the user back to the dashboard.

UC-S5 Scan Barcode

Priority	3
Status	Not Started
Description	The user scans the barcode of an item to add it to their pantry.
User Goal	The user wants to add an item to their pantry by scanning it.
Desired Outcome	The grocery item and its quantity are added to the user's pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2
Requirements	
Pre-Condition	The user is logged into the app and has the dashboard open.
Post-Condition	The grocery item and its quantity are added to the user's pantry.
Trigger	The user wants to add a grocery item to their pantry.
Workflow	<ol style="list-style-type: none">1. The user shall press the "Scan Barcode" button.2. The system shall turn on the device camera.3. The user shall position the camera on the barcode of the grocery item to be added to the pantry.4. The system shall read the barcode of the grocery item.5. The system shall close the device camera.6. The system shall retrieve the details of the grocery item based on the scanned barcode.7. The system shall display the pantry tab of the application of the device screen.8. The system shall update the pantry list to include the details of the scanned grocery item.9. The system shall prompt the user to enter the desired quantity of the newly added grocery item.10. The user shall enter a numeric quantity of the scanned grocery item.11. The user shall press the "Save" button.12. The system shall display a modal to the user confirming that the pantry item has been added successfully.
Alternative Workflow	The users wants to abort scanning the barcode of a grocery item:

	<ol style="list-style-type: none">1. The user shall press the “Cancel” button.2. The system shall take the user back to the dashboard. <p>The users provides an invalid input for the quantity of the item:</p> <ol style="list-style-type: none">1. The user enters a non-numeric value for the quantity of the item or leaves the quantity blank.2. The system prompts the user to enter a numeric value for the quantity of the item.
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UC-P1 View Pantry

Priority	1
Status	Not Started
Description	The user views a list of the grocery items in their pantry.
User Goal	The user wants to know what items are in their pantry.
Desired Outcome	The user can see all items in their pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2
Requirements	
Pre-Condition	The user is logged into the app and has the dashboard open.
Post-Condition	The user can see which items are in their pantry and in what quantity.
Trigger	The user wants to know what food they have in their pantry.
Workflow	<ol style="list-style-type: none">1. The user shall press the “Pantry” button.2. The system shall display a list of the items in the user’s pantry and their respective quantities.
Alternative Workflow	N/A

UC-P2 Add Item

Priority	1
Status	Not Started
Description	The user looks up and adds a grocery item to their pantry.
User Goal	The user wants to add an item to their pantry.
Desired Outcome	The user's pantry contains the added item.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-P1
Requirements	
Pre-Condition	The user is logged into the app and has the pantry tab open.
Post-Condition	The system shall add the desired item to the user's selected pantry.
Trigger	The user buys a new grocery item or has an item that is not listed in their pantry.
Workflow	<ol style="list-style-type: none">1. The user shall press the "Add Item" button.2. The system shall prompt the user with a search bar.3. The user shall enter keywords or the name of the item they wish to add.4. The system shall display a list of items that match the search terms.5. The user shall select one of the items to add.6. The system shall prompt the user for the quantity to add.7. The user shall enter a quantity for the item.8. The system shall add the desired quantity of the item to the user's pantry.
Alternative Workflow	<p>If the user no longer wants to add an item:</p> <ol style="list-style-type: none">3. The user shall press the "Cancel" button.4. The system shall return to the pantry.

UC-P3 Adjust Item

Priority	1
Status	Not Started
Description	The user manually edits the quantity for an item or deletes it from their pantry.
User Goal	The user wants to change how much of an item is in their pantry.
Desired Outcome	The user's pantry reflects the desired adjustment.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-P1
Requirements	
Pre-Condition	The user is logged into the app and has the pantry tab open.
Post-Condition	The system shall make the desired adjustment to the user's selected pantry.
Trigger	The user consumes or throws out an item.
Workflow	<ol style="list-style-type: none">1. The user shall select the quantity field next to a listed item.2. The system shall allow the field to be edited.3. The user shall change the value in the quantity field.4. The system shall record the change to the user's pantry.
Alternative Workflow	<p>If the user sets the quantity to zero:</p> <ol style="list-style-type: none">4. The system shall prompt the user to delete the item.5. The user shall select either the "Delete" or "Cancel" button.6. The system shall delete the item or set the quantity back to its original, depending on the user's selection. <p>If the user instead long presses on a listed item:</p> <ol style="list-style-type: none">4. The system shall prompt the user to delete the item.5. The user shall select either the "Delete" or "Cancel" button.6. The system shall delete the item or dismiss the prompt, depending on the user's selection.

UC-P4 Create New Pantry

Priority	3
Status	Not Started
Description	The user creates a new pantry to store grocery items in.
User Goal	The user wants to create a new pantry.
Desired Outcome	The user has a new pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-P1
Requirements	
Pre-Condition	The user is logged into the app and has the pantry tab open.
Post-Condition	The system shall add a new pantry to the user's pantries.
Trigger	The user decides they want to keep a separate list of grocery items.
Workflow	<ol style="list-style-type: none">1. The user shall press the ellipses button on the action bar.2. The system shall display an options menu.3. The user shall select the "Change Pantry" option.4. The system shall display a list of the existing pantries.5. The user shall press the "Add Pantry" button.6. The system shall prompt the user for a name for the pantry.7. The user shall enter a name for the pantry.8. The system shall add the new pantry to the list of pantries.
Alternative Workflow	<p>The user wants to cancel adding a pantry:</p> <ol style="list-style-type: none">3. The user shall press the "Cancel" button.4. The system shall return to the pantry. <p>The user wants to cancel adding a pantry:</p> <ol style="list-style-type: none">7. The user shall press the "Cancel" button.8. The system shall return to the pantries list.

UC-P5 Switch Active Pantry

Priority	3
Status	Not Started
Description	The user switches the active pantry.
User Goal	The user wants to use a different pantry.
Desired Outcome	The system switches active pantries.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-P1, UC-P4
Requirements	
Pre-Condition	The user is logged into the app and has the pantry tab open.
Post-Condition	The system shall switch active pantries.
Trigger	The user wants to view or modify items in another pantry.
Workflow	<ol style="list-style-type: none">1. The user shall press the ellipses button on the action bar.2. The system shall display an options menu.3. The user shall select the “Change Pantry” option.4. The system shall display a list of the existing pantries.5. The user shall select one of the listed pantries.6. The system shall highlight the selected pantry and make it the active pantry.
Alternative Workflow	<p>The user wants to cancel switching pantries:</p> <ol style="list-style-type: none">5. The user shall press the “Cancel” button.6. The system shall return to the pantry.

UC-P6 Share Pantry

Priority	3
Status	Not Started
Description	The user can invite other accounts to the same pantry.
User Goal	The user wants to allow others to access and modify the information in their pantry.
Desired Outcome	The invited account can access and modify the information in the pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-P1, UC-P4
Requirements	
Pre-Condition	The user is registered, logged in, and on the “Pantry” page.
Post-Condition	An invite has been sent to the other user’s account that they can accept to share the pantry.
Trigger	The user wants to share their pantry with another user.
Workflow	<ol style="list-style-type: none"> 1. The user shall tap on the “pantry.” (icon) 2. The system shall display options to “Add,” ”Delete,” “Invite,” or “Merge” pantries. 3. The user shall select “Invite.” 4. The user shall input the email of the other user they wish to share the pantry with. 5. The user shall hit “Send.” 6. The system shall send an invite email to the designated recipient.
Alternative Workflow	<p>If the user doesn’t want to send the invite:</p> <ol style="list-style-type: none"> 5. The user shall hit “Cancel.” 6. The system shall return to the pantry tab.

UC-P7 Set Expiration

Priority	3
Status	Not Started
Description	The user can manually set expiration dates for items in the pantry.
User Goal	The user wants to keep track of when certain items expire.
Desired Outcome	The system knows when certain items are expired.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-P1, UC-P2, UC-P3
Requirements	
Pre-Condition	The user is registered, logged in, and on the “Pantry” page. The user has ingredients stored in the pantry.
Post-Condition	The changed value is saved as the updated expiration date of the selected ingredient.
Trigger	The user wants to change the expiration date on an ingredient.
Workflow	<ol style="list-style-type: none">1. The user shall tap on an ingredient listed in the pantry.2. The system shall display an ingredient page.3. The user shall tap on the “Expiration” field in the ingredient’s information page.4. The user shall modify the date in the “Expiration” field.5. The user shall tap “Save” on the ingredient’s information page.6. The system shall set the item’s expiration date.
Alternative Workflow	<p>If the user doesn’t want to save the new expiration:</p> <ol style="list-style-type: none">5. The user shall tap on “Cancel.”6. The system shall return the user to the pantry page.

UC-P8 Delete Pantry

Priority	3
Status	Not Started
Description	The user can delete a pantry
User Goal	The user wants to remove a pantry from their pantry tab.
Desired Outcome	A pantry is deleted from the pantry tab.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-P1, UC-P4
Requirements	
Pre-Condition	The user is registered, logged in, and on the “pantry” page.
Post-Condition	The selected pantry has been deleted.
Trigger	The user wants to delete a pantry.
Workflow	<ol style="list-style-type: none">1. The system shall display options to “Add,” ”Delete,” “Invite,” or “Merge” pantries.2. The user shall select “Delete.”3. The system shall display all the available pantries to delete.4. The user shall check the pantries to delete.5. The user shall tap on “Delete.”6. The system shall delete the selected pantries.
Alternative Workflow	<p>If the user doesn’t want to delete:</p> <ol style="list-style-type: none">5. The user shall tap on “Cancel”6. The user is returned to the pantries page.

UC-P9 Merge Pantries

Priority	3
Status	Not Started
Description	The user can merge multiple pantries together.
User Goal	The user wants to merge pantries together.
Desired Outcome	The user has a merged pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-P1, UC-P4
Requirements	
Pre-Condition	The user is registered, logged in, and on the “Pantry” page.
Post-Condition	The pantries are merged.
Trigger	The user wants to combine items in multiple pantries to one.
Workflow	<ol style="list-style-type: none"> 1. The system shall display options to “Add,” ”Delete,” “Invite,” or “Merge” pantries. 2. The user shall select “Merge.” 3. The system shall display all the available pantries to merge. 4. The user shall check the pantries to merge. 5. The system shall prompt the user for a name for the merged pantry. 6. The user shall enter a name. 7. The system shall display a confirmation page with two options: “Merge” and “Cancel.” 8. The user shall select “Merge.” 9. The system shall merge the checked pantries into one pantry.
Alternative Workflow	<p>The user cancels the pantry merge:</p> <ol style="list-style-type: none"> 8. The user selects “Cancel” when choosing pantries to merge. 9. The system cancels the merge and reverts to the original state of pantries.

UC-R1 Request Recipe

Priority	1
Status	Not Started
Description	The user can request a list of recommended recipes based on the items of their pantry.
User Goal	The user wants recipes based on items they have.
Desired Outcome	The user gets a list of recipes.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2
Requirements	
Pre-Condition	The user is registered, logged in, and has items in the pantry either through scanning the receipt or a manual add.
Post-Condition	The user has a list of recipes to choose from.
Trigger	The user is not sure what to make with the items they have, so they ask for recommended recipes.
Workflow	<ol style="list-style-type: none">1. The user shall tap “recipes.”2. The system shall display an option called “recommend recipes.”3. The user shall tap “recommend recipes.”4. The system shall display pantries available to recommend recipes from.5. The user shall select pantry to recommend recipes from (if multiple pantries are present)6. The system shall search from the database to find recipes with matching items.7. The system shall display a list of recipes from search.
Alternative Workflow	<p>The system cannot retrieve recipes:</p> <ol style="list-style-type: none">7. The system shall display a window saying “No recipes found”.8. The user shall close the window.

UC-R2 Create Recipe

Priority	1
Status	Not Started
Description	The user can create their own recipes to be used later.
User Goal	The user wants to store their own recipes.
Desired Outcome	The user has personal recipes uploaded and updated.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2
Requirements	
Pre-Condition	The user is registered, logged in.
Post-Condition	The added recipe is stored in the user's recipes.
Trigger	The user does not want only recommendations, but their own recipe.
Workflow	<ol style="list-style-type: none">1. The user shall tap on "recipes."2. The system shall display options to "add","delete", "edit" recipes.3. The user shall select "add."4. The system shall display text boxes to add items.5. The user shall add items and respective quantities.6. The system shall display a text box for instructions.7. The user shall add the instruction.8. The system shall display a text box for recipe name.9. The user shall enter the recipe name.10. The system shall display "save recipe."11. The user shall select "save recipe."12. The system shall save the recipe.
Alternative Workflow	User does not save recipe: <ol style="list-style-type: none">11. The user shall click "Cancel".12. The system shall display a message "Not saved. Are you sure you want to exit?"13. The user shall select "yes" or "no".14. The system shall return to the homepage if "no" is chosen.

UC-R3 Select Recipe

Priority	1
Status	Not Started
Description	The user can pick a recipe to make, which will automatically update the items in their pantry.
User Goal	The user selects a recipe that they want to prepare or cook.
Desired Outcome	The user chooses a recipe and the amounts of each ingredient used by the user are deducted from the user's pantry.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-R1
Requirements	
Pre-Condition	The user is registered, logged in, and has an existing pantry.
Post-Condition	The respective quantities of ingredients used by the user are removed from the user's pantry.
Trigger	The user has viewed a recipe and wants to proceed with preparing the food.
Workflow	<ol style="list-style-type: none">1. The system shall display a list of recipes from search.2. The user shall choose a recipe to view more info.3. The system shall display full info of the recipe.4. The user shall choose "make."5. The system shall prompt a window with each ingredient listed with their respective amount given from the recipe.6. The system shall prompt "Confirm ingredient amounts?" and displays options "yes" and "no" at the bottom of the window.7. The user shall select "yes."8. The system shall subtract the respective amount of each ingredient from the user's pantry.9. The system shall close the ingredient window and return back to the recipe.
Alternative Workflow	<p>The user doesn't follow the recipe exactly.</p> <ol style="list-style-type: none">7. The user shall select "no".

	<ol style="list-style-type: none">8. The system shall display “+” and “-” next to each listed amount for each ingredient and displays “Confirm” at the bottom of the window.9. The user shall adjust the amounts using “+” and “-”.10. The user shall select “confirm.”11. The system shall subtract the respective amount of each ingredient from the user’s pantry.12. The system shall close the ingredient window and return back to the recipe.
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UC-R4 Delete Recipe

Priority	1
Status	Not Started
Description	The user can delete their own recipe.
User Goal	The user wants to delete a recipe they created.
Desired Outcome	The user has personal recipes uploaded and updated.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-R2
Requirements	
Pre-Condition	The user is registered, logged in, and has recipes saved.
Post-Condition	The selected recipe is deleted from the user's recipes.
Trigger	The user no longer wants to use a recipe they made.
Workflow	<ol style="list-style-type: none">1. The user shall select on "recipes."2. The system shall display options to "add","delete", "edit" recipes.3. The user shall select "delete."4. The system shall prompt "Are you sure you want to delete?" and display "yes" and "no" options.5. The user shall select "yes."6. The system shall remove the recipe from the user's saved recipes.
Alternative Workflow	<p>The user does not wish to delete the recipe:</p> <ol style="list-style-type: none">5. The user shall select "no."6. The system shall return to the homepage.

UC-R5 View Recipe

Priority	3
Status	Not Started
Description	The user can view daily values of a recipe.
User Goal	The user wishes to see the nutritional values of a certain recipe they are interested in.
Desired Outcome	The user views the nutritional information for a recipe.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-R1
Requirements	
Pre-Condition	The user is registered, logged in, and can view recipes.
Post-Condition	The user is shown the nutritional values for a recipe.
Trigger	The user views a recipe and wants to know more about the health and nutritional aspects of the dish.
Workflow	<ol style="list-style-type: none"> 1. The system shall display a list of recipes from search. 2. The user shall choose a recipe to view more info. 3. The system shall display full info of the recipe. 4. The user shall choose "View daily values" 5. The system shall display a window with the daily value information of the recipe. 6. The user shall choose "back". 7. The system shall close the daily value window and return back to the recipe.
Alternative Workflow	<p>The system cannot retrieve daily values for the given recipe:</p> <ol style="list-style-type: none"> 5. The system shall display a window saying "Daily values cannot be retrieved." 6. The user shall choose "back." 7. The system shall close the error window and return back to the recipe.

UC-\$1 Request Shopping List

Priority	3
Status	Not Started
Description	The user can request a recommended shopping list based on the contents of their pantry.
User Goal	The user wants to get a list of recommended shopping lists.
Desired Outcome	The users get their recommended shopping list.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2
Requirements	
Pre-Condition	The user is logged in to the app.
Post-Condition	The system shall give the list of recommended shopping lists.
Trigger	The user wants to get a recommendation based on their pantry lists.
Workflow	<ol style="list-style-type: none">1. The user shall press the “Pantry” button.2. The system shall ask if the user wants a recommended shopping list.3. The user shall press the “Yes” button.4. The system shall list the recommended shopping list.
Alternative Workflow	<p>The system does not have a shopping list suggestion:</p> <ol style="list-style-type: none">4. The system shall display a window saying “No recommendations.”5. The user shall click “exit.”6. The system shall close the error window.

UC-\$2 View Spending History

Priority	3
Status	Not Started
Description	The user can view their spending history.
User Goal	To make users know the summary of what they spent.
Desired Outcome	The list of spent history.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-S1
Requirements	
Pre-Condition	The user is logged into the app.
Post-Condition	The user can see their spending history.
Trigger	The user wants to know how much they have spent on the grocery.
Workflow	<ol style="list-style-type: none">1. The user shall click “Pantry.”2. The system shall display the option “History.”3. The user shall click “History.”4. The system shall display a list of the user’s spending history.
Alternative Workflow	<p>The system does not display spending history:</p> <ol style="list-style-type: none">4. The system shall display a window saying “No spending history.”5. The user shall click “exit.”6. The system shall close the error window.

UC-\$3 Get Shopping List Total

Priority	3
Status	Not Started
Description	The user can get an estimated total shopping price based on the recommended shopping list.
User Goal	To make users know the estimated price they will spend based on the shopping list.
Desired Outcome	The user can see the estimated total price on their shopping list.
Actor	The user
Dependent Use Cases	UC-L1, UC-L2, UC-\$1
Requirements	
Pre-Condition	The user is logged into the app which is opened to the recommended shopping list.
Post-Condition	The user can see the estimated total price of their shopping list.
Trigger	The user can get an idea how much they will spend on grocery.
Workflow	<ol style="list-style-type: none">1. The system shall list the recommended shopping list.2. The user shall click the button “Estimated price.”3. The system shall display the estimated total shopping price based on the recommended shopping list.
Alternative Workflow	<p>The system does not have an estimated shopping list price suggestion:</p> <ol style="list-style-type: none">7. The system shall display a window saying “No estimated price.”8. The user shall click “exit.”9. The system shall close the error window.