Use Cases

for

MyPantry

Version 1.0

Prepared by Bit Legion

Z35 Group 1

27/1/2023

Revision History

Name	Date	Reason For Changes	Version
Mavis Khoo	29/1/2023	Created basic use cases.	1.0
Ie Jia Sheng	30/1/2023	Add in Use Case Diagram.	1.1
Mavis Khoo	12/2/2023	Added functions included in MyProfile page. Made minor changes to Use Case Descriptions.	2.0

Ie Jia Sheng	12/2/2023	Edited Use Case Diagram.	2.1
Mavis Khoo	8/4/2023	Made changes to the Use Case Descriptions to align them with the actual web app functionalities.	3.0
Ie Jia Sheng	8/4/2023	Aligned Use Case diagram according to actual web app implementations.	3.1

Use Case Template

Use Case ID:	LOGIN.01		
Use Case Name:	Log in to account through email.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry
Description:	User will log in to his account through email and password.
Preconditions:	1. User has an account with MyPantry. 2. User has an email and a password.
Postconditions:	1. User will enter his account in the web app. 2. User will not be able to enter the web app.
Priority:	High
Frequency of Use:	High
Flow of Events:	1. MyPantry requests email and password. 2. User enters email and password. 3. MyPantry verifies the email and password. 4. If the email and password are verified, User is allowed to enter the app, the included use case INGD.01 is used to display the Pantry page.
Alternative Flows:	LOGIN.01.AC.S3: If the email or password are invalid. 1. MyPantry displays the message "Error signing in. Please check your email and password.". 2. MyPantry returns to step 1. LOGIN.01.AC.S1: If the User wants to use their Google account to log in. 1. If the User selects "Sign In with Google", then the User uses the included use case LOGIN.02 to log in.
Exceptions:	LOGIN.01.EX.01: User has not verified account through the email sent to them. 1. MyPantry displays "Your email is not verified. Please check your email inbox for a verification email.". 2. User is not allowed to enter the app. 3. MyPantry returns to step 1.
Includes:	INGD.01, LOGIN.02
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	LOGIN.02		
Use Case Name:	Log in to account through Google account.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, Google Sign In API
Description:	User will log in to his account using their Google account.
Preconditions:	1. User has a Google account.
Postconditions:	1. User will enter his account in the web app. 2. User will not be able to enter the web app.
Priority:	High
Frequency of Use:	High
Flow of Events:	1. Google Sign In API requests for Gmail account and password. 2. User enters Gmail account and password. 3. Google Sign In API verifies Google account credentials. 4. If Google account credentials are verified, User is allowed to enter the app, the included use case INGD.01 is used to display the Pantry page.
Alternative Flows:	LOGIN.01.AC.S4: If Gmail account and password are invalid. 1. Google Sign In API returns to step 1.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	LOGIN.03		
Use Case Name:	Sign up for a new account.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry, Firebase
Description:	User will create new account.
Preconditions:	1. User does not already have an account with the email.
Postconditions:	1. User creates new account. 2. User cannot create new account.
Priority:	High
Frequency of Use:	Medium
Flow of Events:	1. MyPantry requests full name, email, password and confirmed password. 2. User enters full name, email, password and confirmed password. 3. MyPantry verifies that full name contains 4-20 characters, and no numerical or special characters. 4. MyPantry verifies that email entered is an email. 5. MyPantry verifies that password has at least 8 characters, and contains at least one lowercase letter, one uppercase letter, one number, and one special character. 6. MyPantry verifies that confirmed password matches the password. 7. Firebase verifies that email is not in use. 8. If the username, password and email are verified, account is created by Firebase. User receives an email to verify account.

Alternative Flows:	LOGIN.03.AC.S3: If full name does not contain 4-20 characters, or contains a numerical or special character.
	    1. MyPantry displays the message "Full name should be 4-20 characters with no numerical & special character".
	    2. MyPantry returns to step 1.
	
	LOGIN.03.AC.S4: If the email entered is not an email.
	    1. MyPantry displays the message "Email must be a valid email.".
	    2. MyPantry returns to step 1.
	
	LOGIN.03.AC.S5: If the password does not have at least 8 characters, or does not contain at least one lowercase letter, one uppercase letter, one number, or one special character.
	    1. MyPantry displays the message "8 to 24 characters. Must include uppercase and lowercase letters, a number and a special character. Allowed special characters: ! @ # $ %".
	    2. MyPantry returns to step 1.
	
	LOGIN.03.AC.S6: If the confirmed password does not match the password.

	1. MyPantry displays the message "Must match the first password input field.".
	2. MyPantry returns to step 1.
	
	LOGIN.03.AC.S7: If the email is already in use.
	   1. MyPantry displays the message "This email is already in use, please use another email.".
	   2. MyPantry returns to step 1.

Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	INGD.01		
Use Case Name:	View ingredient list.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry
Description:	User can view and edit the ingredient list in Pantry.
Preconditions:	-
Postconditions:	1. Ingredients will be added or removed from Pantry. 2. Ingredients will be displayed according to User's choice.
Priority:	High
Frequency of Use:	High
Flow of Events:	1. User clicks on "MyPantry" on the sidebar. 2. If the User selects an ingredient on the right side, then the User uses the included use case INGD.04 to add an ingredient. 3. If the User wants to remove an ingredient from "My Pantry", User uses the included use case INGD.02. 4. If the User wants to remove an ingredient from "Ingredients to use", User uses the included use case INGD.03.
Alternative Flows:	-
Exceptions:	-
Includes:	INGD.02, INGD.03, INGD.04
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	INGD.02		
Use Case Name:	Remove an ingredient from the ingredient list.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry
Description:	User will remove an ingredient from Pantry.
Preconditions:	1. There must be at least one ingredient in Pantry.
Postconditions:	1. Selected ingredient is removed from Pantry.
Priority:	High
Frequency of Use:	High
Flow of Events:	1. User clicks on "Delete" button. 2. User selects unwanted ingredient under "My Pantry". 3. MyPantry removes the unwanted ingredient from Pantry. 4. User clicks on "Deleting from pantry" button.
Alternative Flows:	INGD.02.AC.S3: If User has another ingredient to remove from Pantry. 1. User returns to step 2.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	INGD.03		
Use Case Name:	Remove an ingredient from ingredients to be used to generate recipe.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	8/4/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry
Description:	User will remove an ingredient from ingredients to be used to generate recipe.
Preconditions:	1. There must be at least one ingredient in "Ingredients to use".
Postconditions:	1. Selected ingredient is removed from "Ingredients to use".
Priority:	High
Frequency of Use:	High
Flow of Events:	1. User selects unwanted ingredient under "Ingredients to use". 2. MyPantry removes the unwanted ingredient from "Ingredients to use".
Alternative Flows:	INGD.03.AC.S1: If User wants to remove all ingredients under "Ingredients to use". 1. User clicks on "Clear" button.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	INGD.04		
Use Case Name:	Add an ingredient to the ingredient list.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry, Firebase
Description:	User will add an ingredient to Pantry.
Preconditions:	-
Postconditions:	1. Selected ingredient is added to Pantry.
Priority:	High
Frequency of Use:	High
Flow of Events:	1. MyPantry prompts User to key in the required ingredient. 2. User enters ingredient to be added. 3. MyPantry displays a list of ingredients from Firebase that are related to the search. 4. User clicks on ingredient that they want to add. 5. Ingredient is added to Pantry.
Alternative Flows:	INGD.04.AC.S3: If ingredient cannot be found. 1. MyPantry does not display any ingredients. 2. MyPantry returns to Step 1.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	RECP.01		
Use Case Name:	Generate recipes.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, Spoonacular Search Recipes by Ingredients API, MyPantry
Description:	Spoonacular Search Recipes by Ingredients API generates recipes from selected ingredients.
Preconditions:	1. There must be at least one selected ingredient.
Postconditions:	1. At least one recipe is generated. 2. No recipes are generated.
Priority:	High
Frequency of Use:	High
Flow of Events:	1. User selects ingredients in MyPantry to be used in recipe and clicks "Generate Recipes". 2. Spoonacular Search Recipes by Ingredients API generates multiple recipes based on the ingredients selected. 3. MyPantry displays the ingredients from "Ingredients to use" that are used or unused in the recipe, and the other ingredients required for the recipe that are not in "Ingredients to use". 4. If User clicks on the picture of the recipe, then the User uses the included use case RECP.02 to get recipe details. 5. If User selects "Save this recipe", then the User uses the included use case RECP.03 to save recipe to MyProfile.
Alternative Flows:	RECP.01.AC.S2: No recipes with the selected ingredients can be found. 1. MyPantry does not display any recipes.
Exceptions:	RECP.01.EX.01: User did not select any ingredients. 1. MyPantry does not display any recipes.
Includes:	RECP.02, RECP.03
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	RECP.02		
Use Case Name:	Show recipe information.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, Spoonacular Get Recipe Information API, MyPantry
Description:	Spoonacular Get Recipe Information API links website containing recipe.
Preconditions:	1. User selects picture of recipe.
Postconditions:	1. MyPantry redirects User to website of recipe.
Priority:	High
Frequency of Use:	High
Flow of Events:	1. User clicks on picture of recipe. 2. MyPantry retrieves the website of recipe from Spoonacular Get Recipe Information API. 3. MyPantry redirects User to website containing recipe.
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	1. There is a website for each recipe in Spoonacular Get Recipe Information API.
Notes and Issues:	-

Use Case ID:	RECP.03		
Use Case Name:	Save recipe.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry, Firebase
Description:	User saves recipe to Profile.
Preconditions:	1. User selects "Save this recipe".
Postconditions:	1. Recipe is saved to "Saved Recipes" in Profile.
Priority:	Medium
Frequency of Use:	High
Flow of Events:	1. User clicks on "Save this recipe" under chosen recipe. 2. MyPantry saves recipe to "Saved Recipes" in Profile, and it is added to Firebase.
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	1. There is no limit to the number of saved recipes.
Notes and Issues:	-

Use Case ID:	RECP.04		
Use Case Name:	View Saved Recipes.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry, Firebase
Description:	User can view saved recipes on Profile.
Preconditions:	1. User has at least one saved recipe. 2. User clicks on "View your saved recipes here" in Profile.
Postconditions:	1. MyPantry displays saved recipes. 2. MyPantry does not display any recipes.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	1. MyPantry retrieves saved recipes from Firebase 2. MyPantry displays saved recipes. 3. If User selects "Remove" under a chosen recipe, included use case RECP.05 is used to remove recipe from "My Saved Recipes".
Alternative Flows:	-
Exceptions:	RECP.04.EX.01: User does not have any saved recipes 1. MyPantry displays a blank screen.
Includes:	RECP.05
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	RECP.05		
Use Case Name:	Remove Saved Recipes.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	8/4/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry, Firebase
Description:	User can remove saved recipes.
Preconditions:	1. User has at least one saved recipe.
Postconditions:	1. MyPantry removes chosen saved recipe.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	1. User clicks on "Remove" under chosen saved recipe. 2. Firebase removes recipe from "My Saved Recipes". 3. MyPantry no longer displays that recipe under "My Saved Recipes".
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	MART.01		
Use Case Name:	Find nearby supermarkets.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, GoogleMaps API, GooglePlaces API, MyPantry
Description:	Find supermarkets that are near to User's current location.
Preconditions:	1. User allows web app to track current location.
Postconditions:	1. Nearest supermarkets are displayed on a map. 2. No map is displayed.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	1. User clicks on "Nearby Stores" on the sidebar. 2. GoogleMaps API requests for permission to access User's current location. 3. User allows GoogleMaps API to access current location. 4. GooglePlaces API uses User's current location to locate the nearby supermarkets within a 1.5km radius. 5. GoogleMaps API displays locations of nearby supermarkets on a map. 6. If User selects "Set Radius", then the User uses the included use case MART.02 to change the radius from their current location where the supermarkets are found.
Alternative Flows:	MART.01.AC.S1: User has previously allowed GoogleMaps API to access their current location. 1. GoogleMaps API continues to Step 4.
Exceptions:	MART.01.EX.01: User does not allow GoogleMaps API to access their current location. 2. MyPantry does not display a map of the nearby supermarkets and the page remains blank.
Includes:	-
Special Requirements:	-
Assumptions:	1. All nearby supermarkets are on Google Maps.
Notes and Issues:	-

Use Case ID:	MART.02		
Use Case Name:	Find nearby supermarkets.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, GoogleMaps API, GooglePlaces API, MyPantry
Description:	Find supermarkets that are near to User's current location.
Preconditions:	1. User allows web app to track current location.
Postconditions:	1. Nearest supermarkets are displayed on a map. 2. No map is displayed.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	1. User clicks on "Nearby Stores" on the side bar. 2. GoogleMaps API requests for permission to access User's current location. 3. User allows GoogleMaps API to access current location. 4. GooglePlaces API uses User's current location to locate the nearby supermarkets within a set radius (default 1.5km). 5. GoogleMaps API displays locations of nearby supermarkets on a map.

Alternative Flows:	MART.01.AC.S1: User has previously allowed GoogleMaps API to access their current location.
	    1. GoogleMaps API continues to Step 4.
	
	MART.01.AC.S6: User sets radius from current location containing nearby supermarkets.
	    1. User clicks on "Set Radius" and keys in chosen radius.
	    2.

Exceptions:	MART.01.EX.01: User does not allow GoogleMaps API to access their current location. 1. MyPantry does not display a map of the nearby supermarkets and the page remains blank.
Includes:	-
Special Requirements:	-
Assumptions:	1. All nearby supermarkets are on Google Maps.
Notes and Issues:	-

Use Case ID:	PROF.01		
Use Case Name:	View MyProfile.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry, Firebase
Description:	User can view Profile.
Preconditions:	1. User has an account on MyPantry. 2. User logged in using email account.
Postconditions:	1. MyPantry displays Profile details of User.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	1. User clicks on "Profile" on the sidebar. 2. MyPantry gets Profile details of User from Firebase and displays it. 3. If User wants to edit profile, then the User uses the included use case PROF.02 to edit Profile. 4. If User selects "View your saved recipes here", then the User uses the included use case RECP.04 to view list of saved recipes.
Alternative Flows:	-
Exceptions:	PROF.01.EX.01: If User logged in using Google account. 1. User clicks on "Profile" on the sidebar. 2. MyPantry gets Profile details of User from Firebase and displays it. 3. User is not allowed to edit profile, MyPantry displays "You are signed in with Google, and you cannot update your profile with this form".
Includes:	PROF.02, RECP.04
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	PROF.02		
Use Case Name:	Edit MyProfile.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	12/2/2023	Date Last Updated:	8/4/2023

Actor:	User, MyPantry, Firebase
Description:	User can edit details in Profile.
Preconditions:	1. User is logged in using email account.
Postconditions:	1. MyPantry edits Profile details of User. 2. MyPantry does not edit any details in Profile.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	1. User enters updated details under "Fullname", "Email Address", and "Enter current password to save changes". 2. MyPantry verifies that full name contains 4-20 characters, and no numerical or special characters. 3. MyPantry verifies that email entered is an email. 4. MyPantry verifies that password has at least 8 characters, and contains at least one lowercase letter, one uppercase letter, one number, and one special character. 5. User clicks on "Update Profile". 6. Firebase verifies that email is not already in use. 7. If full name, email and password are verified, MyPantry updates profile details in Firebase. User receives an email to verify account.

Alternative Flows:	PROF.02.AC.S2: If full name does not contain 4-20 characters, or contains a numerical or special character.
	      1. MyPantry displays the message "Full name should be 4-20 characters with no numerical & special character".
	      2. User returns to step 1.
	
	 PROF.02.AC.S3: If the email entered is not an email.
	      1. MyPantry displays the message "Email must be a valid email.".
	      2. User returns to step 1.
	
	 PROF.02.AC.S4: If the password does not have at least 8 characters, or does not contain at least one lowercase letter, one uppercase letter, one number, or one special character.
	      1. MyPantry displays the message "8 to 24 characters. Must include uppercase and lowercase letters, a number and a special character. Allowed special characters: ! @ # $ %".
	      2. User returns to step 1.
	
	 PROF.02.AC.S6: If the email is already in use.

	1. MyPantry displays the message "This email is already in use, please use another email.". 2. User returns to step 1.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-