

**NANYANG
TECHNOLOGICAL
UNIVERSITY**
SINGAPORE

Lab 2 Deliverables

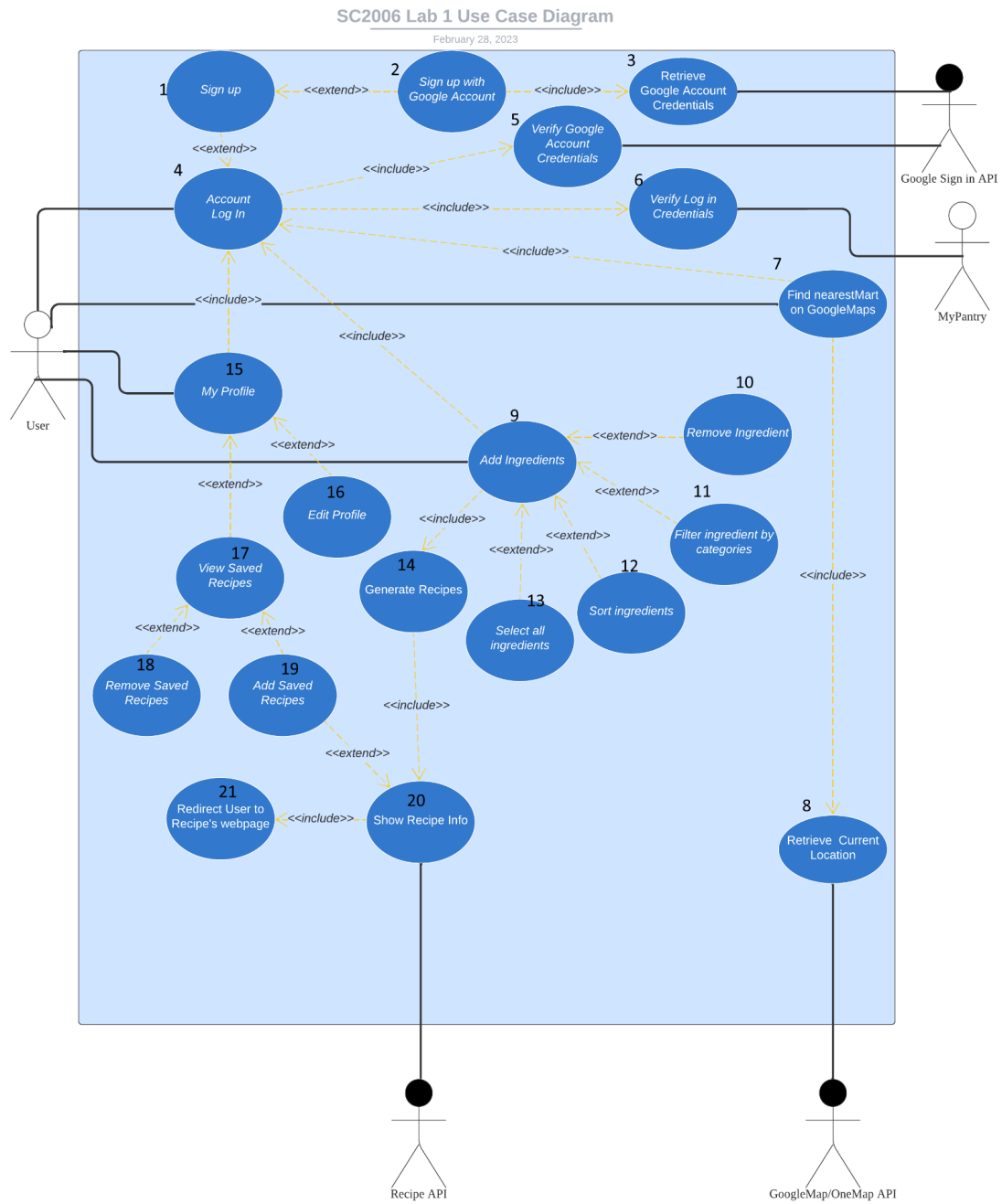
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**Use Case Diagram**

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
Ie Jia Sheng	24/2/2023	Minor changes to Use Case Diagram	3.0

Use Case Template

Use Case ID:	LOGIN.01		
Use Case Name:	Log in to account.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	12/2/2023

Actor:	User, MyPantry
Description:	User will log in to his account.
Preconditions:	<ol style="list-style-type: none"> 1. User has an account with MyPantry. 2. User has a username and a password.
Postconditions:	<ol style="list-style-type: none"> 1. User will enter his account. 2. User will not be able to enter the app.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. MyPantry requests username and password. 2. User enters username and password. 3. MyPantry verifies the username and password. 4. If the username and password are verified, User is allowed to enter the app, the included use case INGD.01 is used to display ingredients in Pantry.
Alternative Flows:	<p>LOGIN.01.AC.S4: If the username and password are invalid.</p> <ol style="list-style-type: none"> 1. MyPantry displays the message "Invalid username or password". 2. MyPantry returns to step 1. <p>LOGIN.01.AC.S1: If the User wants to use their Google account to log in.</p> <ol style="list-style-type: none"> 1. If the User selects Sign In with Google, then the User uses the included use case LOGIN.02 to log in.
Exceptions:	-
Includes:	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:	12/2/2023

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. 2. User will not be able to enter the app.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 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 ingredients in Pantry.
Alternative Flows:	<p>LOGIN.01.AC.S4: If Gmail account and password are invalid.</p> <ol style="list-style-type: none"> 1. Google Sign In API displays the message “Invalid username or password”. 2. 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 new account.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	12/2/2023

Actor:	User, MyPantry
Description:	User will create new account.
Preconditions:	1. User does not have an account with the new username.
Postconditions:	1. User creates new account. 2. User cannot create new account.
Priority:	High
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. MyPantry requests full name, new username, password and email. 2. User enters full name, new username, password and email. 3. MyPantry verifies that username is not in use. 4. MyPantry verifies that email exists. 5. If the username, password and email are verified, account is created.
Alternative Flows:	LOGIN.02.AC.S4: If the username is already in use. <ol style="list-style-type: none"> 1. MyPantry displays the message "Username already in use". 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:	12/2/2023

Actor:	User, MyPantry
Description:	User can view and edit the ingredient list in Pantry.
Preconditions:	-
Postconditions:	<ol style="list-style-type: none"> 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:	<ol style="list-style-type: none"> 1. If the User selects Add Ingredient, then the User uses the included use case INGD.04 to add an ingredient. 2. If the User selects Filter, then the User uses the included use case INGD.03 to filter Pantry. 3. If the User selects Sort, then the User uses the included use case INGD.06 to sort Pantry. 4. If the User selects Select All, then the User uses the included use case INGD.05 to select all items in Pantry.
Alternative Flows:	-
Exceptions:	-
Includes:	INGD.03, INGD.04, INGD.05, INGD.06
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:	29/1/2023

Actor:	User, MyPantry
Description:	User will remove an ingredient from Pantry.
Preconditions:	<ol style="list-style-type: none"> 1. There must be at least one ingredient in Pantry.
Postconditions:	<ol style="list-style-type: none"> 1. Selected ingredient is removed from Pantry.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. MyPantry requests for unwanted ingredient. 2. User selects unwanted ingredient. 3. Unwanted ingredient is removed from Pantry.
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	INGD.03		
Use Case Name:	Filter ingredients.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	29/1/2023

Actor:	User, MyPantry
Description:	Filter ingredients in MyPantry by categories.
Preconditions:	-
Postconditions:	1. Only ingredients that are part of the category will be shown.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. MyPantry displays options for User to choose from: Meat, Vegetables, Grains, Dairy. 2. If User selects Meat, only meat ingredients will be shown in Pantry. 3. If User selects Vegetables, only vegetable ingredients will be shown in Pantry. 4. If User selects Grains, only grain ingredients will be shown in Pantry. 5. If User selects Dairy, only dairy ingredients will be shown in Pantry.
Alternative Flows:	-
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:	12/2/2023

Actor:	User, MyPantry
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:	<ol style="list-style-type: none"> 1. MyPantry prompts User to key in the required ingredient. 2. User enters ingredient to be added. 3. MyPantry displays a list of ingredients 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. <ol style="list-style-type: none"> 1. MyPantry displays "No Related Ingredients". 2. MyPantry returns to Step 1.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	1. The ingredients keyed in manually by the User exist in the app.
Notes and Issues:	-

Use Case ID:	INGD.05		
Use Case Name:	Select all ingredients in ingredient list.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	29/1/2023

Actor:	User, MyPantry
Description:	Select all the ingredients in Pantry.
Preconditions:	1. There is at least one ingredient in Pantry.
Postconditions:	<ol style="list-style-type: none"> 1. All ingredients in Pantry are selected. 2. No ingredients in Pantry are selected.
Priority:	Medium
Frequency of Use:	High
Flow of Events:	1. MyPantry selects all ingredients in Pantry.
Alternative Flows:	-
Exceptions:	INGD.05.EX.01: There are no ingredients in Pantry. <ol style="list-style-type: none"> 1. MyPantry does not select any ingredient in Pantry.
Includes:	-
Special Requirements:	-

Assumptions:	-
Notes and Issues:	-

Use Case ID:	INGD.06		
Use Case Name:	Sort ingredients in ingredient list.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	29/1/2023

Actor:	User, MyPantry
Description:	Ingredients will be sorted by alphabetical order or date added.
Preconditions:	1. There are at least two ingredients in Pantry.
Postconditions:	1. Ingredients are sorted. 2. Ingredients are not sorted.
Priority:	Low
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. MyPantry displays options for User to choose from: A-Z, Newest-Oldest. 2. If User selects A-Z, MyPantry arranges ingredients in Pantry in alphabetical order. 3. If User selects Newest-Oldest, MyPantry arranges ingredients in Pantry from most recently added to least recently added.
Alternative Flows:	-
Exceptions:	INGD.06.EX.01: There are fewer than two ingredients. 1. MyPantry does not sort the ingredients in Pantry.
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:	12/2/2023

Actor:	User, Recipe API
Description:	Recipe 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:	<ol style="list-style-type: none"> 1. User selects ingredients in MyPantry to be used in recipe, and clicks Generate Recipe. 2. Recipe API generates multiple recipes based on the ingredients selected. 3. Recipe API displays preparation time and nutritional information of each recipe. 4. If User selects Get 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:	<p>RECP.01.AC.S2: No recipes with the selected ingredients can be found.</p> <ol style="list-style-type: none"> 1. Recipe API displays message "No recipe found". 2. Recipe API returns to Step 1.
Exceptions:	-
Includes:	RECP.02, RECP.03
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	RECP.02		
Use Case Name:	Get recipe details.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	29/1/2023

Actor:	User, Recipe API
Description:	Recipe API links website containing recipe.
Preconditions:	1. User selects get recipe.
Postconditions:	1. Recipe API displays link to website of recipe.
Priority:	High
Frequency of Use:	High
Flow of Events:	1. Recipe API displays link to website containing recipe.
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	1. All recipes in Recipe API are found on websites.
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:	29/1/2023

Actor:	User, MyPantry
Description:	User saves recipe to MyProfile.
Preconditions:	1. User selects Save this recipe.
Postconditions:	1. Recipe is saved to Favourite Recipes in MyProfile.
Priority:	Medium
Frequency of Use:	High
Flow of Events:	1. MyPantry saves recipe to Favourite Recipes in MyProfile.
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:	12/2/2023

Actor:	User, MyPantry
Description:	User can view saved recipes on MyProfile.
Preconditions:	1. User has at least one saved recipe.
Postconditions:	1. MyPantry displays saved recipes. 2. MyPantry does not display any recipe.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	1. User clicks on view saved recipes in MyProfile. 2. MyPantry displays saved recipes.
Alternative Flows:	-
Exceptions:	RECP.04.EX.01: User does not have any saved recipes 1. MyPantry displays “No saved recipes”.
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	MART.01		
Use Case Name:	Find nearest supermarket.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	29/1/2023

Actor:	User, GoogleMaps API, MyPantry
Description:	Find supermarket that is nearest to User's current location.
Preconditions:	1. User allows app to track location.
Postconditions:	1. Nearest supermarket is displayed.
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on trolley icon at the center of the bottom of the screen. 2. GoogleMaps API uses User's current location to locate the nearest supermarket. 3. GoogleMaps API displays details of nearest supermarket. 4. If User selects Find on Google Maps, MyPantry redirects the User to the Google Maps app.
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	<ol style="list-style-type: none"> 1. Nearest supermarket is on Google Maps. 2. User has Google Maps app.
Notes and Issues:	-

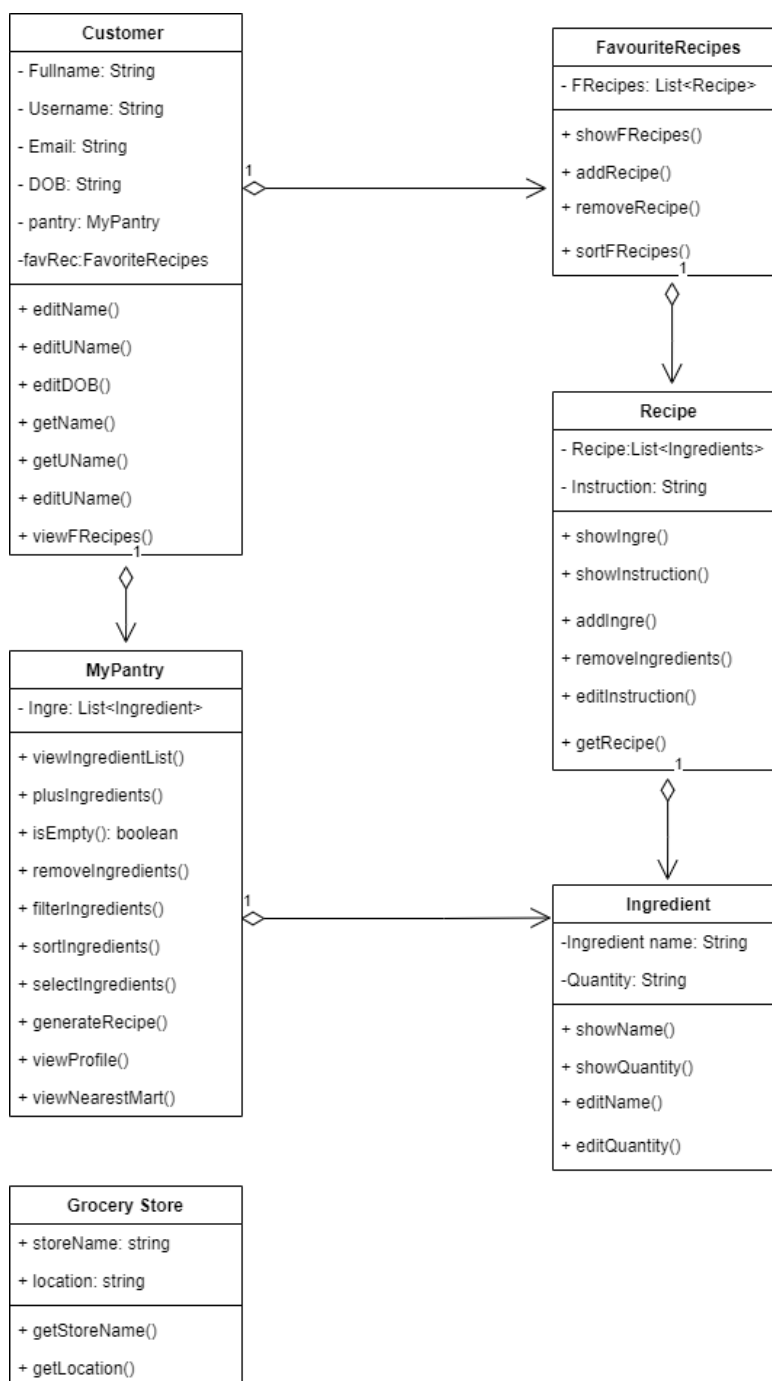
Use Case ID:	PROF.01		
Use Case Name:	View MyProfile.		
Created By:	Mavis Khoo	Last Updated By:	Mavis Khoo
Date Created:	29/1/2023	Date Last Updated:	12/2/2023

Actor:	User, MyPantry
Description:	User can view MyProfile.
Preconditions:	2. User has an account on MyPantry.
Postconditions:	3. MyPantry displays MyProfile details of User.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. User clicks on MyProfile icon on the bottom right of the screen. 2. MyPantry displays MyProfile details of User. 3. If User selects Edit Profile, then the User uses the included use case PROF.02 to edit MyProfile. 4. If User selects Favourite Recipes, then the User uses the included use case RECP.04 to view list of favourite recipes saved in MyProfile.
Alternative Flows:	-
Exceptions:	-
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:	12/2/2023

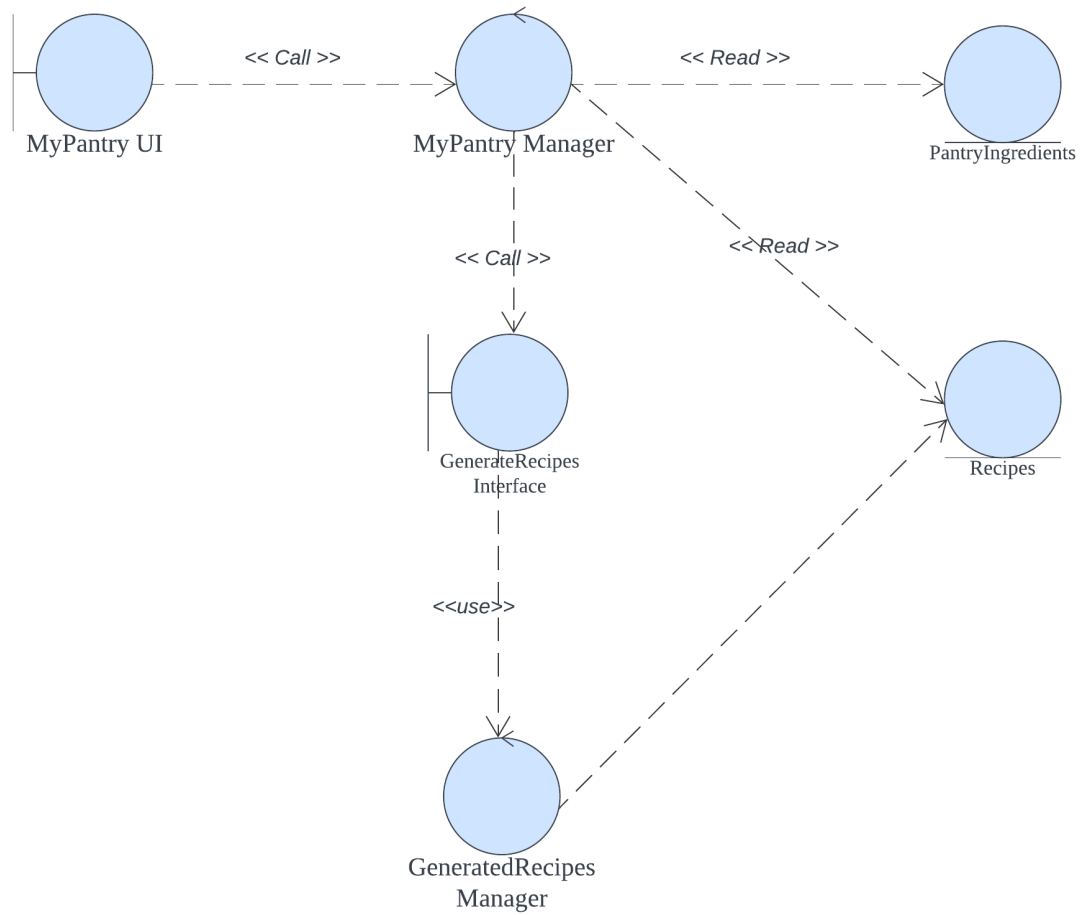
Actor:	User, MyPantry
Description:	User can edit details in MyProfile.
Preconditions:	1. User has an account on MyPantry.
Postconditions:	1. MyPantry edits MyProfile details of User. 2. MyPantry does not edit any details in MyProfile.
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	1. User clicks on Edit Personal Information. 2. MyPantry displays options of which detail to be edited. 3. If User inputs new name, MyPantry checks that name does not contain any numerical or special characters. MyPantry updates name. 4. If User inputs new date of birth, MyPantry updates date of birth.
Alternative Flows:	PROF.02.AC.S3: If User inputs new name that contains numerical or special characters 1. MyPantry displays "Name contains numerical/special characters". 2. MyPantry returns to step 1.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Class Diagram Of Entity Classes

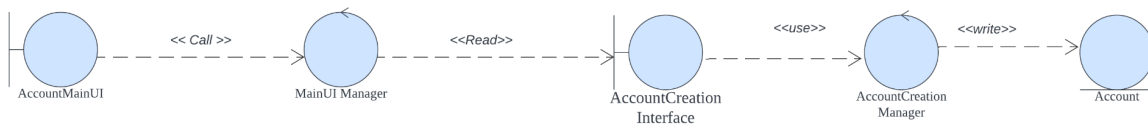


Key Boundary Classes & Control Classes

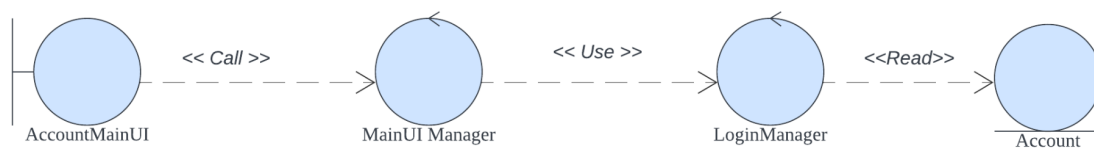
20,21 .ShowRecipeInfo
and RedirectWebpage



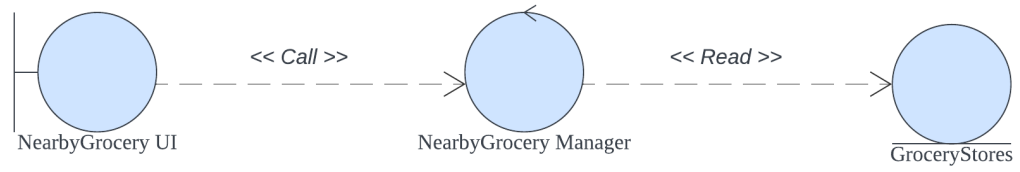
1,2,3.SignUp/SignUpGacc/Retrieve
account



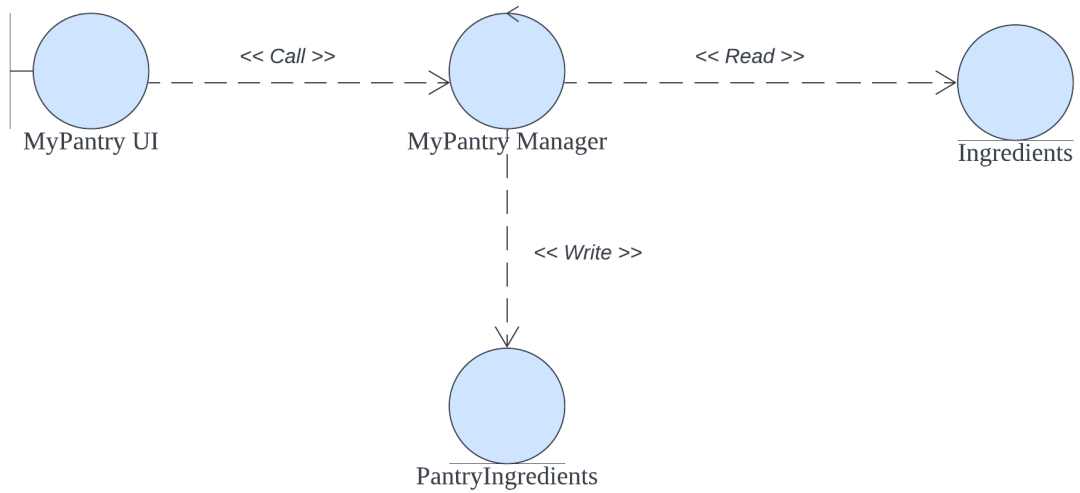
4,5,6.Account
Login/Google sign
in/Verify login credentials



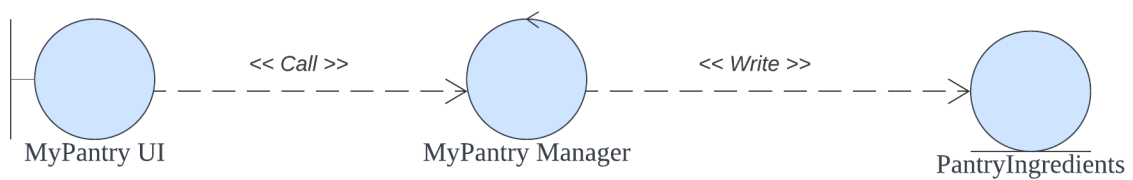
7.NearestMart

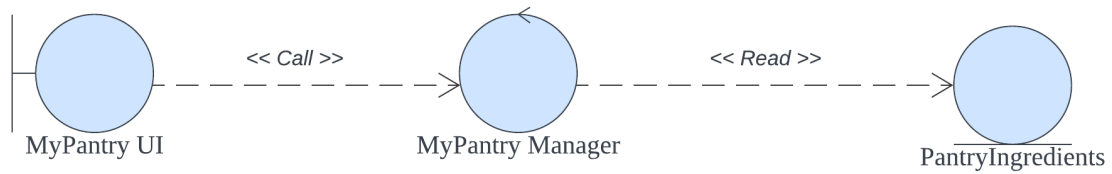


9.Add Ingredient

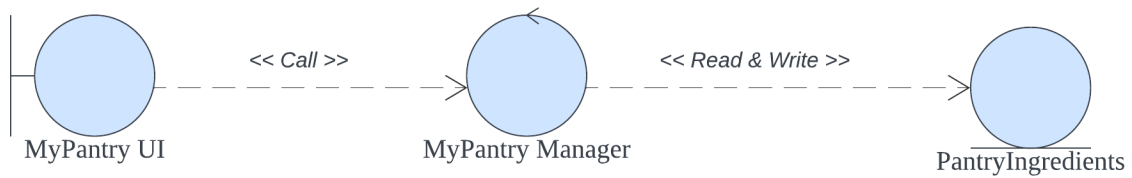


10.Remove Ingredient

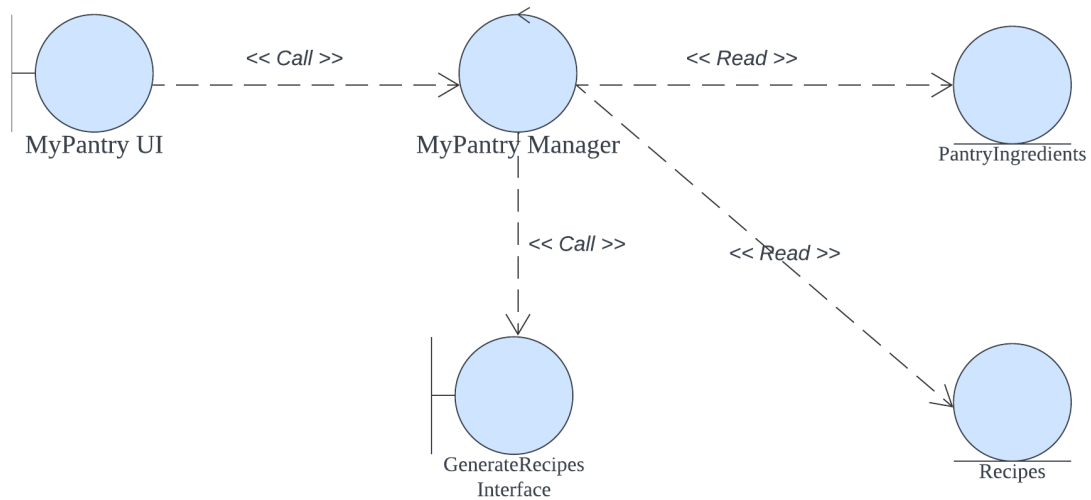


11,12. Filter & Sort
Ingredient

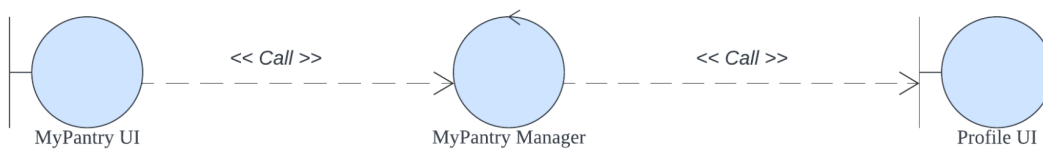
13. Select all Ingredient



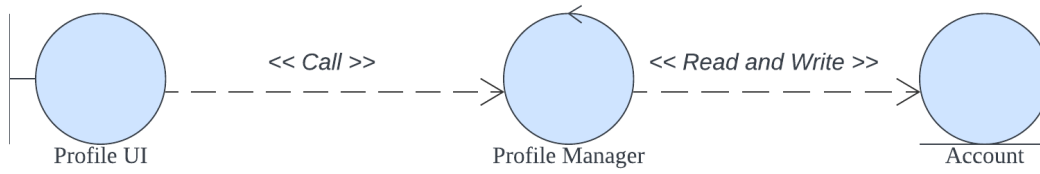
14. Generate Recipes



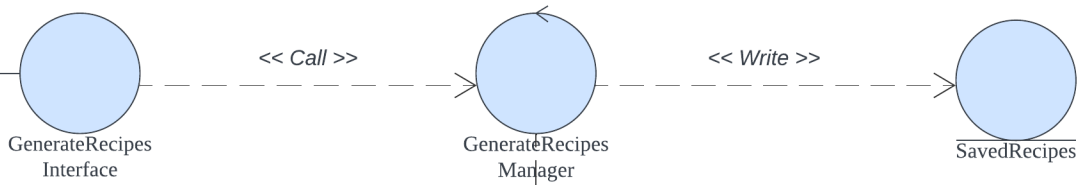
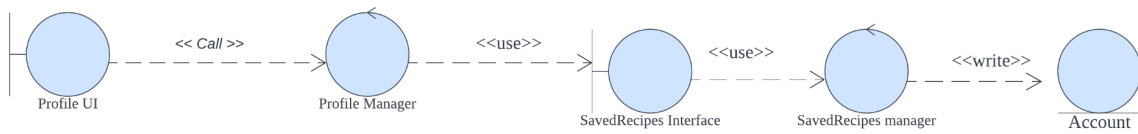
15. MyProfile



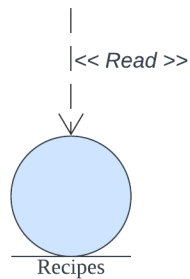
16,17.Edit
profile,ViewSavedRecipes



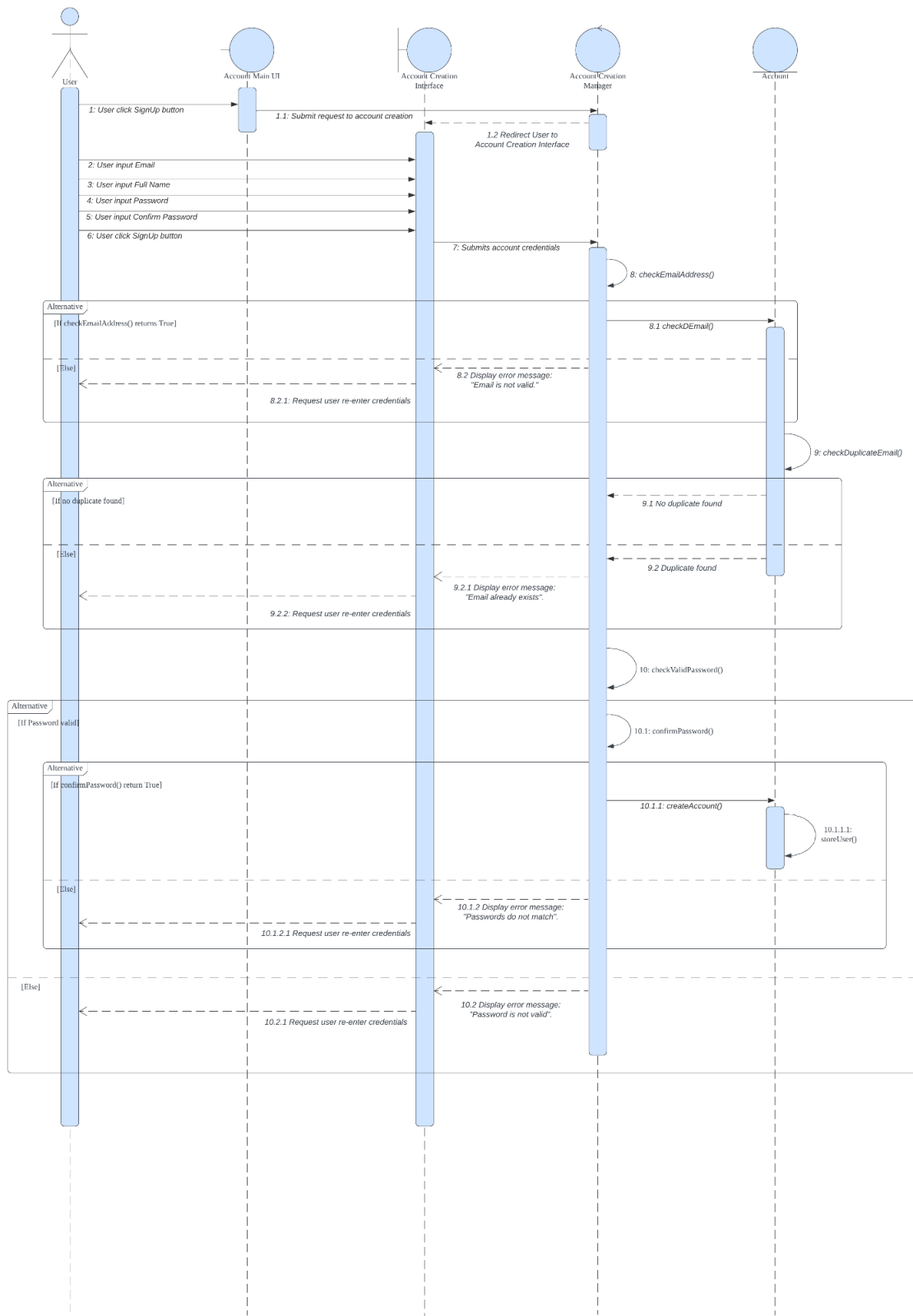
18.RemoveSavedRecipes



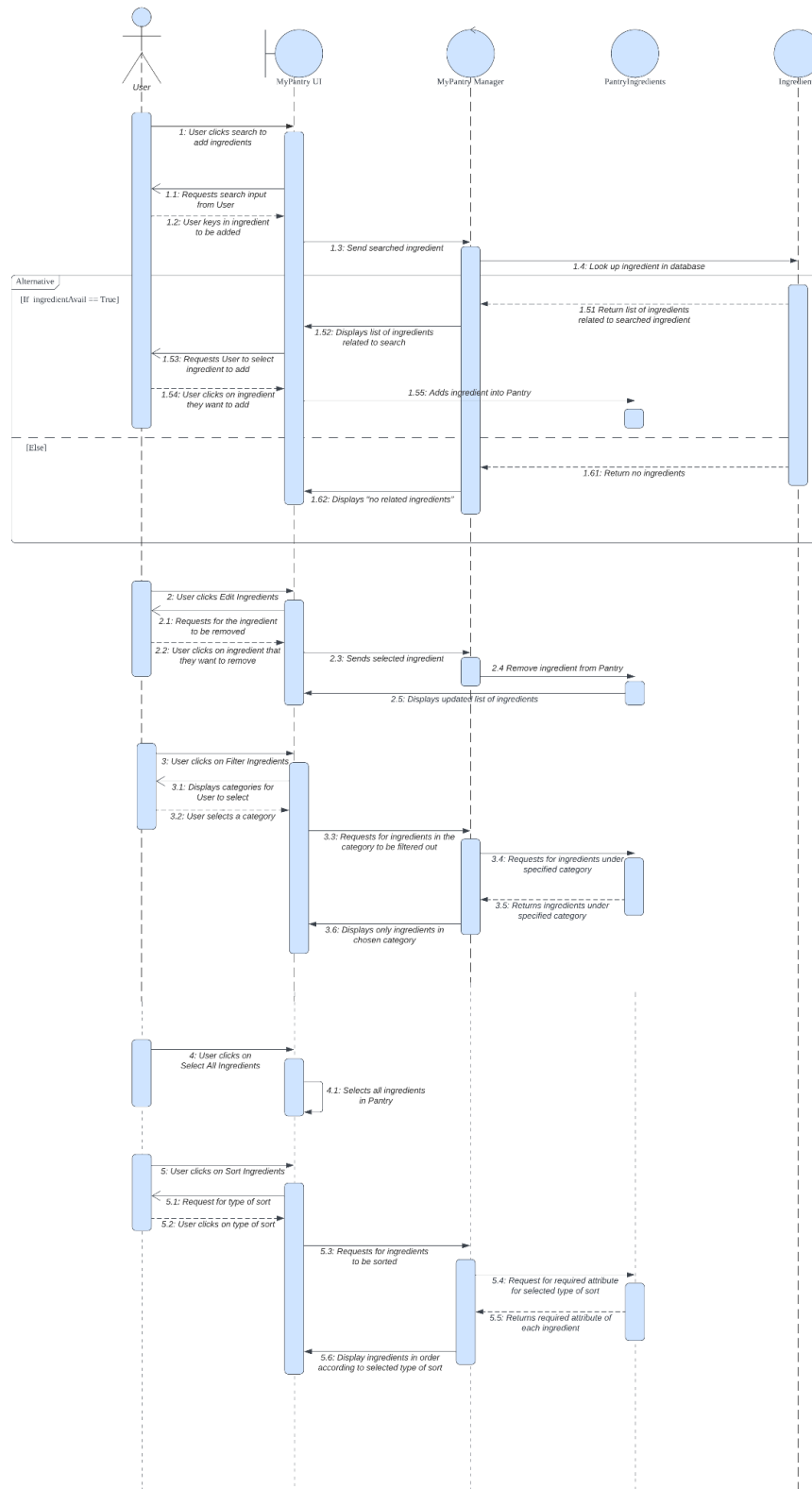
19. SaveRecipe



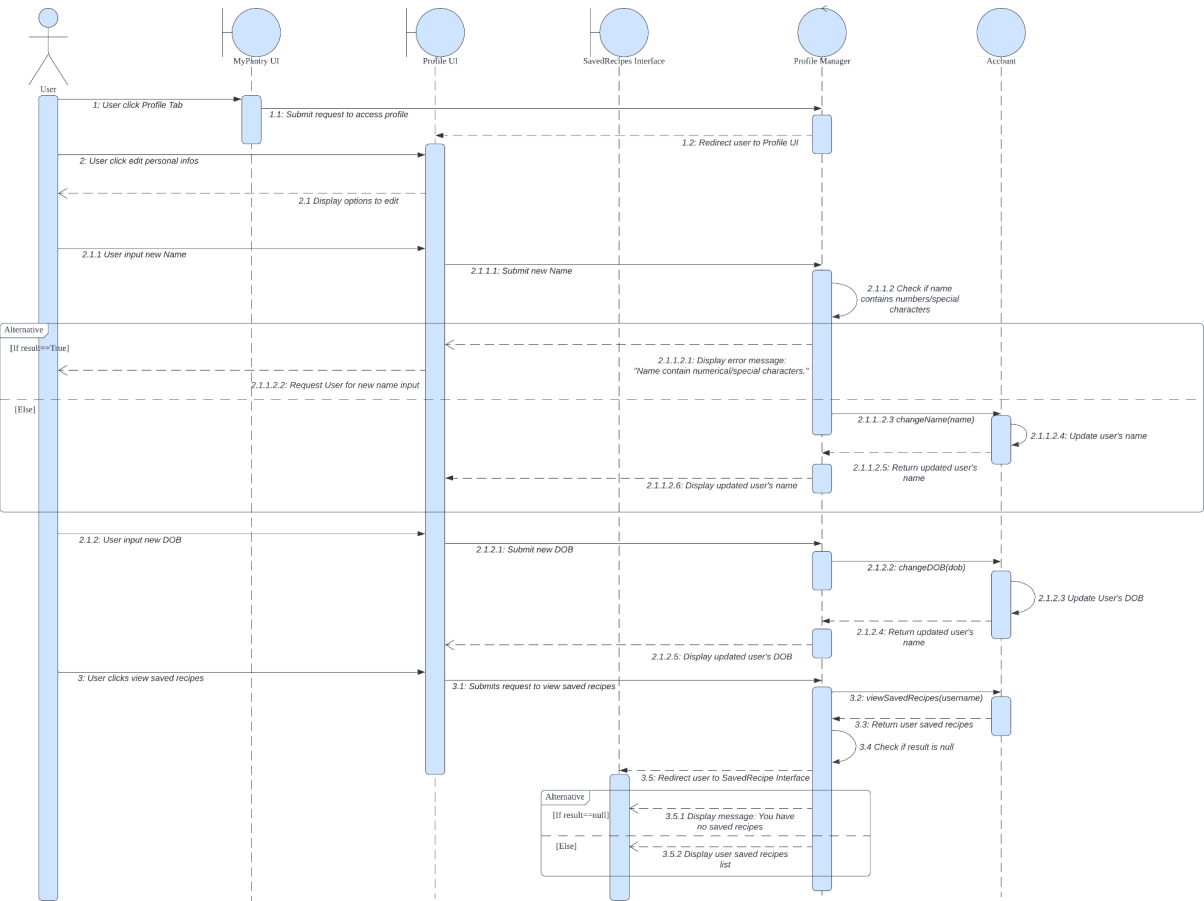
Account Creation



Ingredients



Profile



Initial Dialog Map

