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Title: Grocery List App

Project Summary

Our project aims to create a web application that allows users to create one or more grocery lists associated with their specific login credentials. This is useful for those who like to make grocery lists and keep it in an easily accessible digital format while also eliminating paper waste. Users will create an account and be able to create one or more grocery lists. Within each list, users can add one or multiple items of things they would need to shop for at a grocery store, and sort the items as needed. This application will also contain a Pantry section where users can keep track of what items they have on hand, and therefore won't buy something they already have.

Project Requirements

We do not have any business requirements.

User Requirements				
ID	Requirement	Topic Area	User	Priority
UR-01	As a user, I want to be able to register a new account	Authentication	Customer	Medium
UR-02	As a new user registering for a new account, I want to be notified why I am not able to create an account	Authentication	Customer	Medium
UR-03	As a user, I want to be able to log into my account	Authentication	Customer	Medium
UR-04	As a user, I want to be able to change my password	User Settings	Customer	Medium
UR-05	As a user, I want to be able to select what my display name is	User Settings	Customer	Medium
UR-06	As a user, I want to be able to create a new grocery list	Main Page	Customer	High
UR-07	As a user, I want to be able to select a specific grocery list to see more detailed information about that list	Main Page	Customer	High
UR-08	As a user, I want to be able to edit a specific item on a grocery list	Main Page	Customer	High
UR-09	As a user, I want to be able to add an item to an existing grocery list	Grocery List	Customer	High
UR-10	As a user, I want to be able to sort items on a grocery list	Grocery List	Customer	Medium
UR-11	As a user, I want to be able to select a specific item on a grocery list	Grocery List	Customer	High
UR-12	As a user, I want to be able to log out of my account	Authentication	Customer	Medium
UR-13	As a user, I want to be able to change between the Main page and the Pantry page	Main Page	Customer	High

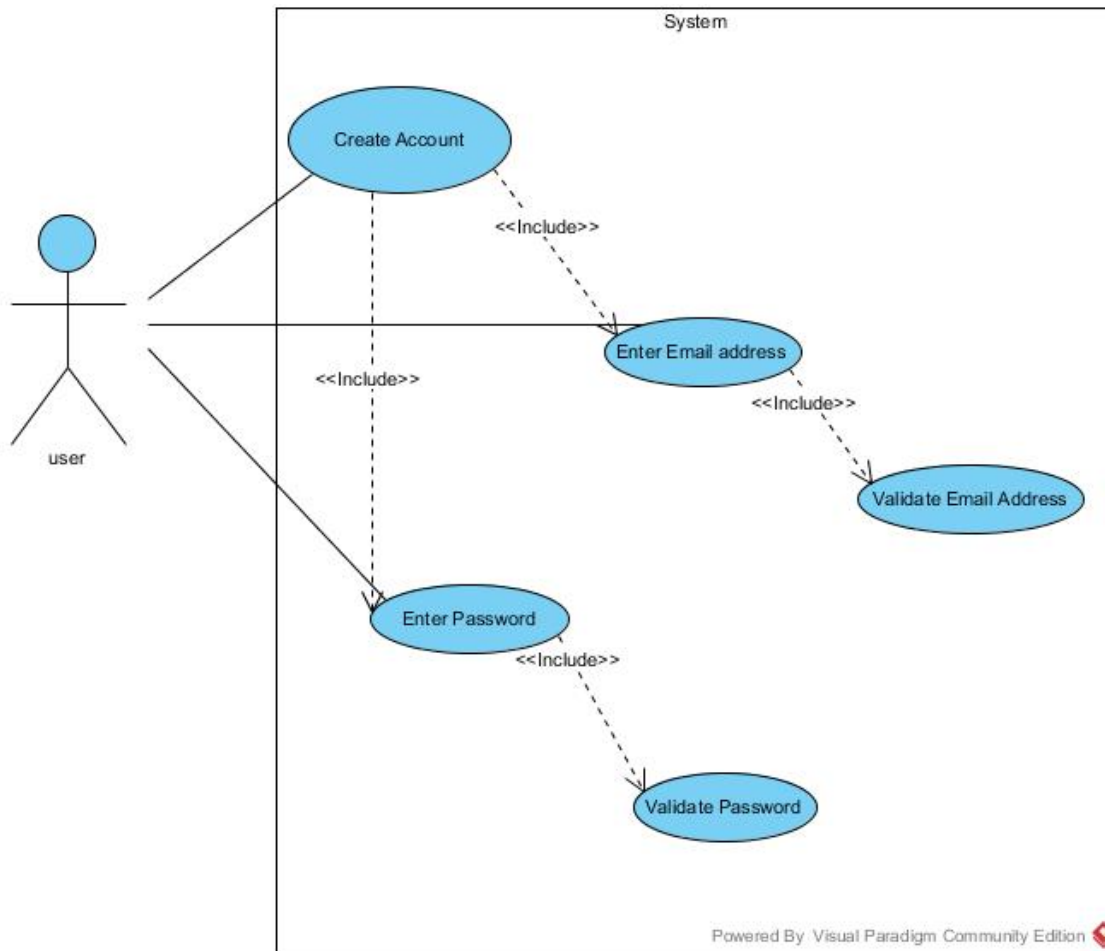
Functional Requirements				
ID	Requirement	Topic Area	User	Priority
F-01	When the user creates a new list, the system should open the create new list entry form	Main Page	System	High
F-02	After creating a new list, when the user presses the OK button, the system should save the grocery list and redirect the user to the main landing page	Grocery list	System	High
F-03	When a user selects a specific grocery list, the system will redirect the user to a page with the name and list of specific items for that grocery list	Grocery list	System	High
F-04	When the user presses the plus button at the top of the grocery list page, a blank entry line is created at the top of the list	Grocery list	System	High
F-05	After adding an item to the grocery list, when the user presses the Enter button, the system saves the new item to the grocery list	Grocery list	System	High
F-06	When the user presses the OK button at the bottom of the edit grocery list page, the new state of the list is saved to the system	Grocery list	System	High
F-07	When a user selects an item on a grocery list, the system highlights that specific item	Grocery list	System	High
F-08	When a specific grocery list item is highlighted and a user presses the up or down arrow, the item is moved up or down one row	Grocery list	System	Medium
F-09	When the user double clicks an existing grocery list item, the system allows the user to edit the item	Grocery list	System	Medium
F-10	When the user clicks on the Create New Account button, the system will send the user to the register page	Authentication	System	Medium
F-11	When the user selects User Settings, the system will launch the user settings page	Main Page	System	High
F-12	When the user selects Change Password, the system will launch the change password page	User Settings	System	High
F-13	When a user changes their Display Name and selects Save, the system saves the new User Name	User Settings	System	High
F-14	When the user is on the Main page and selects the pantry page, the system will load and display the pantry page	Main Page	System	High

Non-Functional Requirements				
ID	Requirements	Topic Area	User	Priority
NF-01	Confirm new account email address does not already exist in the database	Authentication	System	Medium
NF-02	System saves password in the database when registering for new account	Authentication	System	Medium
NF-03	When registering for a new account or changing a password, confirm both passwords entered match	Authentication	System	Medium
NF-04	When user logs in, confirm password associated with entered email matches the email/password combo in database	Authentication	System	Medium
NF-05	When the user closes the app or selects Log Out, the system logs the user out of the app	Main Page	System	High
NF-06	If email and password match, send user to the main page	Authentication	System	High

Use Cases

US-01

Actors: User



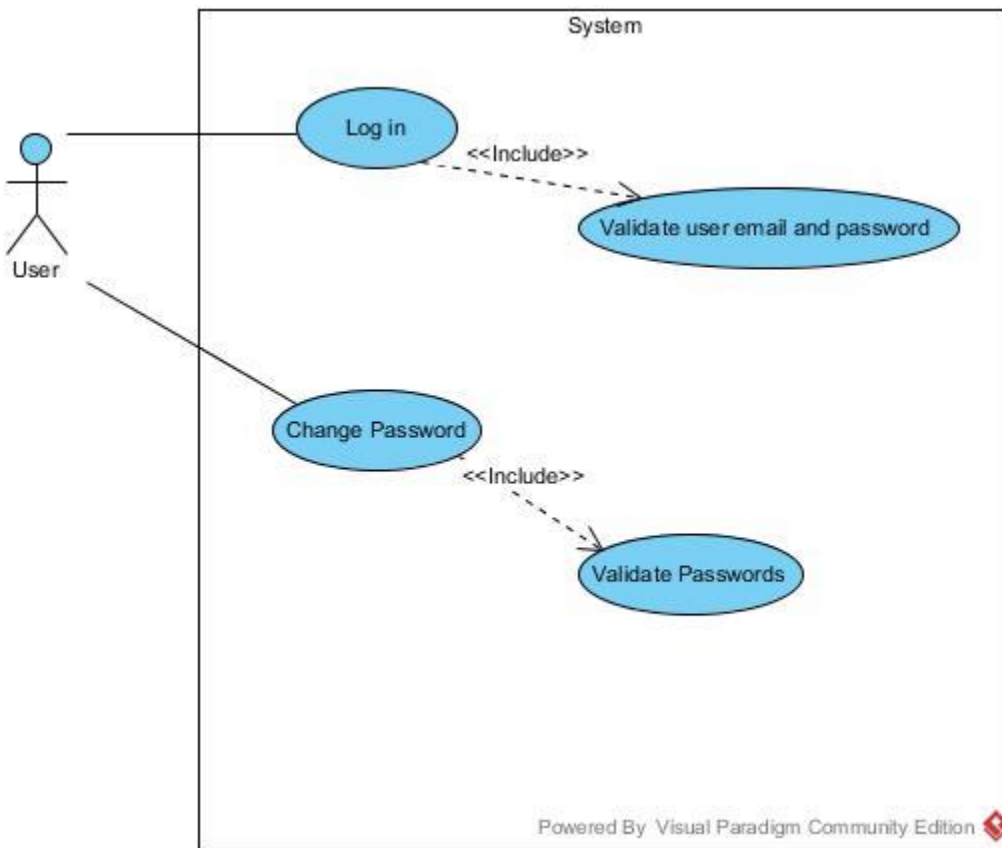
Use Case ID:	US-01
Use Case Name:	Invalid Username or password
Description	As a new user registering for a new account, I want to be notified why I am not able to create an account

Actors:	App user		
Pre-Conditions:	Have at least one register user for the app in the database		
Post-Conditions:			
Frequency of Use:	Occasionally - will occur once with at new registration		
Flow of Events		Actor Action	System Response
	1	Open the website	
	2	Click on Register User	Sends user to register page

	3	Enter an email address that exist in the database and two identical passwords	
	4	Select go	Display the error message "Invalid username or password"
	5	Enter an email address not in the database and password	
	6	Select go	Register the user
	7	Reload login page	
Variations:	3. Enter email address not in the database and two different passwords		
Notes and Issues:			
Developer Notes:			

US-03

Actors: User



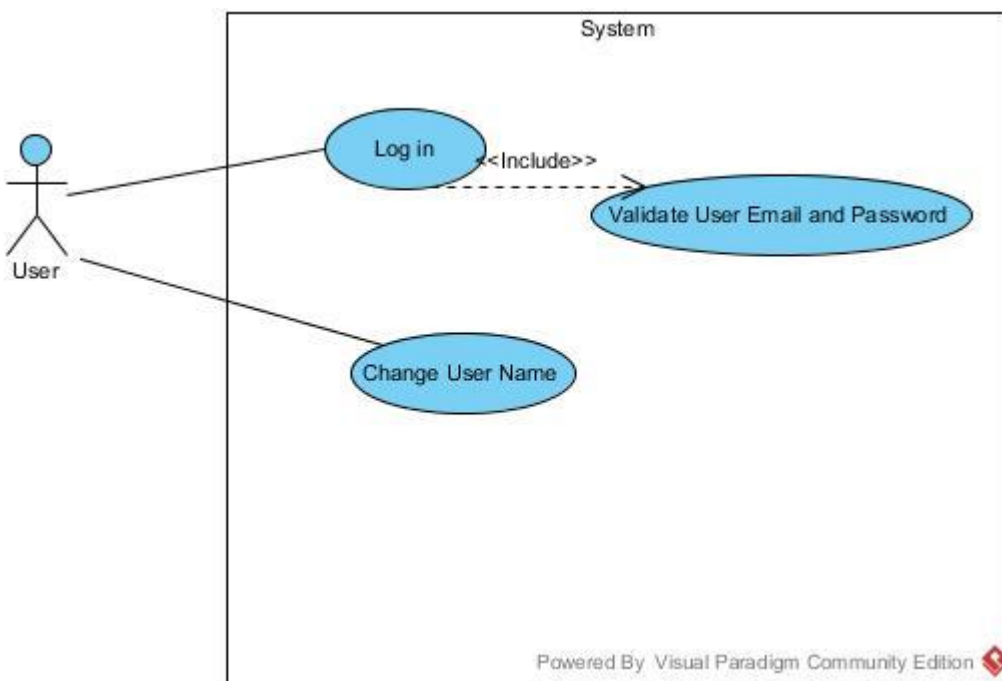
Use Case ID:	US-03
Use Case Name:	Change Password
Description	As a user, I want to be able to change my password (User Settings)

Actors:	App user		
Pre-Conditions:	An account exists in the database		
Post-Conditions:			
Frequency of Use:	Occasionally - will occur only when user would like to change their password		
Flow of Events		Actor Action	System Response
	1	Open the App and log in	Logs use into the app and launches the main page
	2	Select User Settings -> Change Password	Launches user settings page
	3	Enter a Password in the first password text block	First password block is updated
	4	Enter a different password in the second password text block	Display error message

	5	Close the app	Logs User out without changing the password
	6	Open the App and log in with original password	Logs user into the app and launches the main page
	7	Select User Settings -> Change Password	User is will land on the change password page
	8	Enter identical passwords in both password text box	Password boxes display dots
	7	Select Save	Password is saved
	8	Close the app	Logs user out
	9	Open the App and log in with new password	Logs user into the app
Variations:			
Notes and Issues:			
Developer Notes:			

US-04

Actors: User

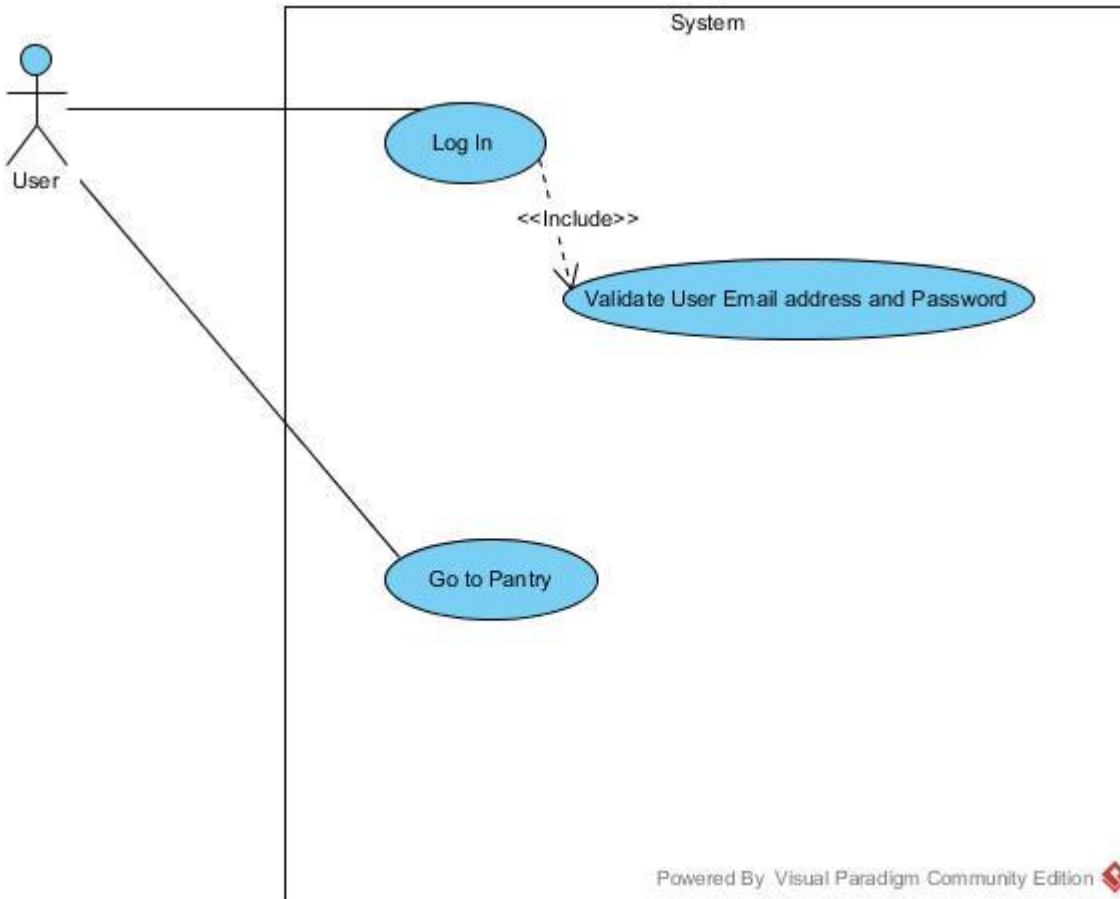


Use Case ID:	US-04
Use Case Name:	Display Name
Description	As a user, I want to be able to select what name is displayed (User Settings)

Actors:	App user		
Pre-Conditions:	an account exists in the database		
Post-Conditions:			
Frequency of Use:	Seldom		
Flow of Events		Actor Action	System Response
	1	Open the App and log in	Logs use into the app and launches the main page
	2	Select User Settings	Launches user settings page
	3	Select user name text box	User name text box is highlighted
	4	Enter new name	
	5	Click Save	User Name is saved
Variations:			
Notes and Issues:			
Developer Notes:			

US-05

Actors: User



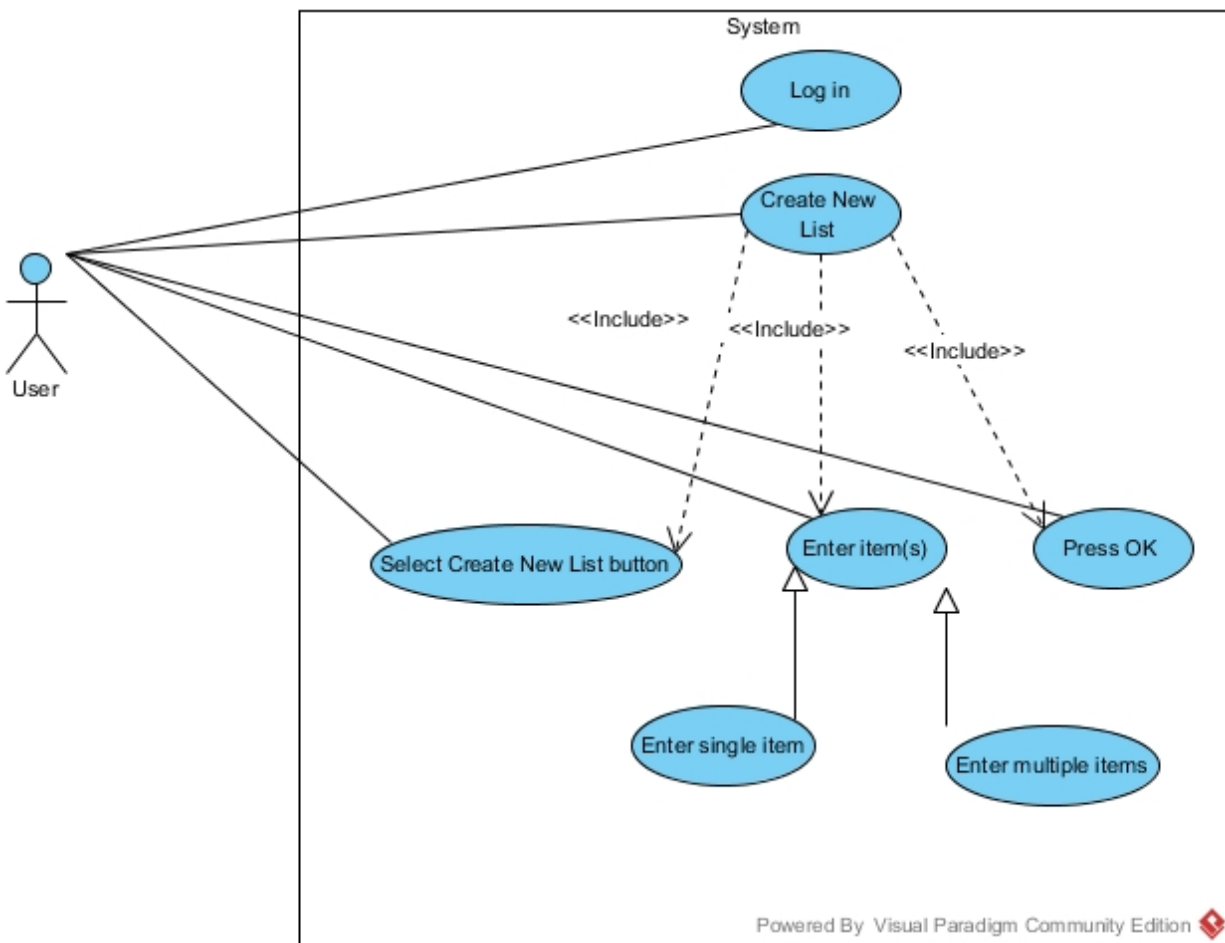
Use Case ID:	US-05
Use Case Name:	Go from Main page to Pantry page
Description	Once I am directed to the main landing page, I want to be able to change to the pantry

Actors:	App user		
Pre-Conditions:	An account exists in the database		
Post-Conditions:			
Frequency of Use:	Frequently - Will occur as the user needs to access different parts of the application		
Flow of Events		Actor Action	System Response

	1	Open the App and log in	logs use into the app and launches the main page
	2	Click on the drop down menu in the upper left corner of the screen	Opens the Drop down menu and lists available pages the user can navigate to
	3	Pantry tab	Redirects user to selected page
Variations:			
Notes and Issues:			
Developer Notes:			

US-06

Actors: User

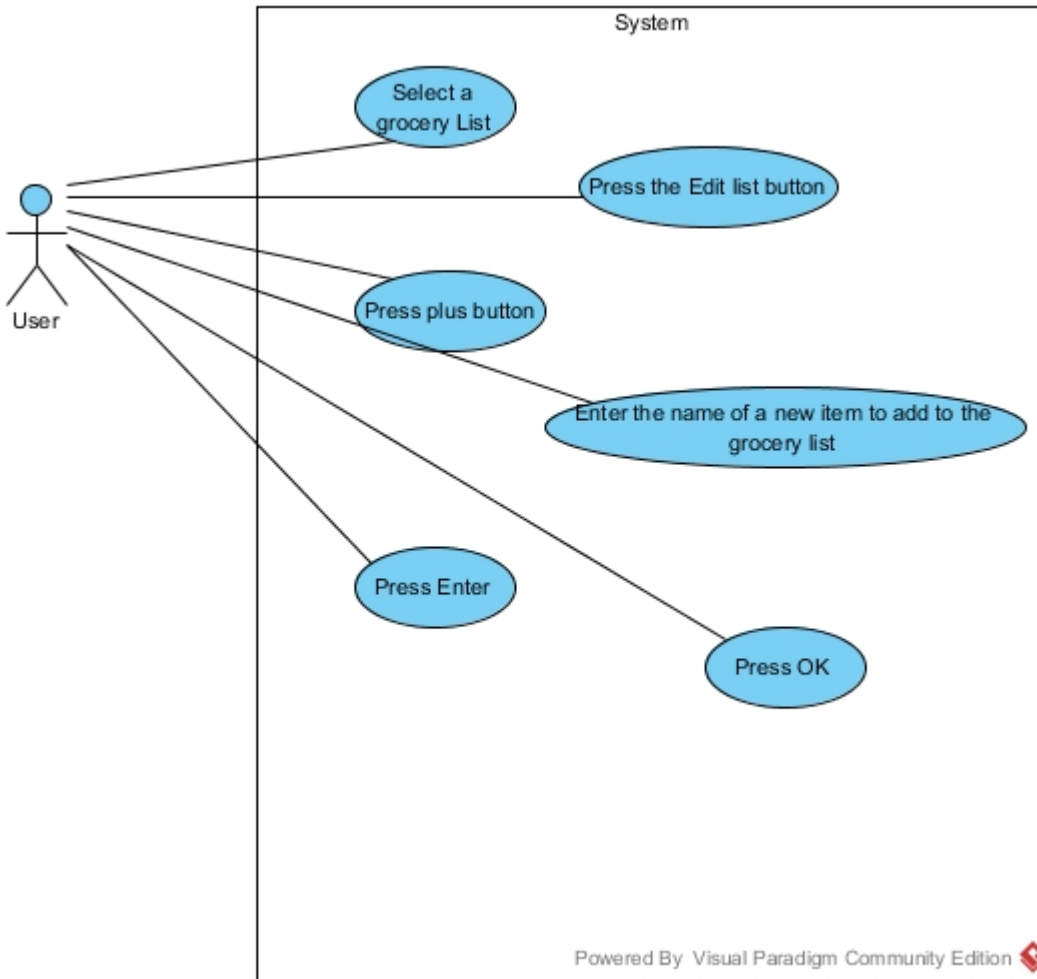


Use Case ID:	US-06
Use Case Name:	Create a New Grocery List
Description	While on the Main landing page, create a new Grocery List

Actors:	App user		
Pre-Conditions:	An account exists in the database		
Post-Conditions:			
Frequency of Use:	Frequently - Will occur for as many lists as the user needs to create		
Flow of Events		Actor Action	System Response
	1	Open the App and log in	Logs use into the app and launches the main page
	2	Press the Create New List button	Opens the create new list entry form
	3	Enter name of list	
	4	Enter a single item on the new list	
	5	Press OK	Save the new list and redirect user to the main landing page
	6	New list is displayed on main page	
Variations:	4. Enter multiple items on the new list		
Notes and Issues:			
Developer Notes:			

US-07

Actors: User



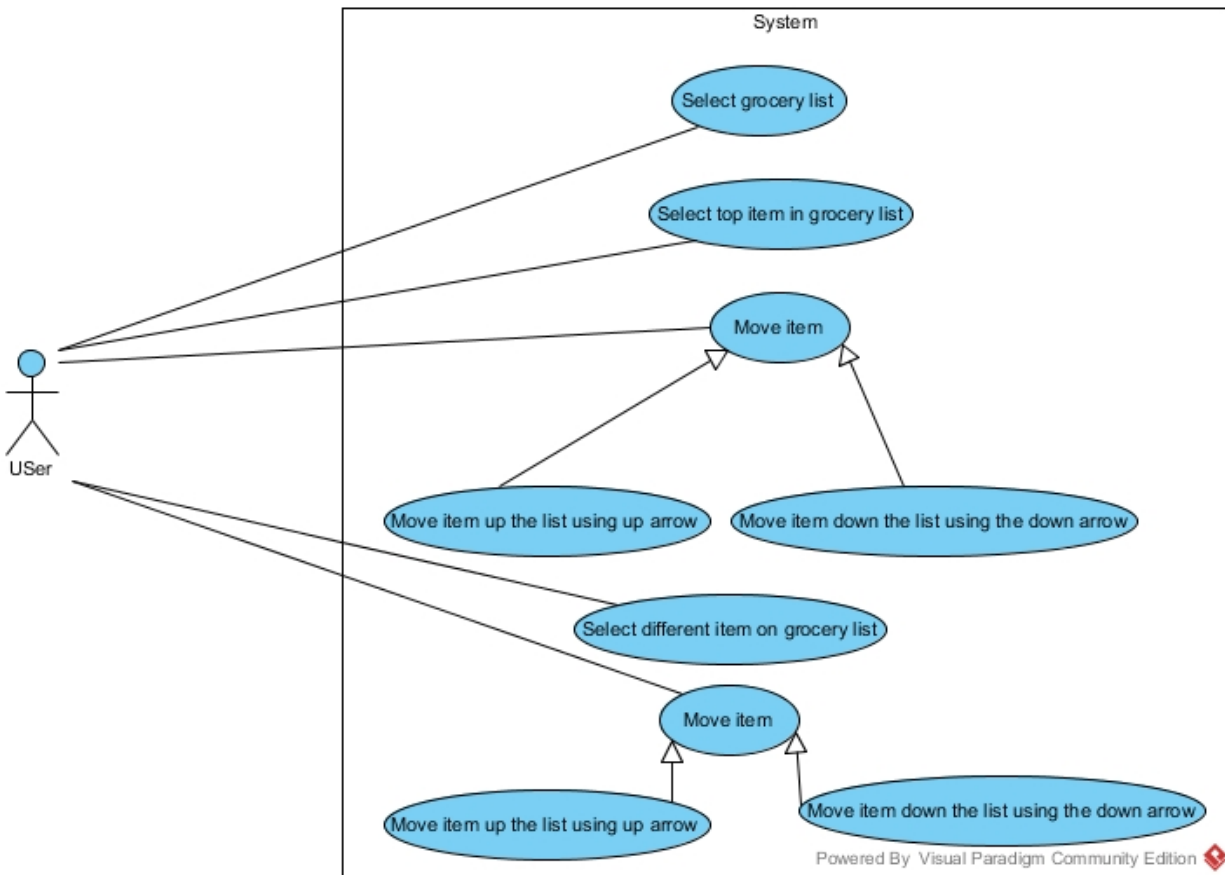
Use Case ID:	US-07
Use Case Name:	Add item to Grocery List
Description	While on the selected Grocery List, add item to existing grocery list.

Actors:	App user
Pre-Conditions:	Frequently - Will occur for as many times as the user needs to add or edit a grocery list
Post-Conditions:	
Frequency of Use:	Frequently - Will occur for as many times as the user needs to add or edit a grocery list

Flow of Events		Actor Action	System Response
	1	From the main landing page, select a grocery list	Opens a grocery list and redirects user to page listing the name of the list and the specific items on the list
	2	Press the Edit List button	Opens the entry form for the specific list
	3	Press the plus button at the top of the page	A blank entry line is created at the top of the list
	4	Enter the name of a new item to add to the grocery list	
	5	Press Enter	Save the new item to the grocery list
	6	Press OK at the bottom of the page	The new state of the list is saved and the main page is reloaded
Variations:			
Notes and Issues:			
Developer Notes:			

US-08

Actors: User



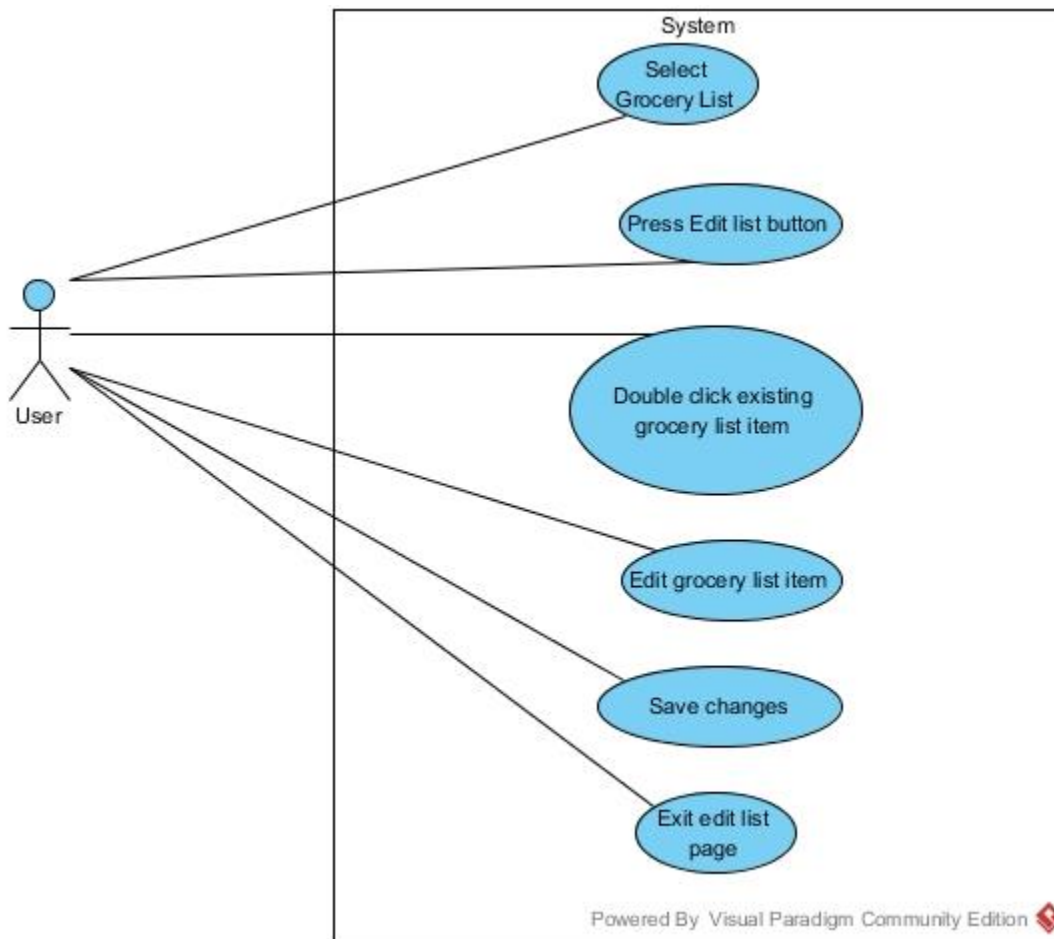
Use Case ID:	US-08
Use Case Name:	Sort Items on Grocery List
Description	While on the selected grocery list, user can sort items

Actors:	App user		
Pre-Conditions:	The user has a grocery list with more than 3 items.		
Post-Conditions:			
Frequency of Use:	Frequently - Will occur for as many times as the user needs to add or edit a grocery list		
Flow of Events		Actor Action	System Response
	1	From the main landing page, select a grocery list	Opens a grocery list and redirects user to page listing the name of the list and the specific items on the list

	2	Select the top item in the grocery list	The item is highlighted
	3	Use the down arrow to move the item to the bottom of the list	The item move down one row each time the down arrow is pushed.
	4	Select a different item at from the bottom of the list	Item is highlighted
	3	Use the up arrow to move the item to the top of the list	The item move up one row each time the up arrow is pushed
Variations:			
Notes and Issues:			
Developer Notes:			

US-09

Actors: User



Use Case ID:	US-09
Use Case Name:	Edit Item on Grocery List
Description	While on the selected Grocery List, edit an existing item

Actors:	App user		
Pre-Conditions:	An account exists, and user is already on the main landing page		
Post-Conditions:			
Frequency of Use:	Frequently - Will occur for as many times as the user needs to add or edit a grocery list		
Flow of Events		Actor Action	System Response
	1	From the main landing page, select a grocery list	Opens a grocery list and redirects user to page listing the name of the list and the specific items on the list
	2	Press the Edit List button	Opens the entry form for the specific list
	3	Double click an existing grocery list item	Allows user to edit the item
	4	Edit the existing grocery list item	
	5	Press Enter	Save the new item to the grocery list
	6	Press OK at the bottom of the page	The new state of the list is saved and the main page is reloaded
	7	Reload Main page	
Variations:			
Notes and Issues:			
Developer Notes:			

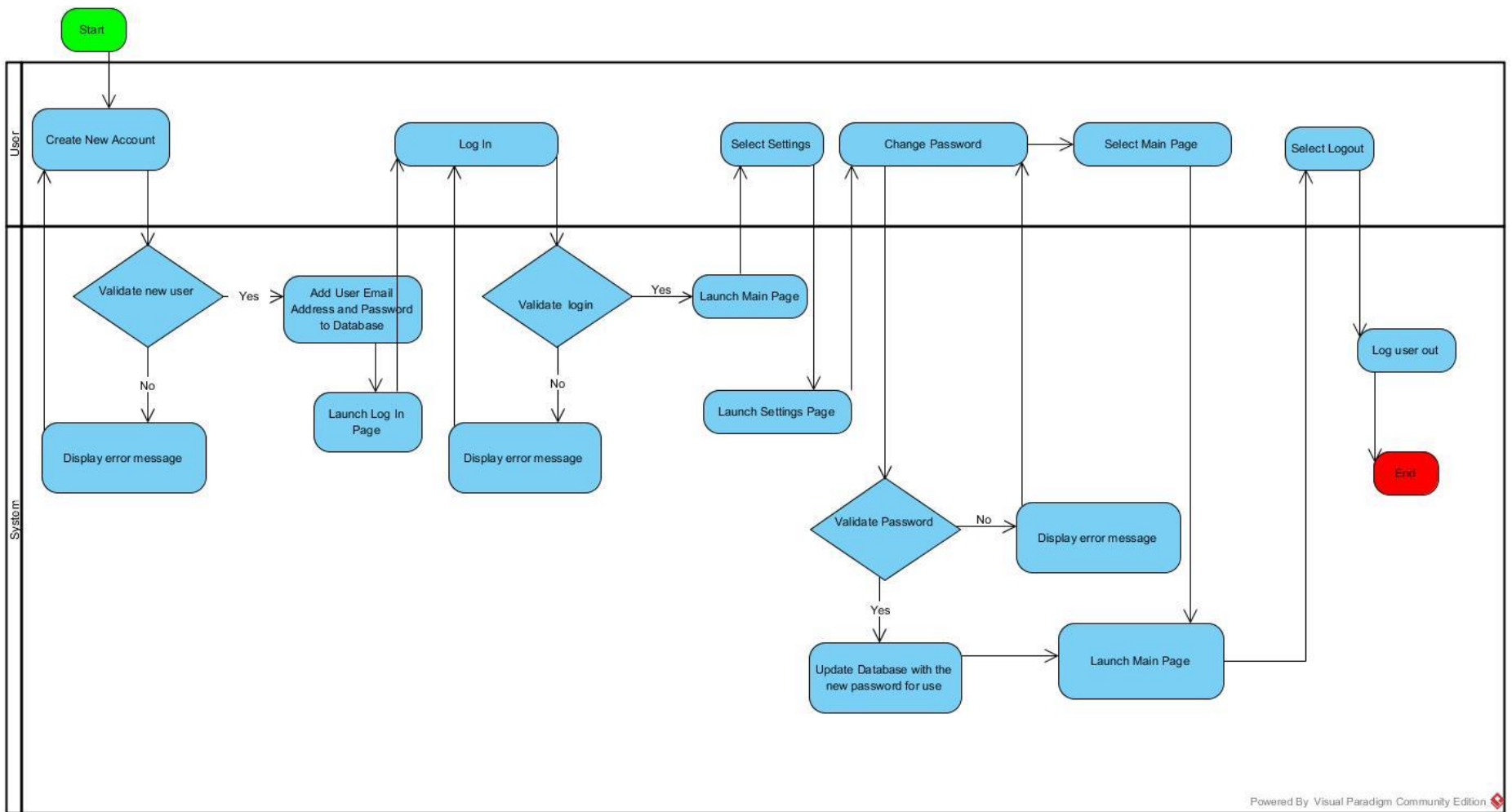
Activity Diagrams

Requirement ID: UR-01, UR-02, UR-03, UR-04, NF-01, NF-02, NF-03, NF-05, NF-06, F-10, F-11, F-12

Use Case ID: US-01, US-03

Use Case Name: Invalid User Name or Password – gives user error message when they create an account and give an invalid user name or password; Change Password- change password from user settings

Implemented by: Peemin Chen

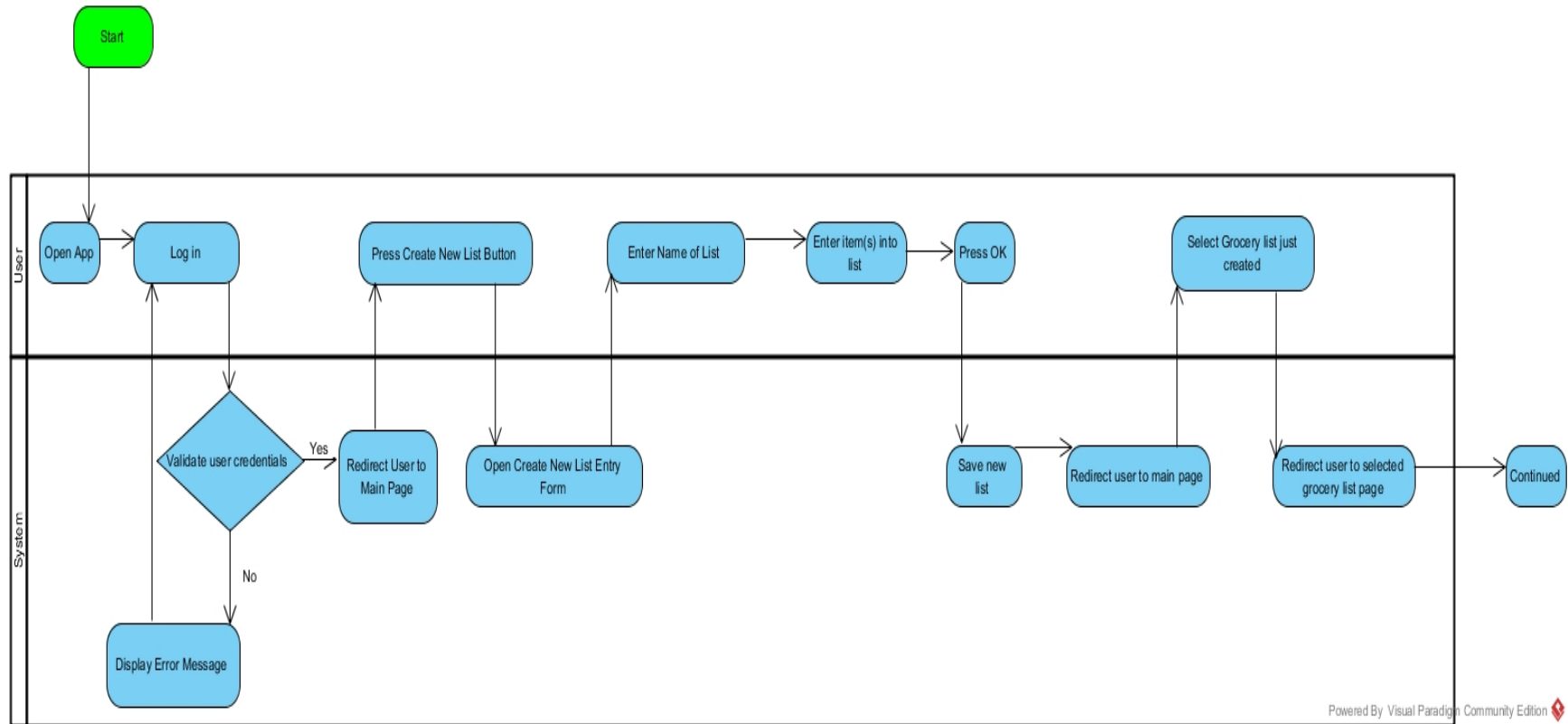


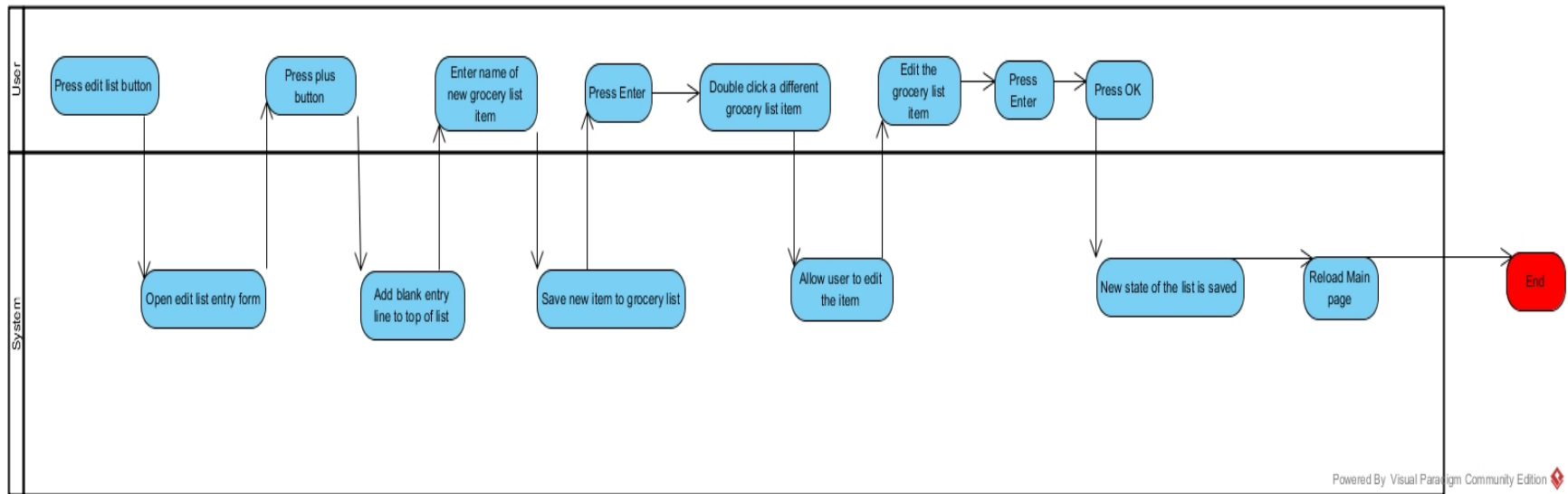
Requirement ID: NF-02, NF-04, NF-06, UR-06, UR-07, UR-08, UR-09, UR-11, F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08

Use Case ID: US-06, US-07, US-09

Use Case Name: Create a New Grocery List; Add Item to Grocery List; Edit item on Grocery List

Implemented by: Margaret Wheeler





Data Storage

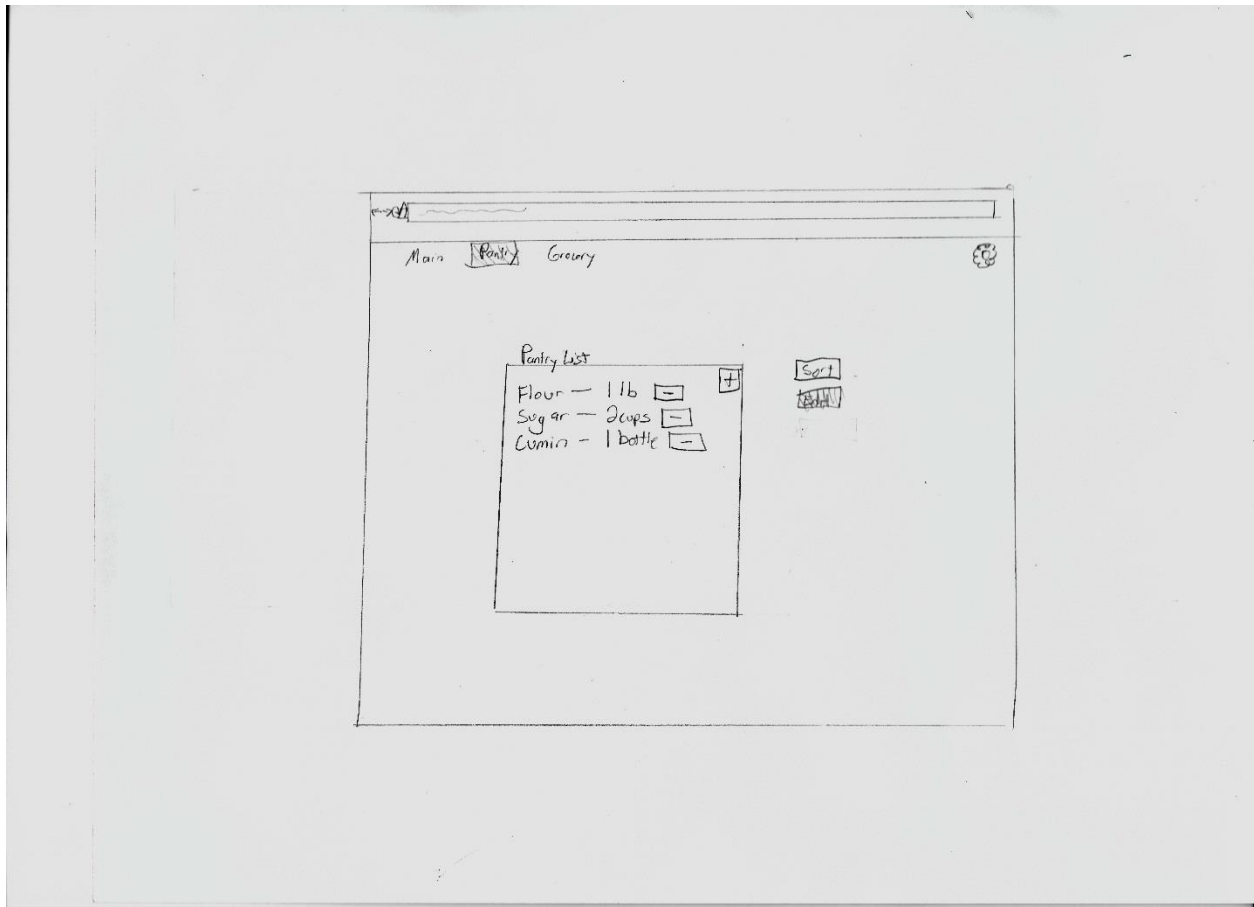
Storage Medium: MongoDB

Classes: databaseController class to act as a proxy between the java application and the information stored in MongoDB. The other classes created will communicate with this class to get and receive data, so they will not have to communicate directly to MongoDB.

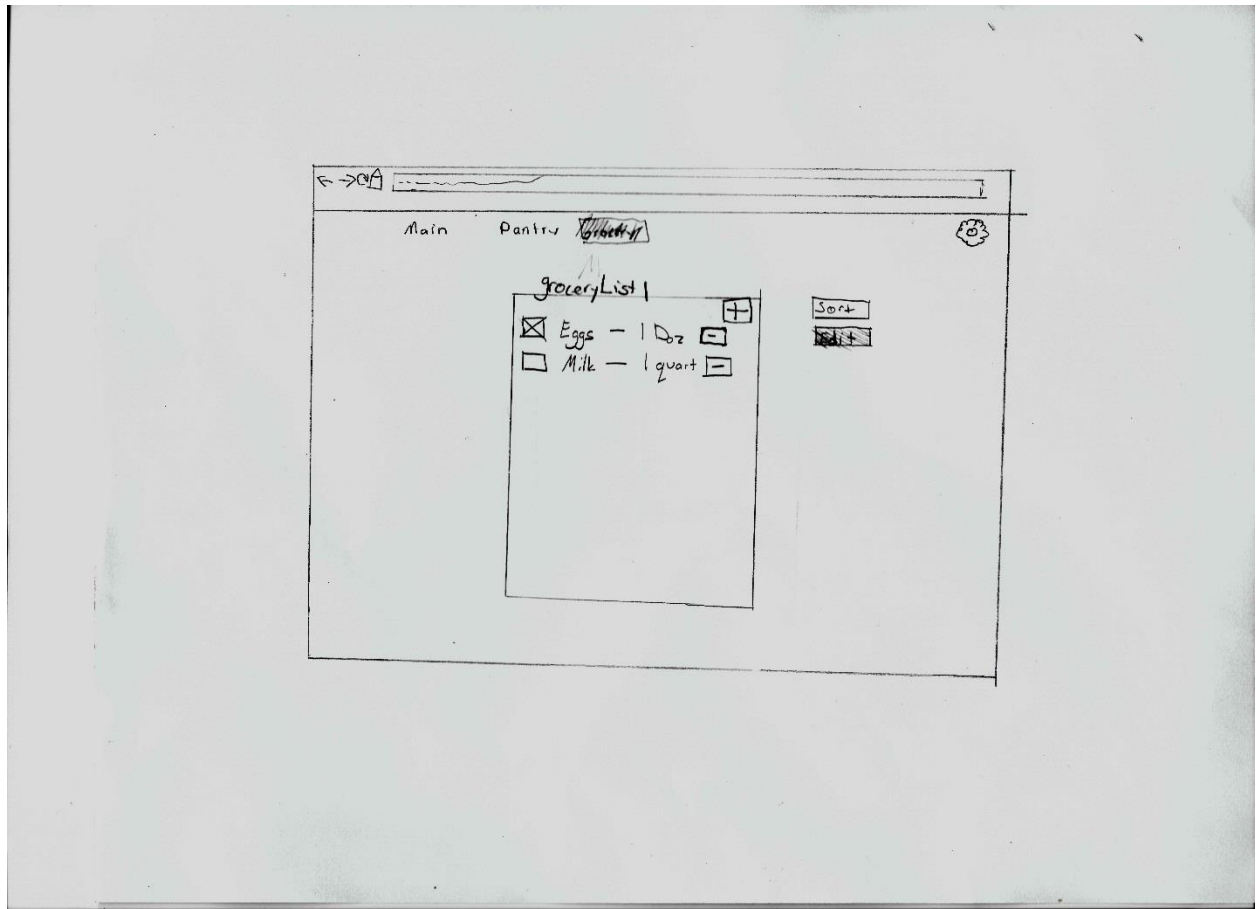
UI Mockups

Our application will have an overall web theme. Each page will contain the overall theme while also remaining distinct to distinguish between the other pages. There will be several pages, including a login page, main page, pages specific to a particular grocery list, a pantry page, a settings page, as well as other pages as needed. The data will be displayed through the web application GUI interface.

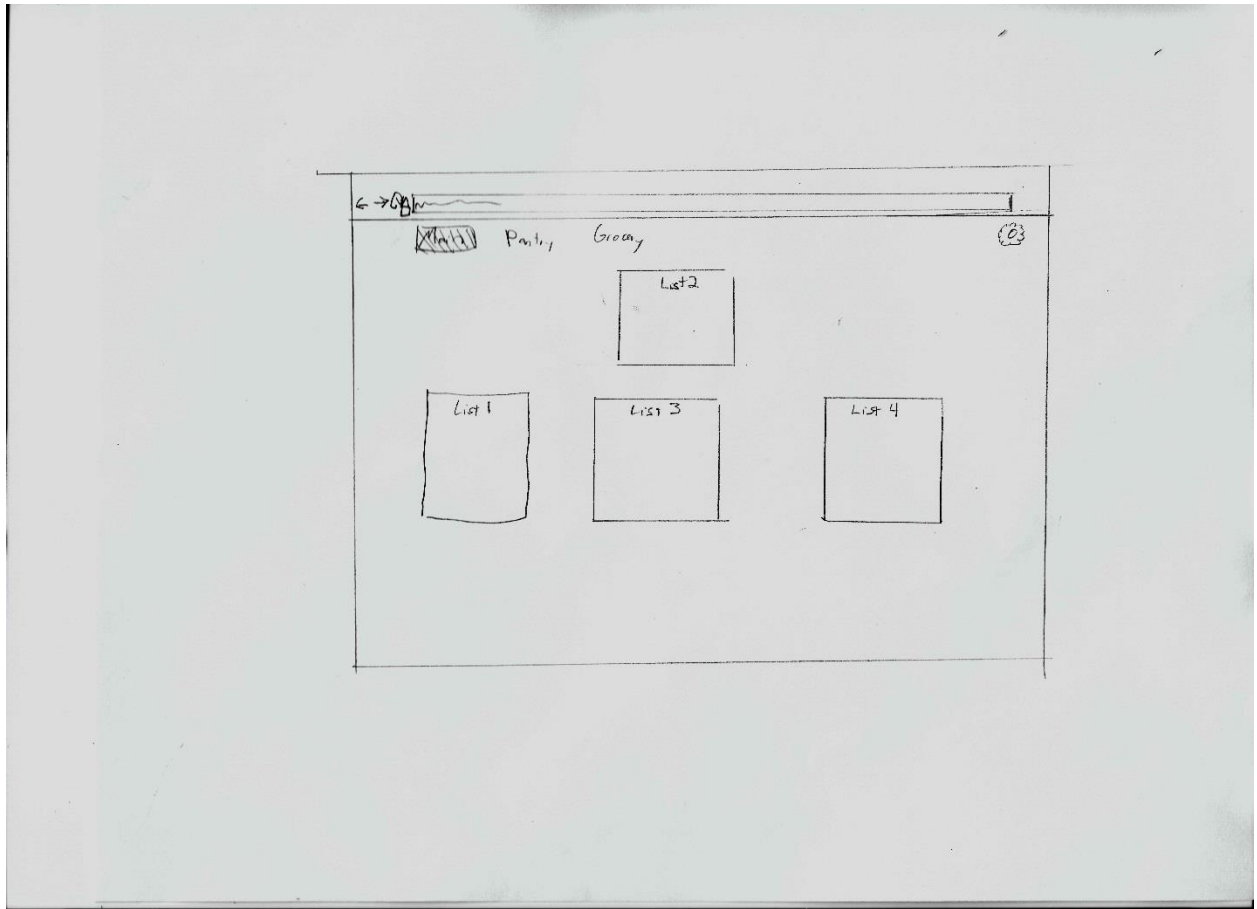
Edit Pantry List



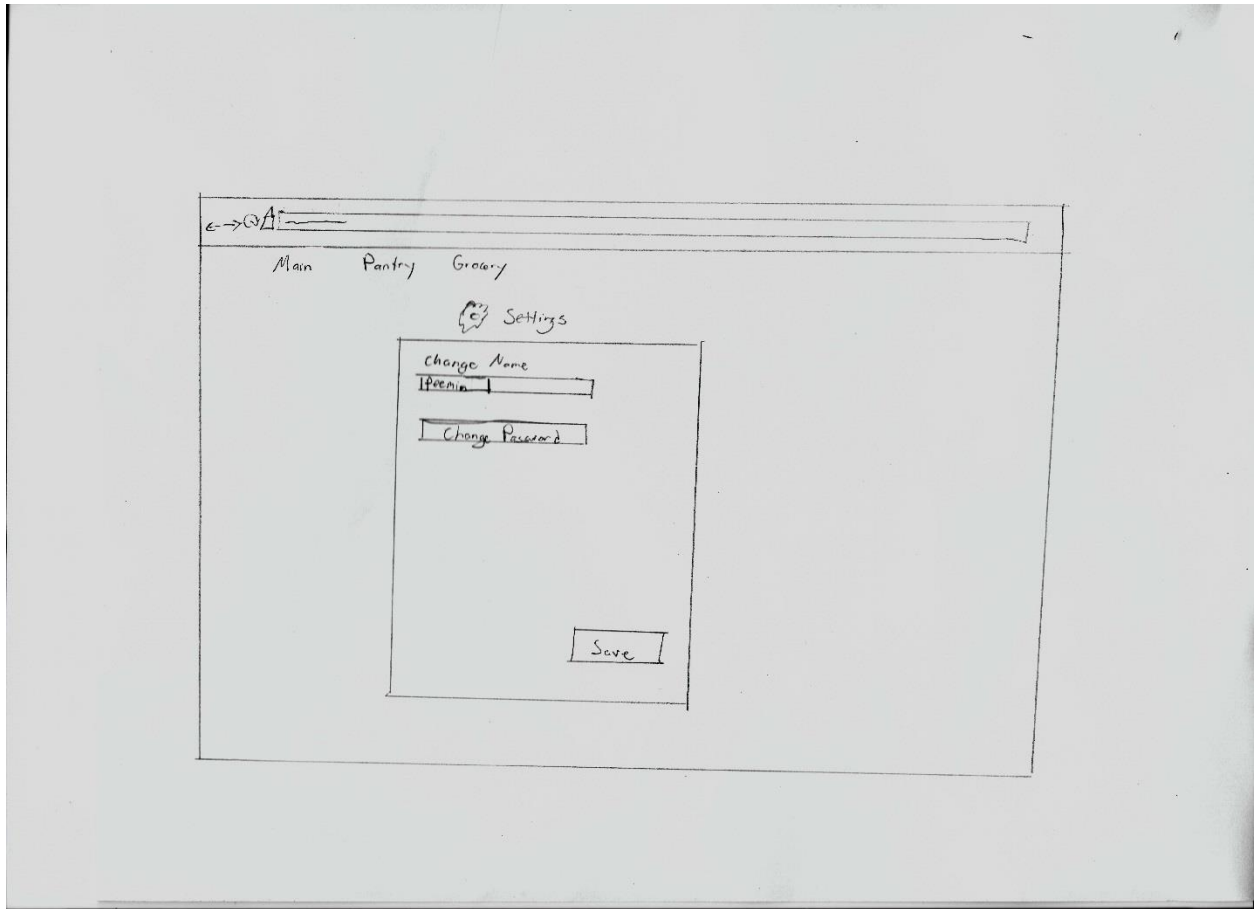
Edit Grocery List



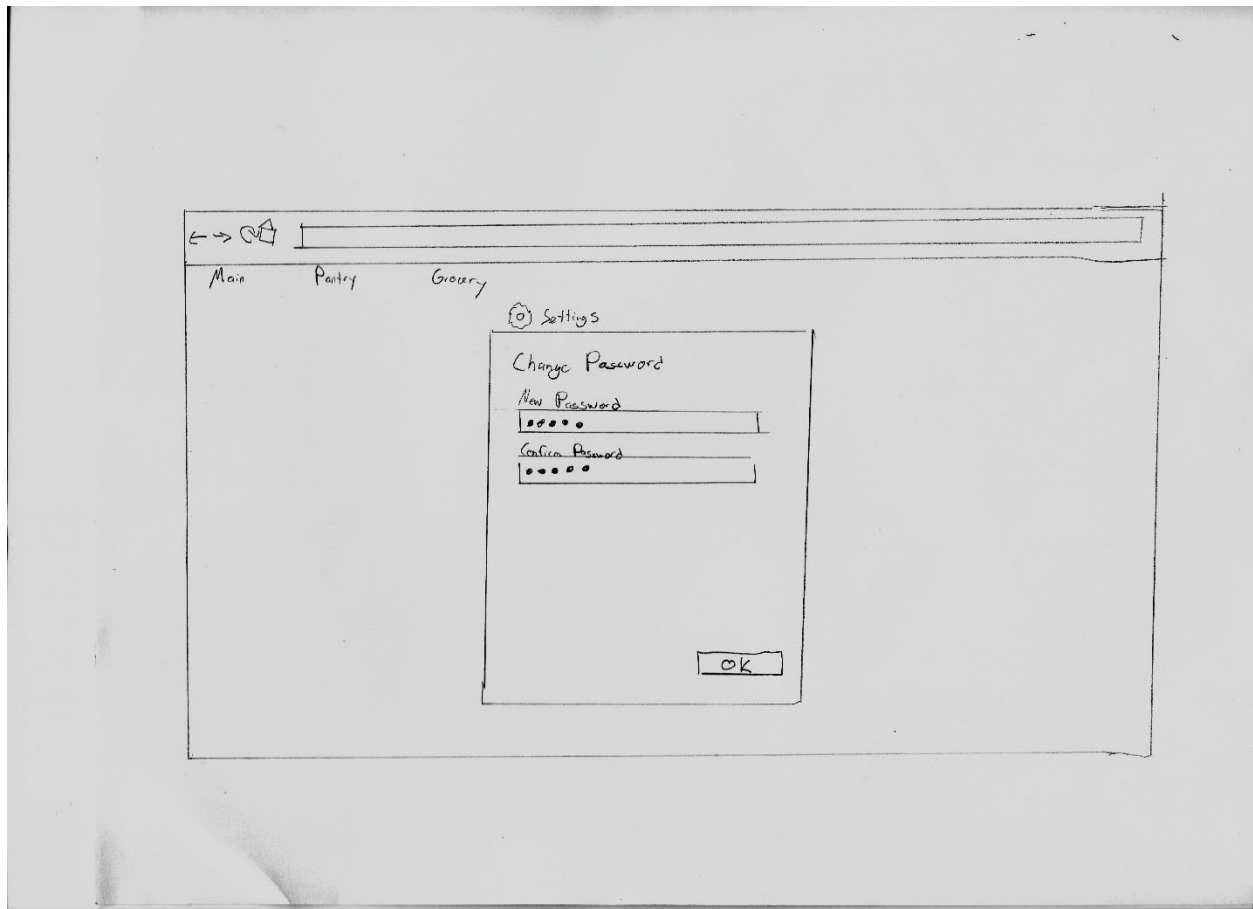
Main Page



Settings



Change Password



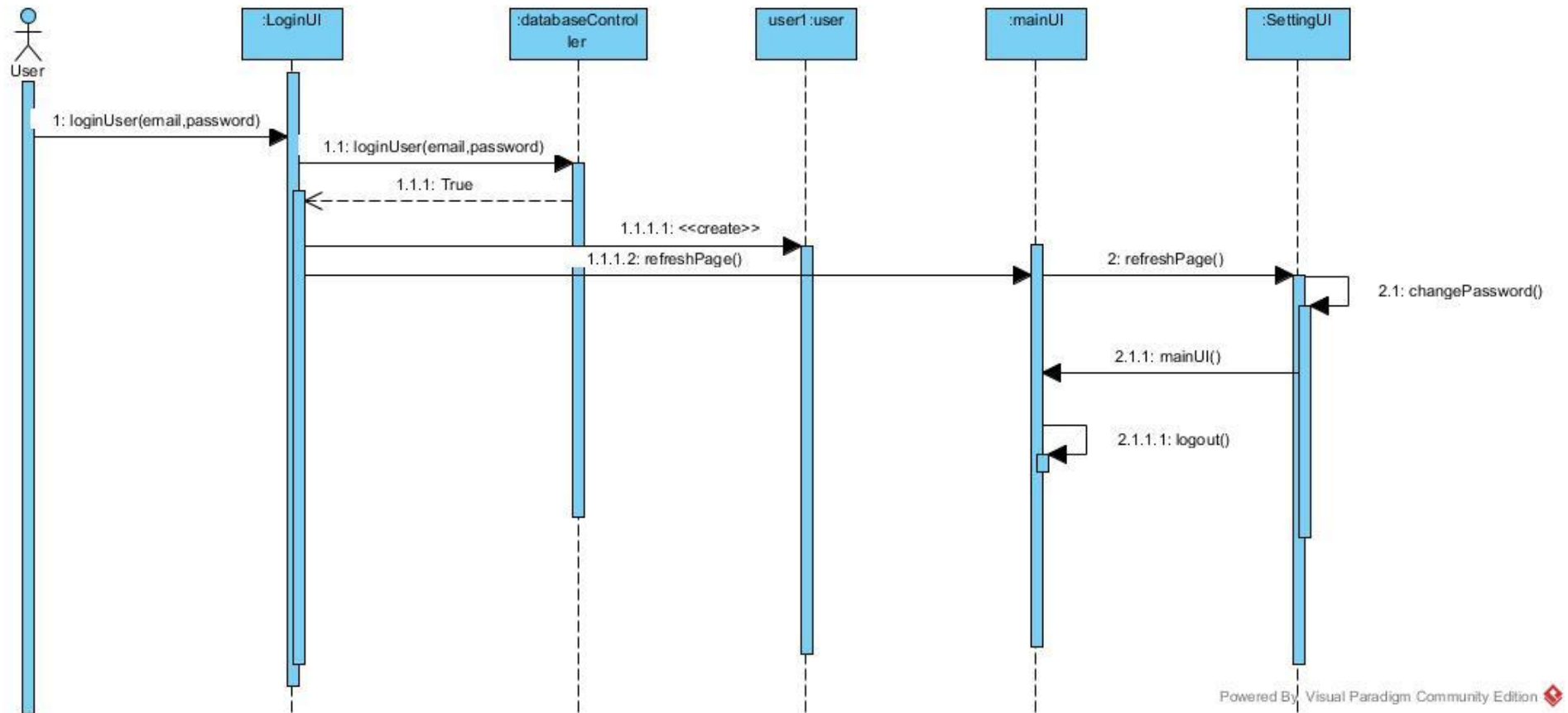
User Interactions

Requirement ID: NF-01, NF-02, NF-04, NF-05, NF-06, UR-04, F-11, F-12

Use Case ID: US-03

Use Case Description: User would like to change their password

Created by: Peemin Chen

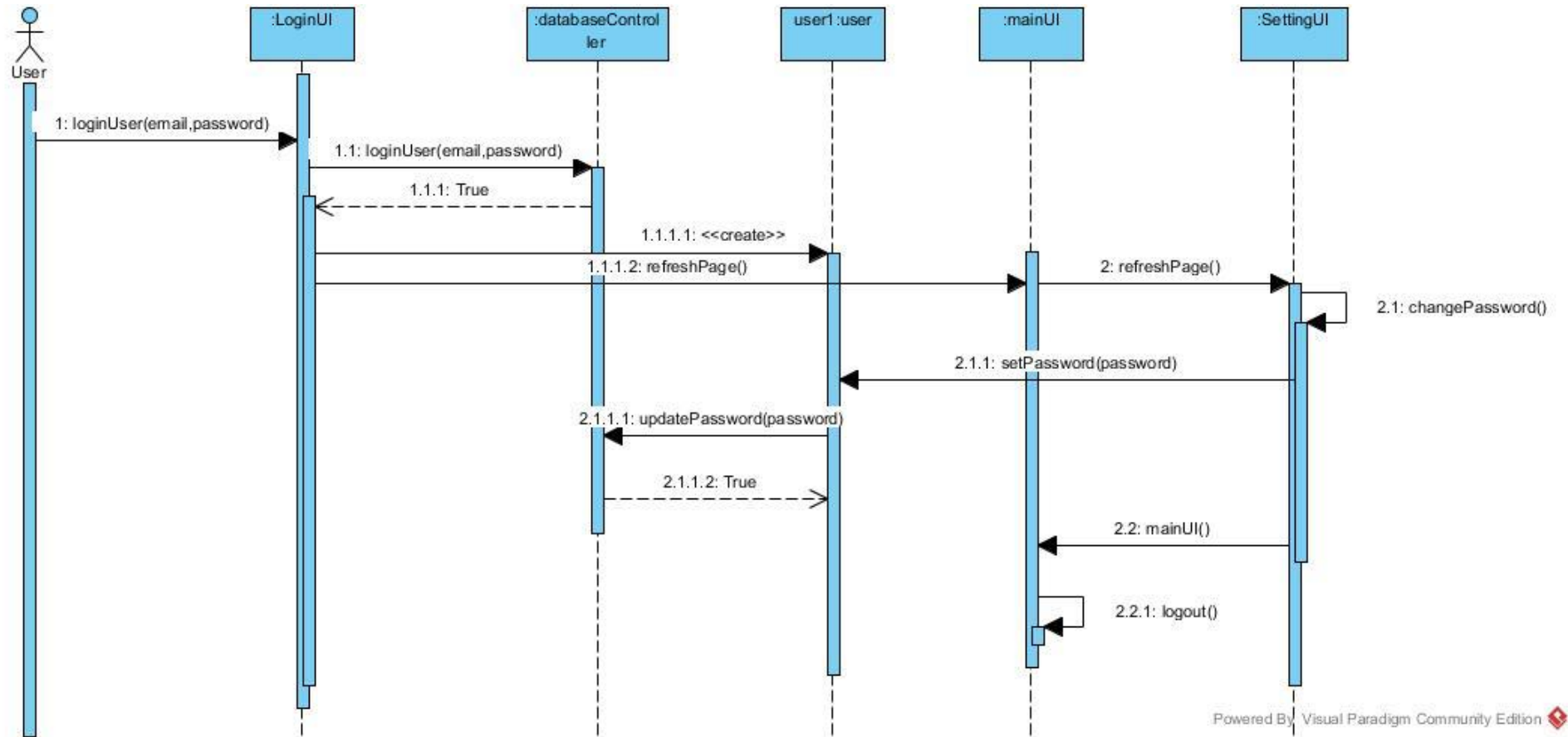


Requirement ID: NF-01, NF-02, NF-04, NF-05, NF-06, UR-04, F-11, F-12

Use Case ID: US-03

Use Case Description: User would like to change their password (successful)

Created by: Peemin Chen

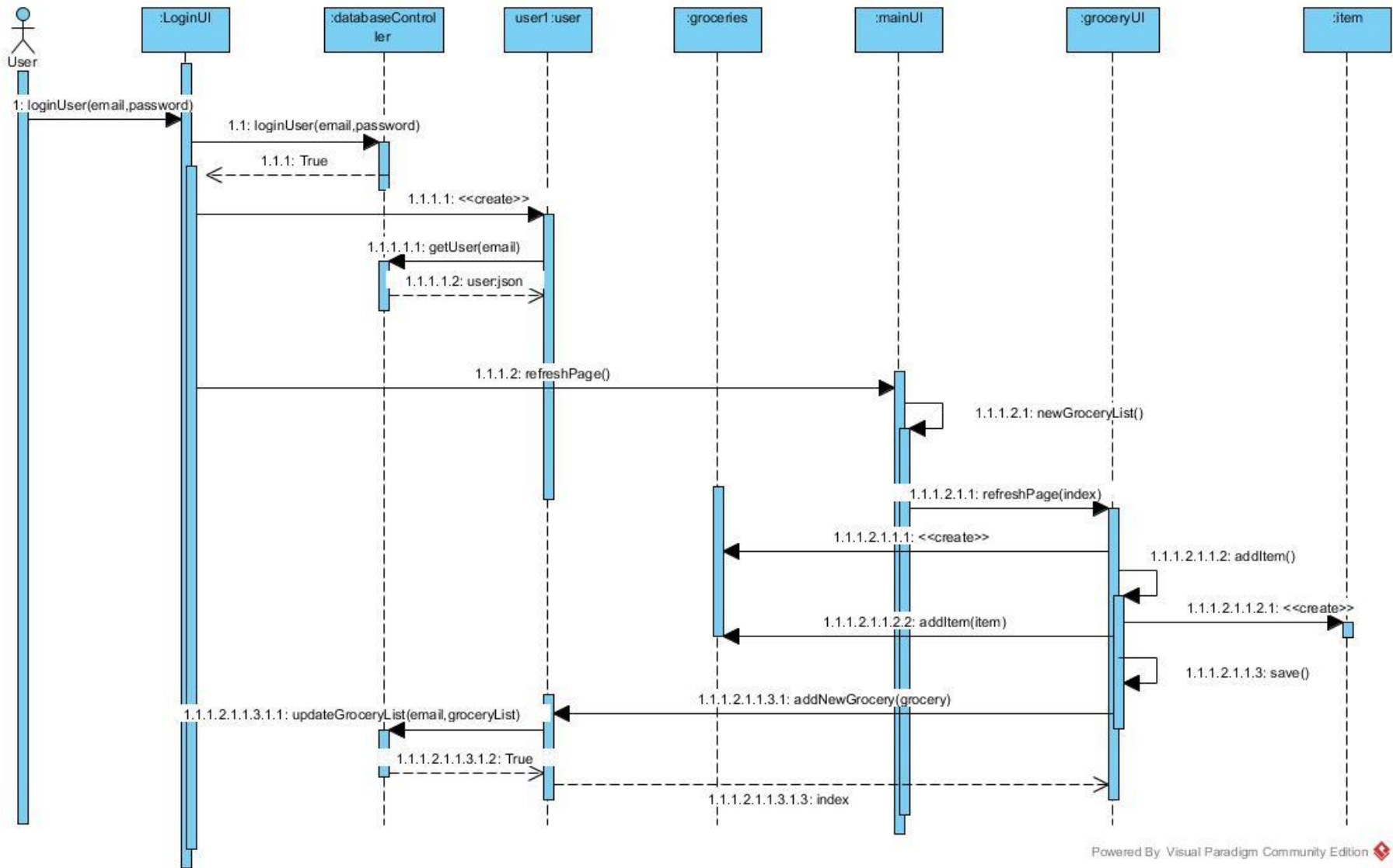


Requirement ID: NF-01, NF-04, NF-06, UR-06, F-01, F-02, F-04, F-05

Use Case ID: US-03

Use Case Description: User would like to create a new grocery list

Created by: Margaret Wheeler

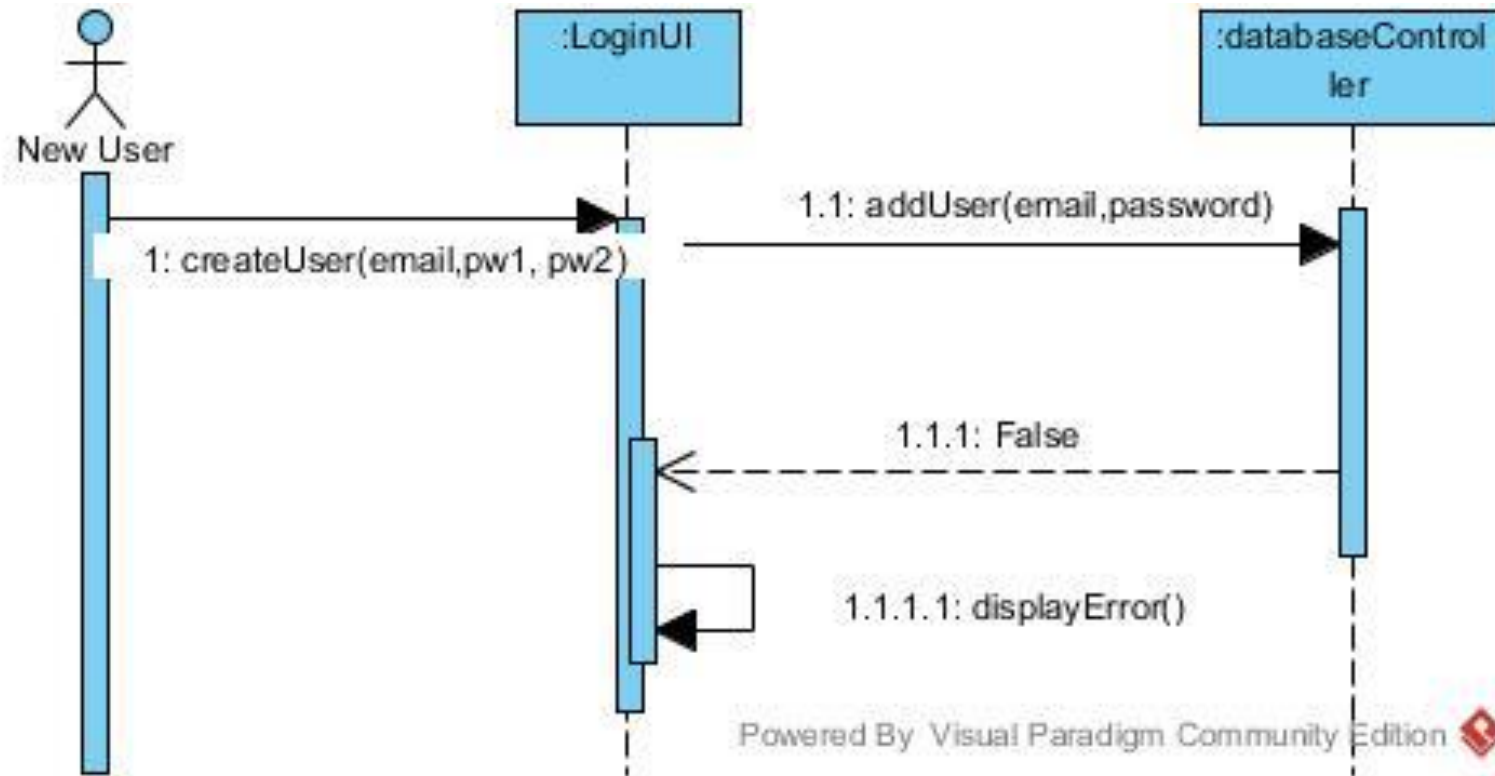


Requirement ID: NF-01, NF-03, UR-02

Use Case ID: US-01

Use Case Description: When registering for a new account, notify the user on why they cannot create an account

Created by: Peemin Chen

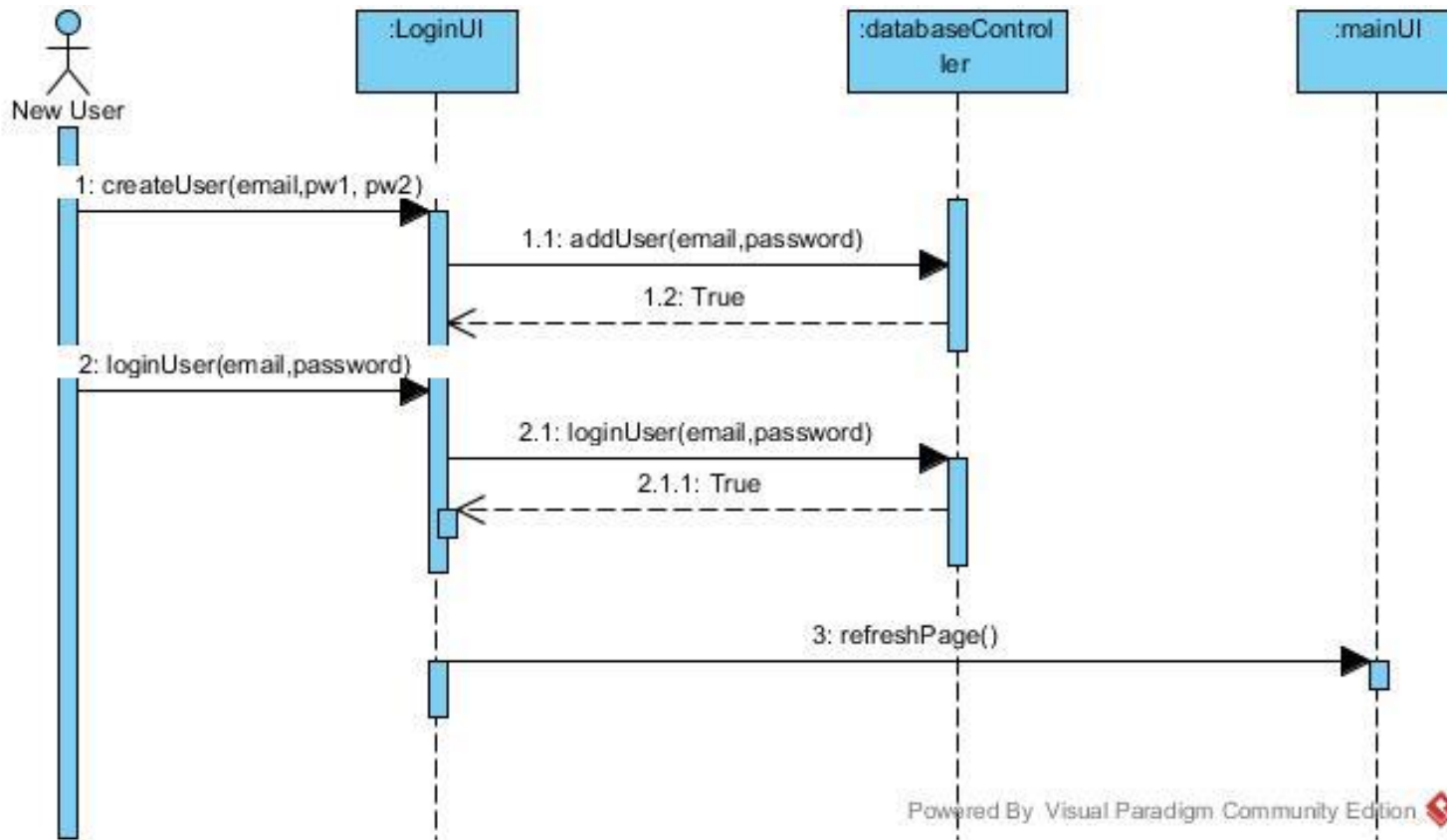


Requirement ID: NF-01, NF-02, NF-03, NF-06, UR-01, F-10

Use Case ID: US-01

Use Case Description: Successfully create new user

Created by: Peemin Chen

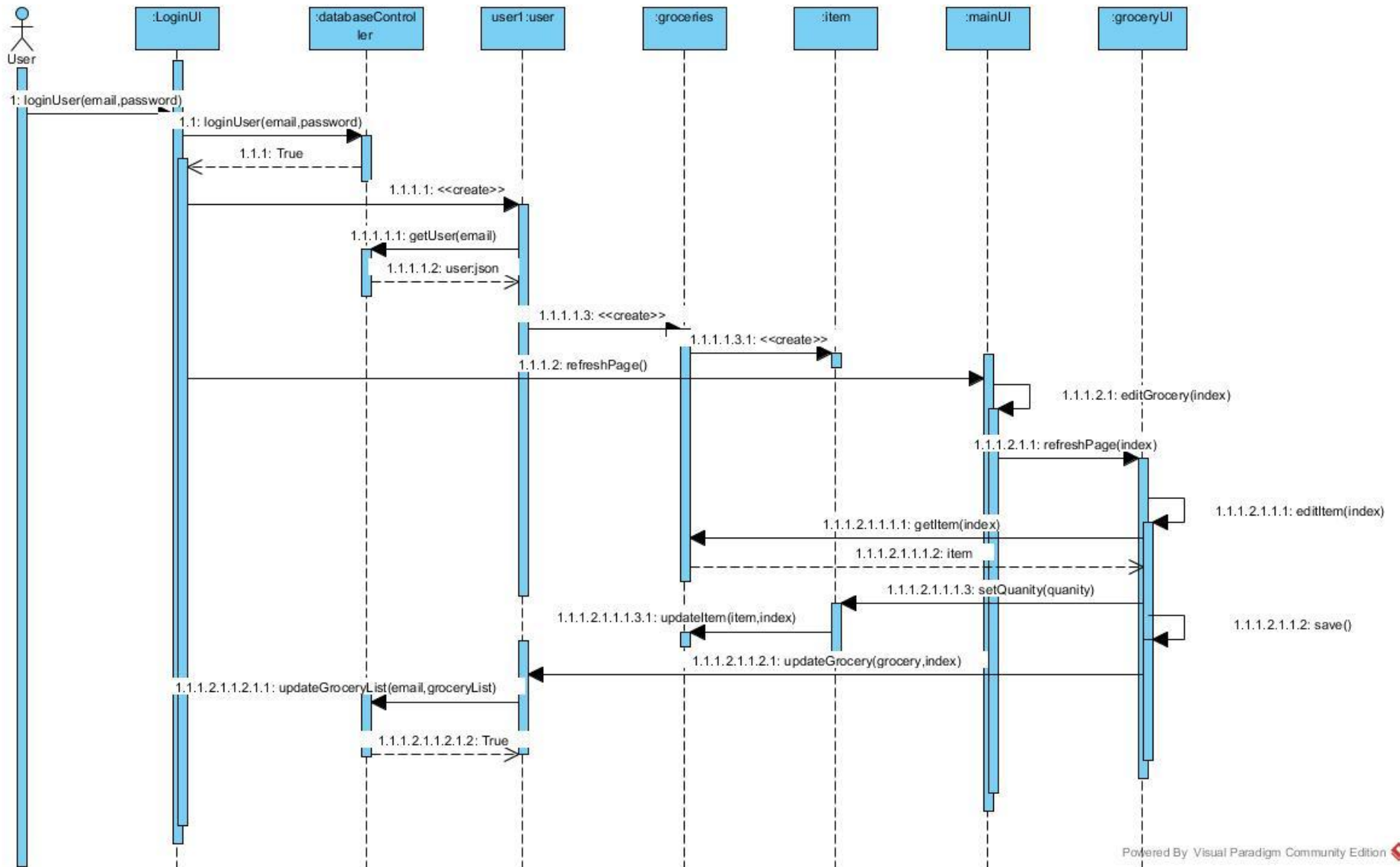


Requirement ID: NF-01, NF-02, NF-04, NF-06, UR-07, UR-08, F-03, F-06, F-07, F-09

Use Case ID: US-09

Use Case Description: Edit an item in a grocery list

Created by: Margaret Wheeler

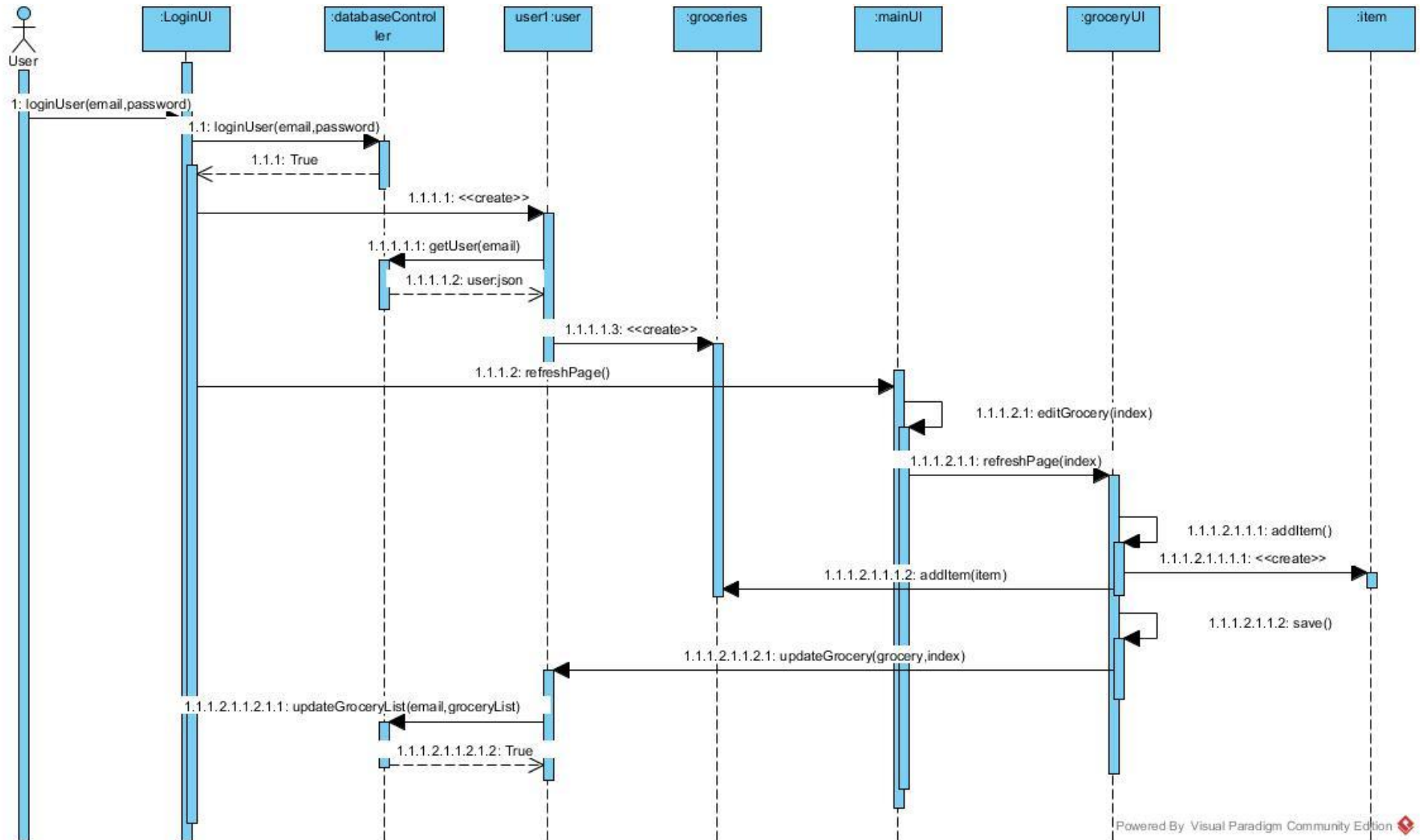


Requirement ID: NF-01, NF-04, NF-06, UR-07, UR-09, F-03, F-04, F-05, F-07

Use Case ID: US-07

Use Case Description: Add item to grocery list

Created by: Margaret Wheeler



Class Diagram

