

## **SW Engineering CSC 648/848 Fall 2019**

### **Milestone 2**

Team 101  
“Pantry Raid”

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Version	Date Submitted for Review	Date Revised
1.0	10/25/19	

## 1. Data Definitions

### **Entities:**

**Account:** An account stores information about the user, including name, refrigerator, and date created.

**Foods:** Foods is a list of foods that can be stored in a refrigerator, be recipe ingredients and be part of a shopping list

**Inventory:** A list of food items that are currently stored in a refrigerator

**Recipes:** A list of recipes

**Shopping list:** A list of food items that a user wants to purchase

### **Entities, Their Relationships, and Their Attributes:**

**Entity: Account**

**Relations:** owns **Inventory**, searches **Recipes**, has **Shopping Lists**, has **Meal Plans**

**Attributes:**

First Name

Last Name

Email

**Entity: Foods**

**Relations:** **Inventory** gets information, **Recipes** gets information,

**Attributes:**

Name

Name Abbreviations

Expiration Time (in days)

**Entity: Inventory**

**Relations:** has **Foods**, adds to **Shopping List**

**Attributes:**

Foods

Added date

Removed date

**Entity: Recipes**

**Relations:** has **Foods**, adds **Shopping List**, adds **Meal Plan**

**Attributes:**

Foods (ingredients)

Name

**Entity: Shopping List**

**Relations:** Opens **Inventory**, **Recipes** adds to list

**Attributes:**

Foods

**Entity: Meal Plan**

**Relations:** Added by an **Account**

**Attributes:**

Recipe

Date

## 2. Functional Requirements

Priority (1)

Add functionality (1).

It allows the user manually push 1 individual item at a time into the inventory list

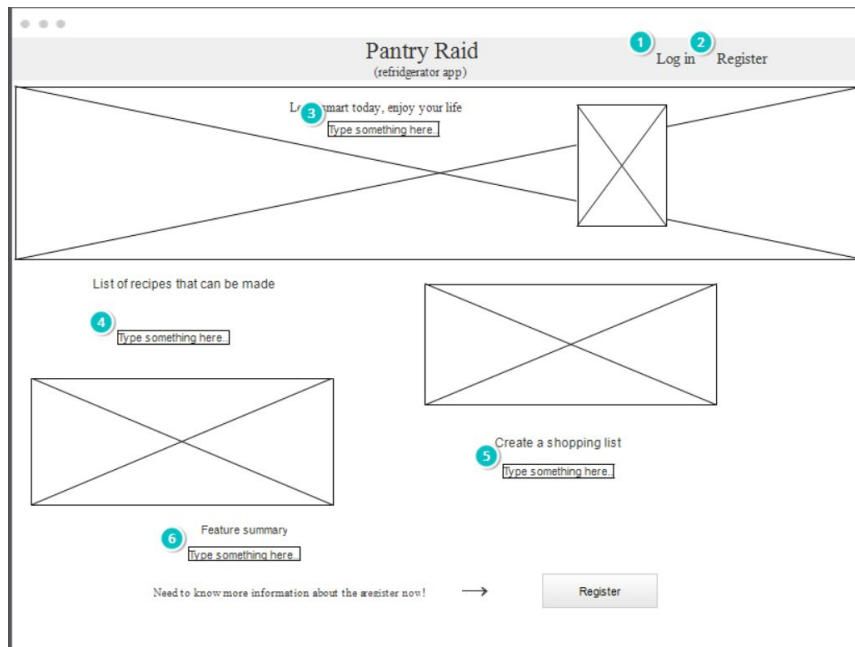
Remove functionality

It allows the user to remove an item from the inventory list base off of user's input

Filter

As a form of searching when the user wants to look for something in their inventory

## 3. UI Mockups and Storyboards



1. Login button for registered user
2. Register button for new user
3. Introduction of the smart of the app
4. Introduction of the function of list of recipe
5. Introduction of the function of create a shopping list
6. List all the features of the app

Pantry Raid  
(refridgerator.app)

Log in Register

Log In

Username

Password

☐ Remember Me

Log In

Forgot your password?

Not a member? Register

1. Cancel the login field
2. If user is interested in becoming a member, click Register

Pantry Raid  
(refridgerator app)

Log in Register

Register

Please fill in the information below

First Name Last Name

Email

Password

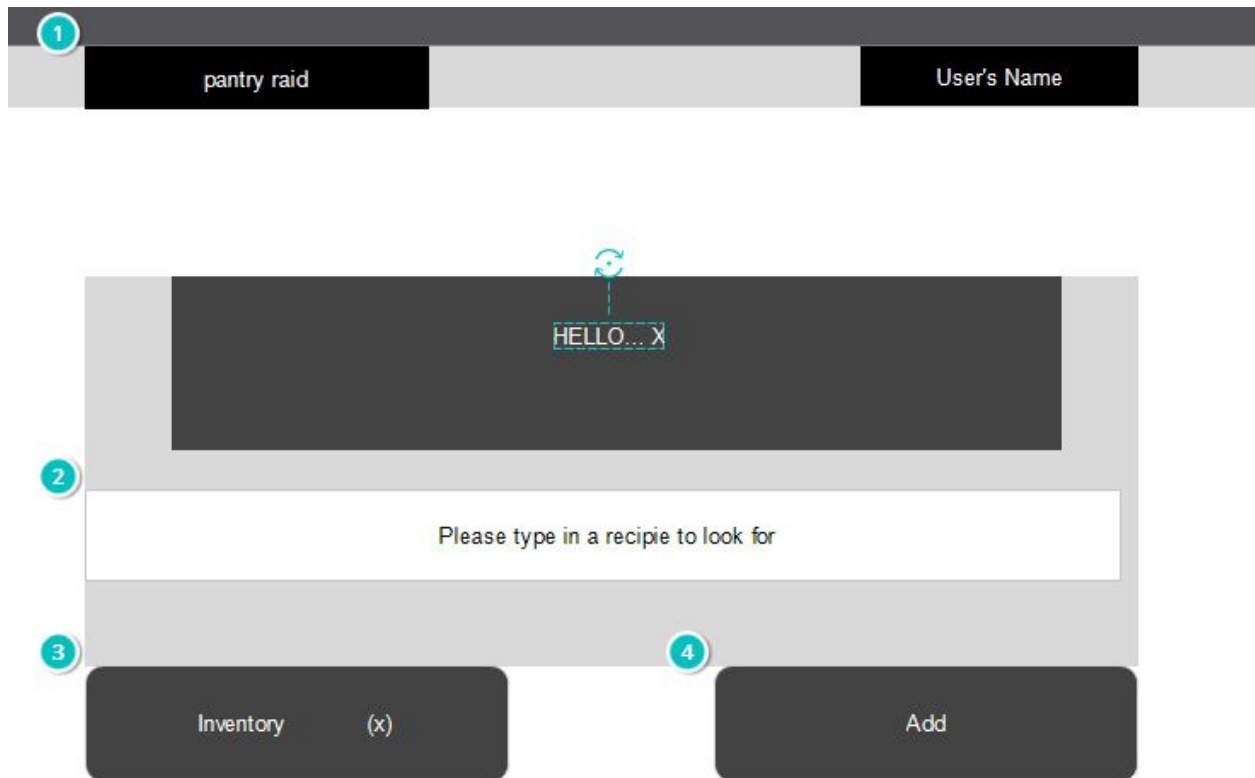
Confirm Password

☐ I accept the term of use & privacy policy

Register

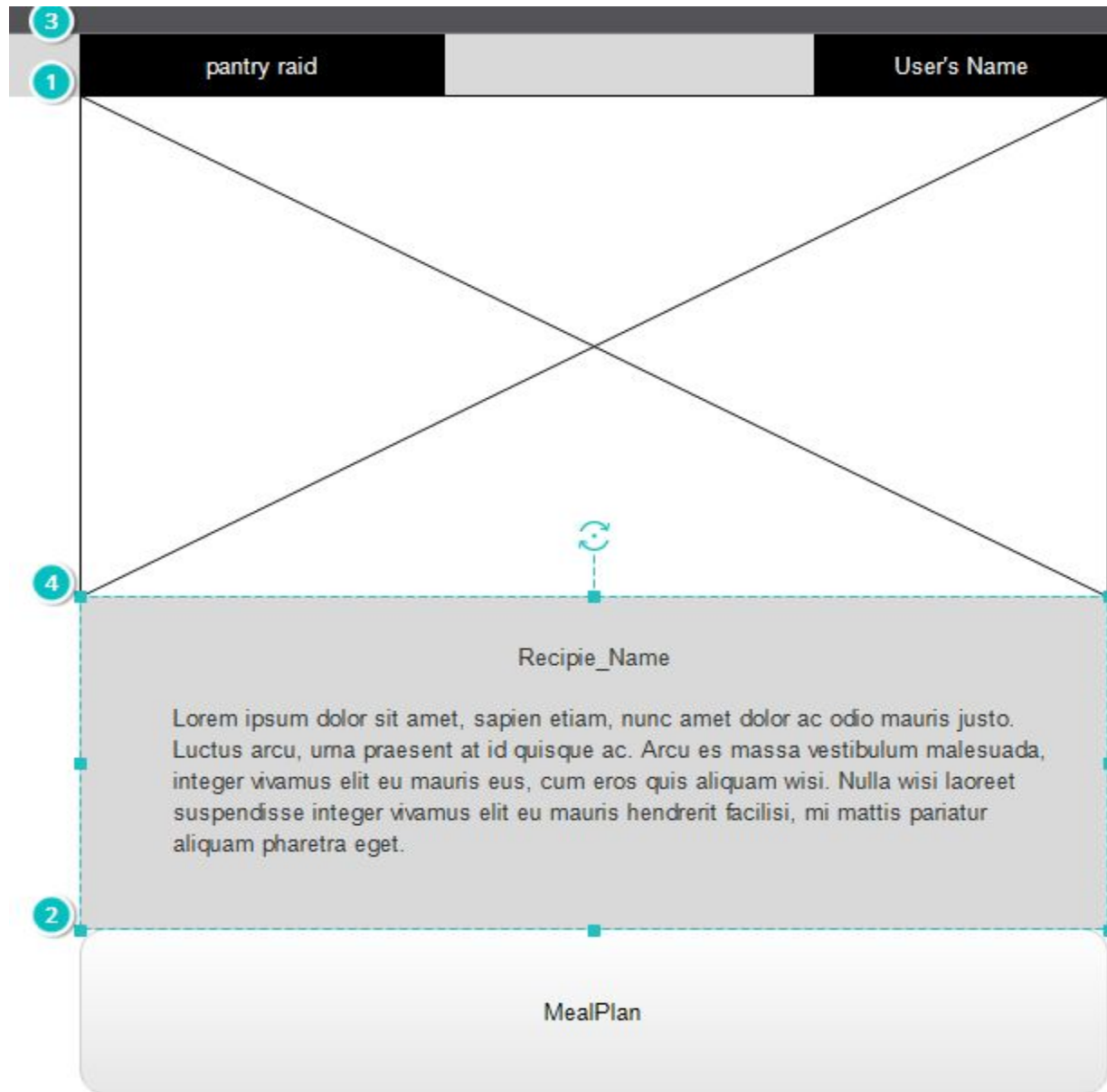
1. Cancel the register field
2. Before register, user has to agree with the term of use and privacy

## Home Page after signing in



1. Tap on the pantry raid button leads you back into the home page for the user
2. Allows the user to search for a specific recipe
3. A button that allows the user to tap on and displays all the user's ingredients in the refrigerator
4. Add button takes you to a shopping list page to add ingredients to shopping list to plan out what to buy

### Recipe page after search



1. After searching for a recipe the image is displayed
2. Meal plan allows the user to save the recipe for the next x amount of days to let the user know what the user will be eating while saving the required ingredients for the shopping list
3. Home button to take back to the front page of the user's display
4. Description of what the recipe is



## Inventory Page after inventory button click

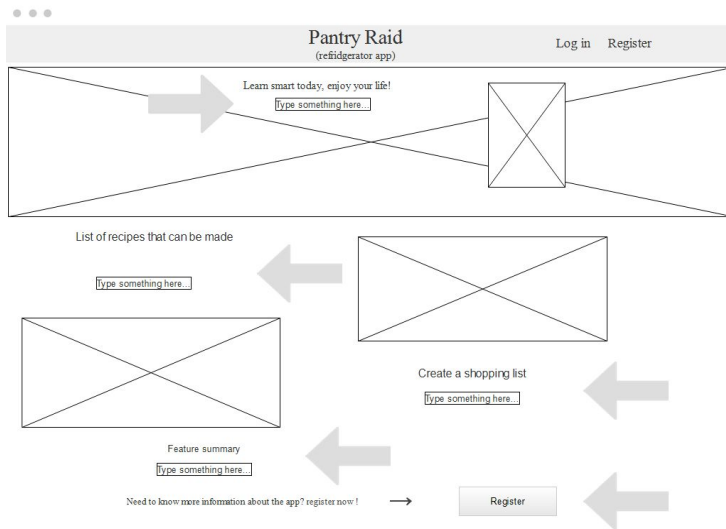


1. Displays the ingredient name
2. Displays the quantity of the ingredient
3. Allows the user to remove the ingredient from the refrigerator
4. Allows the user to upload an image of the receipt from the user's phone, and the ingredients name from the receipt will be added to the refrigerator
5. Allows the user to manually add the ingredient to the refrigerator

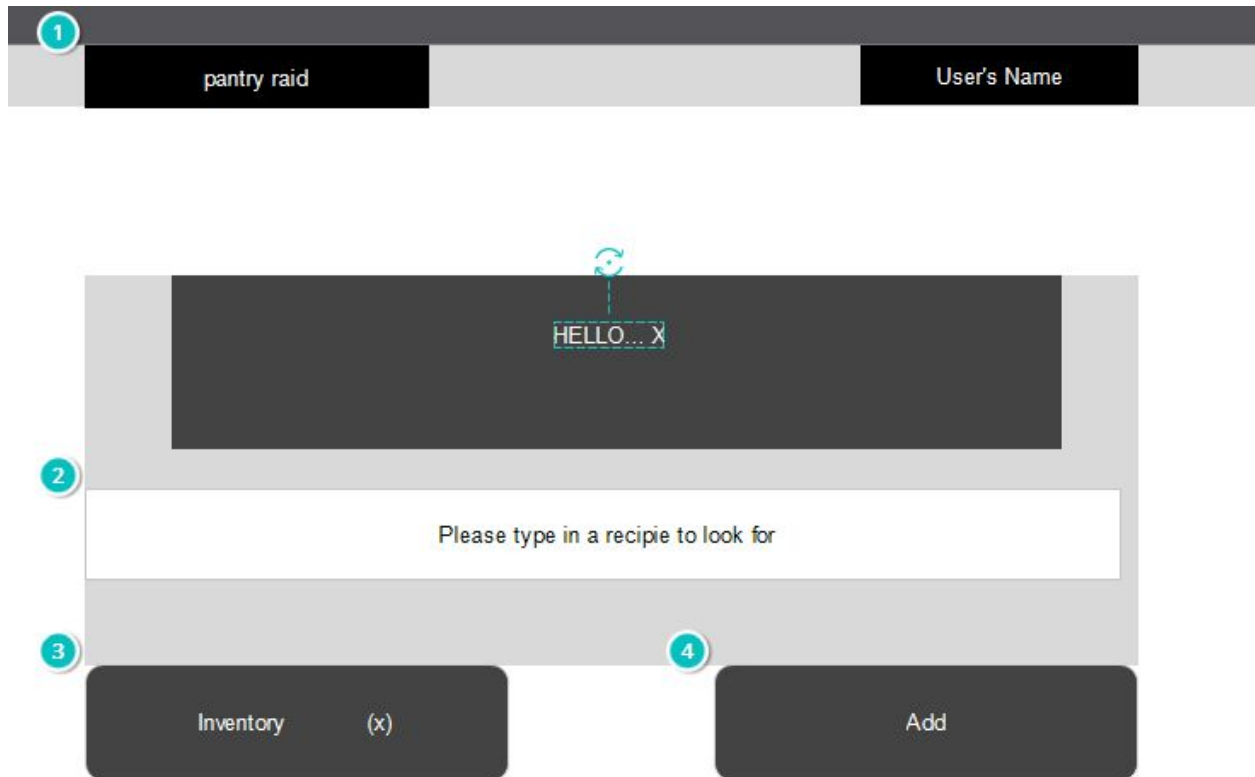
### Storyboards

#### User Story 1

Janey is the middle-aged housewife. She is looking for an app to manage her refrigerator. She finds the app called pantry raid online, and she will evaluate the app if she needs download this one or not.

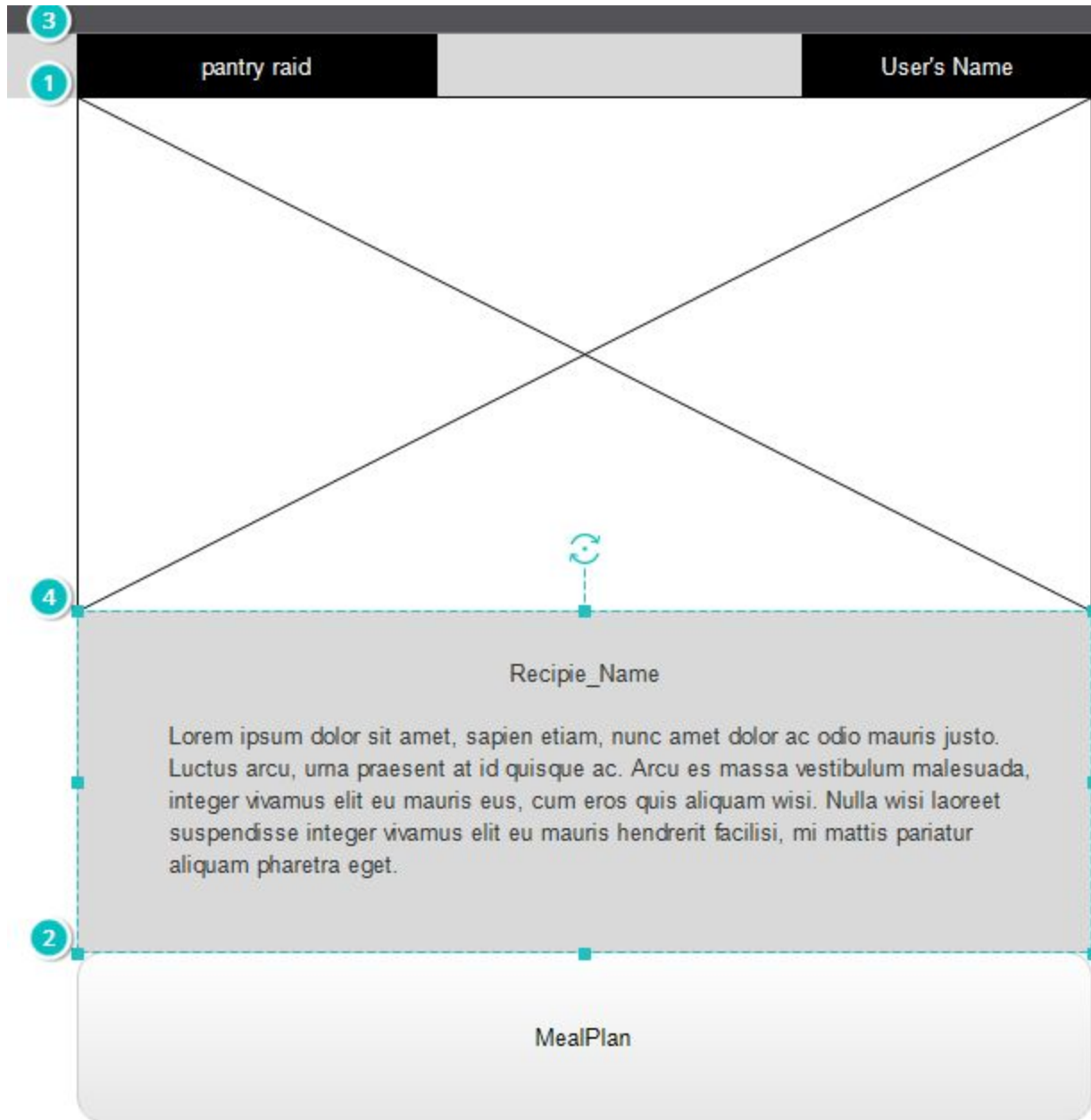


She goes through every point and register to be a member



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Once janey is signed in the list of options are convenient and simple for a new user to navigate throughout the webapp without being confused. The user's home page displays the name of the user. Since janey is a new user can go into the inventory section by tapping on the button to add ingredients into her refrigerator that is already in her current fridge. If Janey wants to start planning out her next shopping, she clicks on the add button to add ingredients to a shopping list to see what she's planning to get on her next trip to the grocery store. Janey can type in the recipes name that she wants to look for into the search section.



If Janey doesn't know what she wants to eat or simple wants to look for a recipe she's planning on making, she can type into the search bar on the user's home page. The recipe page gives the description of the recipe with an image, too.

## Inventory Page for Janey



Once Janey is ready to add new items to the refrigerator, she clicks on the inventory button that guides her to the inventory page. In that page, Janey is able to add ingredients into her refrigerator application. Since Janey is a new user, the inventory page will be empty and will not show the contents of her refrigerator until she adds them manually or via receipt.

## 4. GUI Design


# Pantry Raid

(refrigerator app)

Log in Register


Learn smart today, enjoy your life!


Are you busy with work? Do you want to have an app that manage your refrigerator efficiently? Give this app a try, it will save you a lot of time as well as your future time saving. We are here to provide you with the most interesting features.



✓ List of recipes that can be made

No need to worry about how to cook the food in your refrigerator. The app already saves some recipes for users. Open the app and go to "find your recipe". It will list some recipes, and users just need to choose one. Find your recipe, find out the way you manage your meal.






✓ Create a shopping list

Do you still make a shopping list before going to a supermarket? Just in case you will forget something to buy? Now with this app, shopping become very easy. The app will create a shopping list for you base on the food stock in the refrigerator. When the items use out, it will automatically add to the shopping list. You don't miss anything you want to buy.

### Feature Summary

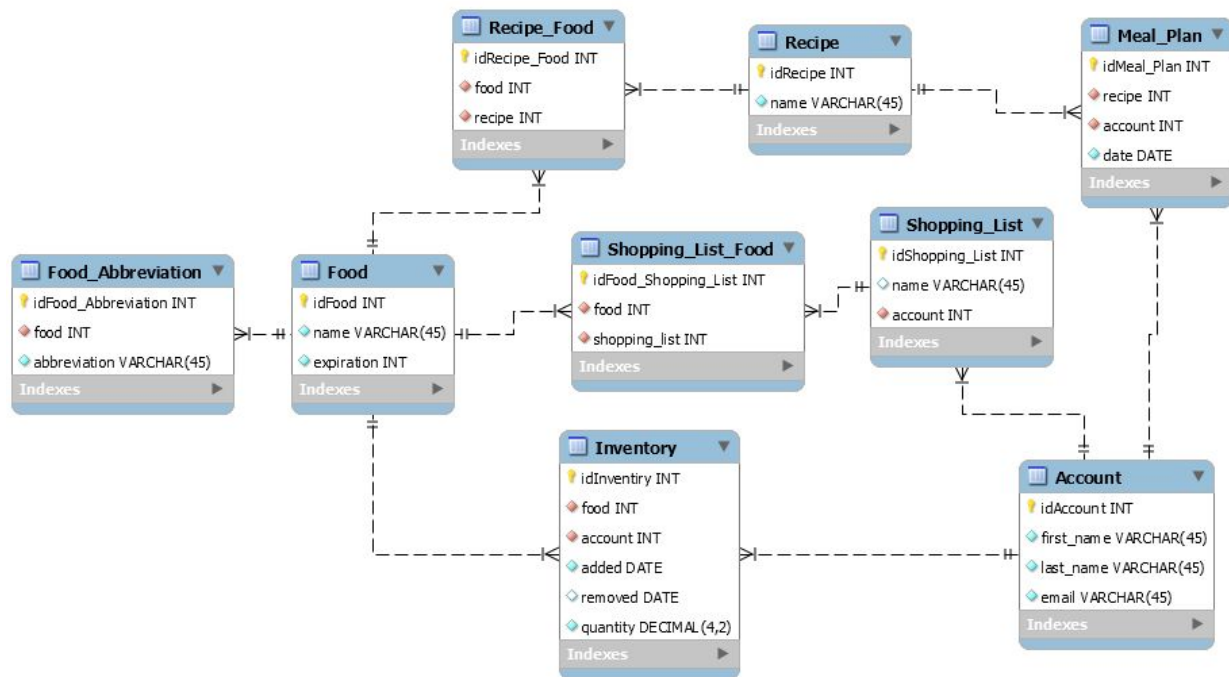
- \* See all the food in inventory
- \* List of recipes that can be made
- \* Create a shopping list based on ingredients
- \* List all food's expiration date
- \* Allow users to add items manually
- \* Upload a receipt to add items to inventory

Need to know more information about the app register now!



Register

## 5. High Level Architecture, Database Organization



## **6. Key Risks for the Project**

### **1 - Skill Risks (Do you have the right skills?)**

Some of us are familiar with backend but are unfamiliar with our frontend framework. Some of us are familiar with our frontend framework but are unfamiliar with working on backend. Since we are equally distributed, all of us are able to come together to teach each other what we need to know in order to understand what is going on. We use the the study sessions on tuesdays and thursdays to come together to understand what is going on and how we can teach each other. If we don't know anything, we seek each other out for answers, online help, or professors in other courses that could give us a better understanding on how to approach certain scenarios.

### **2 - Schedule Risks (Can you make it given what you committed and the resources)**

The entire team is very busy, given that all of us are seniors and are trying our best to study for important midterms and completing assignments. We dedicate ourselves to studying on Tuesdays, Thursdays, and Sundays. On Tuesdays and Thursdays, after class from 2 to whenever (usually for about 3 to 4 hours) we have study sessions in the library to discuss what to do for the project and achieving tasks for the milestone. On Sundays, we have a 30 minute discussion what needs to be completed before our study session and what to complete on our trello page.

### **3 - Technical Risks (any technical unknowns to solve)**

Since most of are very new in building an application from scratch and making everything work together, we spend majority of our time studying and trying to understand our stack with our given schedule. We are using technology that we haven't used before or are



unfamiliar with, for example, we had difficulty in understanding how to use an api properly, but with enough studying from online resources and practicing on how to properly use it through pair programming we were able to understand it. We dedicate as much time studying what we need to know in order to be able to put all the pieces together.

#### 4 - Teamwork risks (any issues to teamwork)

For most of us, it's our first time coming together to collab on building an application with our given knowledge. We try our best to distribute work evenly by using outside applications like trello. We use trello to make cards that allows us to assign tasks to each individual. Since most of us aren't always able to meet up and communicate with one another, we use discord and text messages to always keep in contact with each other by seeing what's going on and how the application/work is progressing. In our discord channel, we have a log section that tells us what happened in our last meeting. We have a resource channel that is dedicated in posting resources on what we should be studying for.

## **7. Project Management**

Like Milestone said, we divided the team into separate groups. The frontend portion of the team worked on the GUI design and UI mockups for the storyboard. The frontend team worked on Home page design, Form page for sign in and sign up, user homepage, and other pages for the user's navigation. They used justinmind for The backend group worked on the Data definitions and High level architecture DB organization. As a team, we collaborated on the functional requirements and the flow of the web application.