



Sprint 1 Planning Document

Team 18:

Vivian Guo, Matt Retoff, Aditya Sankaran, Zach Bridwell, Thomas Schroeder, Anthony Kiselev

Sprint Overview

For the first sprint, we plan to develop the basic features of our REST API, and the basic user interface. This will require building most of our classes in this sprint, as well as developing boilerplate code to allow each member of our team to work somewhat independently. The main page of our website will be made and at the end of the sprint, users should be able to input ingredients and search for recipes.

Scrum Master: Anthony Kiselev

Meeting Plan: Tuesday/Wednesday/Thursdays @ 5:30pm

Risks and Challenges:

Our biggest challenge during this sprint will be coordination. Many of our features are intertwined, and require large amounts of intercommunication in our team in order to build the features as described. Also, coding will be a challenge at first for us since we have minimal experience in the languages we are going to be using such as React JS and Flask. However, once we familiarize ourselves with both languages well enough, we should be better off.

Sprint 1 Detail

User Story #1

As a user, I would like to be able to view recipes

#	Description	Estimated Time	Owner
1	Create database	6 hrs	Anthony
2	Test and debug database using sample recipes	5 hrs	Anthony
3	Create UI panel to display recipes	3 hrs	Vivian
4	Create an algorithm to obtain recipe information from the database	10 hrs	Anthony
5	Connect the algorithm to UI that displays information about the recipe	4 hrs	Vivian/ Anthony

Acceptance Criteria:

- Given that the UI panel to display recipes is implemented correctly, when the user accesses it the panel will correctly respond to the user.
- Given that the database is implemented correctly, when the algorithm tries to obtain recipe information it will be able to interact with the database and its data.
- Given that the algorithm to obtain recipes is correctly implemented, when the algorithm is run it will be able to get the recipe information from the database.
- Given that the algorithm and the UI is correctly connected, when the user calls for the UI it will be properly populated with recipe information.

User Story #2

As a user, I would like to be able to input the ingredients I currently have so that I can have recipes catered to my needs

#	Description	Estimated Time	Owner
1	Create a list that will display ingredients inputted at runtime	3 hrs	Matt
2	Create a prompt to input ingredients	2 hrs	Matt
3	Debug and test inserting ingredients	2 hrs	Matt

Acceptance Criteria:

- Given that the list is created correctly, when the user attempts to view the list the UI will correctly display it.
- Given that the list is displayed correctly, when the list gets too big for the page, the user should be able to scroll through the list of ingredients.
- Given that the input prompt works correctly, the user should be shown each ingredient that they have inputted in a list.
- Given that the adding of ingredients works, when a user finishes inputting ingredients, the ingredients should be inputted to an algorithm for finding recipes.

User Story #3

As a user, I would like to add my ingredients to the database.

#	Description	Estimated Time	Owner
1	Create button to add an ingredient not already in the database	2 hrs	Zach
2	Link button to the database	3 hrs	Zach
3	Create a prompt if the user wants to add the ingredient to the database	2 hrs	Matt
4	Debug and test adding an ingredient to the database	2 hrs	Matt

Acceptance Criteria:

- Given that the button to add ingredients is implemented correctly, when the user clicks it the new ingredient will be added.
- Given that the button and the database are correctly linked, when the button is clicked the database will be updated with the new ingredient.
- Given that the button is implemented correctly, when the user clicks the button a new prompt will be created confirming if the user wants to add a new ingredient.
- Given that the database and button are correctly linked, when the user updates the ingredients their profile will be updated in the database.

User Story #4

As a user, I would like to add ingredients by clicking on options.

#	Description	Estimated Time	Owner
1	Create a checklist for inputting ingredients	2 hrs	Vivian
2	Link buttons to database of ingredients	3 hrs	Vivian
3	Debug and test adding ingredients by clicking on options	2 hrs	Vivian

Acceptance Criteria:

- Given that the checklist is displayed correctly, the user should be able to easily find and add common ingredients to their list of ingredients.
- Given that the common ingredients are included in the checklist, when the user searches through the checklist, ingredients should be categorized into food groups.
- Given that the link between the checklist and database works correctly, when the user selects an ingredient, that ingredient should be added to the list of ingredients that searches for recipes.

- Given that the checklist and database are correctly linked, when the checklist is updated the profile will be updated with the new information as well.

User Story #5

As a user, I would like to add ingredients by typing

#	Description	Estimated Time	Owner
1	Create a search bar for inputting ingredients	3 hr	Vivian
2	Link search bar to database of ingredients	3 hrs	Vivian
3	Debug and test inputting ingredients using a search bar	2 hrs	Vivian

Acceptance Criteria:

- Given that the search bar is displayed correctly, the user should easily be able to begin to type out ingredients they have.
- Given that the search bar works correctly, when the user is typing an ingredient, suggestions for ingredients should be displayed as well.
- Given that the link between the search bar and database works correctly, when the user types an ingredient, that ingredient should be added to the list of ingredients that searches for recipes.

User Story #6

As a user, I would like to see the ingredients I have inputted.

#	Description	Estimated Time	Owner
1	Create UI panel for ingredients	3 hrs	Vivian
2	Link panel to the inputted ingredients	3 hrs	Vivian
3	Create unit tests to test UI panel	2 hrs	Vivian

Acceptance Criteria:

- Given that the UI panel for ingredients is correctly made, when the user wants to see the list of ingredients the UI will display the list to the user.
- Given that the panel is correctly linked to the database, when the panel is created it will correctly retrieve the ingredients from the database.
- Given that the database and the panel are correctly linked, when the database is updated with new ingredients the panel will be updated as well.

User Story #7

As a user, I would like to know how many ingredients I have inputted.

#	Description	Estimated Time	Owner
1	Create an algorithm to count the number of ingredients	2 hrs	Matt
2	Create unit tests to test algorithm	3 hrs	Matt
3	Create a UI panel to display the total number of ingredients	3 hrs	Matt

Acceptance Criteria:

- Given that the algorithm for adding ingredients is implemented correctly, when the user inputs an ingredient, a running count of total ingredients should be incremented.
- Given that the counting algorithm works, when the user inputs an ingredient, the total number of ingredients should be correctly displayed on-screen.
- Given that the counting algorithm works, when the user deletes an ingredient, the total number of ingredients should be updated and displayed correctly.

User Story #8

As a user, I would like to remove all currently selected ingredients.

#	Description	Estimated Time	Owner
1	Create a delete button	2 hrs	Matt
2	Link the button to the database	3 hrs	Matt
3	Implement unit tests to test deletion	3 hrs	Matt

Acceptance Criteria:

- Given that the delete button is correctly made, when the user clicks it the list of ingredients will be cleared.
- Given that the button and the database are correctly linked, when the button is clicked the database will be updated accordingly.
- Given that the button, database, and UI are all correctly linked, when the button is clicked the UI will be updated to display that the ingredients have been cleared.

User Story #9

As a user, I would like to see a list of ingredients for each recipe.

#	Description	Estimated Time	Owner
1	Create a UI panel for ingredients for a recipe	2 hrs	Anthony
2	Create an algorithm to find the ingredients needed for each recipe	5 hrs	Anthony
3	Link the UI panel to display the ingredients needed	3 hrs	Anthony
4	Debug and test viewing all of the ingredients	4 hrs	Anthony

Acceptance Criteria:

- Given that the UI panel for ingredients of a recipe is correctly implemented, when the user is displayed a recipe the ingredients of that recipe will be correctly displayed as well.
- Given that the algorithm to find ingredients of a recipe is correctly implemented, when the ingredients are requested the algorithm will be able to choose the correct ones.
- Given that the UI panel and the algorithm/database is correctly linked, when the panel is made the correct ingredients will be displayed to the user.
- Given that the list of ingredients grows too long to be displayed correctly, when the user views these ingredients the user will be able to scroll through the list.

User Story #10

As a user, I would like to see instructions for each recipe.

#	Description	Estimated Time	Owner
1	Create a UI panel to display instructions	2 hrs	Thomas
2	Link panel to the database	4 hrs	Thomas
3	Debug and test viewing the instructions for a recipe	3 hrs	Thomas

Acceptance Criteria:

- Given that the UI panel for instructions is correctly implemented, when the user is displayed a recipe they will be displayed the instructions of that recipe as well.
- Given that the panel is correctly linked to the database, when the panel is made the correct instruction set for that recipe will be displayed for it.
- Given that the instruction list is too big to display correctly, when the user views the instructions they will be able to scroll through them.

User Story #11

As a user, I would like to search through the recipes I can make using a search bar.

#	Description	Estimated Time	Owner
1	Make a search bar	2 hr	Thomas
2	Link the search bar to the database	3 hrs	Thomas
3	Debug and test using the search bar	2 hrs	Thomas
4	Create an algorithm to find the recipe in the database	4 hrs	Thomas

Acceptance Criteria:

- Given that the search bar is implemented correctly, when the user begins to type in a name of a recipe, the suggestions of recipes that are in the database should show depending on what the user types in the search bar.
- Given that the algorithm to find the recipe in the database is correctly implemented, when the user types in a name of a recipe, the name of the recipe along with a link to the full recipe should be displayed to the user.
- Given that the algorithm to find the recipe in the database is implemented correctly, when the user types in a name of a recipe that doesn't exist in the database, the page should return a "search not found" back to the user.

User Story #12

As a user, I would like to see the total number of recipes I can make with the ingredients I have.

#	Description	Estimated Time	Owner
1	Create an algorithm to count the total number of recipes	2 hrs	Thomas
2	Create a UI panel to display the total number of recipes	3 hrs	Thomas

3	Debug and test the total number of recipes	2 hrs	Thomas
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Acceptance Criteria:

- Given that the algorithm is made correctly, when the algorithm is run it will correctly determine the number of recipes that can be made.
- Given that the UI panel for the total is made correctly, when the user inputs ingredients the panel will display the total number of recipes that can be made.
- Given that the panel and the database/algorithm is correctly linked, when the algorithm runs it will correctly display and update the number of recipes that can be made.

User Story #13

As a user, I would like to click on the recipe name to see the full recipe.

#	Description	Estimated Time	Owner
1	Link a new page to the recipe name	2 hrs	Aditya
2	Create a UI panel to display the ingredients of the recipe on the new page	2 hrs	Aditya
3	Display the recipe's ingredients on the UI panel	3 hr	Aditya
4	Test and Debug the display of ingredients	3 hrs	Aditya

Acceptance Criteria:

- Given that the link to the full recipe exists and is set up correctly, when the user clicks on the name of the recipe, the page containing the full recipe along with the other info comes up for the user.
- Given that the UI is correctly implemented, when the user accesses the display, the display will show up on the page which contains the list of all of the ingredients in the recipe.

- Given that the UI and the database are linked correctly, when the UI displays information about the recipe it will correctly get that information from the database.

User Story #14

As a user, I would like to be able to create an account on Fridge2Food

#	Description	Estimated Time	Owner
1	Create a “New Account” button on the login popup	2 hr	Thomas
2	Display a UI for user to input information	2 hr	Thomas
3	Create an algorithm to determine if the user already has an account	4 hrs	Zach
4	Add the user to the database	2 hrs	Zach
5	Debug and Test creating a new account	4 hrs	Thomas

Acceptance Criteria:

- Given that the button for creating an account exists and is properly implemented, when the user clicks on the button, the page for creating an account should come up for the user.
- Given that the algorithm for figuring out whether the user already has an account is correctly implemented, when a user who already has an account tries to make an account with the same login credentials, the page should display a message stating that there is already an account with the specific username.
- Given that the user is able to input all their info when making an account, when the user has finished inputting all their info and clicks on the create account button, the page should log them in and show the main page of their Fridge2Food account.

- Given that the user database is implemented correctly, when a user creates a new account, the user information should be added to the user database.

User Story #15

As a user, I would like to be able to login and manage my Fridge2Food account.

#	Description	Estimated Time	Owner
1	Create a login button on the home page	3 hrs	Zach
2	Implement a popup window for logging in	3 hrs	Zach
3	Add a “manage profile” button on home page for when user is logged in	2 hr	Aditya
4	Create a new page for displaying user account information	2 hr	Aditya
5	Add a logout button	2 hr	Aditya
6	Test and Debug logging in and logging out of an account	5 hrs	Matt

Acceptance Criteria:

- Given that the user database is implemented correctly, when a user wants to log in, the user can type their login credentials and log into their account.
- Given that the user database is implemented correctly, when a new user wants to create an account, they can click on the “New Account” button and input their information.
- Given that the user database is implemented correctly, when a user wants to view their profile, they can click on the “Manage Profile” button from the homepage to view their account information.
- Given that the logout button works, when the user wants to log out of their account, they can do so by clicking the logout button.

User Story #16

As a user, I would like my passwords to be reset if I forget it.

#	Description	Estimated Time	Owner
1	Create a “forgot password” button	2 hrs	Thomas
2	Link button to user database	3 hrs	Thomas
3	Create algorithm to find the user and email the user their password	4 hrs	Thomas
4	Create unit tests for emailing algorithm	2 hrs	Thomas

Acceptance Criteria:

- Given that the “Forgot Password” button works correctly, when the user clicks on the button, a prompt should appear for the user to input their email.
- Given that the user database is implemented correctly, when a user inputs their email, an algorithm should search the database for that user.
- Given that the searching algorithm works correctly, when the user is found, an email should be sent out containing their old password.
- Given that the user database is implemented correctly, when a user that doesn’t have an account enters their email, the algorithm should see that the user is not in the database and not send out an email.

User Story #17

As a user, I would like to create a profile picture.

#	Description	Estimated Time	Owner
1	Create a button to add a profile picture	2 hr	Aditya
2	Link button to add picture to user database	3 hrs	Aditya
3	Allow user to search their computer for a picture	4 hrs	Aditya

Acceptance Criteria:

- Given that the button to add a picture is correctly made, when the user clicks that button the user will be allowed to search their computer for a picture.
- Given that the button and database is correctly linked, when the user clicks the button the database will be updated to contain the new picture for that user.
- Given that the user has selected a photo from their computer, when they submit it their profile will be correctly updated to display the new photo.

User Story #18

As a user, I would like to be able to change my username.

#	Description	Estimated Time	Owner
1	Create button to change username	2 hr	Aditya
2	Create a prompt for the new username	3 hr	Aditya
3	Update username in the user database	2 hrs	Aditya

Acceptance Criteria:

- Given that the button for changing a username is correctly implemented, when the user clicks on the button, the page for changing a username should come up for the user.
- Given that the prompt for changing a username works properly, when the user inputs the current username for the prompt for the new username, the page should display a message describing the circumstance and again prompt the user to enter a different username.
- Given that the user has changed their username, when the user finishes changing their username and clicks the update button, the page should update and the new username should exist after the page has been refreshed.
- Given that the user database works correctly, the new username should be updated in the database.

Remaining Backlog

Functional Requirements

1. User Account

As a user,

- ~~a. I would like to be able to create an account on Fridge2Food.~~
- ~~b. I would like to be able to login and manage my Fridge2Food account.~~
- ~~c. I would like my password to be reset if I forget it.~~
- ~~d. I would like to create a profile picture.~~
- ~~e. I would like to be able to change my username.~~
- f. I would like to be able to input my allergies as a list of ingredients in the database.
- g. I would like to be able to favorite recipes so that I may find them again.

2. Recipes

As a user,

- ~~a. I would like to be able to view recipes.~~
- ~~b. I would like to see a list of ingredients for each recipe.~~
- ~~c. I would like to see instructions for each recipe.~~
- ~~d. I would like to see the total number of recipes I can make with the ingredients I have.~~
- ~~e. I would like to search through the recipes I can make using a search bar.~~
- f. I would like to have recipes that I have every ingredient for at the top of the list and recipes where I'm missing a couple ingredients near the bottom.
- g. I would like to be able to view ingredient substitutions for recipes.
- h. I would like to be able to input my own recipes.
- i. I would like to be able to access my user created recipes.
- j. I would like to insert pictures of recipes I have created.
- ~~k. I would like to click on the recipe name to see the full recipe.~~
- l. If time allows, I would like to see the utensils and equipments needed for the recipe.
- m. If time allows, I would like to know the nutrition facts about the recipes.

3. Ingredients

As a user,

- ~~a. I would like to be able to input the ingredients I currently have so that I can have recipes catered to my needs.~~
- ~~b. I would like to remove all currently selected ingredients.~~
- ~~c. I would like to add ingredients to the database.~~
- d. I would like to see my most frequent ingredients appear in a dropdown when I click on the search bar.
- ~~e. I would like to add ingredients by clicking on options.~~
- ~~f. I would like to add ingredients by typing.~~
- ~~g. I would like to see the ingredients I have inputted.~~
- ~~h. I would like to know how many ingredients I have inputted.~~
- i. I would like to see pictures of the ingredients when clicking on options.
- j. If time allows, I would like to know the price of an ingredient I do not have at a store nearby.

4. Comments

As a user,

- a. I would like to see all comments made on a recipe.
- b. I would like to reply and like other user's comments.
- c. I would like to rate and comment on recipes I have created so recipes can be reviewed.
- d. As a user, I would like to receive comments on personal recipes so that I may improve them.

5. Sorting

As a user,

- a. I would like to be able to sort recipes by cooking time, calories, rating, etc.
- b. I would also like to sort recipes by meal type (ex. Breakfast, Dinner, Dessert, etc).
- c. I would like to input dietary restrictions (ex. Vegan, vegetarian, pescetarian, etc).
- d. If time allows, I would like to specify the type of cuisine I would like to cook.

6. Accessibility

As a user,

- a. I would like to be able to access Fridge2Food from all of my devices on a mobile-friendly website.
- b. I would like to be able to allow users to fork my recipes so they can make personal alterations
- ~~c. I would like to use the site without logging in.~~
- d. I would like to be able to convert measurements.

- e. I would like to be able to convert between Fahrenheit and Celsius
- f. I would like to see my most popular recipes.
- g. I would like to see the website's most popular recipes.

Non Functional Requirements:

1. Architecture and Performance

The front end web application will be developed using React JS, and the backend will be a combination of Flask and Firebase. Our list of known recipes will be gathered using an API.

2. Usability

The website should be visually appealing, be easily accessible, and categorized as a food and drink application. For us, this means making the website intuitive and simple enough that anyone can come to it and not be confused while using it. We will also want our website to be accessible from any platform and browser so as to reach the largest audience possible.

3. Hosting/Deployment

For our website we will be looking to use Firebase to host the website. Firebase will allow us to easily deploy updates and to handle user management more easily than it would be otherwise. This ease will allow us to focus on other aspects of the project.