

Sprint 2 Retrospective Document

Team 9

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What went well?

Our team members completed our user stories ahead of time this sprint, so we were not rushing to complete the acceptance criteria as opposed to the last sprint. Additionally, our time estimates for each user story were more accurate, which allowed for the sprint to go more smoothly.

We continued to communicate very well over the course of this sprint and we held team meetings that everyone attended when deemed necessary. We switched scrum masters this sprint, and she did a great job keeping us organized and on task. Additionally, we had some learning curves to overcome this sprint due to the fact that none of us had experience in writing unit tests. Although there were many areas we could have improved on in terms of unit testing, we were able to successfully complete all of our unit tests.

User Story #1
As a user, I would like to be able to save recipes.

#	Description	Estimated Time	Owner
1	Add and implement options to save recipe on homepage and recipe UIs	3 hrs	Mahima
2	Implement routing to save a recipe	2 hr	Mahima
3	Implementing routing to unsave a recipe	1 hr	Mahima
4	Unit Tests	3 hrs	Mahima
	Total:		9 hrs

Completed:

On the homepage with the recipe, on each recipe card, a heart icon is present that is filled if the user has saved the recipe and unfilled if the recipe isn't saved. Upon clicking the heart for an unsaved recipe, the user gets the option to choose or create a folder to save the recipe to, and for a saved recipe, clicking the heart will unsave the recipe. The same options are present on the view page of a recipe.

User Story #2

As a user, I would like to be able to organize recipes into customizable folders.

#	Description	Estimated Time	Owner
1	Create and implement options to add custom folders	2 hrs	Mahima
2	Create route to fetch folders of recipes	2 hrs	Mahima
3	Create route to add folders for recipes	2 hrs	Mahima
4	Create route to switch folder of recipe	2 hrs	Mahima
5	Unit Tests	3 hrs	Mahima
	Total:	11 hrs	

On the view of saved folders, there is a button to add folders, and the user can input the name of the folder they would like to save recipes to. Also, anywhere there is the option to save the recipe, the user can choose the folder to save the recipe to. Lastly, on the page with the saved recipes, the user can choose a saved recipe and the folder they would like to move it to.

User Story #3
As a user, I would like to be able to create recipes.

#	Description	Estimated Time	Owner
1	Create UI to create a recipe, including forms for every parameter a recipe has	4 hours	Carmen
2	Create ability to insert a photo for a recipe	1 hour	Carmen
3	Create routes to add new information in the database	4 hours	Carmen
4	Throw an error when fields are missing	1 hour	Carmen
5	Create Unit Tests	3 hours	Carmen
	Total:	13 hours	

Completed:

When the user clicks on the create a recipe option from the profile dropdown, they are directed to a page where they can create a recipe. If they try to create a recipe when one or more required fields are left blank, there is an error popup alerting the user. Given that all the required fields are filled out and the user selects the create a recipe button, the user is directed to the page of their newly created recipe. Additionally, if they put in a valid URL, the image will be shown on their newly created recipe page.

User Story #4
As a user, I would like to be able to view my saved recipes and recipes I have created.

#	Description	Estimated Time	Owner
1	Create UI to view saved recipes in folders	3	Mahima
2	Create routing to fetch saved recipes	2	Mahima
3	Create UI to view created recipes	2	Mahima
4	Create routing to fetch created recipes	1	Mahima
3	Unit tests	2	Mahima
	Total:	10	

On the profile, the created recipes tab now will show the recipe card of all recipes that the user has created, and the saved recipes tab will show all the recipe cards of recipes the user has chosen to save in their corresponding folder.

User Story #5

As a user, I would like to be able to review recipes.

#	Description	Estimated Time	Owner
1	Create button to add a review to a recipe	1 hour	Sarah
2	Create reviewing a recipe UI	5 hours	Sarah
3	Route the review to the database	3 hours	Sarah
7	Unit tests	2 hours	Sarah
	Total:	11 hours	

Completed:

Whenever a user views a recipe, there is a button that allows the user to add a review for that recipe. Whenever the user clicks it, a UI popup appears. The popup allows the user to specify a star rating between 0 stars and 5 stars. The user specifies the star rating by clicking one of the five stars shown on the screen, which then fills in the respective stars to indicate the star rating chosen. There is then a text box labeled "Description/Comments" that allows the user to provide a description of their review. The user can then press "Post" or "Discard." If "Discard" is clicked, the popup is closed and no review is added. When "Post" is clicked, the review is added

to the recipe's reviews as well as the user's reviewed recipes on their profile page.

User Story #6
As a user, I would like to be able to view a recipe's ratings and reviews.

#	Description	Estimated Time	Owner
1	Create routes to pull reviews from database	2 hrs	Sarah
2	Display average star ratings of all reviews	2 hrs	Sarah
3	Display number of reviews	1 hr	Sarah
4	Create UI components for each review	4 hrs	Sarah
5	Unit tests	2 hours	Sarah
	Total:	11 hours	

Completed:

Whenever a user views a recipe, the user can see the number of reviews the recipe has as well as the average star rating from all the reviews. This is located below the add a review button. The user can also scroll to the bottom of the recipe page to browse all the reviews that the recipe has. Each review contains the review's author, star rating (indicated by the number of filled stars) and the description of the review.

User Story #7
As a user, I would like to be able to view the recipes I have already rated/reviewed.

#	Description	Estimated Time	Owner
1	Create routes to pull users reviewed recipes	2 hours	Sarah
2	Create UI to display users reviewed recipes on profile page	2 hours	Sarah
	Create route to recipe page	2 hours	Sarah
5	Unit tests	2 hours	Sarah
	Total:	8 hours	

Completed:

When the user navigates to the "reviewed recipes" section within their profile page, the user can see a list of all the reviews they have created. For each review, the user can see the name of the recipe the review was created for, the star rating the user gave the recipe (indicated by the

number of filled stars), and the description that the user gave the recipe in their review. If the user clicks on the name of the recipe, the user is taken to the recipe page.

User Story #8
As a user, I would like to be able to add ingredients to the ingredient database.

#	Description	Estimated Time	Owner
1	Create UI to add an ingredient to the database	3 hours	Carmen
2	Create routes to add the ingredients to the database	2 hours	Carmen
3	UI that throws an error if the field is empty or if the ingredient already exists	1 hour	Carmen
4	Create Unit Tests	2 hours	Carmen
	Total:	8 hours	_

Completed:

If the user is on the create a recipe page and clicks add an ingredient, they have the option to add an ingredient to the database if it does not already exist. Error popups will alert the user if they attempt to add an ingredient without filling out the text field, if they attempt to add an ingredient that already exists in the database, and if they attempt to add to the list an ingredient that does not exist. Similar functionality exists on the user's fridge page, where when they attempt to add an ingredient to their fridge, they can choose to add an ingredient to the database as well.

User Story #9
As a user, I would like to be able to pull ingredients from the database when creating a recipe.

#	Description	Estimated Time	Owner
1	Create a UI for searching and adding ingredients	1 hour	Kendalyn
2	Link search bar to the database	1 hour	Kendalyn
3	Display all ingredients that contain the inputted string	1 hour	Kendalyn
4	Create buttons and functionality that allow the user to add an ingredient to the recipe	3 hour	Kendalyn
5	Add the selected ingredient to the list of other ingredients needed for this recipe	2 hour	Kendalyn

#	Description	Estimated Time	Owner
6	Make buttons and functionality to set each ingredient's amount and unit	1 hours	Kendalyn
7	Create Unit Tests	3 hours	Kendalyn
	Total:	12 hours	

If the user is on the "create recipe" page, they can click on the "Add Ingredient" button and search for the ingredient they are looking for in the database. Once they have found and selected the ingredient they want, they can set the quantity and units needed for their recipe before adding it to the list. As the user adds ingredients, the list will appear in a table below the button.

User Story #10 As a user, I would like to tag recipes based on dietary restrictions

#	Description	Estimated Time	Owner
1	Create UI to tag recipes	3 hours	Carmen
2	Create routes to add the dietary tags of a recipe to a database	2 hours	Carmen
3	Create routes to remove dietary tags of a recipe from a database	2 hours	Carmen
4	Create Unit Tests	2 hours	Carmen
	Total:	9 hours	_

Completed:

When the user clicks on a recipe, they have the option to add or remove dietary tag labels from a recipe from a row of buttons on the top of the recipe. If they select a button, it will turn gold, and the dietary tag will be added to the recipe. If they click on a button that is gold, it will turn gray, and the dietary tag will be removed from the recipe. They are not able to tag a recipe with the same dietary tag more than once.

User Story #11

As a user, I would like to be able to add ingredients to my shopping list.

#	Description	Estimated Time	Owner
1	UI to add recipe's ingredients to shopping list	2 hours	Jiahui

#	Description	Estimated Time	Owner
2	Check if recipe ingredients are in fridge	2 hours	Jiahui
3	Check if recipe ingredient is already in shopping list	2 hours	Jiahui
4	Route to add ingredients to shopping list in database	2 hours	Jiahui
5	Create unit tests	3 hours	Jiahui
Total:		11 hours	

Completed: Ingredients from a recipe can be added into the user's shopping list depending on the condition whether a specific ingredient is already in the user's shopping list or the user's fridge.

User Story #12
As a user, I would like to edit and combine ingredients in my shopping list.

#	Description	Estimated Time	Owner
1	Create UI to add/remove ingredients from list	2 hours	Jiahui
2	Ability to delete all ingredients	3 hours	Jiahui
3	Route to update shopping list in database	2 hours	Jiahui
4	Create unit tests	3 hours	Jiahui
	Total:	10 hours	

Completed: The user is able to add or remove individual ingredients from their shopping list on the edit page. Ingredients already on the shopping list or in the fridge will not be eligible to be added. The shopping list can also be cleared.

User Story #13 As a user, I would like to be able to view my shopping list.

#	Description	Estimated Time	Owner
1	Add UI to navbar to reach shopping list	2 hours	Jiahui
	Route to retrieve shopping list	2 hours	Jiahui

#	Description	Estimated Time	Owner
2	UI to view shopping list	3 hours	Jiahui
3	Create unit tests	2 hours	Jiahui
	Total:	9 hours	

Completed: The user can view the ingredients in their shopping list on the shopping list popup. Ingredients will not be added twice and ingredients should not appear if they exist in the fridge.

User Story #14
As a user, I would like to be able to share recipes with others.

#	Description	Estimated Time	Owner
1	Create a share button on the recipe pages	1 hour	Kendalyn
2	Routing to send the recipe from the database to the receivers sharing page	4 hours	Kendalyn
3	Unit Tests	3 hours	Kendalyn
	Total:	8 hours	

Completed:

If a user is on the homepage, they can click the send button and view a list of all their friends. They can then select one or multiple friends to send that recipe to. If the user goes to the "shared recipes" page, they can see all of those recipes in the "sent" section for each friend.

User Story #15 As a user, I would like to be able to view my shared recipes

#	Description	Estimated Time	Owner
1	Create UI for viewing recipes shared with you	3 hours	Kendalyn
2	Routing to displaying all recipes that have been sent to you	2 hours	Kendalyn
3	Implement viewing the recipe once clicked	2 hours	Kendalyn
4	Unit Tests	3 hours	Kendalyn
	Total	10 hours	

If a user is looking at the "shared recipes" page, they can click on each friend to view the recipes you sent or received from them. When a user clicks on the recipe card, they will be taken to the "view recipe" page for that recipe.

User Story #16

As a user, I would like to be able to view my friend's profiles.

#	Description	Estimated Time	Owner
1	Create UI to view a friend's profile from search or friend list	3 hours	Kendalyn
2	Only display components that are publicly available	3 hours	Kendalyn
3	Route to retrieve user's privacy settings	2 hour	Kendalyn
4	Route to retrieve friends' user profile data	1 hour	Kendalyn
	Total:	9 hours	_

Completed:

If a user is on the "friends" page, they can click on the "view" button to be taken to that person's profile. While looking at another user's profile, if their privacy settings are set to "everyone" then that tab will always be visible, if their privacy settings are set to "friends only" that tab is only visible if the two users are friends, and if their privacy settings are set to "nobody" then that tab is private.

What did not go well?

Our biggest challenge was that all of our unit testing was done in the final week of the sprint. There was a big learning curve using Cypress for unit testing as none of us had any prior experience with writing unit tests, especially to test a website. A lot of time was spent figuring out how to use Cypress to interact with our website and debugging the test cases after the user stories themselves were fully functional. For this reason, we ran out of time to test some of our user stories involving sharing recipes using unit tests and did manual tests only instead.

In relation to unit testing and development this sprint in general, there were more merge conflicts than before, some of which were expected and some that were not. Both cases required time to fix and merge conflicts left accidentally unresolved led to problems later on down the road which required even more time to fix.

How should we improve?

Our main areas of improvement were regarding unit testing. First point of improvement would be to start unit testing as we finish stories. In general, this sprint we seeked to finish the implementation of all of our tasks, and then unit test, however, this resulted in a large amount of unit testing at the very end of the sprint, and needing to merge and thus resolve lots of merge conflicts at the very end of the sprint. By unit testing as we develop, this will lead to less issues with merging as everyone will not be altering unit testing fields at the same time. Additionally, it will allow us to ensure that all of our stories work as expected before we declare them complete. Therefore, next sprint, we will work on unit testing upon finishing stories to create greater fluidity in our development process and ensure functionality prior to switching to a different task.

An additional point of improvement would be to test the backend more thoroughly by testing the API. This sprint, as we were learning how to unit test, we focused on testing the frontend through end to end testing through cypress, but didn't test the API since we didn't know that it was a capability that cypress had. However, once we learned that, we didn't have the time to learn how to use it, and we primarily checked the backend by making sure the frontend displayed what we would expect the backend to provide, but this is not as thorough and straightforward as testing the API itself to ensure the correct return values. Therefore, we will add on to our unit testing knowledge next sprint and implement unit tests for the API, on stories that would benefit from it.

Lastly, we could improve on uniformity of design throughout the web application. All of us have been using different components or colors, and this overall reduces the fluidity throughout the user's experience of the application, so we can improve this next sprint by increasing communication about design. In doing so, we will all use the same design styles and components that streamline a user's experience, making the web application more intuitive and accessible.