RecipeHub

Prompt added in chatGPT to get business requirements:

Write a description for a web application where users can view recipes, fork them, modify them, and make them their own.
The application is a type of GitHub for recipes where users can share and view recipes shared by themselves and other users on the platform.

Business Requirements

Description:

Welcome to RecipeHub, your ultimate destination for culinary creativity! RecipeHub is a unique web application that combines the collaborative spirit of GitHub with the delicious world of recipes. This platform empowers users to not only explore a vast collection of mouth-watering recipes but also to customize, modify, and truly make them their own.

Key Features:

Nouns
Verbs

1. **Recipe Discovery**: Browse through an extensive library of diverse recipes, from everyday meals to gourmet delights. Our user-friendly interface makes finding the perfect dish for any occasion easy.
2. **Fork and Customize**: Similar to GitHub, RecipeHub allows you to "fork" recipes. This means you can take any recipe as a starting point and create your own version. Want to add a unique twist to that pasta dish or experiment with different spices in a curry? Fork the recipe, make your modifications, and voila - it's now your personalized creation.
3. **Create your own**: Contribute your expertise to the existing library and foster a collaborative environment. Share your unique creations and explore a curated list showcasing a diverse array of recipes contributed by the community.
4. **User Profiles**: Showcase your culinary expertise with a personalized profile. Display the ones you've created and the modifications you've made to existing recipes.

RecipeHub is not just a platform for finding recipes; it's a dynamic community where culinary enthusiasts come together to share, innovate, and create a culinary masterpiece. Join us on RecipeHub and embark on a culinary journey like never before.

Nouns-Verbs

Nouns:
Recipe Library
Users
Profile
Comment

Verbs:
Browse
Customize
Modify
Fork
Showcase/Display
Provide
Explore
Innovate
Create

Target Audience

Culinary enthusiasts
Home cooks
Bakers
Recipe creators

Rules

Users can view recipes.
Users can fork recipes to create personalized versions.
Users can create their recipes and add them to the library
Users can view the original recipes from the library as well as view the ones they have forked

Challenge Questions

How can the platform ensure the integrity of recipe modifications?
How can RecipeHub encourage user engagement and collaboration?
How does the platform handle variations of a recipe with multiple contributors?
How does RecipeHub handle ratings and reviews?

Summary of classes, attributes, and associations

Classes:
Users
Ingredient
Recipe(inherits/extends Ingredient)

Attributes:
- username
- forks
- recipe name
- recipe ingredients
- recipe author
- recipe image
- recipe instructions
+editProfile()
+forkRecipe()
+modifyForkedRecipe()
+addNewRecipe()
+viewRecipeDetails()

Associations:

User Stories

1. As Casual Cook Diya, I want to browse easy recipes to find a quick and simple dinner idea.
2. As Recipe Enthusiast Prem, I want to fork a dessert recipe and add my unique twist to surprise my guests at the dinner party.
3. As Culinary Explorer Tarun, I want to find an authentic Indian curry recipe to recreate the flavors I experienced during my travels.
4. As Social Chef Yashvi, I want to follow other users who share my taste in recipes and engage in discussions about our favorite dishes.
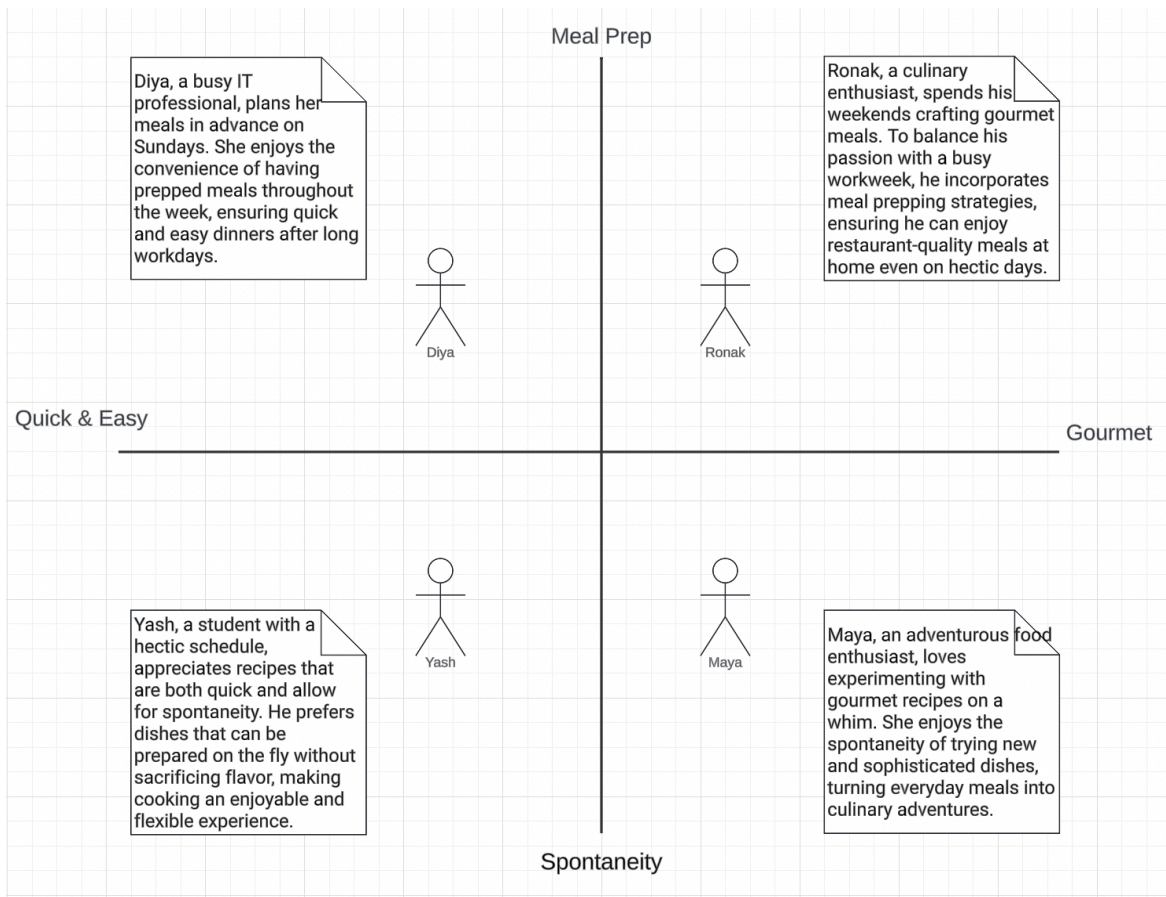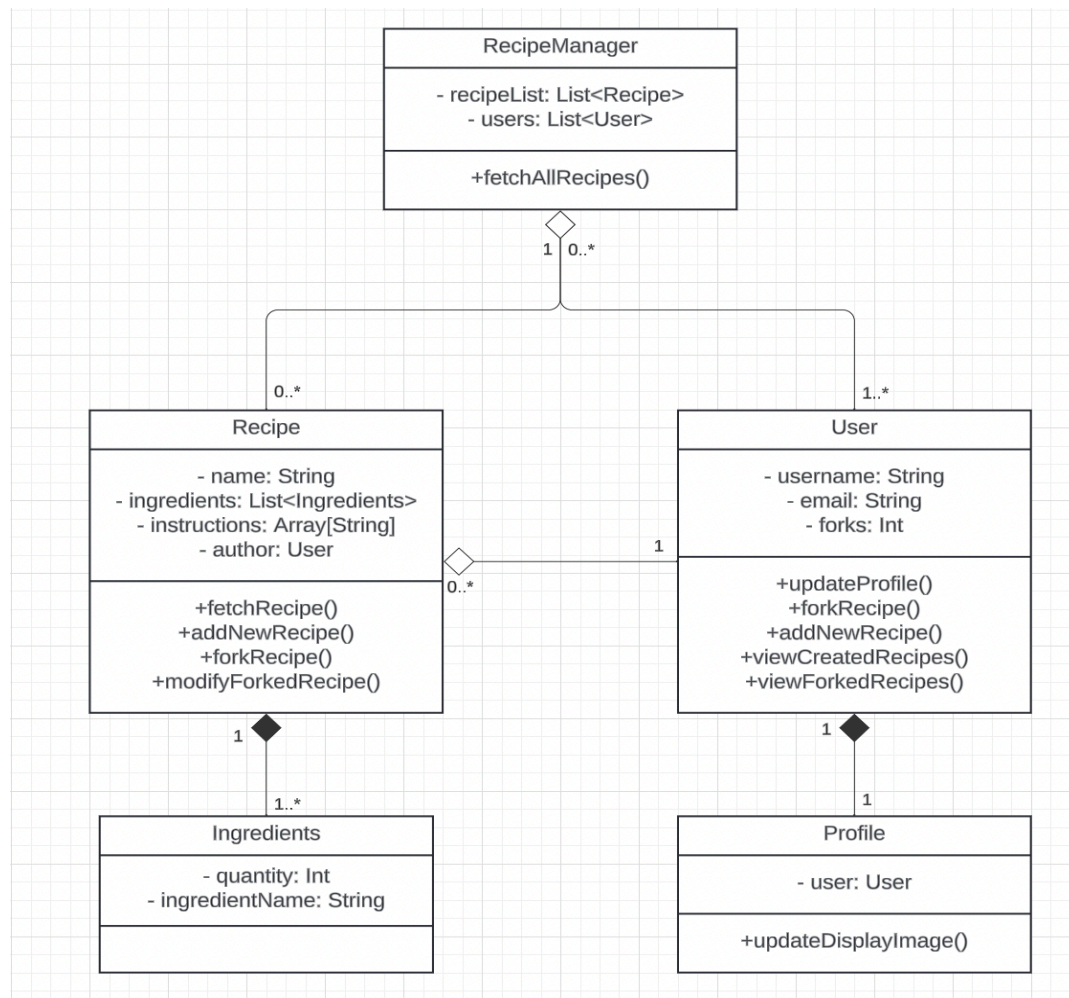
User Personas

Potential Dimensions
1. Cuisine Preferences:
    - Explorers vs. Traditionalists
        - Explorers: Love experimenting with a variety of international cuisines.

- ○ Traditionalists: Stick to their cultural or regional culinary roots.
  - ● Fusion Experts vs. Authenticity
    - ○ Fusion Experts: Enjoy combining elements from different cuisines.
    - ○ Authenticity: Prefer maintaining the authenticity of traditional recipes.
2. Cooking Style:
   - ● Quick & Easy vs. Gourmet
     - ○ Quick & Easy: Create recipes with minimal prep time.
     - ○ Gourmet: Enjoy indulging in elaborate and sophisticated cooking techniques.
   - ● Healthy Living vs. Indulgence
     - ○ Healthy Living: Focused on creating nutritious and health-conscious meals.
     - ○ Indulgence: Prioritize flavor and enjoyment in their dishes.
3. Ingredient Masters:
   - ● Adventurous Eaters vs. Comfort Food
     - ○ Adventurous Eaters: Willing to explore and incorporate exotic or uncommon ingredients.
     - ○ Comfort Food: Find joy in preparing familiar and comforting dishes.
   - ● Sustainability vs. Convenience
     - ○ Sustainability: Prioritize environmentally friendly and locally sourced ingredients.
     - ○ Convenience: Opt for easy-to-find and time-saving ingredients.
4. Tech-Savy Cooks:
   - ● Digital vs. Offline
     - ○ Digital: Make use of technology for finding, organizing, and sharing recipes.
     - ○ Offline: Prefer traditional recipe books and handwritten notes.
   - ● Smart Kitchen vs. Classic Appliances
     - ○ Smart Kitchen: Incorporate smart appliances and devices into their cooking routine.
     - ○ Classic Appliance: Rely on traditional kitchen tools and equipment.
5. Occasion-Based Cooking:
   - ● Celebrations vs. Everyday
     - ○ Celebrations: Excel at preparing dishes for special occasions and events.
     - ○ Everyday: Focus on creating practical, day-to-day meals for themselves and their families.
   - ● Meal Prep vs. Spontaneity
     - ○ Meal Prep: Prioritize planning and preparing meals in advance for efficiency.
     - ○ Spontaneity: Enjoy the creativity of cooking without strict planning.

Identifying User Personas

Meal Prep

Diya, a busy IT professional, plans her meals in advance on Sundays. She enjoys the convenience of having prepped meals throughout the week, ensuring quick and easy dinners after long workdays.

Diya

Ronak, a culinary enthusiast, spends his weekends crafting gourmet meals. To balance his passion with a busy workweek, he incorporates meal prepping strategies, ensuring he can enjoy restaurant-quality meals at home even on hectic days.

Ronak

Quick & Easy

Gourmet

Yash

Yash, a student with a hectic schedule, appreciates recipes that are both quick and allow for spontaneity. He prefers dishes that can be prepared on the fly without sacrificing flavor, making cooking an enjoyable and flexible experience.

Maya

Maya, an adventurous food enthusiast, loves experimenting with gourmet recipes on a whim. She enjoys the spontaneity of trying new and sophisticated dishes, turning everyday meals into culinary adventures.

Spontaneity

UML Diagram

RecipeManager

- recipeList: List<Recipe>
- users: List<User>

+fetchAllRecipes()

1 | 0..*

0..*

Recipe

- name: String
- ingredients: List<Ingredients>
- instructions: Array[String]
- author: User

+fetchRecipe()
+addNewRecipe()
+forkRecipe()
+modifyForkedRecipe()

1..*

User

- username: String
- email: String
- forks: Int

+updateProfile()
+forkRecipe()
+addNewRecipe()
+viewCreatedRecipes()
+viewForkedRecipes()

1

0..*

1

Ingredients

- quantity: Int
- ingredientName: String

1

Profile

- user: User

+updateDisplayImage()

Page 1 - Landing Page:

3 functional tabs:

Recipes - User can view the recipe library

My Recipes - User can view the recipes they have created or contributed to RecipeHub

Forked Recipes - User can view the recipes they have forked.

The 'Popular Recipes' tag highlights images of a few of the recipes in the library. Clicking on them, redirects the user to the details of that particular recipe.
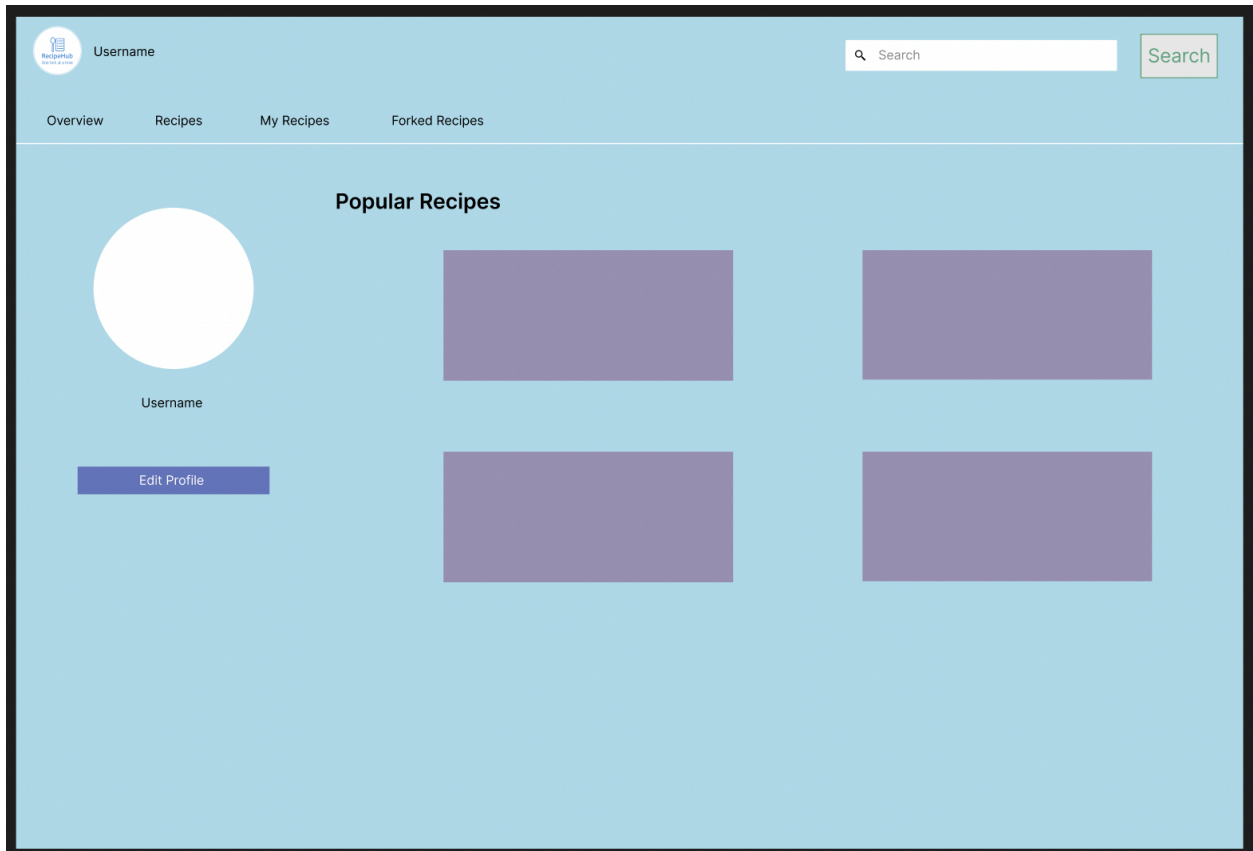
Page 2 - Recipes Library/List

This page displays the list of recipes curated by other users as well as the user's personally created recipes.
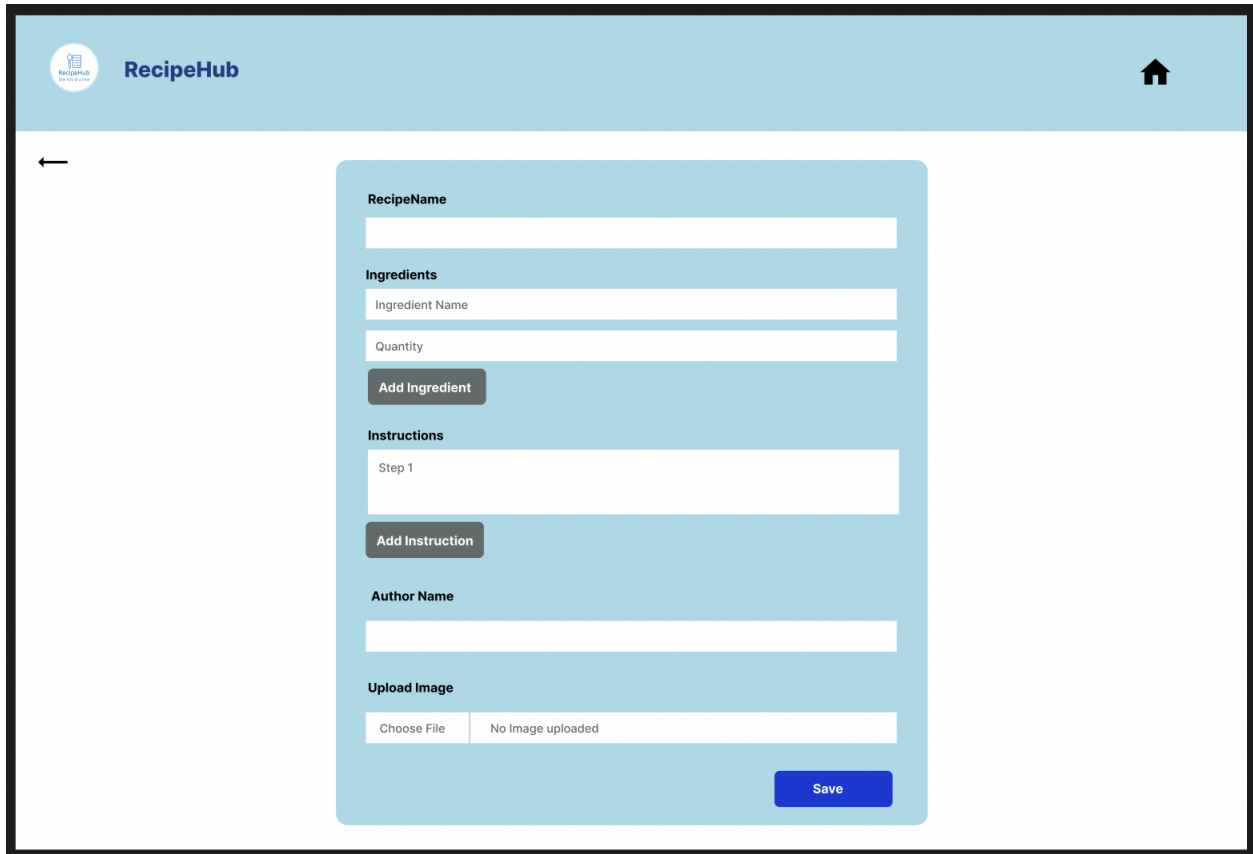
The 'New' button redirects the user to an input screen where they can add a new recipe to the existing list.
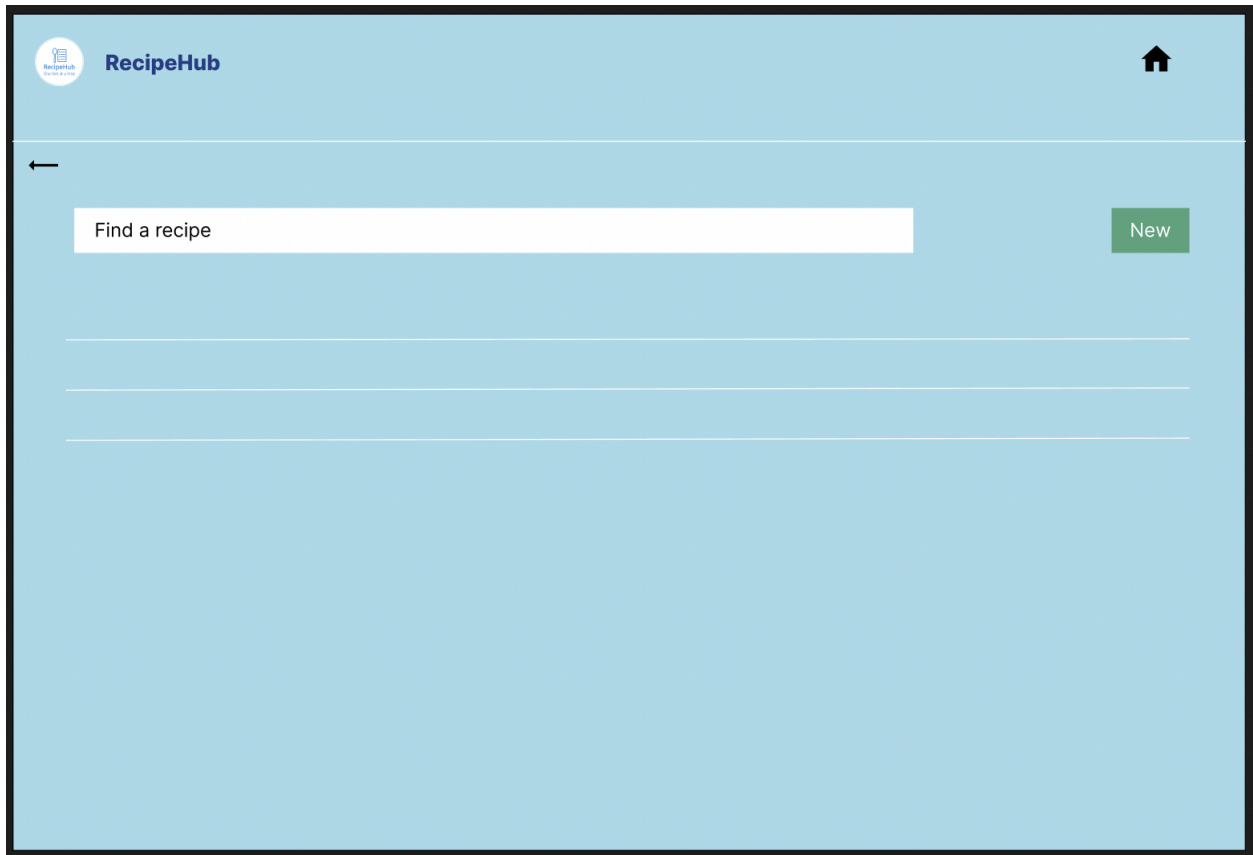
Page 3 - Create Recipe Form

Here the user can enter details of the recipe like the name, the ingredients, their quantities, and step-by-step instructions. They can add their name in the 'Author' section and upload an image of the dish as well.

Page 4 - View Recipe Details

Clicking on either of the recipes in the list or either of the images on the home page redirects the user to a page where they can view the ingredients and preparation instructions for the recipe. This page displays an image of the recipe(if any) and also mentions the author of that recipe.

Fork Button functionality

Clicking on the 'Fork' button redirects the user to the same form that is used to create a new recipe but with the prefilled recipe data. Clicking on save adds this recipe to the user's 'Forked Recipes' tab on the homepage. The user can now view the forked version of the recipe here. They can also view the original version of the recipe in the recipe library/list.