# Kitchen

# Magician

# SW Engineering CSC648/848

# **FALL 2020**

## Team 01

Kevin Wei (Team Lead) : kwei3@mail.sfsu.edu

Allen Sun (Backend Lead)

Paul Asu (Github Master)

Nicole Pang (Developer)

Kevin Ortiz (Developer)

Jeff Cheng (Frontend Lead)

## Milestone 3

#### **History Table**

Version	Date
M3V2	11/20/2020
M3V1	11/19/2020
M2V2	11/18/2020
M2V1	11/01/2020
M1V2	10/08/2020
M1V1	10/01/2020

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#### Section 1: Data Definitions V3

- 1. Unregistered User: Does not have to log in. Can register. Does not have a profile. Is able to browse the website including the home page, about page, search page, profiles of other users, and recipes (through search). Does not have access to groups and cannot join one, and cannot favorite or comment.
- 2. Registered User: Has to log in using their username and password to use specific functions that are available to Register User. Has a profile. Is able to browse the website including the home page, about page, search page, profiles of other users, own user profile, recipes (through search), and groups page. Can join a group, but is not yet part of any. Can favorite and comment. Can log out of account.
  - a. UserID
  - b Username
  - c. Password
    - i. Password must contain at least 8 characters.
    - ii. Password can't be entirely numeric.
  - d. Profile
  - e. Email
    - i. Email must be unique.
  - f. Favorite Recipes
  - g. Number of Favorite Recipes
  - h. User Recipes
  - i. Number of User Recipes
- 3. Group User: A subclass of Registered User. Has to log in using username and password to use specific functions that are available to Register User and/or Group User. Has a profile. Is able to browse the website including the home page, about page, search page, profiles of other users, own user profile, recipes, and groups page. Is already a part of a specific group, but can join up to X groups. Groups to which they belong grants the Group User access to the specific group's corresponding group forum, and can comment in the forum. Can favorite and comment. Can log out of account.
  - a. UserID
  - b. Username
  - c. Password
  - d. Profile
  - e. Email
  - f. Favorite Recipes
  - g. Number of Favorite Recipes
  - h. User Recipes
  - i. Number of User Recipes
  - i. Groups

- 4. Admin: A subclass of Registered User. Can log in using their username and password to use specific functions that are available to Admin, Group User, and/or Registered User. Has a profile. Is able to browse the website including the home page, about page, search page, profiles of other users, own user profile, recipes, and groups page. Already is a part of every group and thus has access to all group forums to monitor activity in each. Can favorite and comment. Can delete other users' comments and recipes at their discretion. Can log out of account.
  - a. UserID
  - b. AdminID
  - c. Username
  - d. Password
  - e. Profile
  - f. Email
  - g. Favorite Recipes
  - h. Number of Favorite Recipes
  - i. User Recipes
  - j. Number of User Recipes
  - k. Groups
- 5. Profile: A supporting class of Registered Users and its derived classes. Contains all information concerning the class instance, i.e. Register User/Group User/Admin. Functionalities, such as the password reset is only available to the user with whom the profile is associated.
  - a. Username
  - b Avatar
  - c Email
  - d. Account Creation Date
- 6. Recipe: The most vital component of the project, a collection of recipes. A complete guide to a dish made by registered, group, or admin users. Contains all the information below and registered/group/admin users can comment, upvote them, and favorite them. The 3-4 recipes with the most upvotes will be considered trending and will be displayed on the home page.
  - a. Name
  - b. RecipeID
  - c. Author
  - d. Meal Type
  - e. Cuisine
  - f. Ingredients
  - g. Preparation Time
  - h. Cooking Time
  - i. Instructions

- i. Picture
  - i. Max Size
- k. Optional Video
  - i. Max Size
- 1. Favorites
- m. Comments
- 7. Comment: Text that can be given by Registered User/Group User/Admin to any recipe, comment, or post in group forums to display their opinion on the respective content.
  - a. CommentID
  - b. UserID
  - c. Message
  - d. Upvotes
- 8. Search: Class that allows any user to filter down and specify what it is they are actually looking for in a recipe. Once filters and search words are applied and users click search, the results will appear on the same page below to filters.
  - a. Results
  - b. Keywords
    - i Name
    - ii. Author
    - iii. Courses
    - iv. Occasions
    - v. Ingredients
    - vi. Preparation Time
    - vii. Cooking Time
    - viii Diet
      - 1. Vegan Group
      - 2. Keto Group
      - 3. Vegetarian Group
      - 4. Gluten Free Group
      - 5. Pescatarian Group
      - 6. Paleo Group
      - 7. Low Carb Group
      - 8. Raw Diet
- 9. Group: A collection of users categorized by specific dietary needs. Registered users can go to the *overall* groups page to join a specific group. Once they have selected and joined a group, on that groups page they will gain access to the group forum of the group that they joined (and become a group user). They can join more groups up to a maximum of X groups. In the group forum page there will be a displayed list of users in the group, by username, and the post section. Group users will be able to converse and chat in this

section with other group users users of the specific group forum. These group users can also comment and upvote in the posts section.

- a. GroupID
- b. Group Name
- c. Group Users
- d. Comments
- e. Total Comments

## Section 2: Functional Requirements V3

#### **Priority 1:**

#### General User:

- 1. Unregistered Users shall be able to register for an account.
- 2. Unregistered Users shall register for an account using a registration form.
  - 2.1. Unregistered Users shall see a user friendly registration form.
  - 2.2. Unregistered Users shall see a login link in the registration form.
- 3. Unregistered Users shall provide an email when registering for an account.
  - 3.1. Unregistered Users shall provide a valid email when registering for an account.
  - 3.1. Unregistered Users shall provide a unique email when registering for an account.
- 4. Unregistered Users shall provide a username during registration.
- 6. Unregistered Users shall verify the password when registering for an account.
  - 6.1. Unregistered Users shall provide the password when registering for an account.
  - 6.2. Unregistered Users shall confirm the password when registering for an account.
- 7. Unregistered Users shall see a navigation bar on all pages.
  - 7.1. Unregistered Users shall see a search bar on the navigation bar on all pages.
  - 7.2. Unregistered Users shall see a footer on all pages.
- 9. Unregistered Users shall be able to search for recipes.
  - 9.1. Unregistered Users shall be able to narrow down their search using filters.
- 10. Unregistered Users shall be able to view recipes.
  - 10.1 Unregistered Users shall be able to view trending recipes on the home page.

#### **Registered User:**

- 13. Registered User shall be able to log in with a valid username.
- 14. Registered User shall be able to log in with a valid password.
- 15. Registered User shall be able to log out.
- 16. Registered User shall have only one profile page.
  - 16.1 Registered User shall see favorite recipes on the profile page.
  - 16.2 Registered User shall see its own recipes on the profile page.
- 22. Registered User shall see a navigation bar on pages.
  - 22.1. Registered User shall see an input search on the navigation bar on all pages.
  - 22.2 Registered Users shall see a footer on all pages.
- 23. Registered User shall be able to search for recipes.
  - 23.1 Registered Users shall be able to narrow down their search using filters.
- 24. Registered User shall be able to view recipes.
  - 24.1 Registered Users shall be able to view trending recipes on the home page.
- 25. Registered User shall be able to create their own recipes.
  - 25.1 Registered User shall be able to upload images for recipes.
  - 25.2 Registered User shall be able to select courses for recipes.
  - 25.3 Registered User shall be able to select occasions for recipes.

- 25.4 Registered User shall be able to select courses for recipes.
- 25.5 Registered User shall be able to select preparation time for recipes.
- 25.6 Registered User shall be able to select cooking time for recipes.
- 25.7 Registered User shall be able to add ingredients for recipes.
- 25.8 Registered User shall be able to add information for recipes.
- 25.9 Registered User shall be able to add title for recipes.
- 25.10 Registered User shall be able to add instructions for recipes.
- 31. Registered User shall be able to add a comment on any recipe.
- 35. Registered User shall be able to favorite a recipe.
- 37. Registered User shall be able to view existing groups.
  - 37.1. Registered User shall be able to join a group.
  - 37.2. Registered Users shall be able to view group forums.
- 37.3. Registered Users shall be able to see users in the group of the corresponding group forum.

#### Admin:

- 39. Admin shall be able to log in with a valid username.
- 40. Admin shall be able to log in with a valid password.
- 41. Admin shall be able to log out.
- 42. Admin shall have a profile page.
- 43. Admin shall be able to change their password.
- 47. Admin shall see a navigation bar on all pages.
  - 47.1 Admin shall see a navigation bar on all pages.
  - 47.2 Admin shall see a different navigation bar on the administration page.
- 49. Admin shall be able to search for recipes.
  - 49.1 Admins shall be able to narrow down their search using filters.
- 50. Admin shall be able to view recipes.
  - 50.1 Registered Users shall be able to view trending recipes on the home page.
- 51. Admin shall be able to create their own recipes.
  - 51.1 Registered User shall be able to upload images for recipes.
  - 51.2 Registered User shall be able to select courses for recipes.
  - 51.3 Registered User shall be able to select occasions for recipes.
  - 51.4 Registered User shall be able to select courses for recipes.
  - 51.5 Registered User shall be able to select preparation time for recipes.
  - 51.6 Registered User shall be able to select cooking time for recipes.
  - 51.7 Registered User shall be able to add ingredients for recipes.
  - 51.8 Registered User shall be able to add information for recipes.
  - 51.9 Registered User shall be able to add title for recipes.
  - 51.10 Registered User shall be able to add instructions for recipes.
- 52. Admin shall be able to change contents of their own recipes.
  - 52.1. Admin shall be able to change any text of their own recipes.

- 52.2. Admin shall be able to change any picture of their own recipes.
- 52.3. Admin shall be able to change any video of their own recipes.
- 53. Admin shall be able to delete any recipes.
- 57. Admin shall be able to add a comment on any recipe.
  - 57.1. Admin shall be able to delete any comment.
- 59. Admin shall be able to favorite a recipe.
- 62. Admin shall be able to delete a group.
- 63. Admin shall be able to reset password for all users.
- 64. Registered User shall be able to view existing groups.
  - 64.1. Registered User shall be able to join a group.
  - 64.2. Registered Users shall be able to view group forums.
- 64.3. Registered Users shall be able to see users in the group of the corresponding group forum.

#### Recipe:

- 66. A recipe shall have a title.
- 67. A recipe shall have one or more recipe categories to be added for search.
- 68. A recipe shall have one or more keywords added for search.
- 69. A recipe shall have one or more ingredients to be added for search.
- 70. A recipe shall have one or more directions on how to finish the recipe.
- 71. A recipe should add zero or one photo.
- 72. A recipe shall be able to add a link to zero or one video.
- 73. A recipe will be labeled trending when it is in the top 5 recipes with the most favorites by users.
- 73.1. A recipe labeled trending will be showcased on the home page.

#### **Group User:**

- 76. Group User shall have all requirements that Registered Users Have
- 77. Group User shall be able to post to the forum.
  - 77.1 Group Users shall be able to join a group.
  - 77.2 Group Users shall be able to leave a group.
- 78. Groups users shall be able to see users who are a part of the same group.

#### **Priority 2:**

#### **General User:**

5. General User shall verify that the email used to register for the account is valid.

#### **Registered User:**

- 17. Registered User shall be able to change visibility of their profile page.
- 18. Registered User shall be able to change their password.
- 19. Registered User shall be able to reset their account password.

- 20. Registered User shall be able to change the avatar for their profile page from the image database.
- 26. Registered User shall be able to edit their own recipes.
- 30. Registered User shall be able to upvote any recipe.
- 32. Registered User shall be able to report a recipe.
- 33. Registered User shall be able to report a comment.

#### Admin:

- 44. Admin shall be able to reset account password at the profile page.
- 45. Admin shall be able to change the avatar for their profile page from the image database.
- 56. Admin shall be able to upvote any public recipe.
- 65. Admin shall be able to delete messages from the group forum.

#### **Group User:**

- 78. Group User shall be able to change visibility of their profile page.
- 79. Group User shall be able to change their password at the profile page
- 80. Group User shall be able to reset account password
- 84. Group User shall be able to change the avatar for their profile page from the image database.
- 89. Group User shall be able to change contents of their own recipes
  - 89.1. Group User shall be able to change any text of their own recipes.
  - 89.2. Group User shall be able to change any picture of their own recipes.
  - 89.3. Group User shall be able to change any video of their own recipes.

#### **Priority 3:**

#### **General User:**

- 8. General User shall see a counter for the total number of registered users on the home page.
- 11.General User shall be able to share a recipe by email.
- 12. General User shall be able to download a recipe.
- 93. General User shall be able to view a Registered User's profile.
- 94. General User shall be able to report a comment.

#### **Registered User:**

- 21. Registered User shall have an attribute for account creation time at the profile page.
- 28. Registered User shall have a counter for their number of recipes on their profile page.
- 29. Registered User shall have a counter for their number of favorite recipes on their profile page.
- 34. Registered User shall be able to share a recipe by email.
- 36. Registered User shall be able to download a recipe.

#### Admin:

- 46. Admin shall have an attribute for account creation time on their profile page.
- 48. Admin shall see a counter for the number of registered users, where appropriate.
- 54. Admin shall have a counter for their number of public recipes on their profile page.

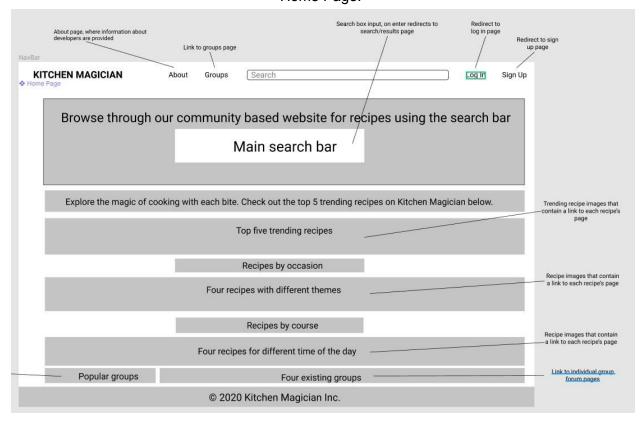
- 55. Admin shall have a counter for their number of favorite recipes on their profile page.
- 60. Admin shall be able to download a recipe.
- 61. Admin shall be able to create a group.

#### **Group User:**

- 85. Group User shall have an attribute for account creation time on their profile page.
- 90. Group User shall see a counter for the number of registered users, where appropriate.
- 91. Group User shall have a counter for their number of recipes on their profile page.
- 92. Group User shall have a counter for their number of favorite recipes on their profile page.

# Section 3: Wireframes Based on Mockups/Storyboards V2

#### Andrew Storyboard: Home Page:



Andrew is talking to his friend Alice. They are discussing the website Kitchen Magician, a website Andrew frequently uses. Alice asks Andrew to show her how he creates recipes.

# Login Page: KITCHEN MAGICIAN About Groups Search Sign Up Log In input box for email Password input box for password

buttom to Login

Log In

Çancel

Sign Up

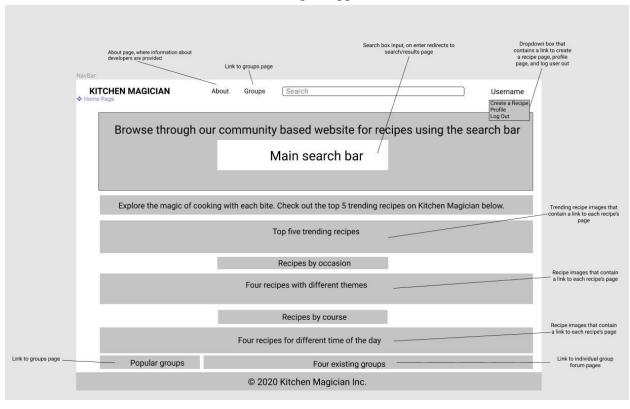
buttom to sign up if you don't have account

Andrew inputs his username and password and clicks the "Log In" button to login to his account.

buttom to cancel

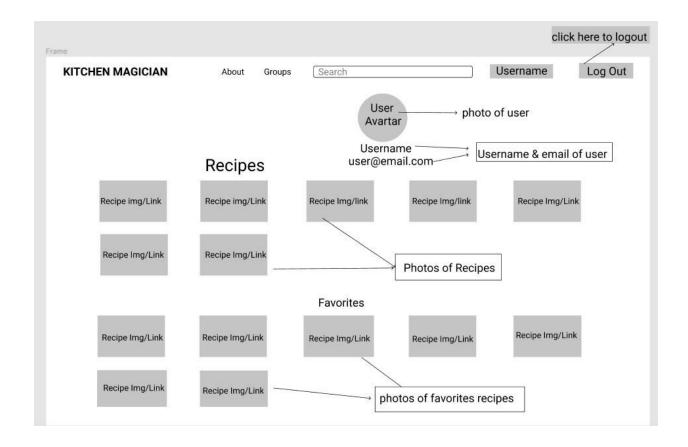
Log In

#### Home Page Logged In:



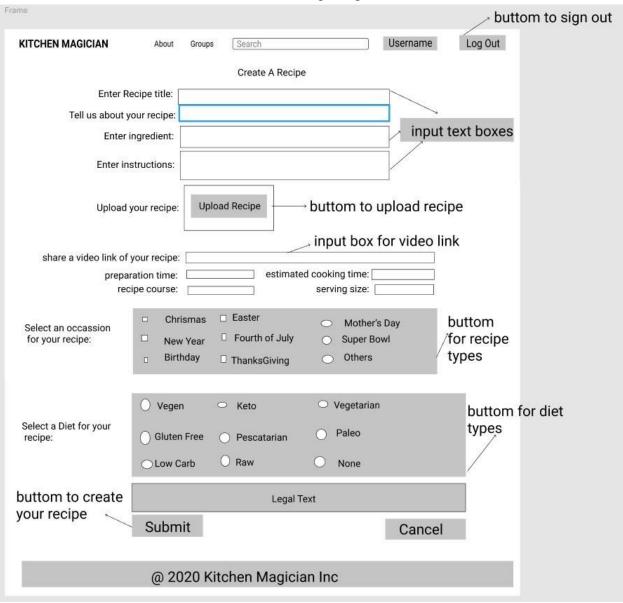
Andrew is now on the homepage. He clicks on the top right where his username is and a drop down menu appears. He clicks on the Profile button.

Profile Page:



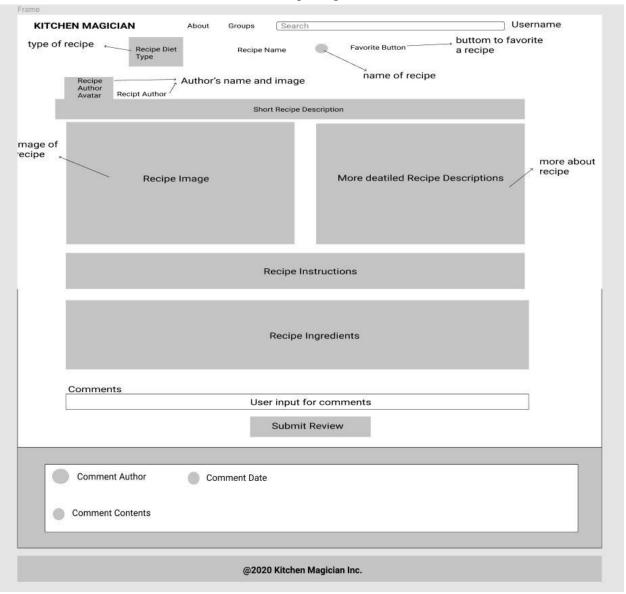
Andrew is now on his profile and he clicks the "Add Recipe" button at the bottom.

#### Create Recipe Page:



Andrew is now on the Create Recipe page. On here he will enter all the information that is needed to show how to exactly make a specific dish. Once he is done entering all fields. He will click on the "Submit" button.

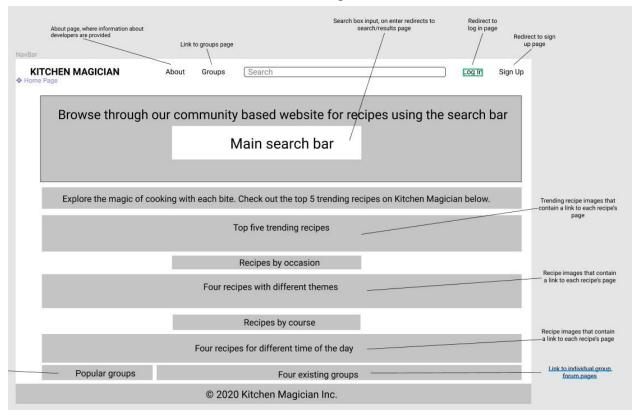
#### Recipe Page:



Once Andrew has submitted his Recipe, he is presented with his Recipe Page. Here his recipe has an image, description, ingredients and instructions.

#### Alice Storyboard:

#### Home Page:

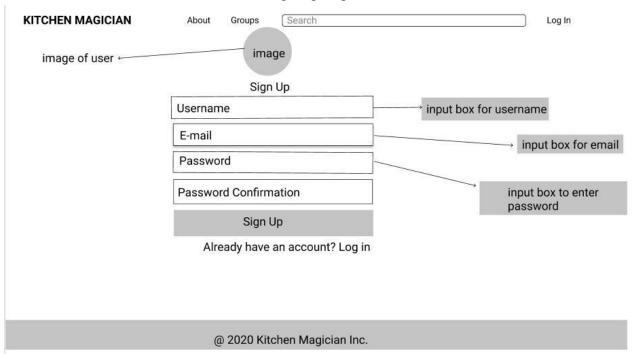


Alice wants to share the ideas she had for recipes.

However, while anyone (General User) can conduct searchers, only registered users have permission to create a recipe.

Therefore, the first step for Alice is to register for an account. Consequently, Alice navigates to Sign Up on the navigation bar.

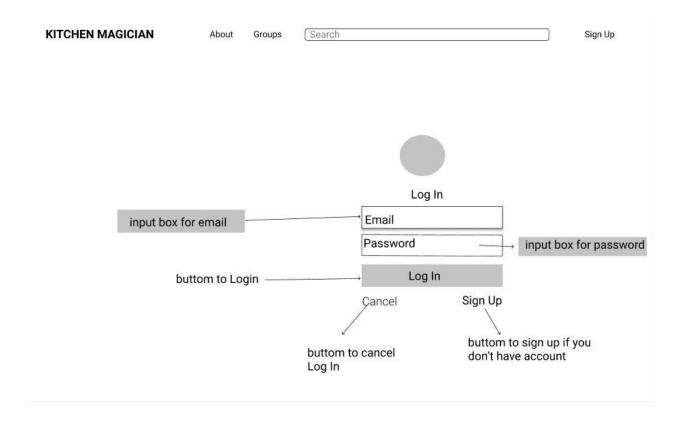
#### Sign Up Page:



Alice is redirected to the Sign Up page.

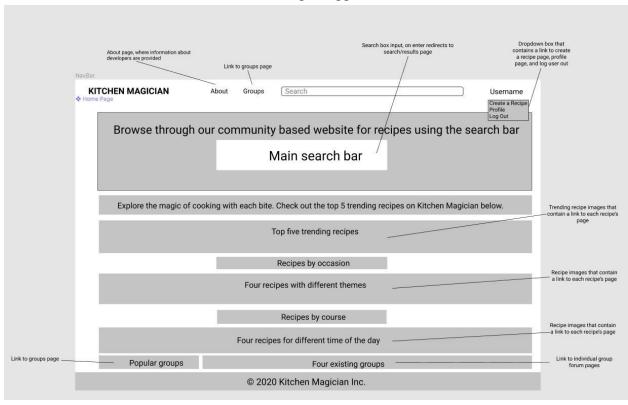
On this page, Alice fills the required information, namely
Username, E-mail, and Password.

Once the information that Alice submitted passed basic checks, i.e. password rules, that passwords match, etc., she clicks on Sign Up at the bottom of the page to continue.



After Alice successfully registered for an account, she is redirected to the login page: the most logical step for the user who has just registered for an account.

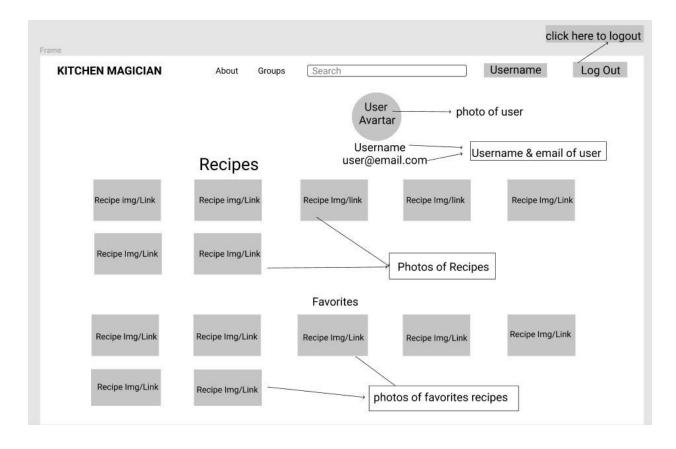
#### Home Page Logged In:



Since the navigation bar reflects changes in the status of the user, i.e. General User to Registered User (if a user registers or a registered user logs in), or Registered User to General User (when a registered user signs out),

Alice clicks on her username, then a submenu activates, and Alice chooses Profile.

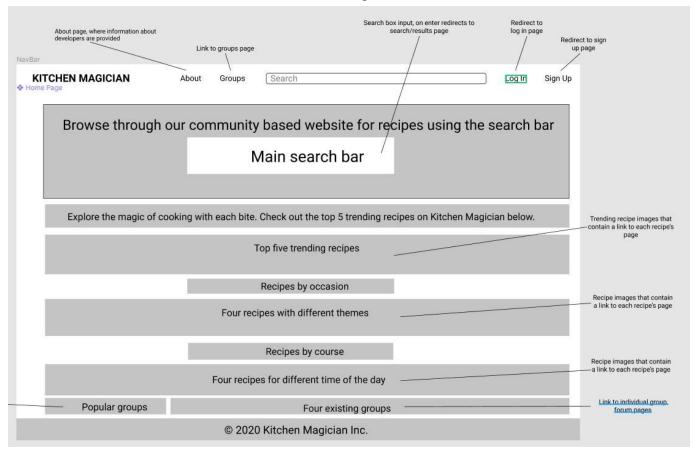
#### Profile Page:



To create the actual recipe, Alice clicks on the Add Recipe button at the bottom of her profile.

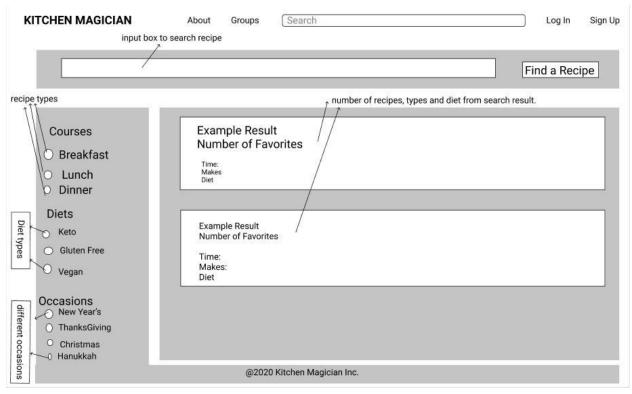
#### **Kite Storyboard:**

#### Home Page:



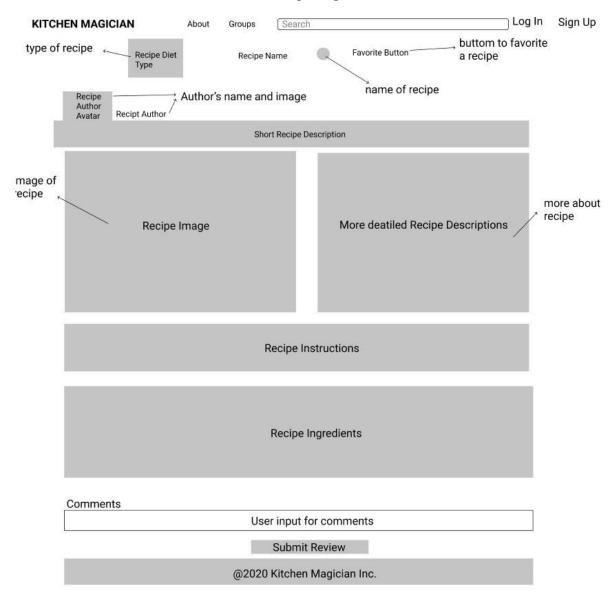
Kite is discussing with Alice about different types of dishes. This reminds Kite that he needs to make a gluten free dinner for his parents. Kite begins on the home page and clicks on the "Search" bar that is located on the Navigation bar at the top of the website. Kite then enters a "Gluten" as his keyword.

#### Search/Results Page:



Kite is then redirected to the Search Results Page. He is given results of what Gluten Recipes are available on Kitchen Magician. He will click on one result depending on which result he likes the best.

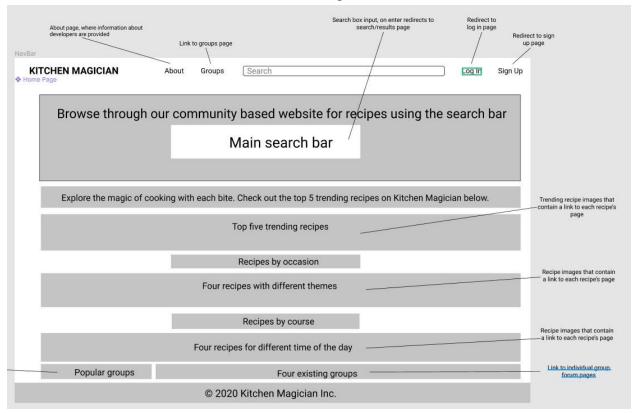
#### Recipe Page:



Once Kite has decided his choice of recipe. He is directed to the Recipe Page. The Recipe page allows Kite to look at the Recipe Image, description, ingredients and the instruction.

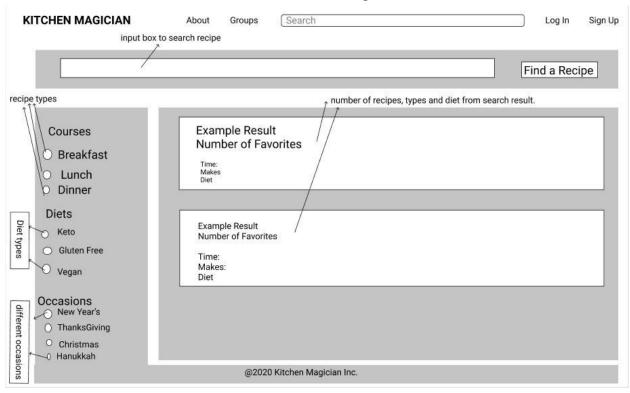
#### **Emma Storyboard:**

#### Home Page:

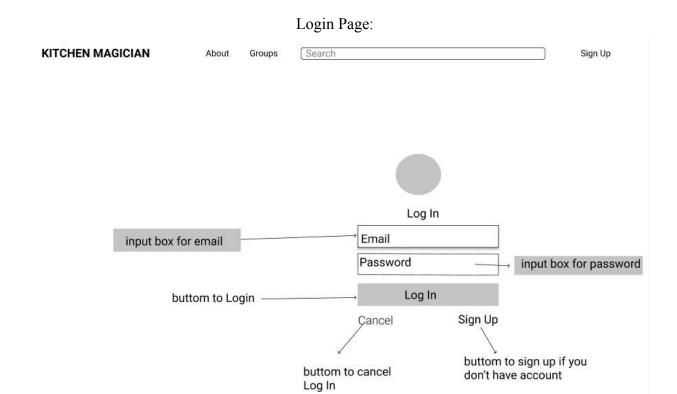


Emma wants to find a turkey recipe to prepare for a dinner party. She goes to the Kitchen Magician website and types "turkey" into the "Search" bar and presses Enter. She is redirected to the Search/Results page.

#### Search/Results Page:

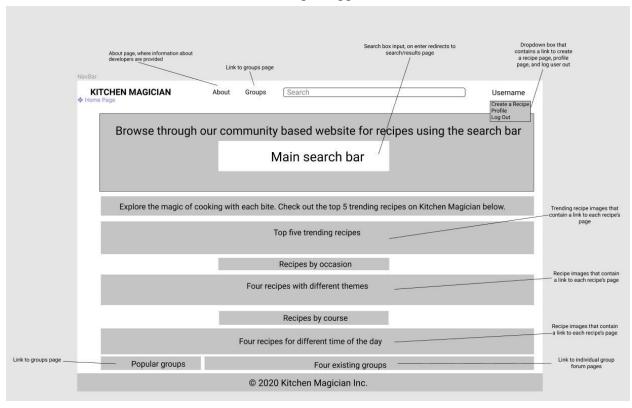


With keyword search, she finds recipes related to "turkey". After she is done browsing through the results, she isn't satisfied. All of a sudden, she realizes that she favorited a great turkey recipe in the past so she decides to log in by pressing the "Log In" button on the top right of the website. She is redirected to the Login page.



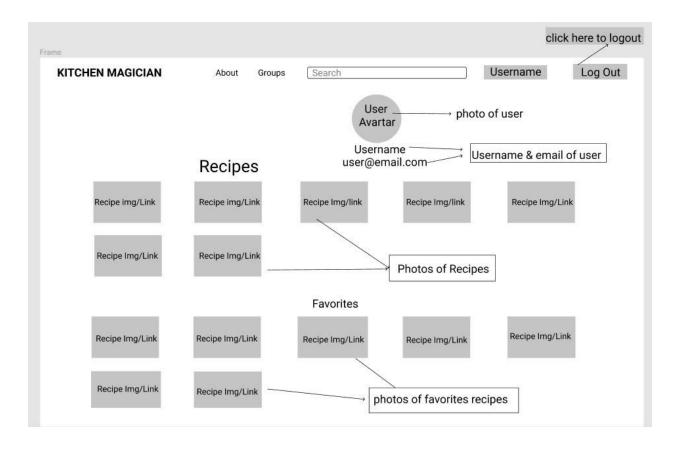
Emma enters her username and password and clicks the "Log In" button. After she clicks the button, she is redirected to the Home page.

#### Home Page Logged In:



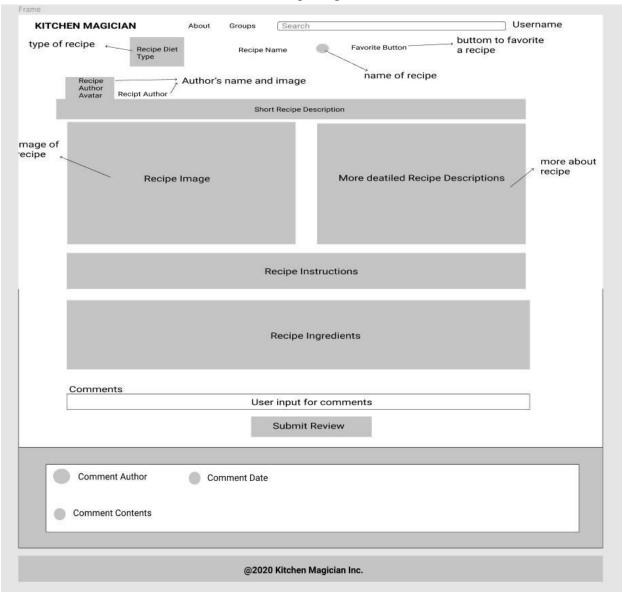
Emma wants to go to her Profile page so she can see all the recipes she favorites in the past. She clicks on her username on the top right of the website and a drop down appears. Emma clicks on the option "Profile" and is redirected to the Profile page.

#### Profile Page:



Emma sees her previously favorited recipes on her profile and is able to locate the turkey recipe she was looking for. She clicks on the turkey recipe and is redirected to it's recipe page.

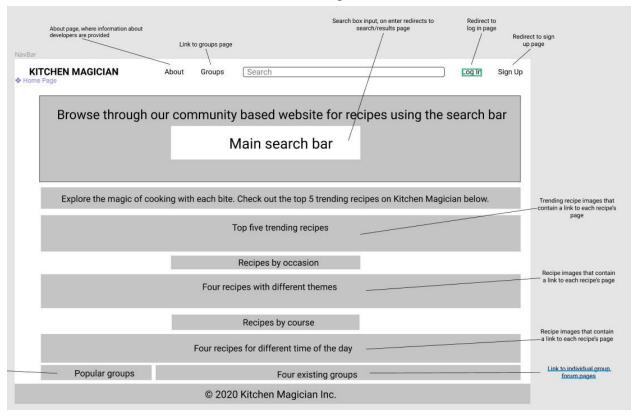
#### Recipe Page:



Emma is able to view all the recipe information and instructions on this page.

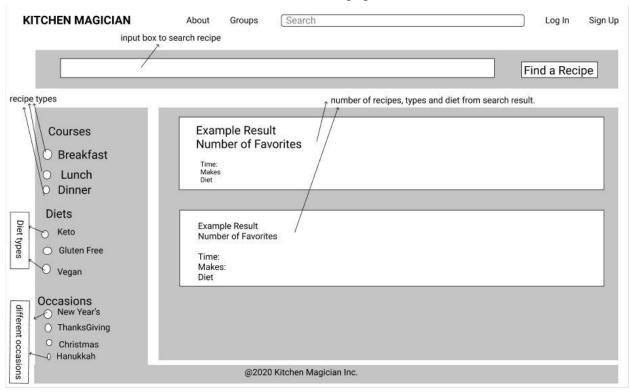
#### Jim Storyboard:

#### Home Page:



Jim remembers the conversation with Alice and goes to the Kitchen Magician Website. Jim lands on the website's Home Page. He then presses the search button on the top of the page in the navigation bar.

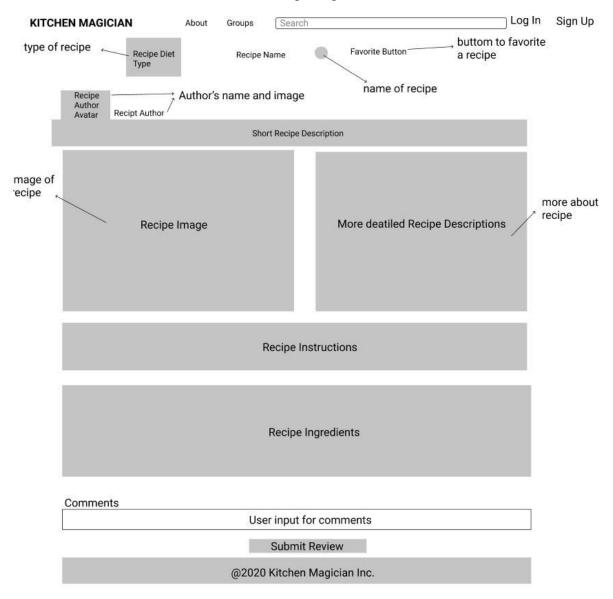
#### Search/Results page:



Jim lands at the website's search/results page. He types in ingredients into the search bar between the navigation bar and the results. He then presses the find a recipe button to the right of the search bar.

The page then refreshes to show the results of Jim's search. Jim then clicks on the first recipe on the page.

#### Recipe Page:



Jim lands on the corresponding recipe's page, and he begins to cook the recipe.

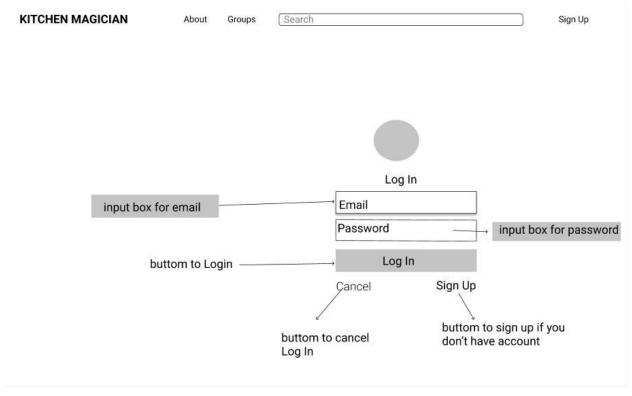
#### Pamela Storyboard:

#### Home Page:



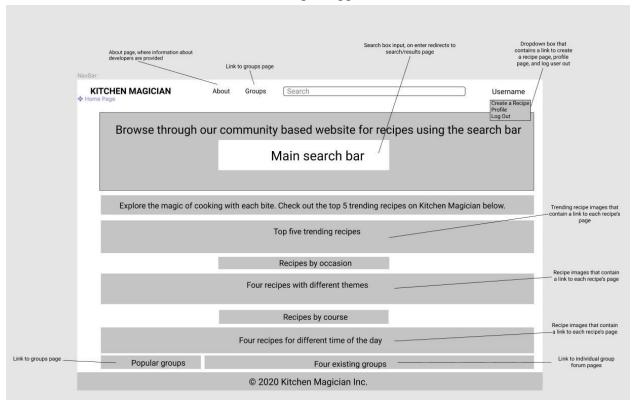
Pamela goes home and goes to the Kitchen Magician website out of curiosity from her conversation with her friends. She clicked on the login button to redirect to the Login Page.

#### Login Page:



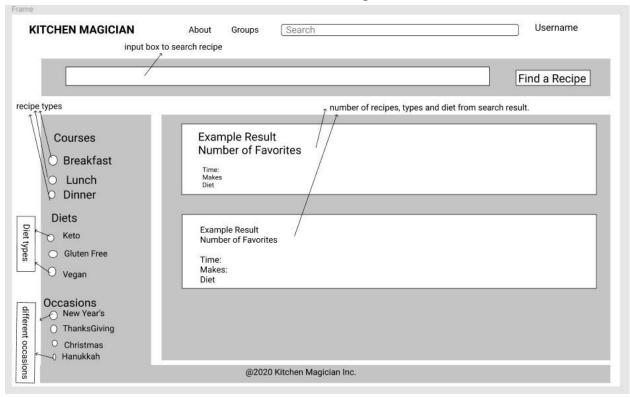
Pamela entered her username and password and clicked on the login button to redirect to the home page.

# Home Page Logged In:



Pamela clicked on the search button to redirect to the search recipe page to search for the recipe she likes.

# Search/Results Page:



Pamela clicked on a recipe she liked on the search results page and was redirected to the recipe page.

# Recipe Page: KITCHEN MAGICIAN Groups Search Username About Recipe name Favorite Button Short Recipe Description Recipe Image More Detailed Recipe Descriptions Recipe Ingredients Comments User input for comments Submit Review © 2020 Kitchen Magician Inc.

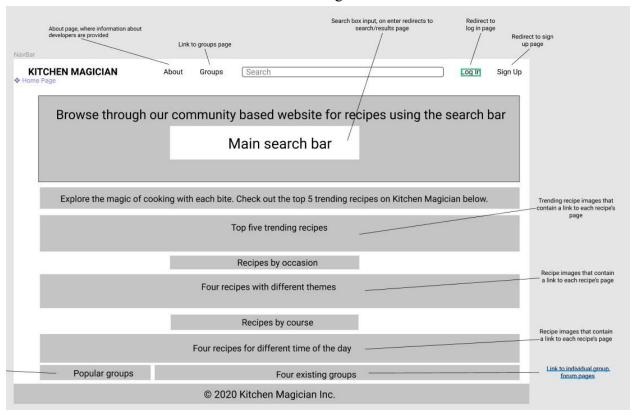
Pamela presses the favorite button to the right of the Recipe name and types in a comment at the bottom of the recipe. She presses the submit review to submit her comment.

# Recipe Page: KITCHEN MAGICIAN Username Recipe name Favorite Button Short Recipe Description Comments Comment Author Comment Date © 2020 Kitchen Magician Inc.

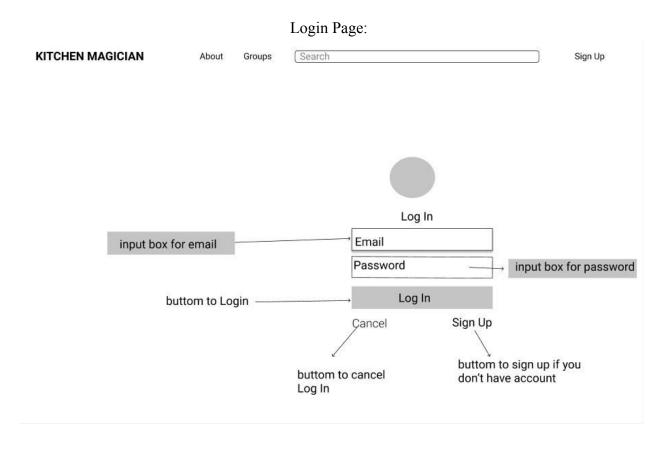
The page refreshes to show that Pamela's comment has been submitted.

#### Tom and Sarah Storyboard:

#### Home Page:

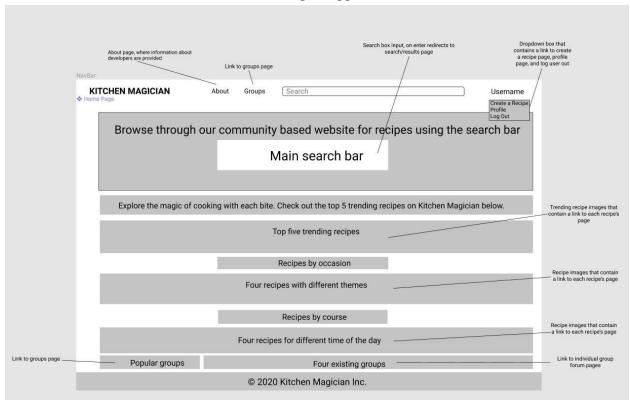


Tom wants to join his wife Sarah and her friend Pamela on the Kitchen Magician website. He and Sarah reach the website and navigate to the login page by pressing the "Log In" button on the top right of the page in the navigation bar.



Tom puts Sarah's username into the username box and puts her password in the password box. He then proceeds to press the "Log In" button under the input boxes. He is then redirected to the home page.

# Home Page Logged In:



Tom then presses the groups button on the navigation bar at the top of the page to go to the groups page.

# Groups Page: KITCHEN MAGICIAN About Groups Search Username Joined Groups Group Group Group **Image Image** Image Group Group Group Image Image **Image** Group **Image Available Groups** Group Group Group **Image Image Image** Group Group Group **Image Image Image** Group Group Group **Image Image Image** © 2020 Kitchen Magician Inc.

Tom lands on the groups page and clicks on one of the available groups to join. The page reloads and now in his joined groups section he clicks on the group he joined to get redirected to the group's group forum.

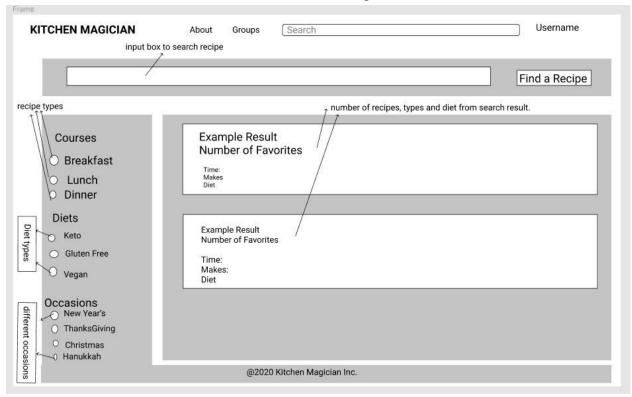
# Group Forum Page:

KITCHEN MAGICIAN	About	Groups	Search		Username
		Gro	Group Forum Image Logo		
Forum Members:					
		-Lis	st of users in group-		
Forum Discussion:					
User Inputted Comment					
Post					
Comment Auth Comment Contents	or Comment Date				Τ.
Comment Auth Comment Contents	or Comment Date				
Comment Auth Comment Contents	or Comment Date				

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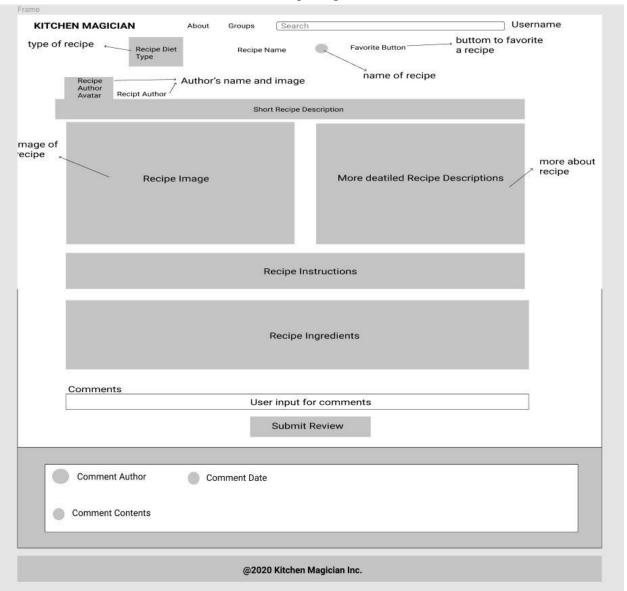
Tom types a question into the comment input under the Forum Discussion section and then clicks the post button under that to submit it. He returns later to see another comment replying to him. The comment informs him of a recipe that his recipe asked for. He then presses the search button on the navigation bar to go to the search page.

#### Search/Results Page:



Tom lands on the website's search page. He types in the specifics and filters given to him by the user who replied to him and then presses the find a recipe button to the left of the keywork input. His page refreshes and he sees the recipe that was suggested to him. He clicks on that recipe and is redirected to it's recipe page.

# Recipe Page:



# Section 4: High Level Database Architecture and Organization V2

#### Part 1: Business Rules

- 1. A registered user shall be able to favorite zero or many recipes.
  - a. A recipe shall be able to be favorited by zero or many registered users.
- 2. A registered user shall be able to comment on zero or many recipes.
  - a. A recipe comment section shall be able to be commented by zero or many users.
- 3. A registered user shall be able to join zero or many groups.
  - a. A group can have zero or many registered users.
- 4. A group can contain zero or many recipes.
  - a. A recipe shall belong to zero or many groups.
- 5. A register user shall have zero or many comments.
  - a. A comment shall belong to one registered user.
- 6. A recipe can have one or many recipes information.
  - a. A recipes information shall belong to one recipe.
- 7. A recipe can have one or many recipes instructions.
  - a. A recipes instruction shall belong to one recipe.
- 8. A recipe can have one or many recipe images.
  - a. A recipe image shall belong to one recipe.
- 9. A recipe can have zero or one recipe video.
  - a. A recipe video shall belong to one recipe.

#### Part 2: High level explanation

Entities: The ERD model consists of users, groups, recipes, group\_recipe, recipe\_comment, group\_comment, recipe\_favorite, recipe\_upvote, recipe\_diet, recipe\_diet\_item, recipe\_preparation\_time\_item, recipe\_cooking\_time, recipe\_occasion, recipe\_occasion\_item, recipe\_course, recipe\_course\_item, recipe\_ingredient, recip

#### Attributes:

The attributes for the Entity Users are: id, user\_name, email, password, avatar\_path, created, updated.

The attributes for Entity group are: id, group\_name, group\_type\_id.

The attributes for Entity recipe: id, name, user\_id, preparation\_time, created, updated

The attributes for Entity group recipe are: id, recipe id, group id.

The attributes for Entity recipe\_comment are: id, user\_id

The attributes for Entity group comment are: id, user id, group id, comment, created.

The attributes for Entity recipe\_favorite are: id, user\_id, recipe\_id

The attributes for Entity recipe\_avorite are: id, user\_id, recipe\_id

The attributes for Entity recipe\_upvote are: id, user\_id, recipe\_id

The attributes for Entity recipe\_diet are: id, name

The attributes for Entity recipe diet item: id, recipe id, recipe diet id

The attributes for Entity recipe\_preparation\_time\_item: id, recipe\_id,

recipe\_preparation\_time\_id.

The attributes for Entity recipe\_preparation\_time: id, preparation\_time, preparation\_time\_max, preparation\_time\_min.

The attributes for Entity recipe\_cooking\_time: id, cooking\_time, cooking\_time\_max, cooking\_time\_min

The attributes for Entity recipe occasion:id, name

The attributes for Entity recipe occasion item: id, recipe id, recipe occasion id

The attributes for Entity recipe course: id, name

The attributes for Entity recipe course item: id, recipe id, recipe ocassion id

The attributes for Entity recipe\_ingredient are: id, recipe\_id, name

The attributes for Entity recipe\_ingredient\_item are: id, recipe\_id, recipe\_ingredient\_id,

The attributes for Entity recipe information are: id, recipe id, name

The attributes for Entity recipe image are: id, recipe id, image

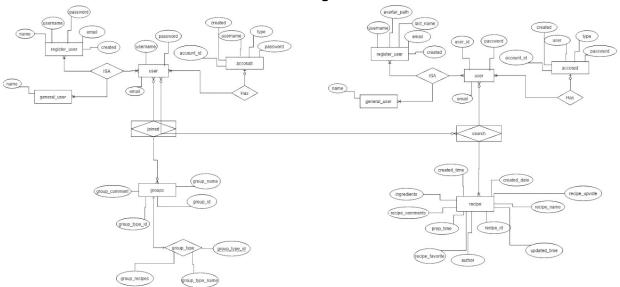
The attributes for Entity recipe\_video are: id, recipe\_id, video\_link

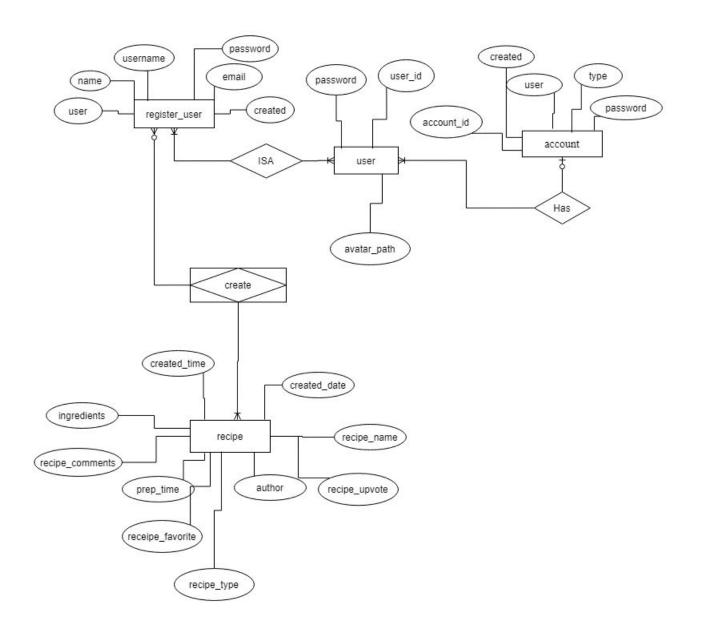
The attributes for Entity recipe\_quantity\_serve are: id, quantity\_serve, quantity\_serve\_num.

The relationships in the ERD consist of users being able to create a profile that will allow users to join groups. The groups will consist of recipes and each group will consist of different types. The groups will have comments between users as well. We also have a recipe page that will allow users to favorite recipes so it is stored in their favorites. The recipes can also be upvoted by users. Recipes will be of different types and shall include recipe ingredients, recipe information, recipe instruction, recipe image and recipe video. Users shall also be allowed to comment on the recipes.

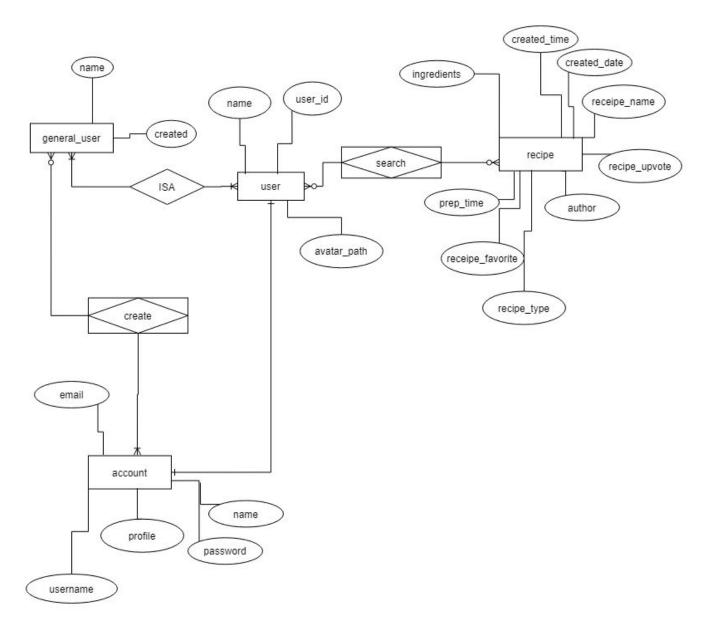
Part 3: Database Model

# ERD Diagram:

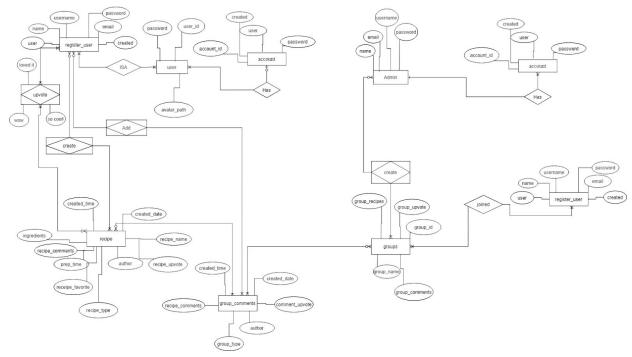




ERD Diagram cont.

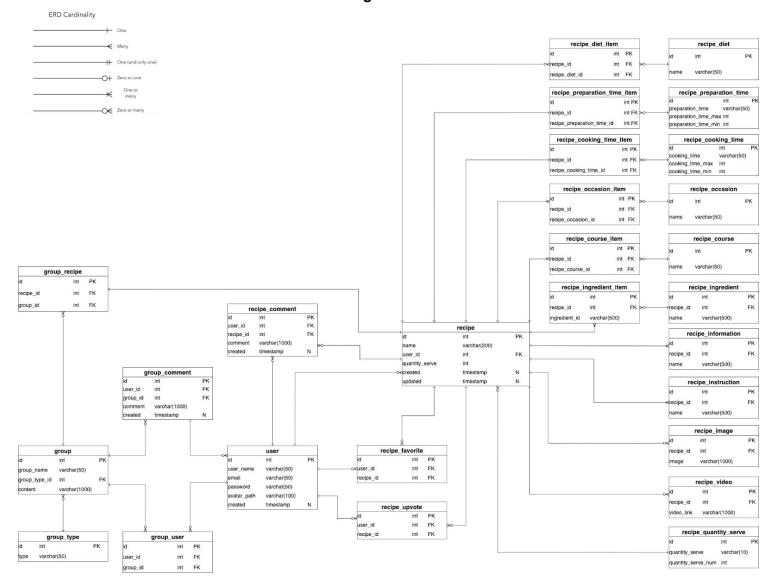


ERD Diagram cont.



ERD Diagram cont.

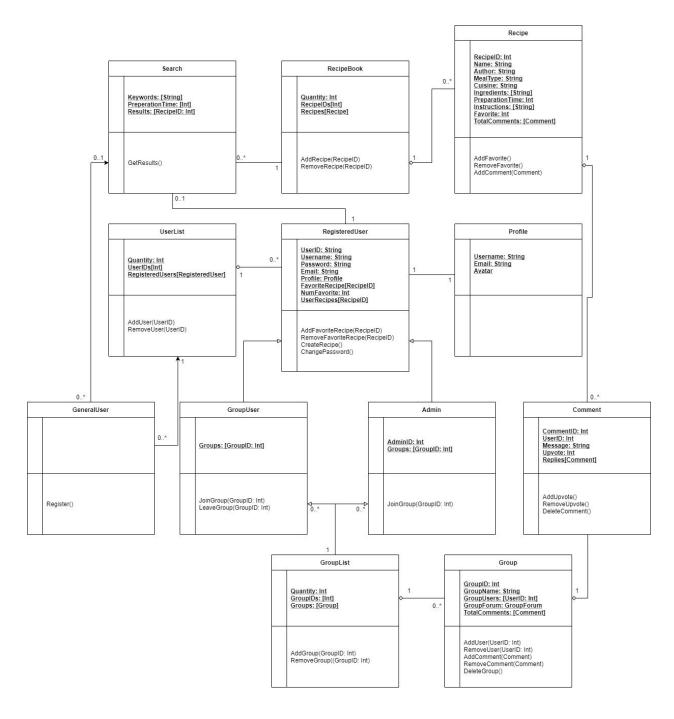
#### **EER Diagram:**



#### Part 4: DBMS

MySQL is the open source database management system used in this application because of its speed, flexibility and reliability.

# Section 5: High Level UML Diagrams V2



# Section 6: List of Contributions

#### 1. Nicole Pang:

Made connecting stories for storyboards, Profile page implementation, Profile page digital mockup, Search/Results page digital mockup, added captions for Emma storyboard, formatted M3 document, attended most meetings, set up meetings

#### 2. Jeff Cheng:

Home page implementation, Home page digital mockup, participated in the group meeting revising functionals, added captions for Alice storyboard, attended all meetings

#### 3. Allen Sun:

Sign up page implementation, Login page implementation, Create Recipe page implementation, Recipe page implementation, Search/Results page implementation, 404 Recipe not found implementation, participated in the group meeting revising functionals, provided instruction and steps for team members to learn frameworks, helped all team members learn frameworks, managed database, worked on section 4, attended most meetings

#### 4. Paul Asu:

Forgot password page implementation, Forgot password digital mockup, participated in the group meeting revising functionals, made ERD diagram missing from M2, added captions for Pamela storyboard, attended all meetings

#### 5. Kevin Wei:

Group Forum page implementation, About, Login, Signup, Group Forum, Create Recipe, Recipe not found digital mockups, participated in the group meeting revising functionals, added captions for Jim and Tom and Sarah storyboards, constructed storyboard paneling, reformatted functionals after review, helped members learn and debug code, gave feedback on page implementations, attended all meetings, set up meetings, ran meetings

#### 6. Kevin Ortiz:

Groups page implementation, Groups page digital mockup, participated in the group meeting revising functionals, made ERD diagram missing from M2, added captions for Andrew and Emma storyboards, helped members learn and debug code, worked on section 4, attended most meetings