SW Engineering CSC 648-05 Spring

2023

RecipeReel T03 Milestone 3

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History table

M3V1	April 27, 2023
M2V2	April 27, 2023
M2V1	April 3, 2023
M1V2	April 3, 2023
M1V1	March 2, 2023

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1. Data Definitions

1. General user: This entity is a user that accesses the site with no registered account. A general user will have access to a limited selection of features of the site. A general user is allowed to browse and search recipes but cannot interact with posts such as leaving a comment, saving a post, or giving a like to a post.

2. Register an account: It is an entity that allows a general user to register/sign up for an account so they can access more functions of the site. The purpose of this entity is to allow a general user to create an account and start using the social features of the site.

3. Search**:** It is an entity that allows users to search for recipes by specific keywords. These keywords can be (but not limited to) ingredients, users, or cultural cuisine. General users have access to search because we want them to be able to look up recipes that they would like to cook.

4. Registered user**:** It is an entity that created an account and can sign in to the website from different devices. This user will have a unique email and a password.

    4.1 Username

    It is an entity that is typically a string of characters that was chosen by the user to identify themselves. The length of the username shall be limited to a minimum of 6 characters and a maximum of 20 characters. The username is required when logging in on the website. It's paired with a password.

    4.2 Password

    It is an entity that refers to a combination of characters, strings, numbers, or letters that was chosen by users to secure their account and prevent unauthorized access. The password shall be a minimum of eight characters long. This entity is required when logging into the website. When both the username and password are correctly entered, the user will be granted access to their account.

    4.3 Following

    It is an entity that refers to a registered user who follows another user's content on the website. When a user follows another user, they can view the updates about the new contents that the following user has posted. The purpose of this entity is to build connections between users, help users find similar interests in recipes, and discover new recipes and content with other users.

4.4 Unfollowing

It is an entity that allows a registered user to unfollow certain users. The purpose of this entity is to allow users to see only recipes from specific users that they are interested in following.

4.5 Posts

It is an entity that allows a registered user to post personal recipes, allowing them to help spread new varieties and food ideas. The post contains 1-6 images per post, with a maximum of 2000 characters.

4.6 Delete posts

It is an entity that allows a registered user to delete or remove their own post or the content of the recipe. When a user deletes a recipe post, the content will be removed from the website, and all the comments from other users are no longer visible on the website. The purpose of this entity is to give users the ability to manage their accounts. It also can be helpful if a user accidentally posts something; they can quickly delete it by being seen by other users.

4.7 Like

It is an entity that allows users to express their positive reaction or appreciation for a particular recipe post. The purpose of a “like” entity is to provide a simple and quick way for users to show their support or approval without having to write a comment or engage in a more extended conversation. This also allows users to see how popular or well-received a particular recipe is.

4.8 Dislike

It is an entity that allows users to express negative sentiment or dissatisfaction. The purpose of a “dislike” entity is to provide users with a way to give feedback on a recipe that they don’t enjoy or find useful without having to write a comment or engage in an extended conversation.

4.9 Comment

It is an entity that allows users to engage in a conversation or provide feedback on a particular recipe post. Users can write a text-based response, which they can then share publicly for other users to see and respond to. This can be used to communicate thoughts, views, or ideas in a comment entity in a more extensive and detailed manner, as well as to interact with other users.

4.10 Rate

It is an entity that allows users to provide a way to express their opinions and experiences with a particular recipe and help other users make informed decisions. The rating would help provide feedback to the particular user who posted the recipe and help other users decide whether or not to try it out.

5. Top Rated: Top rated is an entity that will provide users with ratings based on several factors such as the quality and uniqueness of the recipes, the level of detail in the instructions, the variety of recipes offered, and difficulty of cooking.

6. Latest Post**:** Latest post entity for a recipe website would be the most recently published recipe on the website. This would be a new recipe that has just been added to the website's collection. The latest post entity is important as it keeps the website fresh and up-to-date, and provides users with new content to explore and engage with.

7. Recipe**:** Recipe is an entity that will provide users information about a specific recipe. It includes other entities such as, recipe title, which is the name of the dish; A brief description of this recipe; Ingredient list which informs the user all the ingredients needed to make the dish; Cooking time, which tells the user the amount of time required to cook the dish; Recipe images that user posted, and comments from other users etc.

   7.1 Title

   It is an entity that will provide the user with a name for a particular recipe. It provides the user with information or a description that accurately reflects the content of the recipe.

   7.2 Description

   It is an entity that will provide the user with a short summary of the dish that highlights its main ingredients and background. The description may also provide additional details such as serving size, cooking time, and any special equipment or techniques that are needed.

   7.3 Instruction

   Instructions are an entity that will provide the user with step-by-step guidance on how to prepare and cook a dish. Instructions also interact with other entities, such as the ingredient list, which informs the user of all the ingredients needed to make the dish, and the cooking method, which informs the user if they need a grill or stove to cook certain meals.

   7.4 RecipeImages

It is an entity that users post on the website; a registered user can post 1-6 images that are related to the recipe. Some good photographs can also make the recipe more appealing and attractive, which can increase engagement and interest among users.

7.5 Category

It is an entity that shall allow users to easily navigate and filter through the available recipes based on their preferences. It is an entity that serves as a container for organizing and grouping various sub-data items such as cuisine, ingredient, occasion, and dietary restrictions. The category entity will provide an efficient and useful way for users to find the recipes they are looking for.

7.5.1 Dietary restrictions

It is a sub-data item that users can use to find recipes based on diet specifications. This will allow users to have the option of finding their favorite recipes based on their dietary restrictions. Such as keto, gluten-free, vegan, dairy-free, halal, etc., and the search shall return based on their restrictions.

7.5.2 Occasion

It is a sub-data item that users search for recipes based on the occasion or event. Users can select the type of occasion they are preparing for, such as a holiday or birthday party, and the search will return all recipes that are suitable for or categorized for that occasion.

7.5.3 Cuisine

It is a sub-data item that users can use to search for recipes based on specific cuisines. Users can select the cuisine they are interested in, such as American, African, Mexican, or Asian, and the search shall return recipes that fall under the selected cuisine type.

7.6 Ingredients

It is an entity that users shall search for recipes based on the ingredients they have on hand. The ingredients shall include various items that are used in cooking recipes, such as chicken, fish, pork, beef, vegetables, and others. These ingredients can be represented as an enumeration or a list, and the search shall return recipes that can be made with those ingredients.

7.7 Cooking Time

Cooking time is an entity that will provide users with an estimation of the total time required to cook a specific dish. The purpose of this entity is to allow users to plan their meal preparation and manage their time. The format of this entity will be displayed

as hours and minutes. Cooking time also interacts with other entities, such as preparation time, which tells the user the amount of time required for preparing the dish, and resting time, which tells the user how long to let the food sit before eating.

7.8 Difficulty

Difficulty is an entity that will provide the user with an idea of how hard the dish will be to make for themselves. By having this feature, it allows the user to find dishes that suit their level of cooking skills.

2. Functional Requirements

2.1 Must Have Functionalities

2.1.1 General Users

- A general user shall be able to register for an account of RecipeReel using a username, password and email.
- A general user shall be able to view recipes posted on the website using a feed.
- A general user shall be able to search or filter recipes using predefined categories/cuisines.
- A general user shall be able to search or filter recipes using predefined ingredients.
- A general user shall be able to search using cooking time.
- A general user shall be able to search using a keyword or term that matches a recipe's category (cuisine), ingredient, cooking time, title, and difficulty.
- A general user shall be able to view recipes, details, and comments.

2.1.2 Registered Users

- A registered user shall be able to log in with a username and password.
- A registered user shall be able to save their favorite recipes.
- A registered user shall be able to leave comments on recipes.
- A registered user shall be able to like comments on recipes.
- A registered user shall be able to dislike comments.
- A registered user shall be able to post recipes to ReciperReel.
- A registered user shall be able to delete a recipe they posted to RecipeReel.
- A registered user shall be able to follow other registered users.
- A registered user shall be able to unfollow other registered users.
- A registered user shall be able to log out.
- A registered user shall be able to view a feed of recipes(posts) based on other registered users they follow.
- A registered user shall be able to rate a recipe using a 1-5 scale.

2.1.3 Admin

- An admin shall be able to use tools such as PGAdmin and AWS tools to monitor and update all site contents.
- An admin shall be able to manage website functionalities using source code.
- An admin shall be able to analyze site performance using AWS amplify console.
- Admin shall keep user information and data stored safely using a postgres DB.
- An admin shall be able to manage the amount of storage the website has in order to make sure there's enough to store contents such as images, recipes, descriptions, and more.
- An admin shall manage the amount of storage the website used using AWS RDS console.

2.2 Desired Functionalities

2.2.1 General Users

- A general user shall be able to register using a phone number.
- A general user shall be able to filter by author.
- A general user shall be able to filter recipes by date added.
- A general user shall be able to filter by highest review.
- A general user shall be able to filter based on calorie count.
- A general user shall be able to filter by difficulty level.
- A general user shall be able to search for recipes that do not include ingredients.

2.2.2 Registered Users

- A registered user shall be able to verify with their phone number.
- A registered user shall be able to enable 2FA using a 2FA app.
- A registered user shall be able to edit their profiles.
- A registered user shall be able to download a pdf of a recipe.
- A registered user shall be able to archive their recipes.
- A registered user shall be able to edit their security information.
- A registered user shall be able to save posts.
- A registered user shall be able to edit their recipes.
- A registered user shall be able to delete their recipes.

2.2.3 Admin

- An admin user shall be verified using two-factor authentication.
- An admin user shall be able to verify using their phone number.

2.3 Opportunistic functionalities

2.3.1 General Users

- A user shall have access to a meal planner tool for their meal criteria.

2.3.2 Registered Users

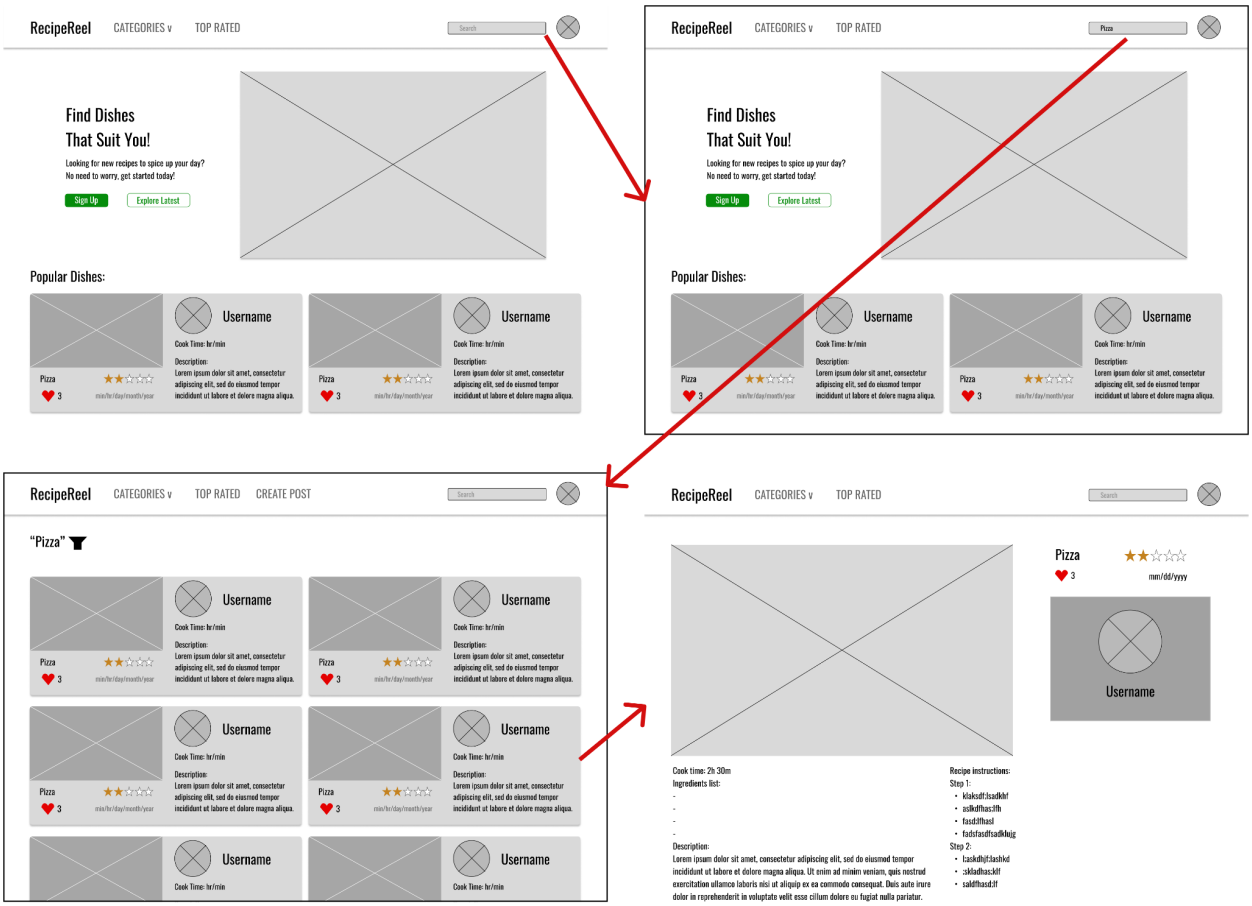
- Registered users shall be able to privately message each other.
- Registered users shall be able to opt for notifications.

2.3.3 Admin

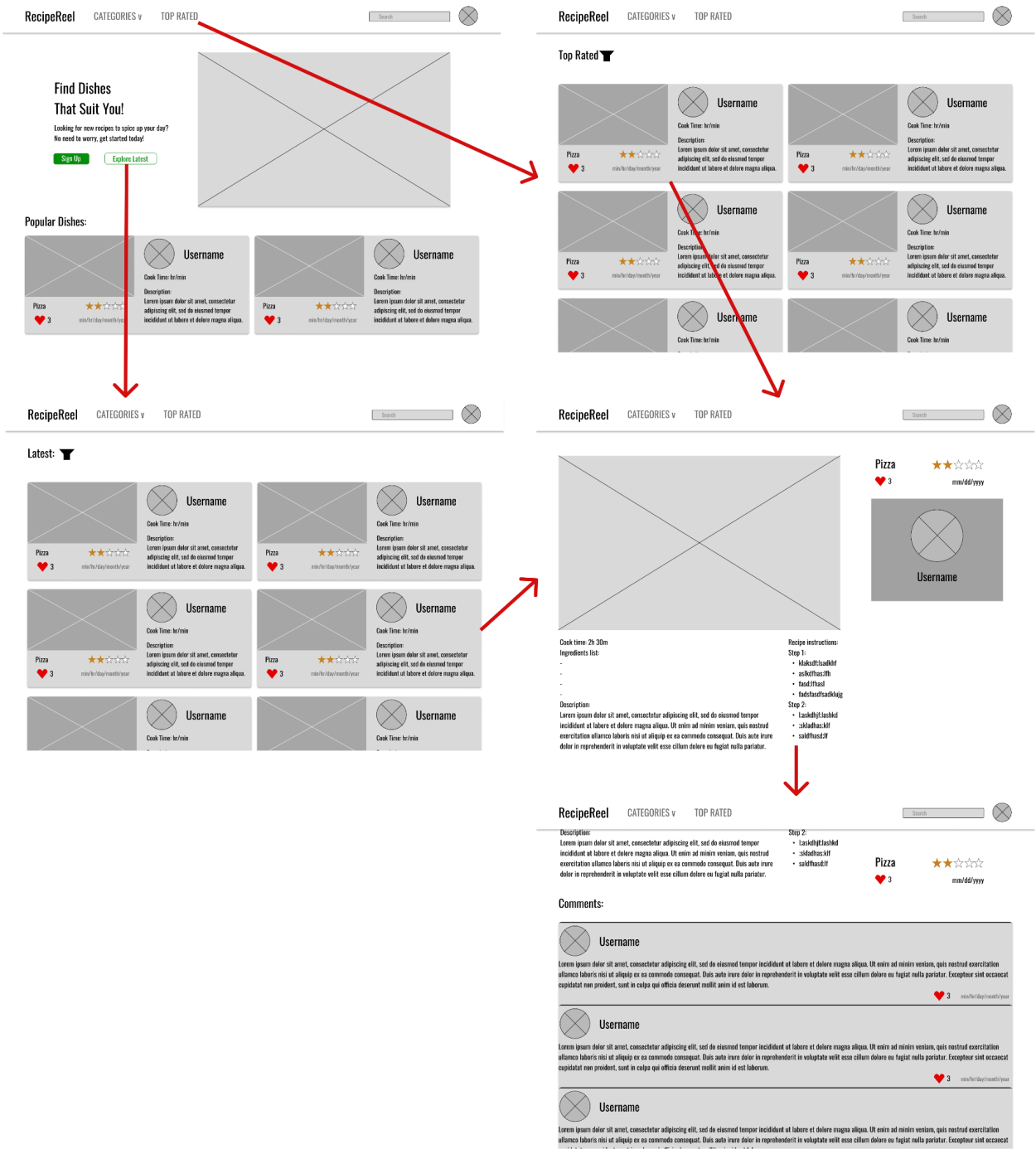
- An admin shall have monitoring tools for tracking system metrics.
- An admin shall have a revenue management tool.

3. Wireframes Based on your Mockups/Storyboards V2

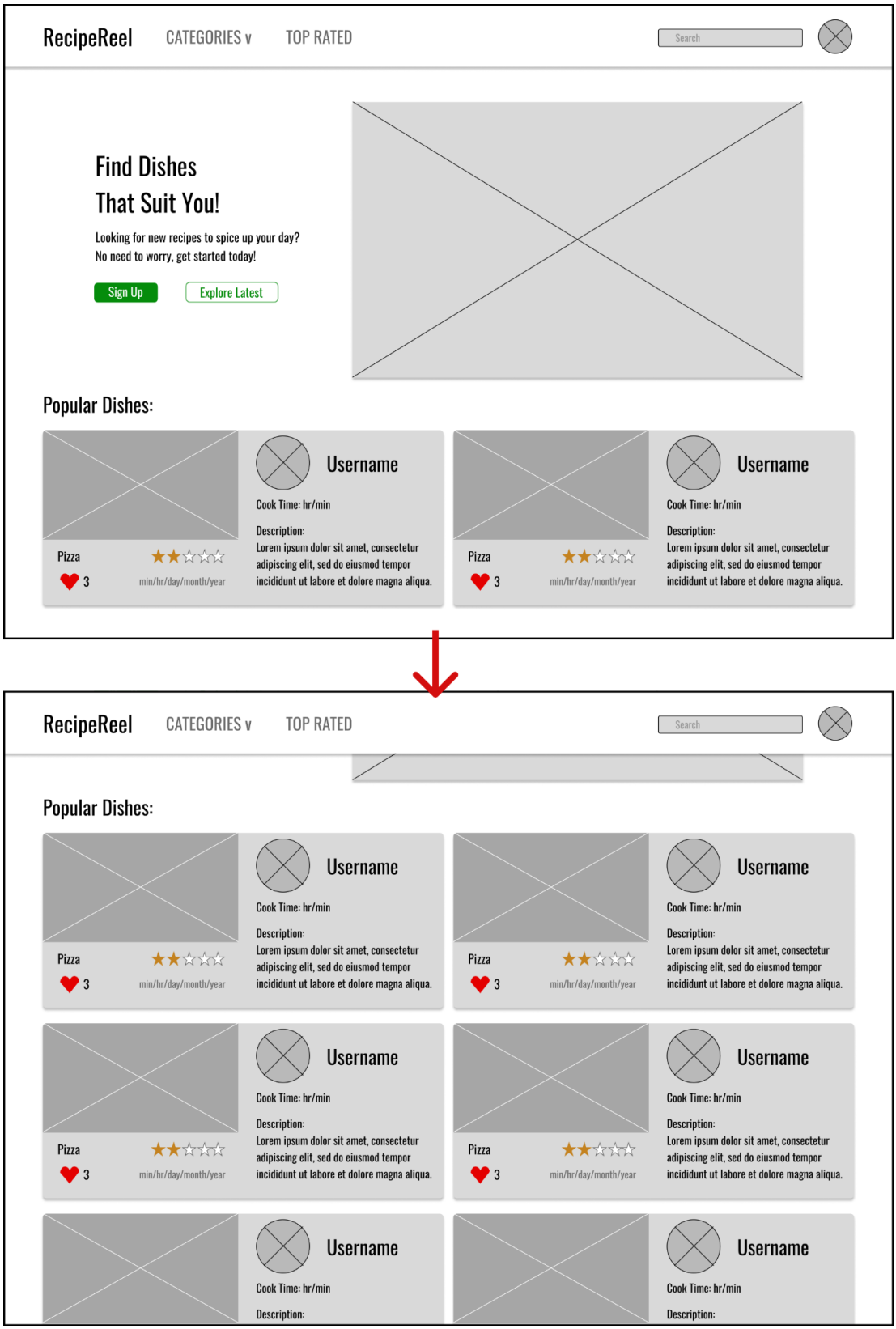
Use Case 1:



Use Case 2:


RecipeReel
CATEGORIES v
TOP RATED
Search
Find Dishes
That Suit You!
Looking for new recipes to spice up your day?
No need to worry, get started today!
Sign Up
Explore Latest
Popular Dishes:
Username
Cook Time: hr/min
Description:
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
Pizza
3
Top Rated
Latest:
Cook time: 2h 30m
Ingredients list:
Recipe instructions:
Step 1:
Step 2:
Pizza
mm/dd/yyyy
Comments:

Use Case 3:


RecipeReel
CATEGORIES v
TOP RATED
Search
Find Dishes
That Suit You!
Looking for new recipes to spice up your day?
No need to worry, get started today!
Sign Up
Explore Latest
Popular Dishes:
Username
Cook Time: hr/min
Description:
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RecipeReel
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TOP RATED
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Popular Dishes:
Username
Cook Time: hr/min
Description:
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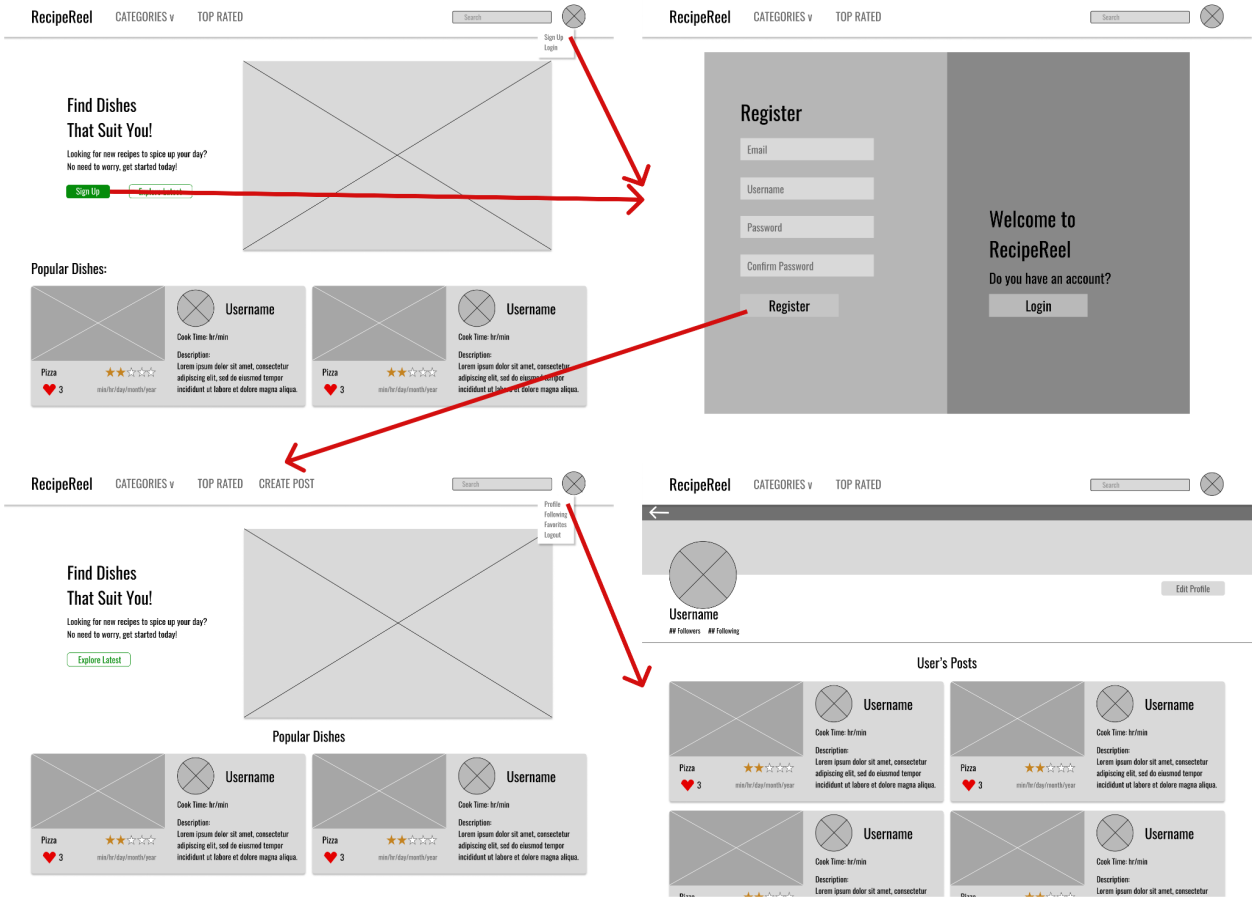
Pizza
3
min/hr/day/month/year

Use Case 4:


RecipeReel
CATEGORIES ∨
TOP RATED
Search
Sign Up
Login
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Explore Latest
Popular Dishes:
Username
Cook Time: hr/min
Description:
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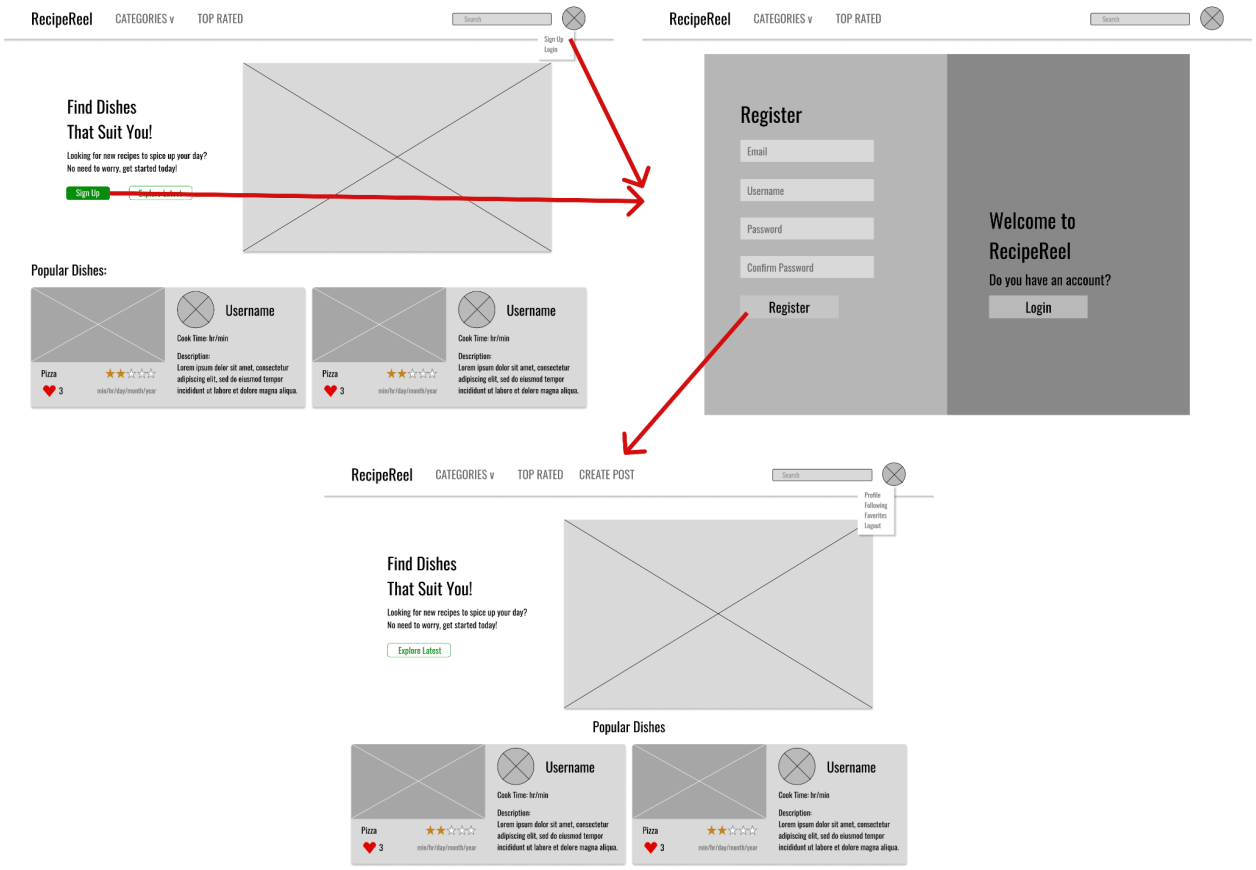
Pizza
3
Register
Email
Username
Password
Confirm Password
Register
Welcome to
RecipeReel
Do you have an account?
Login
CREATE POST
Profile
Following
Favorites
Logout
Popular Dishes
Edit Profile
Followers
Following
User's Posts

Use Case 5:


RecipeReel
CATEGORIES ∨
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Looking for new recipes to spice up your day?
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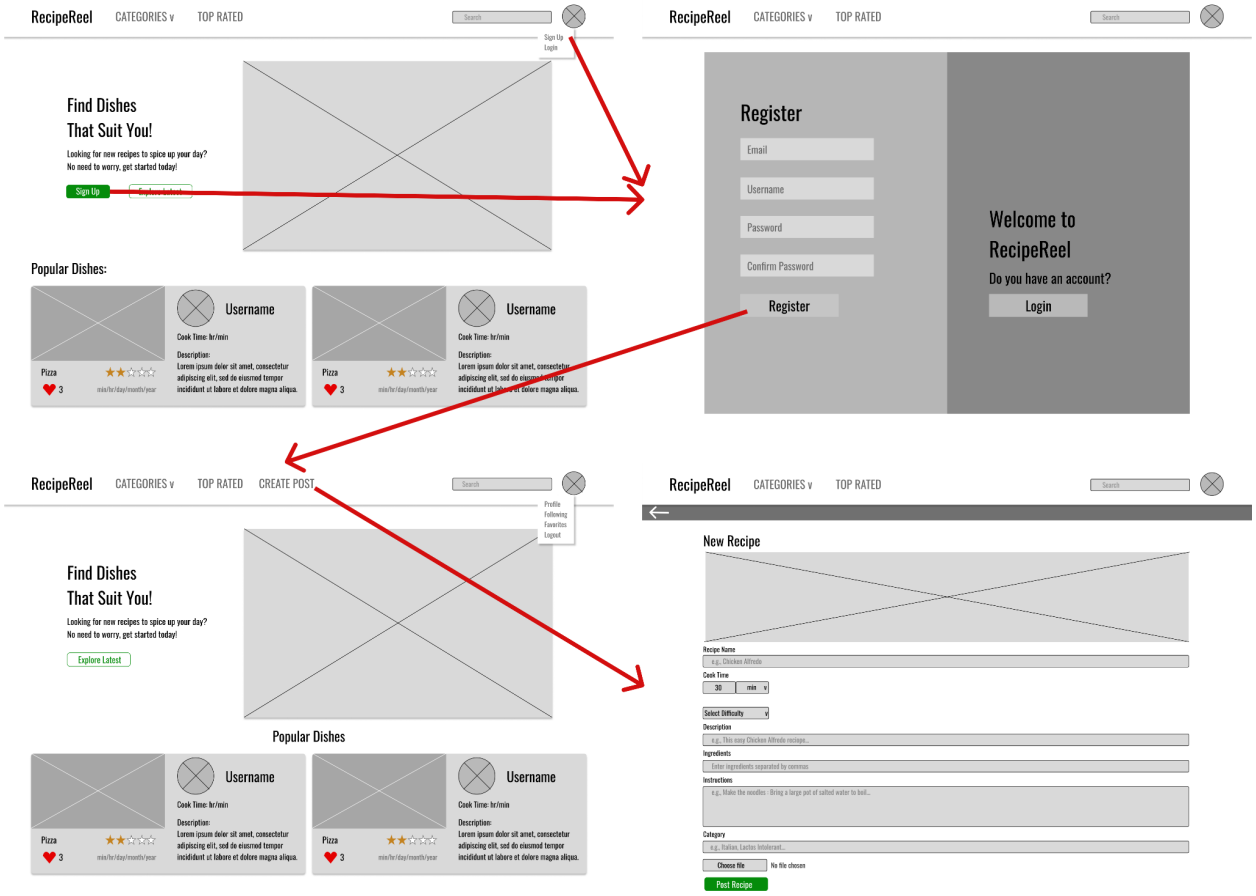
Explore Latest
Popular Dishes:
Username
Cook Time: hr/min
Description:
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
Pizza
3
Register
Email
Username
Password
Confirm Password
Register
Welcome to
RecipeReel
Do you have an account?
Login
CREATE POST
Profile
Following
Favorites
Logout
Popular Dishes

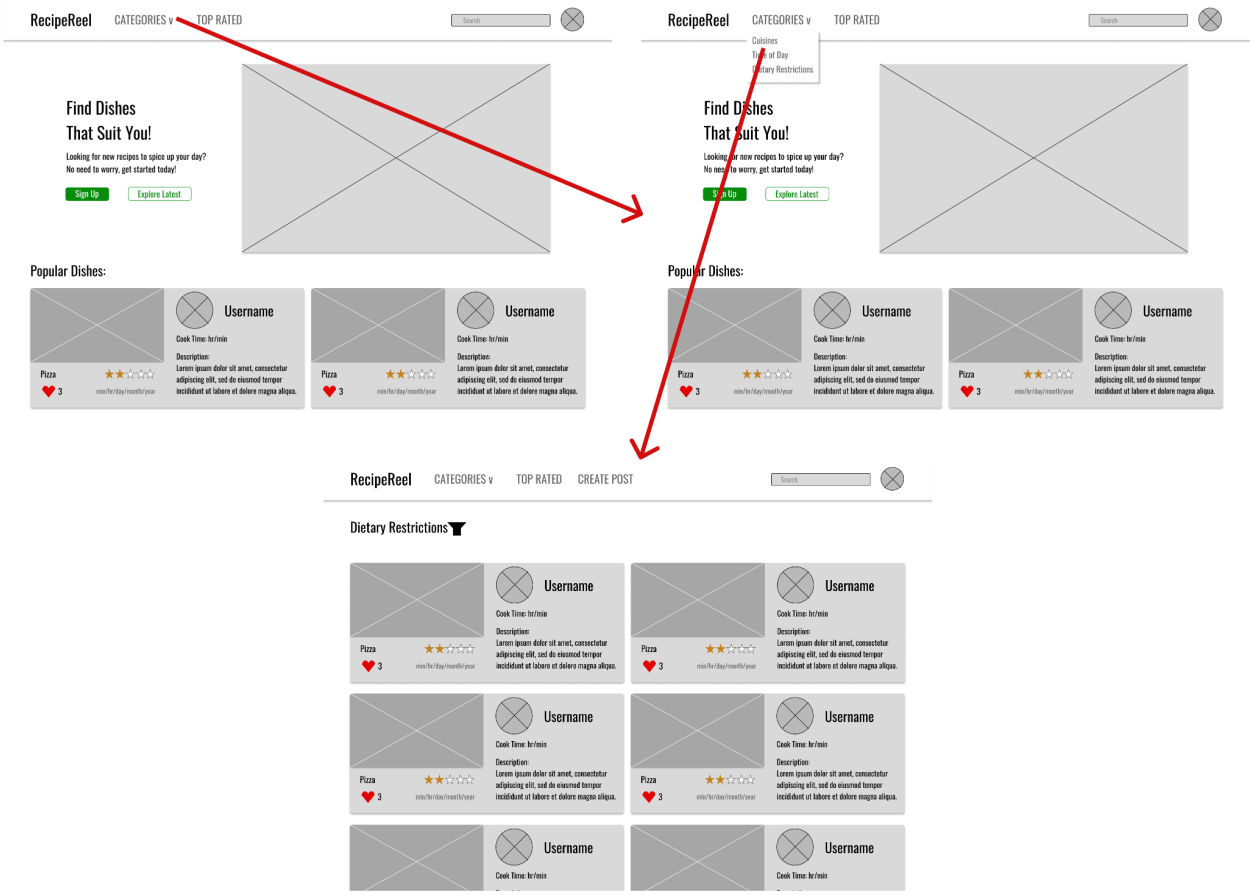
Use Case 6:


RecipeReel
CATEGORIES ∨
TOP RATED
Search
Sign Up
Login
Find Dishes
That Suit You!
Looking for new recipes to spice up your day?
No need to worry, get started today!
Sign Up
Explore Latest
Popular Dishes:
Username
Cook Time: hr/min
Description:
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
Pizza
3
Register
Email
Username
Password
Confirm Password
Register
Welcome to
RecipeReel
Do you have an account?
Login
CREATE POST
Profile
Following
Favorites
Logout
Popular Dishes
New Recipe
Recipe Name
Cook Time
Select Difficulty
Description
Ingredients
Instructions
Category
Choose file
No file chosen
Post Recipe

Use Case 7:

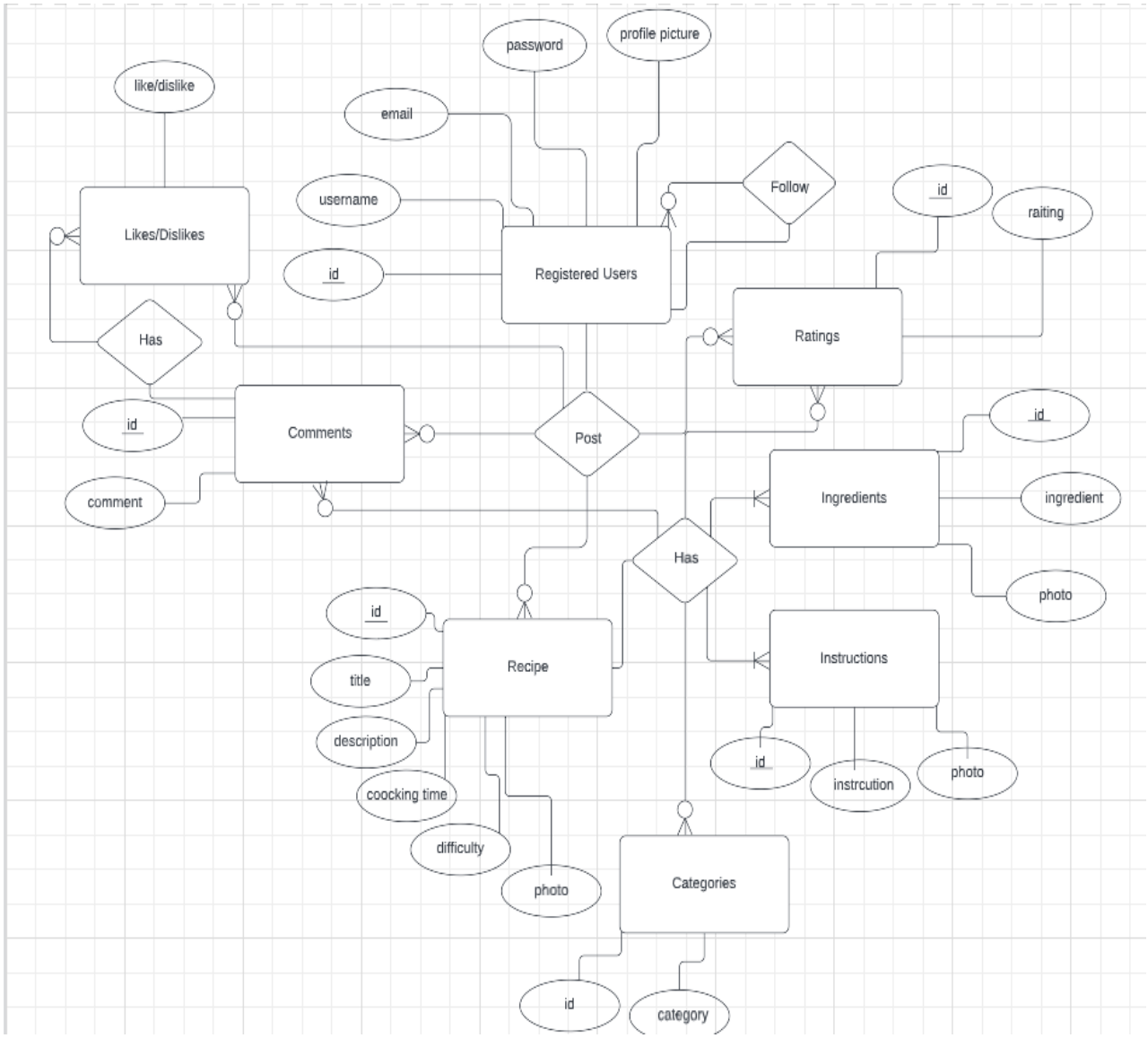
RecipeReel
CATEGORIES v
TOP RATED
CREATE POST
Find Dishes
That Suit You!
Looking for new recipes to spice up your day?
No need to worry, get started today!
Sign Up
Explore Latest
Popular Dishes:
Username
Cook Time: hr/min
Description:
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
"Pizza"
Ratings
Likes
Cook Time:
Highest to Lowest
Lowest to Highest
Pizza
3
mm/dd/yyyy
Cook time: 2h 30m
Ingredients list:
Recipe instructions:
Step 1:
Step 2:

Use Case 8:

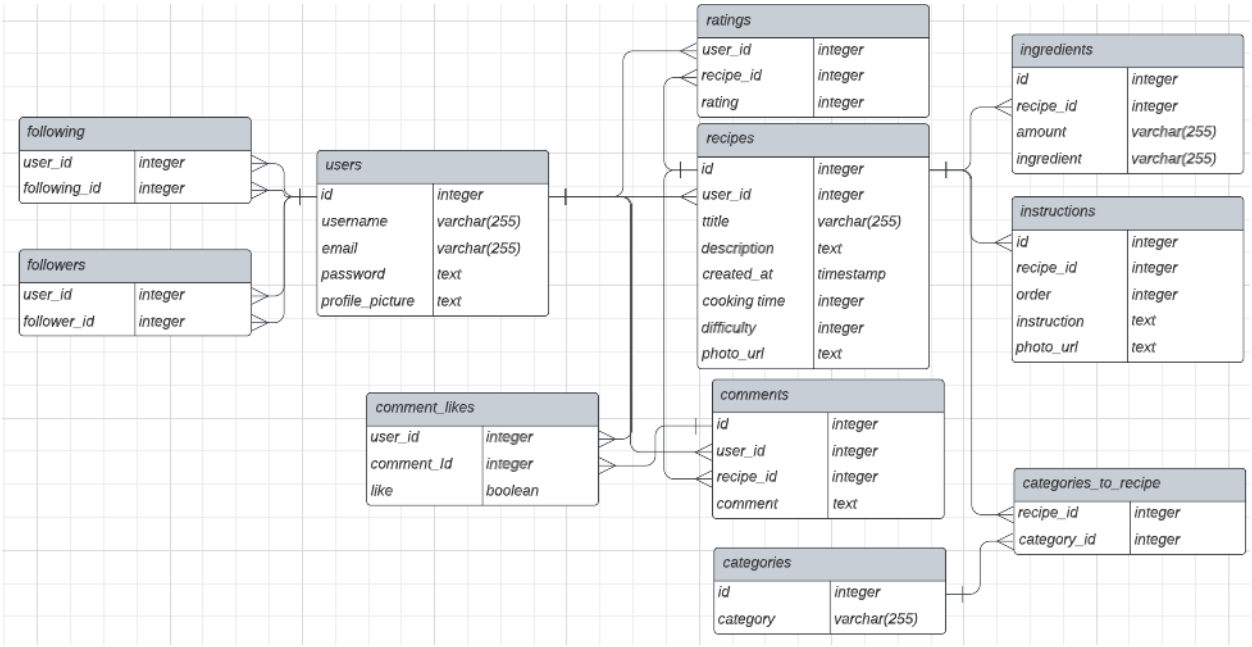

RecipeReel
CATEGORIES v
TOP RATED
Search
Find Dishes
That Suit You!
Looking for new recipes to spice up your day?
No need to worry, get started today!
Sign Up
Explore Latest
Popular Dishes:
Username
Cook Time: hr/min
Description:
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
Pizza
3
RecipeReel
CATEGORIES v
TOP RATED
CREATE POST
Search
Dietary Restrictions
Username
Cook Time: hr/min
Description:
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
Pizza
3

4. High level database architecture and organization V2

4.1 ERD Diagram

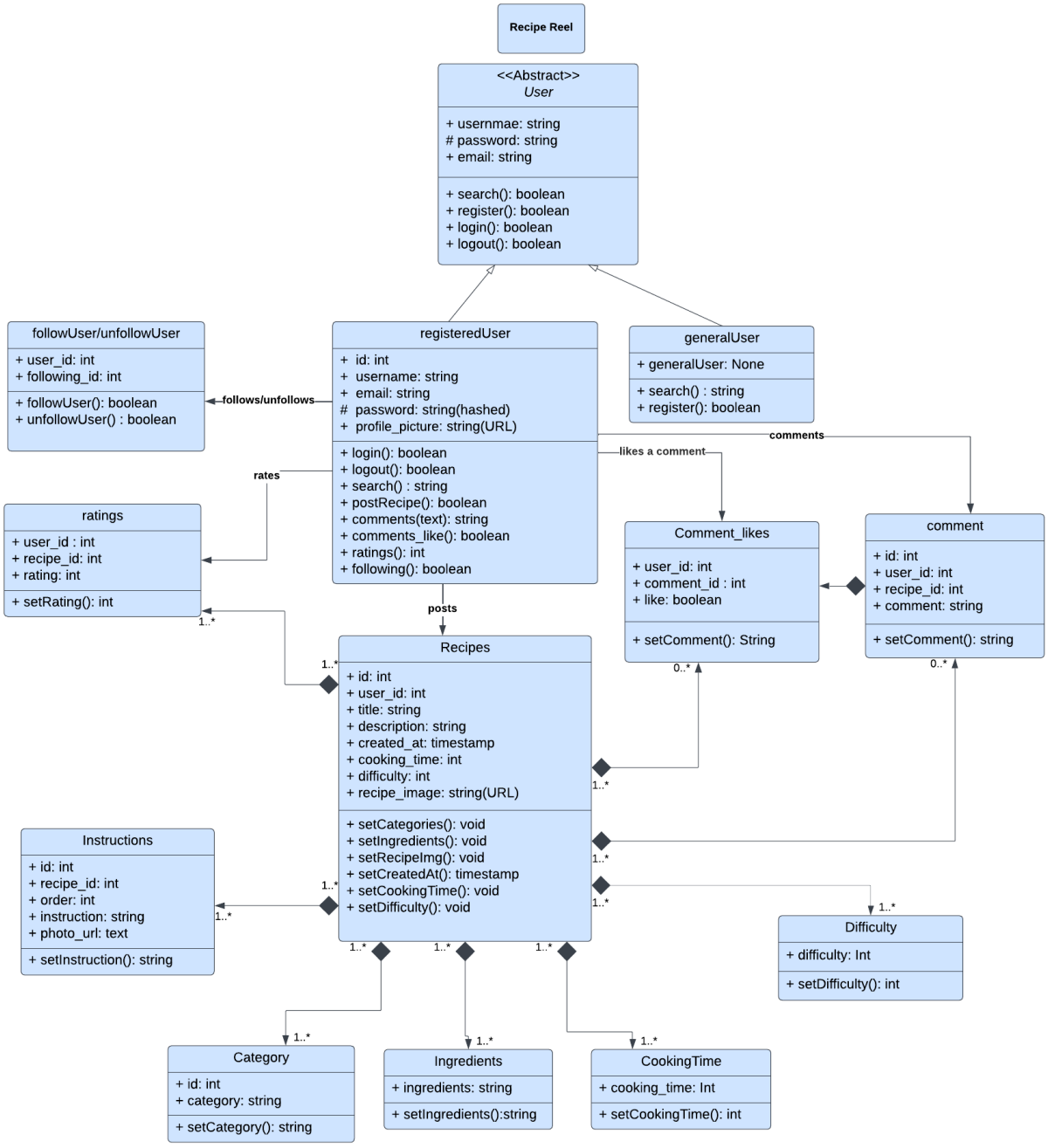


4.2 EER Diagram

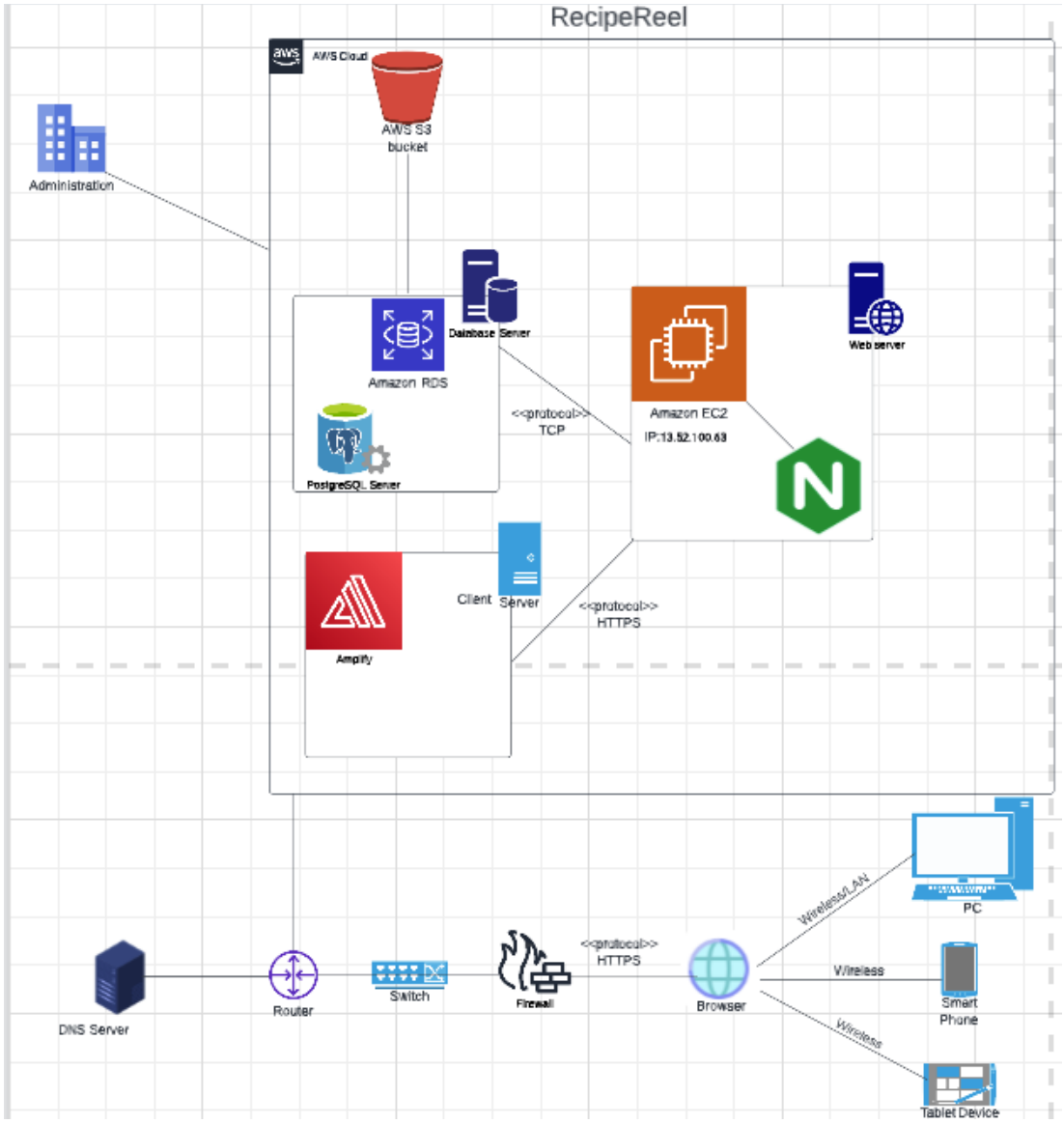


5. High Level Diagrams V2

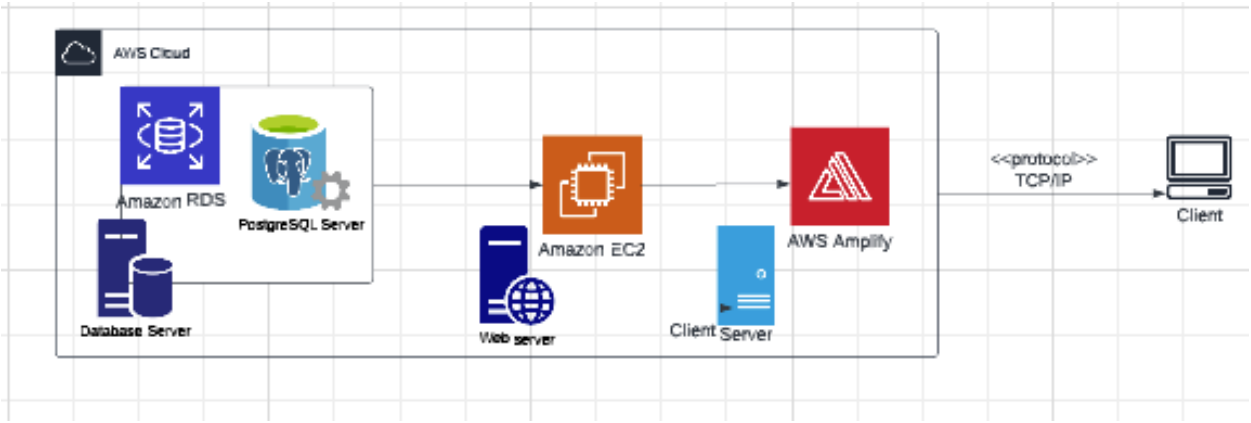
5.1 UML



5.2 Application Network Diagram



5.3 Deployment Diagram



6. Team Member Contributions

Team member	Contributions/Activities	Score
Team lead Yueling Liu	● Assigned tasks to each team member ● Collaborated with team members ● Organized meetings and followed up on progress ● Designed login page in the frontend ● Designed register page nn the frontend ● Implemented validation for register page in the frontend ● Reviewed documentation and provided feedback to team members ● Reviewed front end code and provided feedback to team members	
Backend lead Duncan Herington	● Implemented route for login, logout, search in the backend ● Connected login, logout, search routes to the front end ● Implemented login validation in the back end ● Implemented login validation in the front end ● Added jwt tokens for login in the backend ● Redesigned homepage postcards ● Implemented the category drop-down menu to the navbar and made the navbar dynamic to both logged-in and logged-out users ● Reviewed code in the back end ● Helped fix High Level APIs and Main Algorithms of milestone 2 V2	10/10
Backend lead Marcel Azouri	● Created wireframe UI models ● Created wireframe storyboards ● Fixed storyboards for Milestone 2 V2 ● Helped fix High Level APIs and Main Algorithms of milestone 2 V2	9/10

Document lead Priya Pradeep	• Redesigned PostRecipe page • Implemented a dropdown menu for “category” option • Refined “post image” option to allow user to add up to 6 photos at a time • Connected “post recipe” page to “post details” page when clicked on ‘post recipe’ • Documented M3 • Formatted the documented	7/10
Github lead Nathan Le Howland	• Implemented user and recipe models in the back end • Seeded database tables • Implemented following/follower in the front end • Implemented following/follower in the back end • Implemented register endpoint in the back end • Completed AWS S3 integration • Responsible for managing and updating the project's GitHub repository • Managed regular updates and maintained the deployment of the application • Implemented user registration with profile picture upload functionality in the backend • Assisted Section 4 database ERD in M2 • Completed EER in M3	10/10
Database lead Samuel	• Created Top rated page • Created Favorite page	6/10
Document lead Yasson	• Created a fully interactive Profile page. (Profile.js) • Created a fully interactive individual post page. (PostDetails.js) • Created Profile Card. (ProfileCard.js) • Reviewed Priya’s Post page. (PostRecipe.js - approved). • Reviewed Samuel’s Top Rated page.	8/10