

Documentation: The Recipe Hub Web Application

Name: Katrina Ying

The Recipe Hub: Overview

In this web application, called "The Recipe Hub", users can create accounts, submit their favorite recipes, rate recipes, and leave comments. The frontend will be built with HTML and CSS, while the backend will use PHP to manage recipe data, including ingredients, instructions, and ratings. A MySQL database will store the recipe details, and users will be able to search, filter, and view recipes. AWS EC2 will host the application, and security groups will be used to secure access and maintain scalability in the infrastructure.

Firstly, guests are able to access the main page of The Recipe Hub and view recipes. Upon entering the main page, guests are greeted with a scrollable list of current recipes in the database. Each recipe has a title and a short description displayed. Guests can click the "View Recipe" button to see the ingredients list, instructions, and user ratings. Guests can also see the username of whoever created/posted the recipe. However, only users can rate recipes.

On the top right corner, there is a button to log in or register for an account. Incoming users can input a username, email, and password to create an account. Then, they can log in with their username and password. Once the user is logged in, they will see their username displayed on the top right next to the "Log Out" button.

Users can click the green "Add Recipe" button at the bottom of the recipe list to add a recipe. Here they can enter a recipe title, description, ingredients, and instructions. There is also the option to remove an ingredient if there is a typo or spelling error.

Additionally, users have the ability to edit their recipe at any point in time. When users leave a rating on someone else's recipe, they have the ability to edit or delete that rating. "Ratings" include a number rating from 1-5 and a textual comment.

In summary, "The Recipe Hub" is a dynamic web application that allows users to share their favorite recipes, rate them, and leave comments. The platform's user-friendly frontend, built with HTML and CSS, is supported by a PHP backend to manage recipe data and user interactions. The MySQL database stores essential recipe details, enabling users to search, filter, and view recipes with ease. Hosted on AWS EC2 with secure access through security groups, the application ensures scalability. The system caters to both guests and registered users, providing a seamless experience for recipe exploration, submission, and rating. Users can edit and manage their contributions, ensuring the platform remains interactive and up-to-date as time goes on.

These Usernames and Passwords can be used to test the application. Feel free to create a new account as well!

Username	Password	Email
katrinaying	Recipe23	kying@scu.edu
chef_bob	Chefbob88	chefbob1@gmail.com

Creating Tables for SQL Database

USE recipe_db;

Users Table (Stores user accounts)

```
CREATE TABLE users (  
    user_id INT AUTO_INCREMENT PRIMARY KEY,  
    username VARCHAR(50) UNIQUE NOT NULL,  
    email VARCHAR(100) UNIQUE NOT NULL,  
    password_hash VARCHAR(255) NOT NULL,  
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP  
);
```

Recipes Table (Stores recipes submitted by users)

```
CREATE TABLE recipes (  
    recipe_id INT AUTO_INCREMENT PRIMARY KEY,  
    user_id INT,  
    title VARCHAR(255) NOT NULL,  
    description TEXT NOT NULL,  
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
    Recipe_instructions TEXT NOT NULL,  
    FOREIGN KEY (user_id) REFERENCES users(user_id) ON DELETE CASCADE  
);
```

Ingredients Table (Stores ingredients for each recipe)

```
CREATE TABLE ingredients (  
    ingredient_id INT AUTO_INCREMENT PRIMARY KEY,  
    recipe_id INT,  
    ingredient_name VARCHAR(255) NOT NULL,  
    quantity VARCHAR(50) NOT NULL,  
    FOREIGN KEY (recipe_id) REFERENCES recipes(recipe_id) ON DELETE CASCADE  
);
```

Ratings Table (Stores ratings given by users)

```
CREATE TABLE ratings (  
    rating_id INT AUTO_INCREMENT PRIMARY KEY,  
    recipe_id INT,  
    user_id INT,  
    rating INT CHECK (rating BETWEEN 1 AND 5),  
    comment TEXT, -- Users can leave comments or tips here  
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
    FOREIGN KEY (recipe_id) REFERENCES recipes(recipe_id) ON DELETE CASCADE,  
    FOREIGN KEY (user_id) REFERENCES users(user_id) ON DELETE CASCADE  
);
```

Insert Sample Data into Tables

```
INSERT INTO users (username, email, password_hash) VALUES
('john_doe', 'john.doe@example.com', 'yourhashedpassword'),
('jane_smith', 'jane.smith@example.com', 'yourhashedpassword');
```

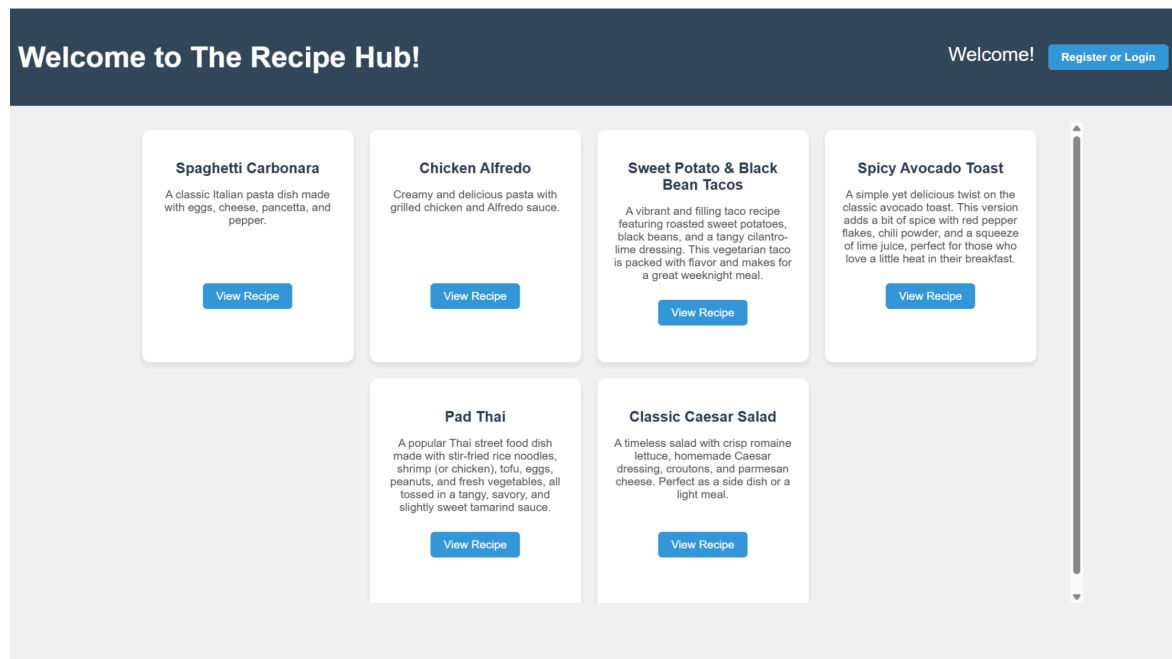
```
INSERT INTO recipes (user_id, title, description) VALUES
(1, 'Spaghetti Carbonara', 'A classic Italian pasta dish made with eggs, cheese, pancetta, and pepper.'),
(2, 'Chicken Alfredo', 'Creamy and delicious pasta with grilled chicken and Alfredo sauce.');
```

```
INSERT INTO ingredients (recipe_id, ingredient_name, quantity) VALUES
(1, 'Spaghetti', '200g'),
(1, 'Pancetta', '100g'),
(1, 'Eggs', '2'),
(1, 'Parmesan cheese', '50g'),
(2, 'Fettuccine pasta', '200g'),
(2, 'Chicken breast', '2'),
(2, 'Heavy cream', '200ml'),
(2, 'Parmesan cheese', '50g');
```

```
INSERT INTO ratings (recipe_id, user_id, rating, comment) VALUES
(1, 1, 5, 'Amazing! The best pasta I've ever had.'),
(2, 2, 4, 'Very creamy, but I would add more seasoning next time.');
```

Web Application Design and UI

Homepage as Guest



View recipe as Guest

Spaghetti Carbonara

Created by: john_doe

A classic Italian pasta dish made with eggs, cheese, pancetta, and pepper.

Ingredients

- 200g - Spaghetti
- 100g - Pancetta
- 2 - Eggs
- 50g - Parmesan cheese

Instructions

Cook spaghetti according to package instructions. In a pan, cook pancetta until crispy. Whisk eggs and Parmesan cheese together. Toss hot pasta with pancetta and remove from heat. Quickly mix in egg mixture, stirring continuously to create a creamy sauce. Serve immediately with black pepper and extra Parmesan.

Ratings

john_doe - Rating: 5 / 5

Amazing! The best pasta I've ever had.

katrinaying - Rating: 5 / 5

Great recipe! Healthy and delicious.

[Back to Home](#)

Please see the next page for more information.

Register for an account

Register for Recipe Sharing

Username:

Email:

Password:

Register

Already have an account? [Login here](#)

Log In to account

Login to Recipe Sharing

Username:

Password:

Login

Don't have an account? [Register Here](#)

Homepage when logged in as User (katrinaying)

Welcome to The Recipe Hub!

Hello, katrinaying!Logout

Spaghetti Carbonara

A classic Italian pasta dish made with eggs, cheese, pancetta, and pepper.

View Recipe

Chicken Alfredo

Creamy and delicious pasta with grilled chicken and Alfredo sauce.

View Recipe

Sweet Potato & Black Bean Tacos

A vibrant and filling taco recipe featuring roasted sweet potatoes, black beans, and a tangy cilantro-lime dressing. This vegetarian taco is packed with flavor and makes for a great weeknight meal.

View Recipe

Spicy Avocado Toast

A simple yet delicious twist on the classic avocado toast. This version adds a bit of spice with red pepper flakes, chili powder, and a squeeze of lime juice, perfect for those who love a little heat in their breakfast.

View Recipe

Pad Thai

A popular Thai street food dish made with stir-fried rice noodles, shrimp (or chicken), tofu, eggs, peanuts, and fresh vegetables, all tossed in a tangy, savory, and slightly sweet tamarind sauce.

View Recipe

Classic Caesar Salad

A timeless salad with crisp romaine lettuce, homemade Caesar dressing, croutons, and parmesan cheese. Perfect as a side dish or a light meal.

View Recipe

Add Recipe

View John’s recipe (that you rated as katrinaying)

Spaghetti Carbonara

Created by: john_doe

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Ratings

john_doe - Rating: 5 / 5

Amazing! The best pasta I've ever had.

katrinaying - Rating: 5 / 5

Great recipe! Healthy and delicious.

Edit RatingDelete Rating

Back to Home

Add a new recipe

Add a New Recipe

Recipe Title:

Recipe Description:

Ingredients

Ingredient:

Ingredient Name

Quantity:

Quantity

Remove Ingredient

Add Another Ingredient

Instructions

Add Recipe

Back to Home

View your own recipe (as katrinaying)

Classic Caesar Salad

Created by: katrinaying

A timeless salad with crisp romaine lettuce, homemade Caesar dressing, croutons, and parmesan cheese. Perfect as a side dish or a light meal.

Ingredients

- 2 heads - Lettuce
- 1/4 cup - Caesar Dressing
- 1/4 cup - Parmesan Cheese
- 1 cup - Croutons
- 1 tbsp - Olive Oil

Instructions

In a large bowl, toss the chopped romaine lettuce with Caesar dressing until well coated. Add the grated parmesan cheese and toss again. Gently mix in the croutons. Drizzle with olive oil and season with freshly ground black pepper. Serve immediately and enjoy!

Ratings

No ratings yet.

Edit Recipe

Back to Home

Edit your own recipe (as katrinaying)

Edit Recipe

Recipe Title:

Classic Caesar Salad

Recipe Description:

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Edit your own recipe (continued)

Ingredients

Ingredient:

Lettuce

Quantity:

2 heads

Remove Ingredient

Ingredient:

Caesar Dressing

Quantity:

1/4 cup

Remove Ingredient

Ingredient:

Parmesan Cheese

Quantity:

1/4 cup

Remove Ingredient

Ingredient:

Croutons

Quantity:

1 cup

Remove Ingredient

Edit your own recipe (continued)

Ingredient:

Croutons

Quantity:

1 cup

Remove Ingredient

Ingredient:

Olive Oil

Quantity:

1 tbsp

Remove Ingredient

Add Another Ingredient

Update Recipe

Back to Recipe

Rating others' recipes (Example: Bob wants to rate Katrina's recipe)

Sweet Potato & Black Bean Tacos

Created by: katrinaying

A vibrant and filling taco recipe featuring roasted sweet potatoes, black beans, and a tangy cilantro-lime dressing. This vegetarian taco is packed with flavor and makes for a great weeknight meal.

Ingredients

- 2 - Sweet Potato
- 1 can - Black Beans
- 8 - Corn or Flour Tortillas
- 1/2 cup - Red Onion
- 1 - Avocado

Instructions

Roast 2 medium sweet potatoes (peeled and diced) at 400°F (200°C) for 25–30 minutes, until soft and lightly browned. In a pan, cook 1 can (15 oz) of black beans with 1 teaspoon of ground cumin and 2 minced garlic cloves for 5–7 minutes, stirring occasionally. Warm 8 small tortillas in a dry skillet or microwave for about 30 seconds each. Once warm, fill each tortilla with mashed sweet potatoes, black beans, and fresh toppings like 1 sliced avocado, salsa, and 1/4 cup of fresh cilantro. Serve with lime wedges from 2 limes.

Ratings

No ratings yet.

Rate Recipe

Back to Home

Bob clicks on “Rate Recipe” button and submits his rating

Rate Recipe

Rating (1 to 5):

Comment:

[Submit Rating](#)

Bob’s rating appears on Katrina’s recipe

Sweet Potato & Black Bean Tacos

Created by: [katrinaying](#)

A vibrant and filling taco recipe featuring roasted sweet potatoes, black beans, and a tangy cilantro-lime dressing. This vegetarian taco is packed with flavor and makes for a great weeknight meal.

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Ratings

chef_bob - Rating: 5 / 5

Wonderful, so delicious! Thank you for posting this!

[Edit Rating](#) [Delete Rating](#)

[Back to Home](#)