SW Engineering CSC648/848
UMA*Me*

Section 04 | Team 03

Member	Role
Khalid Mehtab Khan	Team Lead
Dat Vo	Backend Lead
Anish Khadka	Frontend Lead
Renee Sewak	Scrum Master
Jacob Perez	GitHub Master

Server Link: http://3.14.254.41/

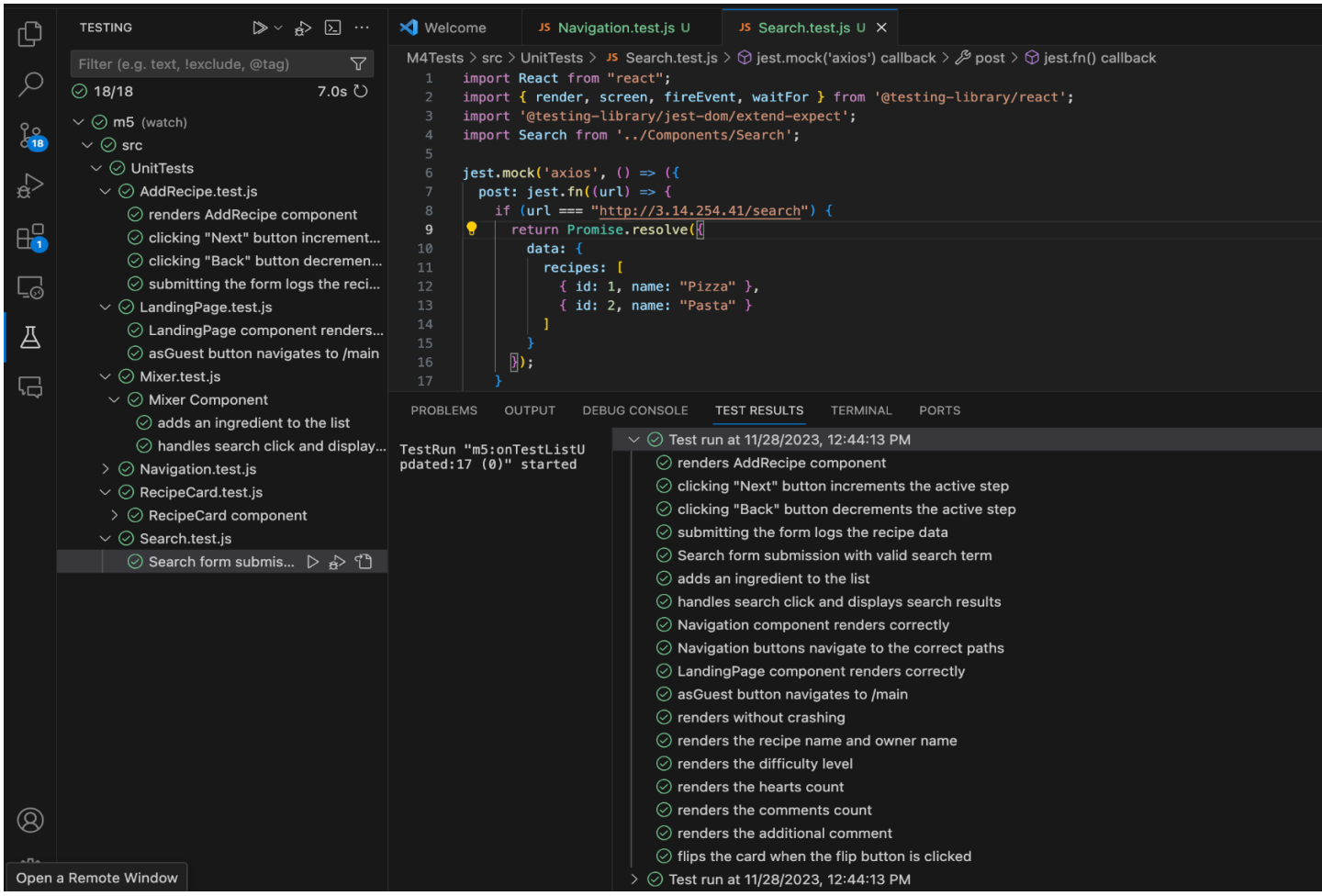
Github Repository Link:
https://github.com/CSC-648-SFSU/csc648-04-fall23-csc648-04-fall23-team03/tree/master

Directory:

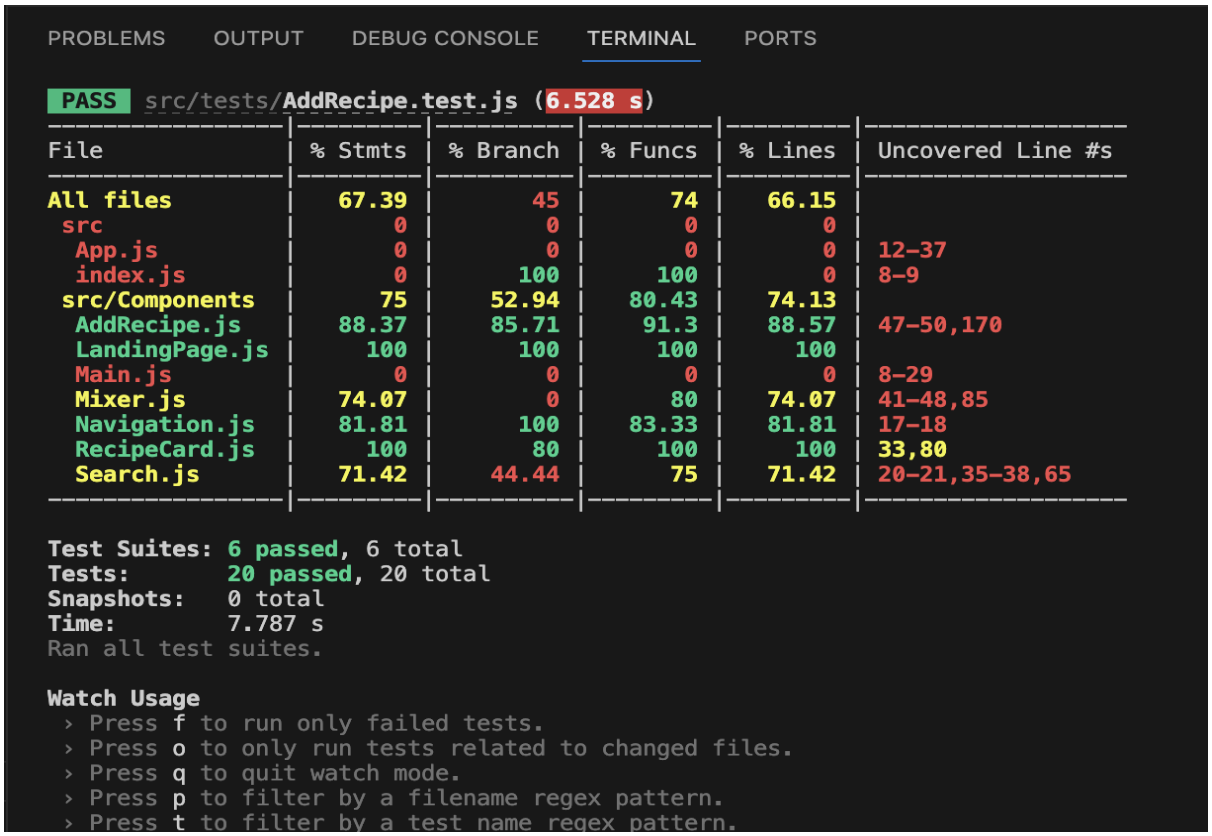
Front end Source Code:	master > M4 > UmameFrontEnd
Back end Source Code:	master > M4 > UmameBackEnd
Testing % Coverage:	master > M4 > UmameTesting
JsDoc and Style Guides:	master > M4 > JsDOC and Styles

November 29, 2023

Unit Tests:



- All unit tests passed.



All coverage of unit tests

The above ss displays the coverage of all the .js files.

The functional and statement coverage of the p1 features tests that are written are upto the requirement.

Add Recipe.js

The AddRecipe component provides a step-by-step recipe creation workflow, allowing users to input recipe details, including name, ingredients, instructions, and additional comments. The user can navigate through each step using a stepper, and The data is logged upon submission.

Functional Coverage:	• Ensures that the AddRecipe component renders successfully. • Validates that the stepper navigation functions correctly, allowing users to move forward and backward through the steps. • Verifies that submitting the form logs the correct recipe data to the console.

	● Tests the ability to dynamically add and delete ingredients during the recipe creation process. ● Tests the ability to dynamically add and delete instructions during the recipe creation process.
Statement Coverage:	● Verifies that the component structure and stepper management code are executed. ● Ensures that functions handling user input, such as handleChange and handleListChange, are executed correctly. ● Validates that the functions responsible for adding and deleting items in dynamic lists are executed without errors. ● Ensures that the renderStepContent function correctly renders content based on the active step. ● Verifies that the handleSubmit function, logging the recipe data, is executed.

RecipeCard.js:

This feature provides a visually appealing and interactive representation of a recipe card. It displays key information about the recipe, including the recipe name, owner name, image, difficulty level, hearts count, comments count, and additional comments. Users can interact with the card by flipping it to view additional details.

Functional Coverage:	● - Ensures that the RecipeCard component renders successfully. ● - Validates that the recipe card displays key information accurately. ● - Verifies that the card flips when the user clicks the flip button, toggling between the front and back views.
Statement Coverage:	● Ensures that the component structure is correct, and the state (isFlipped) is managed appropriately.

	• Validates that the flip function is executed when the user clicks the flip button. • Ensures that the content on both the front and back views is rendered based on the provided recipe data. • Verifies that click events, such as flipping the card, are handled correctly.

LandingPage.js:

The LandingPage serves as the initial interface for users accessing the application. It includes elements such as a welcome message, a name input field, a login button, and an "Continue as Guest" button. It allows users to navigate in a guest access mode without requiring user authentication. This feature aims to provide a welcoming and user-friendly entry point for both registered users and guests.

Functional Coverage:	• Ensures the "Welcome" message is correctly displayed, welcoming users to the application. • Verifies the presence and functionality of the name input field, allowing users to enter their names. • Checks the rendering of the login button, providing users with the option to log in. • Verifies the rendering and functionality of the "Continue as Guest" button, allowing users to access the application as guests.
Statement Coverage:	• confirms that clicking the "Continue as Guest" button triggers the correct navigation to the "/main" route.

	• Ensures that the code rendering the name input field is executed, making the field available for user input. • Verifies that the code rendering the login button is executed, providing users with a login option. • Checks the code handling the click event on the "asGuest" button, ensuring appropriate responses to user interactions. • Confirms that the code rendering the welcome message is executed, displaying a welcoming message to users.

Mixer.js:

This component serves as a mixer for searching recipes based on ingredients. Users can input ingredients, add them to the mixer, and then perform a search to find recipes containing those ingredients.

Functional Coverage:	• The handleAdd function is responsible for adding ingredients to the mixer list when the "Add" button is clicked. • The onSearchClick function performs a search based on the ingredients in the mixer list. • The search results are displayed using the RecipeCard component. • Users can interact with the search bar, "Add" button, and "Mix" button to add ingredients and initiate searches.
Statement Coverage:	• The first test case ('adds an ingredient to the list') covers the statement related to adding an ingredient to the mixer list.

	• The second test case (it('handles search click and displays search results', ...)) covers the statement related to triggering a search and displaying search results.

Search.js:

The Search component serves as a search interface where users can input a search term for recipes. The search is performed based on the recipe name, and the results are displayed using the RecipeCard component.

Functional Coverage:	• The onTermChange function updates the state with the current search term. • The handleSubmit function handles the form submission and triggers the search based on the entered search term. • The component uses Axios to send a POST request to a specified API endpoint (http://3.14.254.41/search). • If the search is successful and recipes are found, they are displayed using the RecipeCard component. • Appropriate alerts are shown for invalid search terms or errors during the search. • Users can interact with the search bar and the search button to input search terms and trigger searches.
Statement Coverage:	• The test case (Search form submission with valid search term) covers the statement related to form submission with a valid search term. It simulates user input in the search bar, triggers the search

	button click, and verifies that the recipes ("Pizza" and "Pasta") are displayed in the search results.

Navigation.js

The navigation bar consists of four buttons: Home, Search, Mixer, and Add. Each button corresponds to a different route within the application, and clicking on a button triggers navigation to the associated route using the useNavigate hook from 'react-router-dom'.

Functional Coverage:	• The first test (Navigation component renders correctly) checks whether the component renders correctly. It ensures that each navigation button ("Home," "Search," "Mixer," and "Add") is present in the rendered component. • The second test (Navigation buttons navigate to the correct paths) checks whether clicking on each navigation button correctly updates the URL path using the useNavigate hook from react-router-dom. It verifies that clicking on "Home" navigates to '/main,' "Search" navigates to '/search,' "Mixer" navigates to '/mixer,' and "Add" navigates to '/add.'

Statement Coverage:	• The Navigation component is a functional component that renders a set of buttons based on the provided icons and labels. • The handleChange function is responsible for updating the state (value) and triggering navigation when a button is clicked. • The component uses the useNavigate hook to update the URL path based on the selected button. • The tests ensure that each button is present in the rendered component and that clicking on each button triggers the expected navigation.

INTEGRATION TESTS

Test ID	Test Description	Prerequisite	Test Data	Test Scenario	Results	Date Tested
01	A test of the website's login functionality	- User is not already logged into the website	- username: dcv - password: password	- Navigate to validation page - Submit credentials	Expected: Site opens Actual: As expected Passed: Yes Expected: User is logged in Actual: As expected Passed: Yes	11/28/2023
02	A test of the website's signup functionality	- User is not already logged into the website - Provided email is not already in use by another account	- name: Dat Vo - username: dcv - email: dat@mail.com - password: password	- Navigate to validation page - Submit new user information	Expected: Site opens Actual: As expected Passed: Yes Expected: New account is created Actual: As expected Passed: Yes	11/28/2023
03	Non-registered users can view recipes	- User is not logged in	N/A	- Navigate to homepage	Expected: Site opens and recipes appear Actual: As expected Passed: Yes	11/28/2023

04	Registered users can create and post a recipe	- User is logged in	- name:Chicken Noodle Soup - ingredients: [{ "name": "butter", "amount": 0.5, "unit": "tbsp" }], - tags: ["warm", "winter", "soup"] - additionalComment: Add salt, pepper, more herbs and spices	- Fill form to create a new recipe - Recipe appears on homepage	Expected: Form is submitted to backend Actual: As expected Passed: Yes Expected: Newly created recipe appears first on homepage Actual: As expected Passed: Yes	11/28/2023
05	Difficulty bar appears on each recipe card	- Must be on a page that displays recipe cards	N/A	- Navigate to homepage	Expected: Recipes appear with complexity bar to indicate difficulty Actual: As expected Passed: Yes	11/28/2023

06	Any user is able to search for a recipe using a search bar.	- User can be not logged in	{
			"searchType": "name",
			"searchTerm": "Chicken Noodle Soup"
			}
				- Search function	Expected: Form is submitted to back end, returns Chicken Noodle Soup
					
					Actual: As expected
					
					Passed: Yes
						11/28/2023

07	Any user is able to filter for recipes using recipe tags for example: ingredients, dishes, food type etc.	- User can be not logged in	{
			"searchType": "tag",
			"searchTerm": "filipino"
			}
				- Search function with specific requirements	Expected: Form is submitted to back end, returns Pork Menudo
					
					Actual: As expected
					
					Passed: Yes
						11/28/2023

08	Any user is able to search for another user	- User can be not logged in	{
			"searchType": "user",
			"searchTerm": "Jacob Perez"
			}
				- Search function with specific requirements	Expected: Form is submitted to back end, returns Jacob Perez user
					
					Actual: As expected
					
					Passed: Yes
						11/28/2023

09	All users can input a list of	- Must have list of ingredients	{ "ingredients":	- Mixer search	Expected: Form is submitted to back	11/28/2023

	ingredients they have on hand, and the app will point to recipes they can cook with just those ingredients.		["Chicken", "Ginger", "Water", "Taro Root"] }		end, returns Actual: Returns multiple recipes, some of which don't even have the ingredients Passed: Yes?	

10	Registered users can leave comments on recipes.	- User is logged in	{
			"commentOwner": "653e9a1fba8bd6face7a8568",
			"commentContent": "I hoped you like it.",
			"recipeID": "653e9dd6ba8bd6face7a8590"
			}
				- Leave comment on recipe	Expected: Form is submitted to back end, returns success message
					
					Actual: As expected
					
					Passed: Yes
						11/29/2023

11	Registered users can leave hearts on recipes and comments.	- User is logged in	{
			"recipeID": "653e9dd6ba8bd6face7a8590"
			}
				- User likes comment or recipe	Expected: Form is submitted to back end, returns success message
					
					Actual: As expected
					
					Passed: Yes
						11/29/2023

2.) Coding Practices

Coding Style

Google JavaScript Style Guide

The JavaScript Style Guide provides a set of best practices and conventions for Writing JavaScript code. It includes formatting, naming conventions, comments, Programming practices and more.

Enforcement

Tool: ESLint with Google Style Plugin

Npm provides easy installation and personalized setup for ESLint

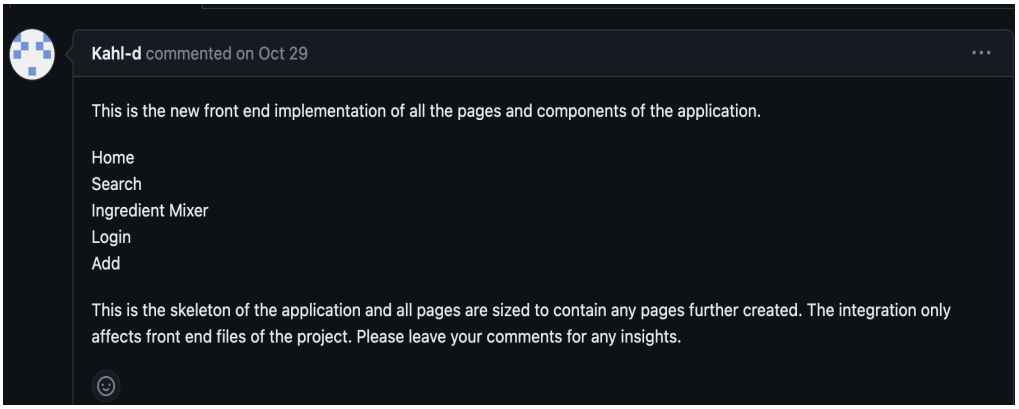
```
khalidkhan@Khalids-MBP M4 % npx eslint --init

You can also run this command directly using 'npm init @eslint/config'.
? How would you like to use ESLint? …
  To check syntax only
  To check syntax and find problems
❯ To check syntax, find problems, and enforce code style
```

```
✔ Where does your code run? · browser
✔ How would you like to define a style for your project? · guide
? Which style guide do you want to follow? …
  Airbnb: https://github.com/airbnb/javascript
  Standard: https://github.com/standard/standard
❯ Google: https://github.com/google/eslint-config-google
  XO: https://github.com/xojs/eslint-config-xo
```

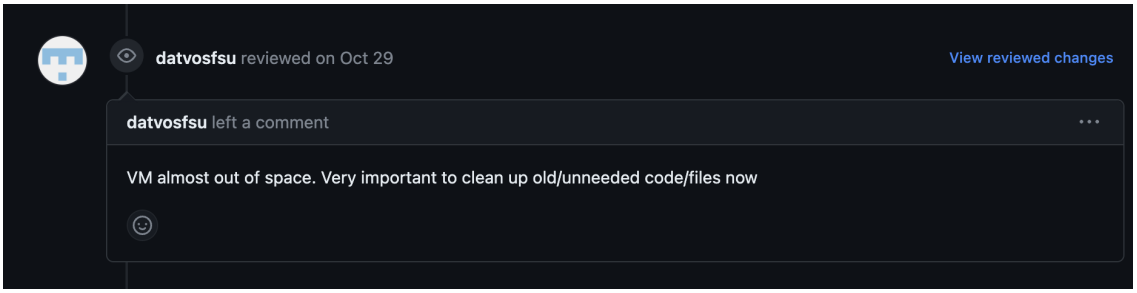
Comments & Documentation (Github Comments)

For best practices, our team utilizes the comments feature on Github to communicate any new



updates/changes/recommendations regarding

UMAMe. It allows the backend and frontend to communicate in a centralized location. It also keeps us on track in terms of progress since the comments and repo are located adjacent to one another.



Naming Conventions

By using CamelCase, a style of code that creates meaningful and descriptive names for our variables, classes, and functions, we are able to keep a more clean and concise project. By making sure our code is as concise as can be, it allows for a better flow through our code

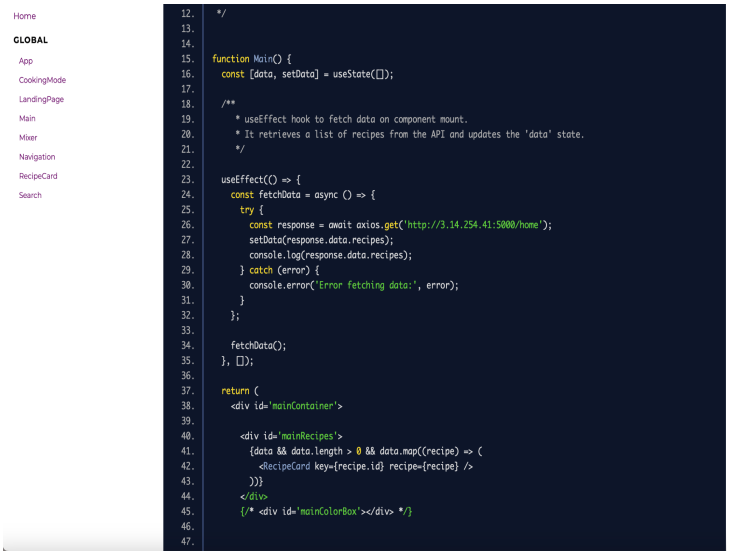
By following a proper hierarchy, we can be stay organized & create an understandable flow

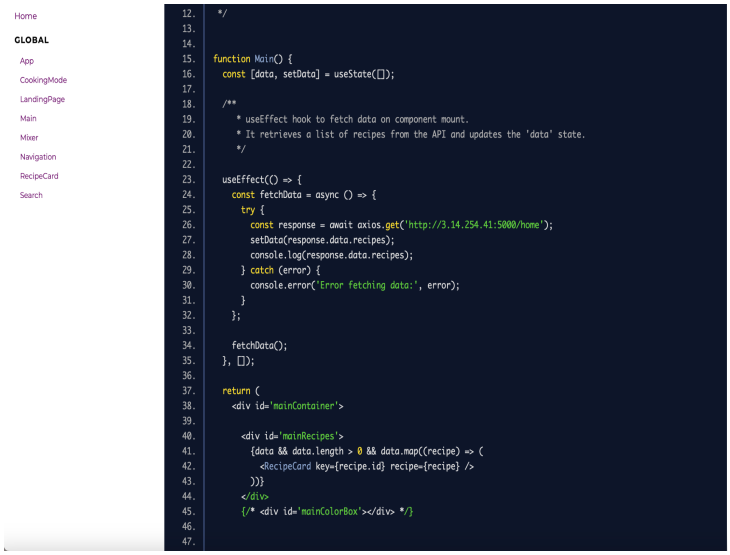
```
|-- src
   |-- Components
   |   |-- AddRecipe.js
   |   |-- RecipeCard.js
   |   |-- LandingPage.js
   |   |-- Mixer.js
   |   |-- Search.js
   |   |-- Navigation.js
   |-- tests
      |-- AddRecipe.test.js
      |-- RecipeCard.test.js
      |-- LandingPage.test.js
      |-- Mixer.test.js
      |-- Search.test.js
      |-- Navigation.test.js
   |-- App.js
   |-- index.js
```

Demonstration of Coding Style in Source Files

Main Component (Main.js)	Purpose: Renders the main page of the

	application Proper use of naming conventions, function structure, and modular design as per the Google Style Guide
Search Component (Search,js)	Purpose: Handles the search functionality Code readability, use of comments, and error handling following the style guide
Navigation Component (Navigation.js)	Purpose: Provides navigation between different parts of the app Consistent formatting, clean code structure, and effective use of React hooks.
Recipe Card Component (RecipeCard.js)	Purpose: Displays individuals recipes in card format Adherence to object and array formatting guidelines, as well as modular and reusable code structure
Cooking Mode Component (CookingMode.js)	Purpose: Offers a detailed view for cooking instructions Demonstrates the style guide's best practices in organizing long JSX and JavaScript code effectively





jsDoc (Main.js)
(Proper naming conventions & error handling)

jsDoc (RecipCard.js)
(Proper commenting)

```
|-- src
    |-- Components
    |   |-- AddRecipe.js
    |   |-- RecipeCard.js
    |   |-- LandingPage.js
    |   |-- Mixer.js
    |   |-- Search.js
    |   |-- Navigation.js
    |-- tests
        |-- AddRecipe.test.js
        |-- RecipeCard.test.js
        |-- LandingPage.test.js
        |-- Mixer.test.js
        |-- Search.test.js
        |-- Navigation.test.js
    |-- App.js
    |-- index.js
```