Recipe Search Component Documentation

Overview:

The Recipe Search Component is a React functional component that enables users to search for recipes by name and view their details. It provides real-time search suggestions and displays selected recipe details.

Features:

- Real-time Search Suggestions: Fetches matching recipes dynamically as users type.
- **Debounce Effect:** Reduces API calls by delaying the search execution.
- Recipe Details Display: Shows recipe name, image, ingredients, and instructions upon selection.

Requirements:

- React
- JavaScript
- CSS
- JSON

Dependencies:

- react: Uses the React library for component building.
- useState: Manages state variables for search input, suggestions, and selected recipe.
- **useEffect**: Handles side effects, such as fetching recipes with a debounce effect.

Functional Breakdown:

Recipe Data Handling -

• The component fetches an array of recipe objects from an API via the fetchRecipes function.

 Recipes include attributes such as id, name, image, ingredients, and instructions.

Search Functionality -

- Users enter a search query in an input field.
- If a query is provided, an API call is made after 500ms to fetch matching recipes.
- If no results are found, a message is displayed.

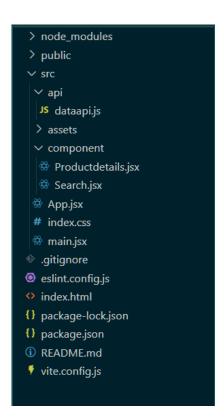
Manual Selection -

- Users can click on a recipe suggestion to select it.
- The selected recipe's details are displayed below the search input.
- Clicking a recipe clears the search input and hides suggestions.

Event Handlers:

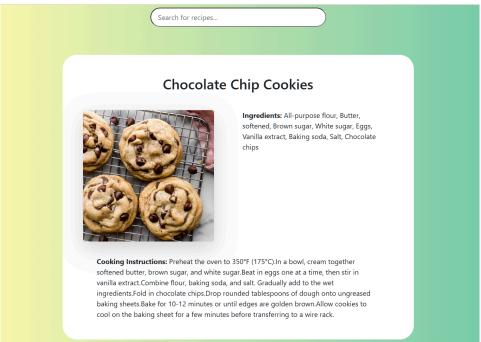
 handleSuggestionClick(recipe): Handles the selection of a recipe from the search suggestions.

Project Structure:



Output:





Conclusion:

The Recipe Search Component enhances user experience by providing an easy-to-use interface for finding and displaying recipes. It is modular and can be extended with additional features such as favorites, filters, and enhanced UI styling.