Frontend Development with React.js Project Documentation format.

CookBook: Your Virtual Kitchen Assistant

1. Introduction

Project Title: Cookbook: Your Virtual Kitchen Assistant

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2. Project Overview

Purpose:

The Cookbook application is designed to simplify meal preparation by offering a virtual kitchen assistant.

Users can browse, save, and manage their favourite recipes with detailed instructions and ingredient lists.

Features:

- Extensive Recipe Library with Search & Filter Options
- Step-by-Step Cooking Instructions
- Bookmark Feature for Favourite Recipes
- Light/Dark Mode for Enhanced Visual Comfort
- Responsive Design for Optimal Viewing on All Devices

- Ingredient Checklist for Easy Shopping and Preparation

3. Architecture

Component Structure:

App.js — Root component managing layout and routes

Header.js — Navigation bar with search functionality

RecipeList.js — Displays categorized recipe cards

RecipeCard.js — Individual card displaying recipe details

RecipeDetails.js — Detailed view of selected recipe

Footer.js — Provides additional resources and links

State Management: Context API

Routing: React Router

4. Setup Instructions

Prerequisites:

- Node.js (v18 or higher)
- npm or yarn

Installation:

- 1. Clone the Repository: https://github.com/sugapriya120/cook-book.git
- 2. Install Dependencies: `npm install`
- 3. Create .env file:

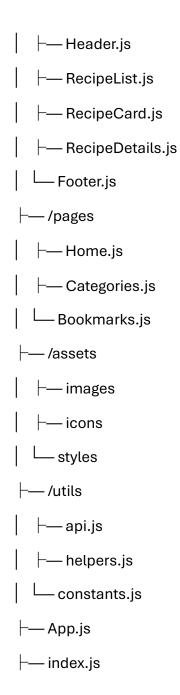
`REACT_APP_RECIPE_API_KEY=your_api_key_here`

4. Run the Application: `npm start`

5. Folder Structure

/src

---/components



Running the Application

Frontend Server Command: `npm start`

7. Component Documentation

Key Components:

Header: Provides navigation and search functionality

RecipeList: Displays available recipes categorized by type

RecipeCard: Displays individual recipe details

RecipeDetails: Offers step-by-step instructions

Reusable Components:

Button Component: Used for actions like 'View Recipe' or 'Bookmark'

Modal Component: Displays detailed recipe information

8. State Management

Global State: Managed via Context API

Local State: Managed using React's `useState()`

9. User Interface

- Clean and intuitive layout optimized for smooth navigation

- Mobile-first design for seamless browsing

- Elegant Light/Dark mode toggle for improved accessibility

10. Styling

CSS Frameworks/Libraries: Tailwind CSS

Theming: Integrated light/dark mode

11. Testing

Testing Strategy:

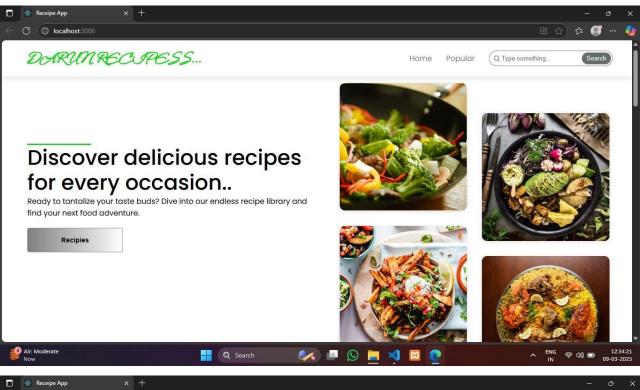
Jest for unit testing

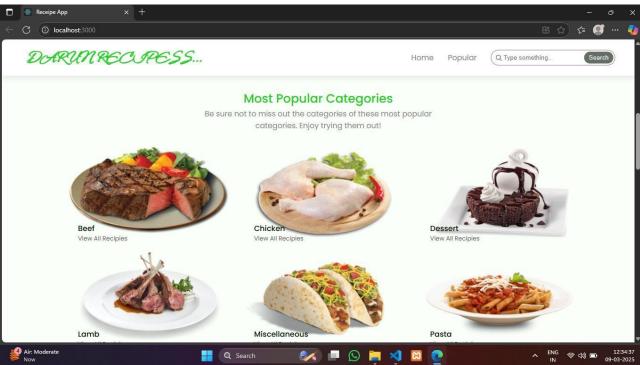
React Testing Library for component testing

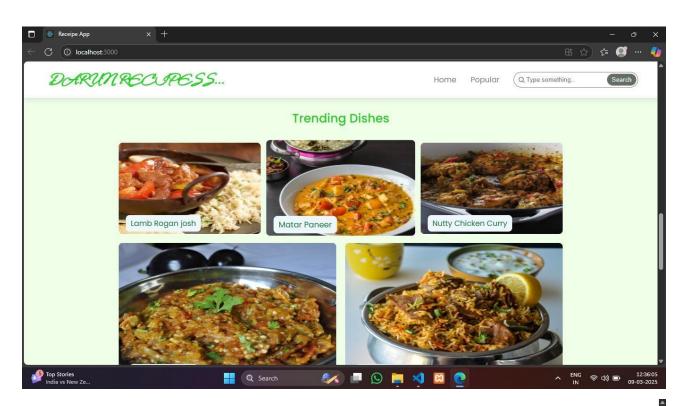
Code Coverage: Ensured high test coverage with Jest reports

12. Screenshots or Demo

Screenshots:











Q Type something...

Brown Stew Chicken

Jamaican Chicken

Procedure

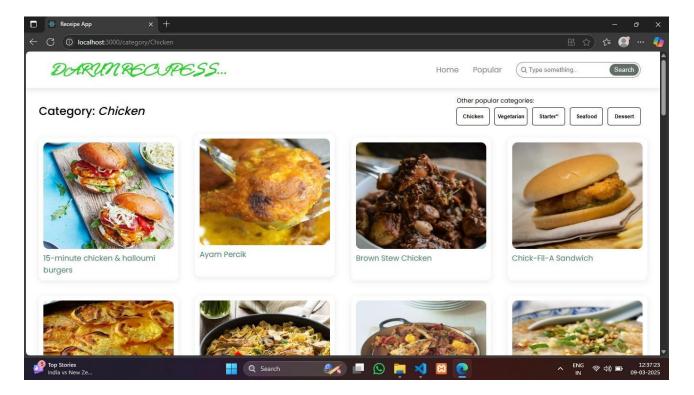
Squeeze lime over chicken and rub well. Drain off excess lime juice. Combine tomato, scallion, onion, garlic, pepper, thyme, pimento and soy sauce in a large bowl with the chicken pieces. Cover and marinate at least one hour. Heat oil in a dutch pot or large saucepan. Shake off the seasonings as you remove each piece of chicken from the marinade. Reserve the marinade for sauce. Lightly brown the chicken a few pieces at a time in very hot oil. Place browned chicken pieces on a plate to rest while you brown the remaining pieces. Drain off excess oil and return the chicken to the pan. Pour the marinade over the chicken and add the carrots. Stir and cook over medium heat for 10 minutes. Mix flour and coconut milk and add to stew, stirring constantly. Turn heat down to minimum and cook another 20 minutes or until tender.

Video Tutorial



Ingredients

1 - Chicken	1 whole
2 - Tomato	1 chopped
3 - Onions	2 chopped
4 - Garlic Clove	2 chopped
5 - Red Pepper	1 chopped
6 - Carrots	1 chopped
7 - Lime	1
8 - Thyme	2 tsp
9 - Allspice	1 tsp
10 - Soy Sauce	2 tbs
11 - Cornstarch	2 tsp
12 - Coconut Milk	2 cups
13 - Vegetable Oil	1 tbs



Live Demo Link:

13. Known Issues

- Certain API endpoints may experience delays during peak traffic
- Ingredient checklist feature may require further optimization

14. Future

Enhancements

- Al-Based Recipe Suggestions
- User Authentication for personalized recipe collections
- Integration with Grocery Shopping Platforms
- Offline Mode for accessing saved recipes