

Project Documentation

Introduction

Project Title: Cookbook: Your Virtual Kitchen Assistant

Team Members:

- J. Venmathi – Frontend Developer (React)
- A. Al Hilmiya – UI/UX Designer
- N. Deenul Nisha – Backend Developer (API Integration)
- R. Dharshini – Project Manager
- S. Femina Jasmine – Documentation and Research

Project Overview

Purpose:

Cookbook is a virtual kitchen assistant designed to help users manage recipes, discover new dishes, and organize cooking activities. The goal is to provide an intuitive, user-friendly frontend where users can search, save, and customize recipes with ease.

Features:

- Recipe search with filtering (ingredients, cuisine, difficulty level).
- Personalized recipe suggestions.
- Save favorite recipes to a virtual cookbook.
- Step-by-step cooking instructions with timers.
- Ingredient checklist for shopping and preparation.
- Responsive design for mobile and desktop.

Architecture

Component Structure:

- App.js – Main entry point, sets up routing and context providers.
- Navbar – Navigation bar for switching between pages.

- RecipeList – Displays recipe cards with image, title, and short description.
- RecipeDetails – Shows detailed steps, ingredients, and nutrition.
- SearchBar – Filters recipes based on keywords and categories.
- Favorites – Displays saved recipes.
- ShoppingList – Helps organize required ingredients.
- Footer – Common site footer with links.

State Management:

- Context API used for global state (favorites, user preferences, shopping list).
- Local state within components for UI-level handling (form input, filters).

Routing:

Implemented with React Router:

- `/`` Home (featured recipes)
- `/recipes`` Recipe listing
- `/recipes/:id`` Recipe details
- `/favorites`` Saved recipes
- `/shopping-list`` Ingredient checklist

Setup Instructions

Prerequisites:

- Node.js (≥ 16)
- npm or yarn
- Git

Installation:

1. Clone the repository: `git clone https://github.com/your-username/cookbook-`

frontend.git

2. Navigate to project: `cd cookbook-frontend`
3. Install dependencies: `npm install`
4. Start the development server: `npm start`

Folder Structure

Client (React Application):

/src

 /components

 Navbar.js

 Footer.js

 RecipeCard.js

 SearchBar.js

 /pages

 Home.js

 Recipes.js

 RecipeDetails.js

 Favorites.js

 ShoppingList.js

 /assets

 /images

 /icons

 /context

GlobalState.js

/utils

api.js

formatDate.js

index.js

App.js

Utilities:

- api.js Handles API requests (fetching recipes).
- formatDate.js Helper for date/time formatting.
- Custom hooks (useFavorites, useShoppingList) for managing specific states.

Running the Application

To run the frontend locally:

npm start

This starts the development server on <http://localhost:3000>

Component Documentation

Key Components:

- RecipeCard: Displays recipe thumbnail, title, and short info. (Props: recipe object)
- RecipeDetails: Shows detailed recipe with steps, nutrition facts. (Props: recipeId)
- SearchBar: Filters recipes by keyword, category, or difficulty. (Props: onSearch)

Reusable Components:

- Button: Custom styled button component.

- Modal: For displaying popups (e.g., recipe instructions).

State Management

Global State (via Context API):

- favorites: Stores user's saved recipes.
- shoppingList: Holds selected ingredients for grocery use.
- userPreferences: Tracks cuisine/diet filters.

Local State (useState):

- Input handling in search fields.
- Modal toggles for recipe instructions.

User Interface

Pages include:

- Home Page Featured recipes with hero banner.
- Recipes Page Grid of recipes with filters.
- Recipe Details Page Step-by-step cooking guide with timers.
- Favorites Page Saved recipe collection.
- Shopping List Interactive checklist for ingredients.

Styling

CSS Frameworks/Libraries:

- Tailwind CSS for utility-first styling.
- Styled-Components for dynamic styles.

Theming:

- Light and Dark mode toggle.

- Custom color palette for brand consistency.

Testing

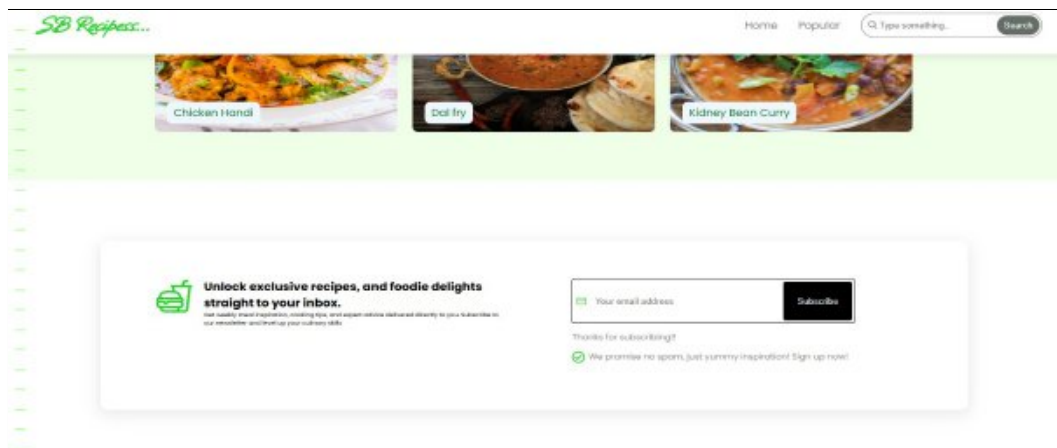
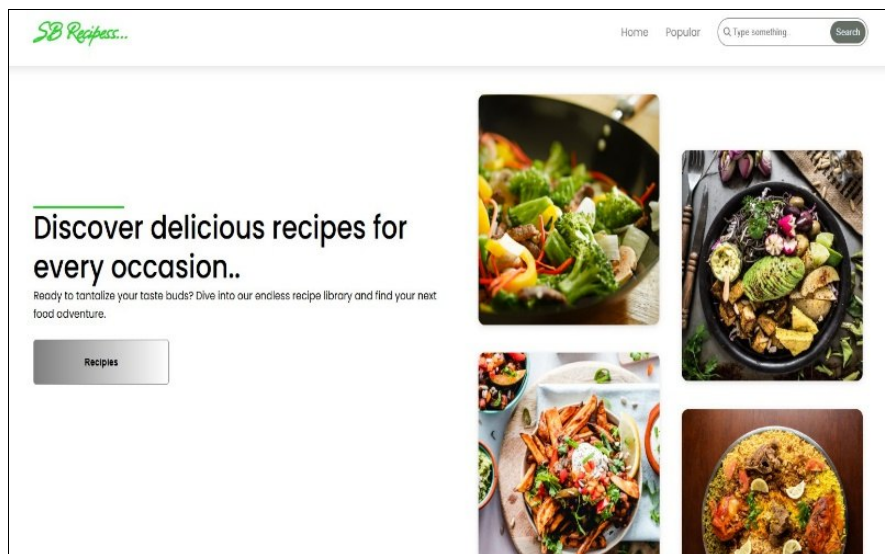
Testing Strategy:

- Unit Testing with Jest.
- Component testing with React Testing Library.
- End-to-End Testing with Cypress.

Code Coverage:

- Configured via Jest for minimum 80% coverage.

Screenshots or Demo



Most Popular Categories

Be sure not to miss out the categories of these most popular categories. Enjoy trying them out!



Beef

[View All Recipes](#)



Chicken

[View All Recipes](#)



Dessert

[View All Recipes](#)



Lamb

[View All Recipes](#)



Miscellaneous

[View All Recipes](#)



Pasta

[View All Recipes](#)

Category: Chicken

Other popular categories:

[Chicken](#)

[Vegetarian](#)

[Starter](#)

[Snack](#)

[Dessert](#)



15-minute chicken & halloumi burgers



Ayam Perik



Brown Stew Chicken



Chick-Fil-A Sandwich



Category: *Seafood*

Other popular categories:

Chapters

vegetarian

Starter™

See Also

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Baked salmon with fennel & tomatoes



Cajun spiced fish tacos



Escovitch Fish



Fish tales



As possible. Leave the puree to cool and discard the seeds. You should end up with around 325ml/11fl oz of puree. Put the cream and yoghurt in a large bowl and whip with an electric whisk until soft peaks form when the whisk is removed from the bowl – the acidity of the fruit will thicken the cream further, so don't take it too far. When the puree is completely cold, adjust the sweetness to taste by adding more sugar if needed. Pour it into the bowl with the whipped cream and yoghurt and stir just once or twice until very lightly combined. Spoon the blackberry foam into individual wide, glass dishes – or one large, single bowl. It should look quite marbled, so don't over-stir it. Scatter a few tiny mint leaves on top and decorate with the reserved blackberries. Sprinkle with a little sugar if you like and serve with the hazelnut biscuits.

Video Tutorial



| | |
|-------------------|--------------|
| I1 - Double Cream | 300ml |
| I2 - Yogurt | 100ml |
| I3 - Mint | Garnish with |



Blackberry Fool

Golden

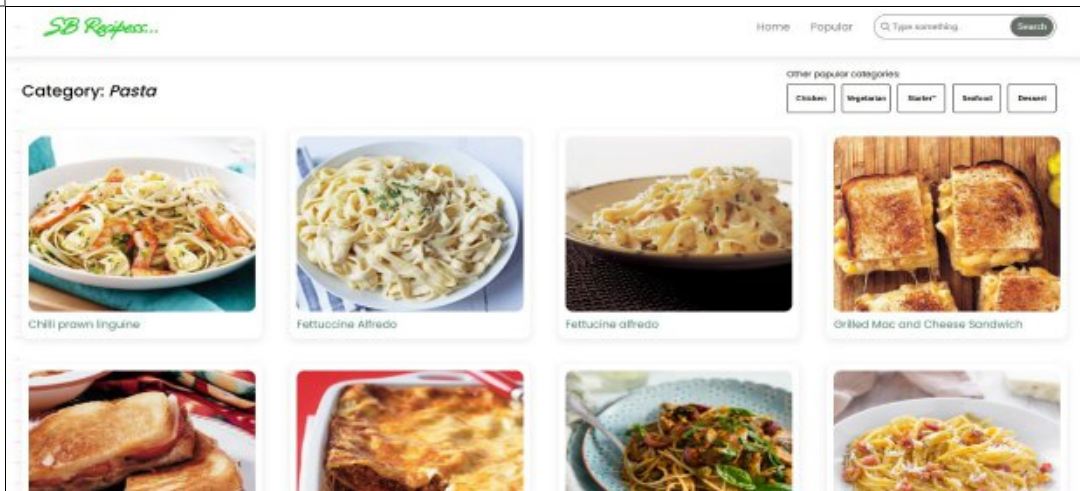
Das Konzept

Procedure

For the biscuits, preheat the oven to 200C/390F (fan)/400C and line two large baking trays with baking parchment. Scatter the nuts over a baking tray and roast in the oven for 6–8 minutes, or until golden-brown. Watch them carefully so that they don't have a chance to burn. Remove from the oven, tip onto a board and leave to cool. Put the butter and sugar in a large bowl and beat with a wooden spoon until light and creamy. Roughly chop the cooled nuts and add to the creamed butter and sugar, along with the lemon zest, flour and baking powder. Stir well until the mixture comes together and forms a ball – you may need to use your hands. Divide the biscuit dough into 24 even pieces and roll into small balls. Place the balls the prepared baking trays, spaced well apart to allow for spreading. Press the biscuits to flatten to around 1cm (3/8 inch) thick. Bake the biscuits, one tray at a time, for 12 minutes or until very pale.

Ingredients

| | |
|-------------------|---------|
| 1 - Hazelnuts | 50g |
| 2 - Butter | 125g |
| 3 - Caster Sugar | 150g |
| 4 - Lemon | Grated |
| 5 - Plain Flour | 150g |
| 6 - Baking Powder | 1/2 tsp |
| 7 - Blackberries | 900g |



Known Issue

- API response delay may affect recipe loading.
- Dark mode not fully optimized for some pages.
- No offline support yet.

Future Enhancements

- Voice-enabled cooking assistant.
- AI-based meal planner.
- Social sharing of recipes.
- Offline recipe access with PWA support.
- Integration with smart kitchen devices.