

Frontend Development with React.js – Project Documentation

1. Introduction

Project Title:

Cook Book – Your Virtual Kitchen Assistant.

Team Members:

Akshya D – Frontend Developer

Dharsha R – UI/UX Designer

Padma Priya S – State Management & Integration

Enija Srri P S – Testing & Deployment

2. Project Overview

Purpose:

The project aims to provide a virtual kitchen assistant that helps users explore, save, and manage recipes with ease. It focuses on delivering an intuitive UI, responsive design, and a seamless cooking experience.

Features:

Recipe browsing with categories & filters

Search functionality with live suggestions

User authentication (login/signup with validation)

Recipe saving and favorites list

Responsive UI for mobile and desktop

3. Architecture

Component Structure:

Node.js – Root component with routing

Header, Footer, Navbar – Layout components

RecipeList, RecipeDetail – Feature components

Auth – Login/Signup forms Favorites – User's saved recipes

State Management:

Global state handled using Context API (AuthContext, RecipeContext)

Local state managed using useState & useReducer

Routing (react-router-dom):

/ → Home

/recipes → Recipe list

/recipe/:id → Recipe details

/login → Login/Signup
/favorites → User's saved recipes

4. Setup Instructions

Prerequisites:

Node.js (v16 or later)
npm or yarn

Installation:

git clone https://github.com/your-repo/cook-book.git
cd cook-book/client
npm install
Environment Variables (.env):

REACT_APP_API_URL=http://localhost:5000/api
REACT_APP_AUTH_KEY=your-secret-key

5. Folder Structure

client/
public/
src/
assets/ # Images, icons, styles
components/ # Reusable UI components
pages/ # Page-level components
context/ # Context API files
hooks/ # Custom hooks
utils/ # Helper functions
Node.js
index.js
package.json

Utilities:

api.js – API call handler
useAuth.js – Custom hook for authentication
useFetch.js – Data fetching hook

6. Running the Application

Frontend (React):

cd client
npm start

7. Component Documentation

Key Components:

RecipeCard – Displays recipe preview (Props: title, image, time)

RecipeDetail – Shows recipe details (Props: id)

AuthForm – Handles login & signup

Reusable Components:

Button – Configurable button with variant prop.

Input – Reusable input with validation

8. State Management

Global State:

Managed with Context API (AuthContext, RecipeContext)

Local State:

useState for modal/toggle state

useReducer for complex form handling

9. User Interface

Screenshots Placeholder:

Home Page

Recipe Detail Page

Login/Signup

Favorites Page

10. Styling

CSS Frameworks/Libraries:

Tailwind CSS – Utility-first styling

Styled Components – Dynamic styles

Theming:

Light/Dark mode toggle (via Context)

11. Testing

Testing Strategy:

Unit Testing – Jest + React Testing Library

Snapshot Testing – Components UI

End-to-End Testing – Cypress

Code Coverage:

Configured with Jest coverage reports

12. Screenshots or Demo

Live Demo (Netlify/Vercel): <https://cook-book-demo.netlify.app>

(Insert screenshots of Home, Recipe Details, and Favorites here)

1. HOME





SB Recipes...

Home Popular Q Type something... Search

Discover delicious recipes for every occasion..

Ready to tantalize your taste buds? Dive into our endless recipe library and find your next food adventure.

Recipes



2. RECIPE DETAILS

SB Recipes...

Home Popular Q Type something... Search

Carrot Cake

British


Dessert

Procedure

For the carrot cake, preheat the oven to 160C/325F/Gas 3. Grease and line a 26cm/10in springform cake tin. Mix all of the ingredients for the carrot cake, except the carrots and walnuts, together in a bowl until well combined. Stir in the carrots and walnuts. Spoon the mixture into the cake tin and bake for 1 hour 15 minutes, or until a skewer inserted into the middle comes out clean. Remove the cake from the oven and set aside to cool for 10 minutes, then carefully remove the cake from the tin and set aside to cool completely on a cooling rack. Meanwhile, for the icing, beat the cream cheese, caster sugar and butter together in a bowl until fluffy. Spread the icing over the top of the cake with a palette knife.

Video Tutorial

Carrot Cake Recipe - Chef Tips



Chef Tips

Watch on YouTube

Ingredients

1 - Vegetable Oil450ml

2 - Plain Flour400g

3 - Bicarbonate Of Soda2 tsp

4 - Sugar550ml

5 - Eggs5

6 - Salt1/2 tsp

7 - Cinnamon2 tsp

8 - Carrots500g grated

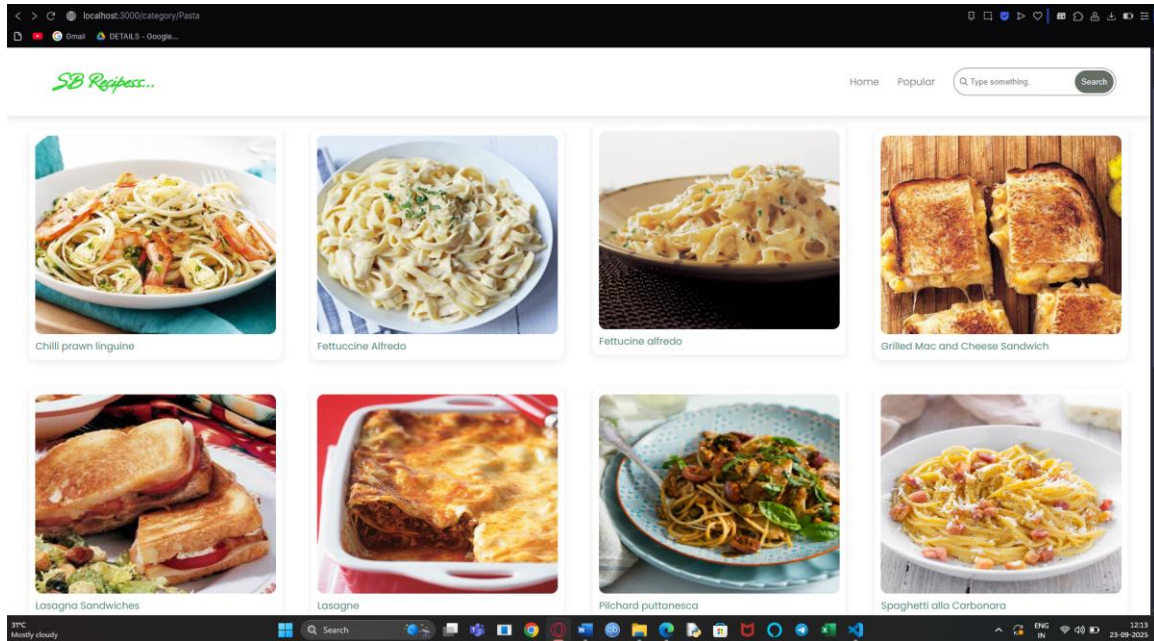
9 - Walnuts150g

10 - Cream Cheese200g

11 - Caster Sugar150g

12 - Butter100g

3. FAVORITES



13. Known Issues:

- Recipe API occasionally returns incomplete data
- Favorites list does not persist after refresh (without backend integration)

14. Future Enhancements

- Voice-based recipe assistant
- Meal planner & shopping list integration
- Push notifications for saved recipes
- Advanced filtering (calories, cuisine, etc.)