#### 1. INTRODUCTION

In this collection, you will find dishes that cater to different dietary preferences and restrictions—vegan, gluten-free, low-carb, and more. Each recipe has been carefully crafted with clear instructions, tips for enhancing flavor, and suggestions for meal prep. We've also included a variety of cuisecipe. Whether you're cooking for your family, hosting friends, or preparing a quiet meal for yourself, this cookbook is designed to make your cooking experience enjoyable and rewarding

#### PROJECT TITLE

#### COOKBOOK - YOUR VIRTUAL KITCHEN ASSISTANT

#### **TEAM ID**

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## 2. PROJECT OVERVIEW

#### • Purpose:

CookBook is an AI-powered virtual kitchen assistant designed to help users explore, organize, and manage recipes. It provides personalized suggestions, generates shopping lists, and assists with meal planning, making cooking simple and enjoyable.

#### Features:

- o Recipe search by ingredients, cuisine, or dietary preference
- o AI-powered recipe recommendations
- Step-by-step cooking assistant with timers
- Shopping list generator
- Save and categorize favorite recipes
- o User accounts for personalization

## 3. ARCHITECTURE

#### • Component Structure:

- o Navbar & Sidebar navigation and quick access
- o Recipe Explorer displays recipes based on search/filter
- Recipe Details detailed cooking instructions

- o Shopping List auto-generated from recipes
- Profile & Favorites user preferences and saved recipes
- State Management:
  - Global: Context API (or Redux) for managing authentication, recipe data, shopping list
  - Local: useState for UI interactions (modals, toggles)
- Routing (React Router):
  - $\circ$  /  $\rightarrow$  Home
  - o /recipes → Recipe Explorer
  - $\circ$  /recipe/:id  $\rightarrow$  Recipe Details
  - $\circ$  /shopping-list  $\rightarrow$  Shopping List
  - $\circ$  /profile  $\rightarrow$  User Profile

## 4. SETUP INSTRUCTIONS

- Prerequisites:
- o Node.js (LTS version)
- o npm or yarn package manager
- o Git
- VS Code
- Installation:
- 1. Download Node.js and install based on OS (Windows .msi or macOS .pkg).
- 2. After installation, open Windows PowerShell (Admin)  $\rightarrow$  run:

cpp

set-executionPolicy unrestricted

3. Install dependencies:

nginx

npm install

4. Run development server:

Sql

npm start

5. App will run on: <a href="http://localhost:3000">http://localhost:3000</a>

CookBook\_ Your Virtual Kitchen ...

5. FOLDER STRUCTURE

# 

## 6. RUNNING THE APPLICATION

• Frontend:

sql

npm start

### 7. COMPONENT DOCUMENTATION

- Key Components:
  - o RecipeCard Displays recipe summary
  - RecipeDetails Shows cooking steps
  - ShoppingList Generates list from selected recipes
  - **o** UserProfile Stores user preferences
- Reusable Components:
  - o Buttons, Modals, SearchBar, Filters

## 8. USER INTERFACE

- Responsive design with recipe cards, search filters, and step-by-step guides
- Screens:
  - o Login
  - Explore recipes
  - Recipe details

Shopping list

(Screenshots can be added here as placeholders)

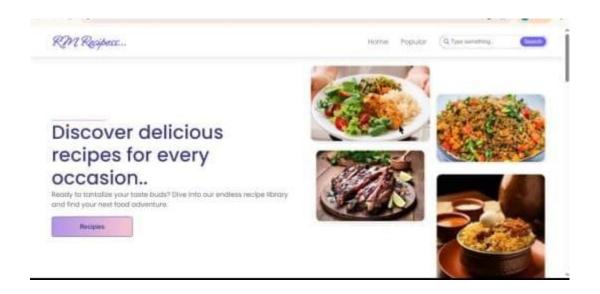
## 9. STYLING

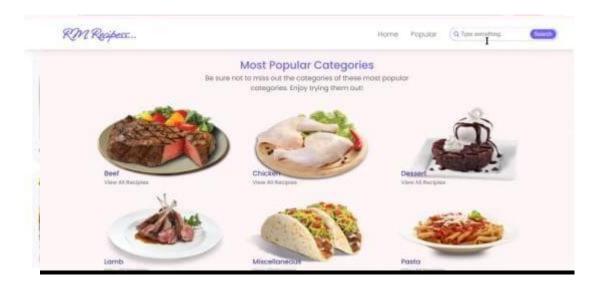
- Frameworks: Tailwind CSS, Styled Components
- Theming: Light/Dark mode toggle

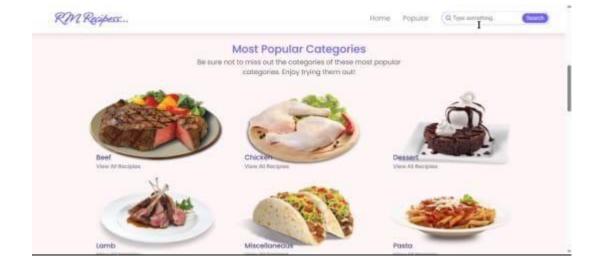
## 10. TESTING

- Testing Strategy:
  - $\circ$  Unit testing  $\rightarrow$  Jest
  - **○** Component testing → React Testing Library
  - $\circ$  End-to-end  $\rightarrow$  Cypress
- Code Coverage: Ensure 80%+ coverage on critical components

## 11. SCREENSHOTS OR DEMO







## 12.SAMPLE RECIPES

## **SPEGHATTI**



## **INGREDIENTS**

- Spaghetti 200 grams
- Tomatoes 3 or 4, finely chopped
- Onion 1 small, finely chopped
- Garlic 2 cloves, minced
- Olive oil 2 tablespoons
- Fresh basil leaves 5 or 6
- Oregano ½ teaspoon (optional)
- Salt as needed
- Black pepper as needed
- Water as needed

## **PROCEDURE**

- Boil the Spaghetti
- In a large pot, bring plenty of water to a boil.
- Add a pinch of salt to the water.

- Put the spaghetti in and cook it for about 8–10 minutes, or until soft but not mushy (al dente texture).
- Once cooked, drain the water and drizzle a little olive oil on the spaghetti to prevent it from sticking together.
- Prepare the Tomato Sauce
- Heat 2 tablespoons of olive oil in a pan over medium heat.
- Add the minced garlic and chopped onion. Sauté until the onion becomes soft and slightly golden.
- Add the chopped tomatoes to the pan. Stir well.
- Add salt, black pepper, and oregano (if using). Mix everything together.
- Let the mixture simmer on low heat for 10–15 minutes until the tomatoes break down and the sauce becomes thick.
- If the sauce becomes too thick, you can add a little water to adjust the consistency.
- Mix Spaghetti with Sauce
- Add the cooked spaghetti to the sauce in the pan.
- Toss everything together so the spaghetti is well coated with the sauce.
- Cook on medium heat for another 2–3 minutes to let the flavors blend.
- Garnish and Serve
- Turn off the heat and add fresh basil leaves.
- Stir gently.
- Serve hot. You can sprinkle extra black pepper or add grated cheese if you like

## LASAGNA



**INGREDIENTS** 

- Lasagna sheets 9 to 12
- Ground beef or chicken 300 g (optional for non-vegetarian version)
- Tomato sauce 2 cups
- Onion 1, chopped
- Garlic 2 cloves, minced
- Olive oil 2 tbsp
- Ricotta or cottage cheese 1 cup
- Mozzarella cheese 1 cup, grated
- Parmesan cheese ½ cup, grated
- Salt as needed
- Black pepper as needed
- Italian herbs (basil, oregano) 1 tsp
- Spinach or vegetables (optional) 1 cup, chopped

#### **PROCEDURE**

- Prepare the sauce
  - o Heat olive oil in a pan. Sauté garlic and onion until soft.
  - o Add ground meat (if using), cook until browned.
  - o Add tomato sauce, salt, pepper, and herbs. Simmer for 10-15 minutes
- Boil the lasagna sheets
  - o Cook the lasagna sheets in boiling salted water until soft. Drain and set aside.
- Prepare the cheese mixture
  - o In a bowl, mix ricotta (or cottage cheese), spinach (optional), salt, and pepper.
- Assemble the lasagna
  - o In a baking dish, spread a layer of sauce.
  - o Add a layer of lasagna sheets.
  - o Spread the cheese mixture over the sheets.
  - o Sprinkle mozzarella and parmesan cheese.
  - Repeat the layers until all ingredients are used, ending with sauce and cheese on top.
  - Bake
  - o Preheat the oven to 180°C (350°F).
  - O Cover with foil and bake for 30 minutes.
  - Remove the foil and bake for another 10–15 minutes until cheese is golden
  - o Serve
  - Let it cool for 10 minutes before cutting and serving.

**RAVIOLI** 



## **INGREDIENTS**

- Ravioli sheets or fresh pasta sheets 12
- Ricotta cheese 1 cup
- Spinach 1 cup, chopped
- Parmesan cheese ½ cup, grated
- Nutmeg a pinch
- Salt as needed
- Black pepper as needed
- Olive oil 1 tbsp
- Butter 2 tbsp
- Garlic 1 clove, minced
- Tomato sauce or cream sauce 1 cup

#### **PROCEDURE**

- Prepare the filling
  - In a bowl, mix ricotta cheese, chopped spinach, grated parmesan, salt, pepper, and a pinch of nutmeg.
- Fill the ravioli
  - O Place one sheet of pasta on a flat surface.
  - o Spoon small amounts of the filling at regular intervals.
  - o Cover with another sheet and press gently around the filling to seal.

- Cook the ravioli
  - Boil water in a large pot with a little salt.
  - Add the ravioli and cook for 3–5 minutes until they float.
- Prepare the sauce
  - o In a pan, melt butter with olive oil.
  - o Add garlic and cook briefly.
  - o Pour in the tomato sauce or cream sauce and heat.
- Serve
  - o Drain the ravioli and place on plates.
  - o Pour the sauce over the ravioli and sprinkle extra parmesan cheese on top.

#### 13. KNOWN ISSUES

- Initial load may be slow (external recipe API)
- Limited offline functionality

#### 13.ERROR OCCURS

- ENOENT stands for Error NO ENTry, meaning the system can't find the file or directory.
- It's specifically complaining that it can't find package.json in the folder you're working in:
- C:\Users\Admin\Downloads\code-20250910T144214Z-1-001\
- The package.json file is missing in the directory.
- This file is essential for Node.js projects using npm because it describes the project's dependencies, scripts, and configuration.

```
npm error syscall open
npm error path C:\Users\Admin\Downloads\code-20250910T144214Z-1-001\package.json
npm error error -4058
npm error encent Could not read package.json: Error: ENOENT: no such file or directory, open 'C:\Users\Admin\Downloads\code-20250910T144214Z-1-001\package.json'
npm error encent This is related to npm not being able to find a file.
npm error encent
npm error encent
npm error A complete log of this run can be found in: C:\Users\Admin\AppData\Local\npm-cache\_logs\2
025-09-10T14_48_14_675Z-debug-0.log
C:\Users\Admin\Downloads\code-20250910T144214Z-1-001\]
```

- Npm error syscall open
  - $\circ$   $\rightarrow$  npm tried to open a file but failed.
- Npm error path C:\Users\Admin\Downloads\code-20250910T144214Z-1-001\package.json
  - $\circ$   $\rightarrow$  npm is trying to find the package json file in the directory mentioned.
  - Npm error errno -4058

- $\circ$  This is the system error code. -4058 means ENOENT, which stands for Error NO ENTry (file not found).
- Npm error enoent Could not read package.json: Error: ENOENT: no such file or directory
  - $\circ$   $\rightarrow$  npm cannot find the package.json file it needs to proceed.
  - Npm error This is related to npm not being able to find a file.
    - → The error is because npm expects package.json in the current directory but it's missing.

```
problems Output Debug Console TERMINAL PORTS

npm error syscall open
npm error path C:\Users\Admin\Downloads\code-20250910T144214Z-1-801\package.json
npm error error -4858
npm error encent Could not read package.json: Error: ENDENT: no such file or directory, open 'C:\Users\Admin\Downloads\code-20250910T144214Z-1-801\package.json'
npm error encent This is related to npm not being able to find a file.
npm error encent
npm error A complete log of this run can be found in: C:\Users\Admin\AppData\Local\npm-cache\_logs\2
025-89-10T14_48_14_675Z-debug-0.log

C:\Users\Admin\Downloads\code-20250910T144214Z-1-801>
```

- A log file is generated:
  - $\circ$   $\rightarrow$  It tells you where the full error details are saved, in this case:
  - $\hline C:\Users\Admin\AppData\Local\npm-cache\_logs\2025-09-10T14\_48\_14\_675Z-debug-0.log \\$
  - o Without this file, npm doesn't know how to handle the projects
- You are running npm commands in a directory where there's no package.json.
- You may have forgotten to initialize the project using:
  - o Npm init
  - Or you are in the wrong folder.
- Perhaps you downloaded files but didn't set up the project yet.

#### 14. FUTURE ENHANCEMENTS

- Voice for hands-free cooking
- AI-based weekly meal planning
- Grocery delivery integration

• Nutrition calculator per recipe

## 15.CONCLUSION

The Cookbook: Your Virtual Kitchen Assistant project showcases how React.js can be used to build an engaging, scalable, and user-friendly application. With its structured components, efficient state management using Context API, and responsive design, the app makes discovering, organizing, and cooking recipes easier and more enjoyable.