

## 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 cuisines. 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

**NM2025TMID30136**

### TEAM LEADER

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

## 3. ARCHITECTURE

- **Component Structure:**
  - Navbar & Sidebar – navigation and quick access
  - Recipe Explorer – displays recipes based on search/filter
  - Recipe Details – detailed cooking instructions

- **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):**
  - **/ → Home**
  - **/recipes → Recipe Explorer**
  - **/recipe/:id → Recipe Details**
  - **/shopping-list → Shopping List**
  - **/profile → User Profile**

#### 4. SETUP INSTRUCTIONS

- **Prerequisites:**
  - **Node.js (LTS version)**
  - **npm or yarn package manager**
  - **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) → run:**

```
cpp
set-executionPolicy unrestricted
```
  3. **Install dependencies:**

```
nginx
npm install
```
  4. **Run development server:**

```
Sql
npm start
```
  5. **App will run on: <http://localhost:3000>**

**CookBook\_ Your Virtual Kitchen ...**

#### 5. FOLDER STRUCTURE

**cookbook/**

| — **public/**

| — **src/**

| | — **components/** # Navbar, RecipeCard, ShoppingList, etc.

| | — **pages/** # Home, Recipes, Profile

| | — **context/** # Global state management

| | — **assets/** # Images, icons

| | — **utils/** # Helper functions

| | — **App.js**

| | — **index.js**

| — **package.json**

## **6. RUNNING THE APPLICATION**

- **Frontend:**

**sql**

**npm start**

## **7. COMPONENT DOCUMENTATION**

- **Key Components:**

- **RecipeCard** – Displays recipe summary
- **RecipeDetails** – Shows cooking steps
- **ShoppingList** – Generates list from selected recipes
- **UserProfile** – Stores user preferences

- **Reusable Components:**

- **Buttons, Modals, SearchBar, Filters**

## **8. USER INTERFACE**

- **Responsive design with recipe cards, search filters, and step-by-step guides**
- **Screens:**
  - **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:
  - Unit testing → Jest
  - Component testing → React Testing Library
  - End-to-end → Cypress
- Code Coverage:  
Ensure 80%+ coverage on critical components

## 11. 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



Miscellaneous



Pasta

## Most Popular Categories

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



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[View All Recipes](#)



Dessert

[View All Recipes](#)



Lamb



Miscellaneous



Pasta

## **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
  - Heat olive oil in a pan. Sauté garlic and onion until soft.
  - Add ground meat (if using), cook until browned.
  - Add tomato sauce, salt, pepper, and herbs. Simmer for 10–15 minutes
- Boil the lasagna sheets
  - Cook the lasagna sheets in boiling salted water until soft. Drain and set aside.
- Prepare the cheese mixture
  - In a bowl, mix ricotta (or cottage cheese), spinach (optional), salt, and pepper.
- Assemble the lasagna
  - In a baking dish, spread a layer of sauce.
  - Add a layer of lasagna sheets.
  - Spread the cheese mixture over the sheets.
  - Sprinkle mozzarella and parmesan cheese.
  - Repeat the layers until all ingredients are used, ending with sauce and cheese on top.
  - Bake
  - Preheat the oven to 180°C (350°F).
  - Cover with foil and bake for 30 minutes.
  - Remove the foil and bake for another 10–15 minutes until cheese is golden
  - 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**
  - **Place one sheet of pasta on a flat surface.**
  - **Spoon small amounts of the filling at regular intervals.**
  - **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**
  - In a pan, melt butter with olive oil.
  - Add garlic and cook briefly.
  - Pour in the tomato sauce or cream sauce and heat.
- **Serve**
  - Drain the ravioli and place on plates.
  - 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.

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
npm error syscall open
npm error path C:\Users\Admin\Downloads\code-20250910T144214Z-1-001\package.json
npm error errno -4058
npm error enoent 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 enoent This is related to npm not being able to find a file.
npm error enoent
npm error A complete log of this run can be found in: C:\Users\Admin\AppData\Local\npm-cache\_logs\2025-09-10T14_48_14_675Z-debug-0.log
C:\Users\Admin\Downloads\code-20250910T144214Z-1-001>

```

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

- 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**
  - 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-1-001\package.json
npm error errno -4058
npm error enoent 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 enoent This is related to npm not being able to find a file.
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C:\Users\Admin\Downloads\code-20250910T144214Z-1-001>

```

- **A log file is generated:**
  - It tells you where the full error details are saved, in this case:
  - C:\Users\Admin\AppData\Local\npm-cache\\_logs\2025-09-10T14\_48\_14\_675Z-debug-0.log
  - 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:
  - 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.**