Cook Book: Your Virtual Kitchen Assignment

1. Introduction

• Project Title:
Cook Book: Your Virtual Kitchen Assignment

• Team ID:
NM2025TMID30470

• Team Leader:
GIRI M – giri10rvb2022@gmail.com

• Team Members:
– RANJITH C –
rranjith23059@gmail.com
– KAJENDIRA D –
kajendira7@gmail.com
– THIRUVASAGAN P –
thiruvasagan2006@gmail.com
– KATHIR V –
smallboykathir@gmail.com

2. Project Overview

• Purpose:
This project aims to create a virtual kitchen platform where users can share recipes, cooking tips, and meal planning techniques. It serves as a community for cooking enthusiasts to collaborate, explore, and enhance their culinary skills.

• Features:
– Recipe creation and sharing
– Meal planner and nutritional tracker
– User ratings and reviews
– Cooking tips and video tutorials
– Admin panel for moderation and management

---

3. Architecture

- Frontend:
React.js with Bootstrap and Material UI for responsive and user-friendly interfaces.

- Backend:
Node.js and Express.js for server logic and API endpoints.

- Database:
MongoDB stores user data, recipes, comments, and preferences.

---

4. Setup Instructions

• Prerequisites:
– Node.js
– MongoDB
– Git
– React.js
– Express.js
– Mongoose
– Visual Studio Code or preferred IDE

• Installation Steps:

  1. Clone the repository:
git clone [repository URL]

  2. Install client dependencies:
cd client
npm install

  3. Install server dependencies:
cd ../server
npm install

5. Folder Structure

```
virtual-kitchen/
|-- client/            # React frontend
|   |-- components/
|   |-- pages/
|-- server/            # Node.js backend
|   |-- routes/
|   |-- models/
|   |-- controllers/
```

---

6. Running the Application

• Frontend:
cd client
npm start

• Backend:
cd server
npm start

• Access:
Visit http://localhost:3000

7. API Documentation

• User:
– /api/user/register
– /api/user/login

• Recipes:
– /api/recipes/create
– /api/recipes/:id

• Comments:
– /api/comments/add
– /api/comments/:recipeId

• Nutrition:
– /api/nutrition/track

---

8. Authentication

• JWT-based authentication for secure login and session management.

• Middleware protection ensures only authenticated users access private routes.

---

9. User Interface

• Landing Page – Overview of recipes and trending dishes
• User Dashboard – Personalized recommendations and saved recipes
• Admin Panel – Manage users, recipes, and feedback
• Recipe Details Page – Instructions, ingredients, and ratings

---

10. Testing

• Manual Testing: Conducted during development milestones.

• Tools Used:
– Postman
– Chrome Dev Tools
– Jest (for unit testing)

---

11. Screenshots or Demo

[Include screenshots or demo link here]

---

12. Known Issues

[List known bugs or incomplete features here]

---

13. Future Enhancements

– Integration with external APIs for nutrition tracking
– Personalized meal plans based on dietary preferences
– AI-based recipe suggestions
– Social sharing features