

Frontend Development with React.js Project Documentation format.

CookBook: Your Virtual Kitchen Assistant

Introduction Project Title: Cookooke Your Virtual Kitchen Assistant

Team Members:

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2. Project overview Purpose:

'The Cookook application is designed to simply meal preparation by offering a vetal litehenssistant.

Users can browse, save,and manage ther favorite recipes with detailed instructionsand ingredient lists

Features: Extensive Reeipe Library with Search & Filter Options 'Step-by Step Cooking Instructions Bookmark Feature for Favorite Recipes Lght/Darc Mode for Enhanced Visual Comfort

- Responsive Design for Optimal Viewing on All Deviees

- Ingredient Checklist for Easy Shopping and Preparation

3. Architecture

Component Structure:

App.js — Root component managing layout and routes

Header.js — Navigation bar with search functionality

RecipeList.js — Displays categorized recipe cards

RecipeCard.js — Individual card displaying recipe details

RecipeDetails.js — Detailed view of selected recipe

Footer.js — Provides additional resources and links

State Management: Context API

Routing: React Router

4. Setup Instructions

Prerequisites:

- Node.js (v18 or higher)
- npm or yarn

Installation:

1. Clone the Repository:

```
`git clone https://github.com/darunraj0071/cookbook-app.git`  
`cd cookbook-app`
```

2. Install Dependencies:

```
`npm install`
```

3. Create .env file:

```
`REACT_APP_RECIPE_API_KEY=your_api_key_here`
```

4. Run the Application:

```
`npm start`
```

5. Folder Structure

/src

├── /components

│ ├── Header.js

```
|   ├── RecipeList.js
|   ├── RecipeCard.js
|   ├── RecipeDetails.js
|   └── Footer.js
└── /pages
    |   ├── Home.js
    |   ├── Categories.js
    |   └── Bookmarks.js
└── /assets
    |   ├── images
    |   ├── icons
    |   └── styles
└── /utils
    |   ├── api.js
    |   ├── helpers.js
    |   └── constants.js
└── App.js
└── index.js
```

6. Running the Application

Frontend Server Command: ``npm start``

7. Component Documentation

Key Components:

Header: Provides navigation and search functionality

RecipeList: Displays available recipes categorized by type

RecipeCard: Displays individual recipe details

RecipeDetails: Offers step-by-step instructions

Reusable Components:

Button Component: Used for actions like 'View Recipe' or 'Bookmark'

Modal Component: Displays detailed recipe information

8. State Management

Global State: Managed via Context API

Local State: Managed using React's `useState()`

9. User Interface

- Clean and intuitive layout optimized for smooth navigation
- Mobile-first design for seamless browsing
- Elegant Light/Dark mode toggle for improved accessibility

10. Styling

CSS Frameworks/Libraries: Tailwind CSS

Theming: Integrated light/dark mode

11. Testing

Testing Strategy:

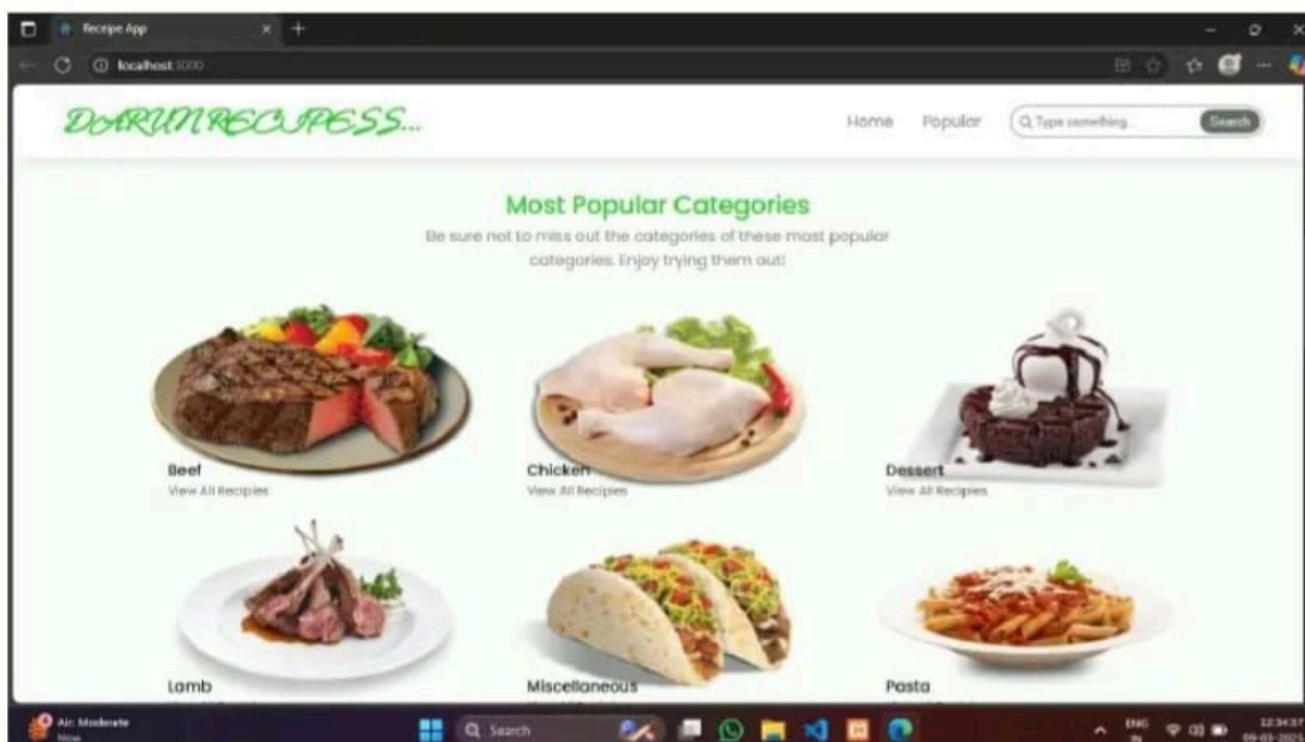
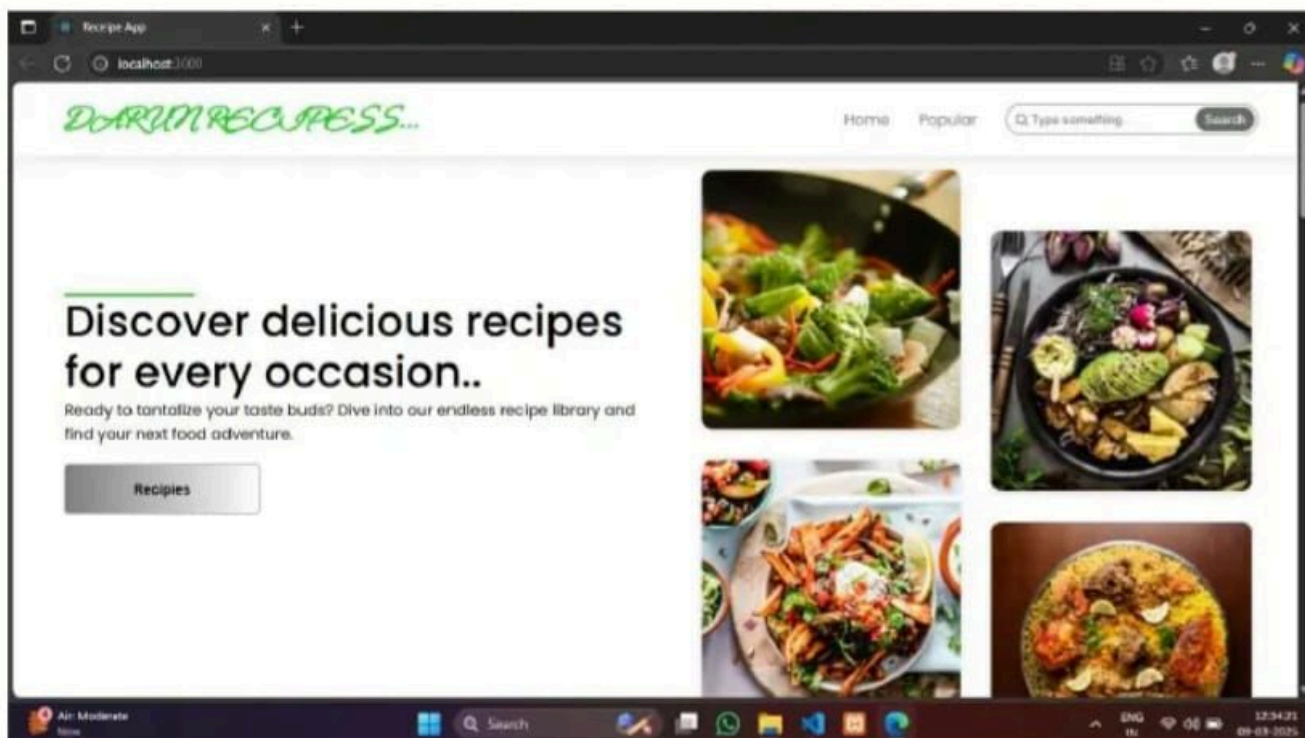
Jest for unit testing

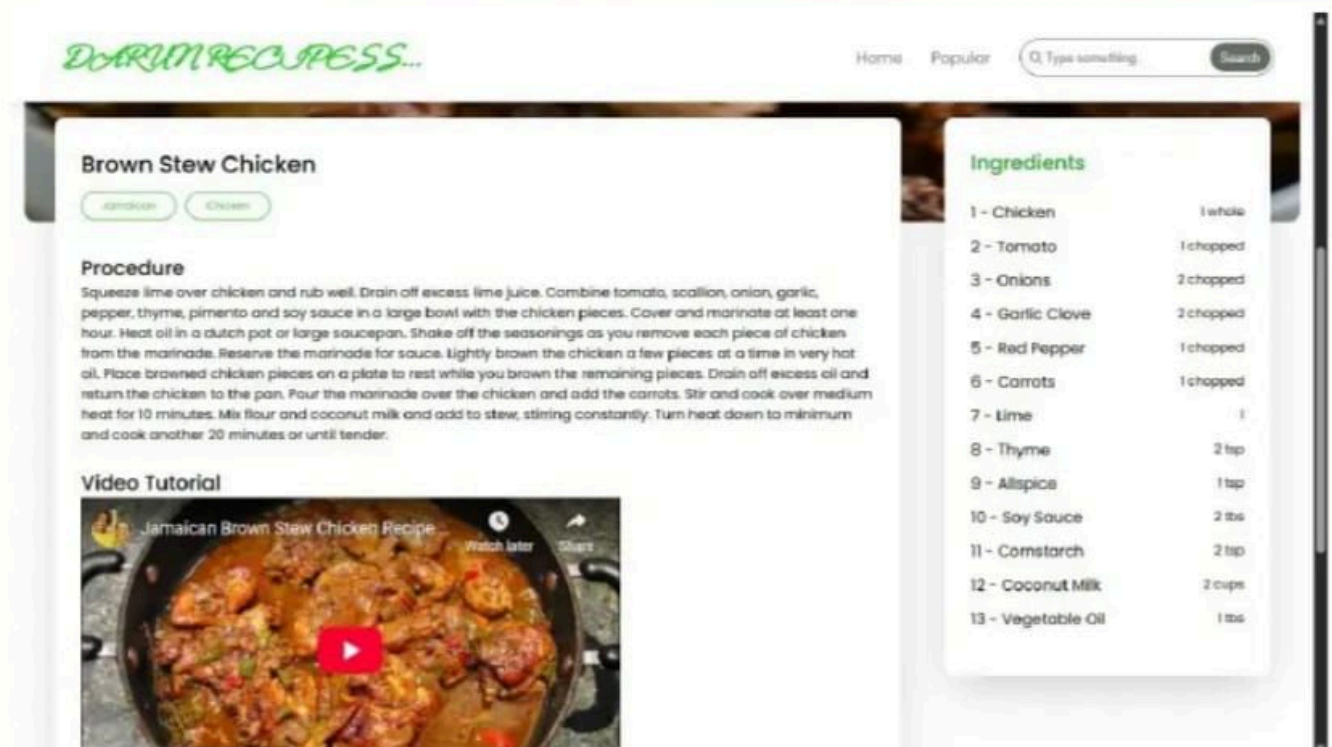
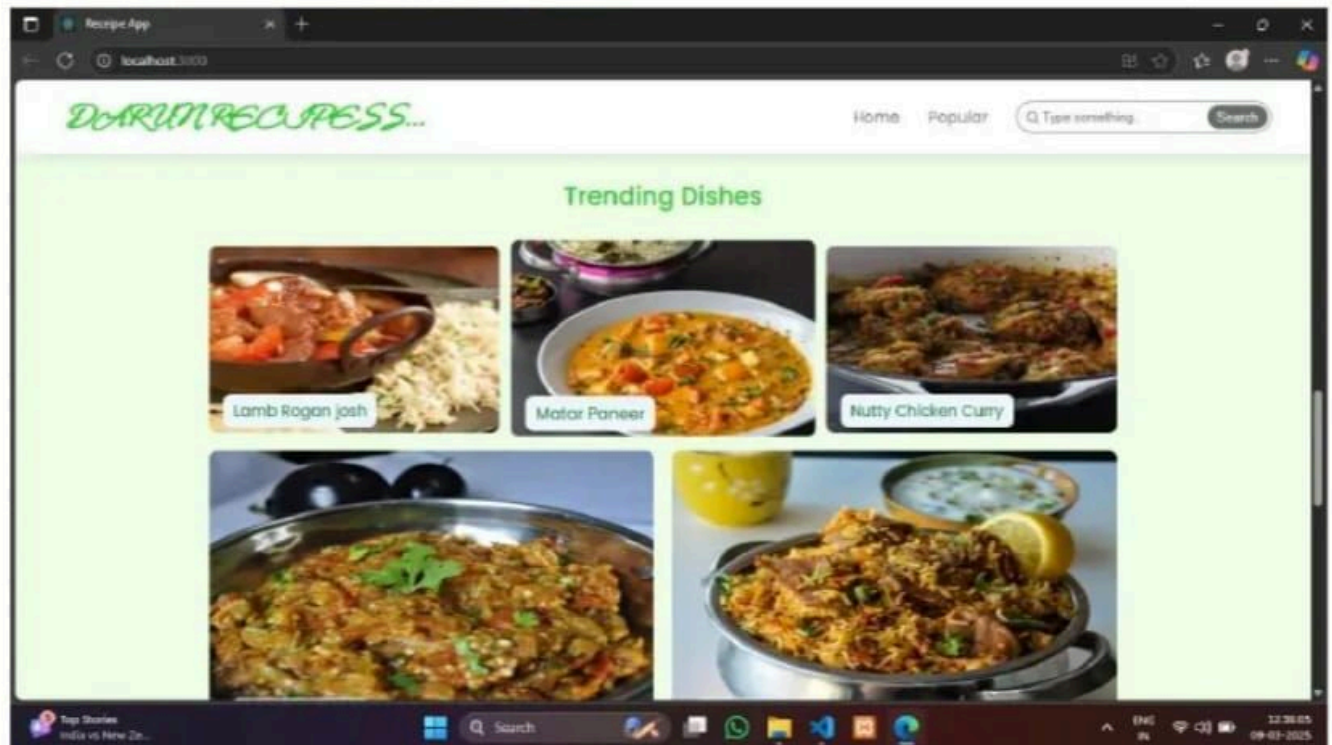
React Testing Library for component testing

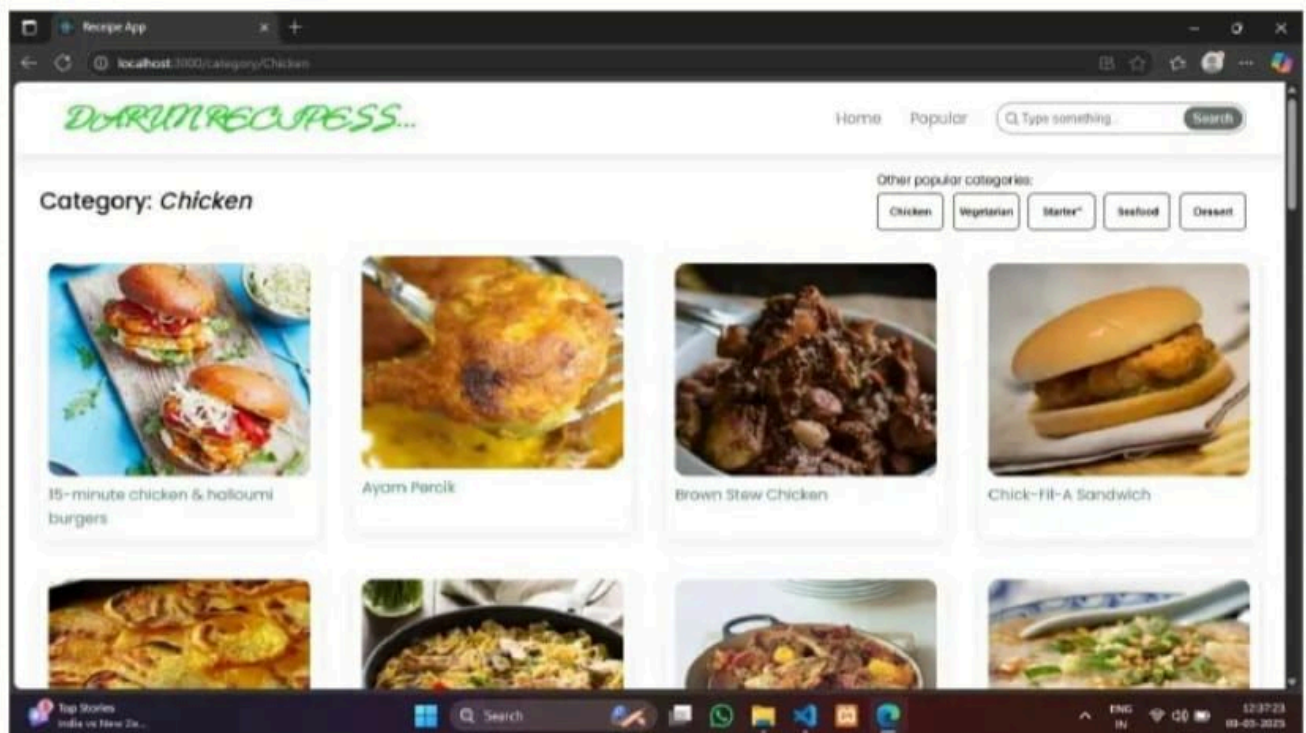
Code Coverage: Ensured high test coverage with Jest reports

12. Screenshots or Demo

Screenshots:







Live Demo Link:

13. Known Issues

- Certain API endpoints may experience delays during peak traffic
- Ingredient checklist feature may require further optimization

14. Future Enhancements

- AI-Based Recipe Suggestions
- User Authentication for personalized recipe collections
- Integration with Grocery Shopping Platforms
- Offline Mode for accessing saved recipes