Cookbook Project Documentation Introduction

Project Title: Cookbook Web Application

Team Members:

Team ID: SWTID1741176409146391

Team Members	Email Id
Team Leader : TEENU ANAND P	teenuanandanand@gmail.com
Team member : VIGNESH S	vigneshsrinivasan056@gmail.com
Team member : SAMINATHAN P	sami2005nathan@gmail.com
Team member : DHANALAKSHMI D	kumar1311sathish@gmail.com
Team member : Sathish kumar M	dhanalakshmi20047@gmail.com

Project Overview

Purpose

The **Cookbook** project is a web application built using **React.js with Vite**. It allows users to browse, manage, and share recipes easily. The goal is to provide a user-friendly platform for food lovers and home chefs to organize their favorite recipes.

Features

- User Authentication Secure login and signup functionality.
- **Recipe Management** Users can add, edit, and delete recipes.
- Search & Filters Advanced search options to find recipes easily.
- Favorites & Bookmarks Users can save their favorite recipes.
- **Responsive Design** Optimized for mobile and desktop use.

Architecture

Component Structure

The application follows a modular component-based architecture:

- App. jsx The main entry component.
- Header.jsx Navigation bar component.
- Home.jsx Displays a list of recipes.
- RecipeCard.jsx A reusable component for individual recipe display.
- RecipeForm.jsx Form to add/edit recipes.
- Footer.jsx Footer section.

State Management

- Uses Context API for managing global state.
- RecipeContext.jsx handles recipe-related data across components.
- Local state is used within individual components for UI interactions.

Routing

- Uses react-router-dom for navigation between pages.
- Example routes:
 - \circ / \rightarrow Home Page
 - o /recipe/:id → Recipe Details Page
 - o /add-recipe → Add New Recipe Page

Setup Instructions

Prerequisites

• Install **Node.js** (latest stable version recommended)

Installation

- 1. Clone the repository:
- 2. git clone https://github.com/yourusername/cookbook.git
- 3. Navigate to the project directory:

- 4. cd cookbook
- 5. Install dependencies:
- 6. npm install
- 7. Start the development server:
- 8. npm run dev

Folder Structure

```
m cookbook
 ⊢ ਛ src
  - components
   ├ 📜 Header.jsx
   ► 1 RecipeCard.jsx
   RecipeForm.jsx
  🕨 🖶 pages
   ► 1 Home.jsx
   RecipeDetails.jsx
  - de context
  RecipeContext.jsx
  ├ 📜 App.jsx
   L main.jsx
 ► = public
 - nackage.json
 ► 1 vite.config.js
 - README.md
```

Running the Application

- Run the frontend locally:
- npm run dev

Component Documentation

Key Components

RecipeCard.jsx

```
import React, { useEffect } from 'react';
import YouTube from 'react-youtube';
import axios from 'axios';
import { useNavigate, useParams } from 'react-router-dom';
```

```
const Recipie = () => {
  return (
     <div className="recipe-page">
       {recipie ? (
         <div className="recipe-container">
          {/* Recipe Header: Image and Ingredients */}
           <div className="recipe-header">
            <div className="recipe-img">
                src={recipie.strMealThumb}
                alt="food-item"
                className="recipe-image"
            </div>
            <div className="ingredients-container">
              <h3>Ingredients</h3>
              {Object.entries(recipie).map(([key, value]) => {
                  if (key.startsWith('strIngredient') && value) {
                    const ingredientNumber = key.slice('strIngredient'.length);
                    const measure =
                      recipie[`strMeasure${ingredientNumber}`] | '';
                    return (
                      <h5>{value}</h5>
                       {p>{measure}
                     );
                  return null;
                })}
              </div>
           </div>
           {/* Recipe Details: Procedure, Area, Category */}
           <div className="recipe-details">
            <h4>{recipie.strMeal}</h4>
            <div className="recipe-specials">
              {recipie.strArea && recipie.strArea}
```

```
{recipie.strCategory && recipie.strCategory}
             </div>
             <div className="procedure">
               <h5>Procedure</h5>
               {recipie.strInstructions}
             </div>
           </div>
           {/* YouTube Video */}
           {recipie.strYoutube && (
             <div className="youtube-video-container">
               <h5>Video Tutorial</h5>
               < You Tube
                 className="youtube-video"
                 videoId={recipie.strYoutube.slice(32)}
                 opts={{
                  height: '315',
                  width: '560',
                }}
             </div>
           )}
         </div>
         )}
     </div>
  );
export default Recipie;
```

Reusable Components

- **Header.jsx** Navigation bar
- **Footer.jsx** Bottom section
- **RecipeCard.jsx** Displays a single recipe card
- **RecipeForm.jsx** Handles recipe creation/editing

State Management

Global State

- Managed using Context API in RecipeContext.jsx.
- Provides recipes data to all components.

Local State

• Used within components for UI handling, such as form inputs.

User Interface

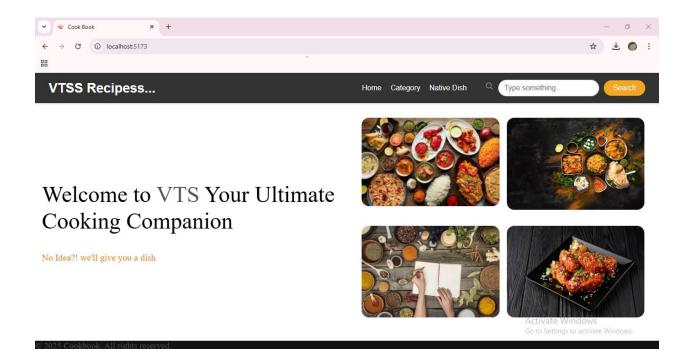
Styling

- CSS: Normal CSS.
- Theming: Custom styles for buttons, cards, and navigation.

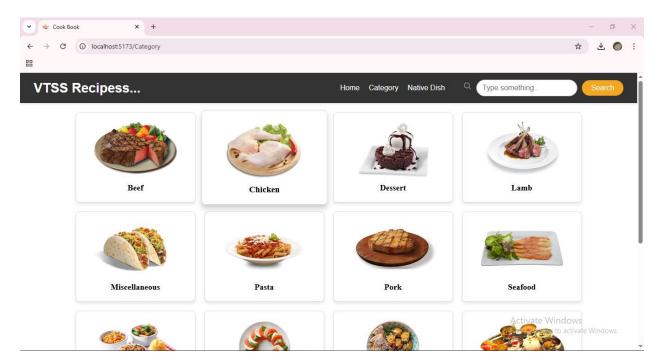
Testing

- Testing Strategy: Uses Jest and React Testing Library for unit tests.
- Code Coverage: Ensures key components have sufficient test coverage.

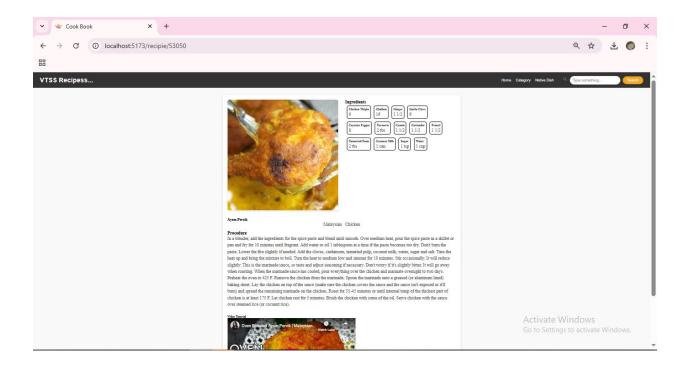
Screenshots or Demo



Home Page



Cateogory Page



Demo Link:

https://drive.google.com/file/d/1pLQJp4xJwkfMcZhke4kSkAIHXBl7TkcF/view?usp=drive_link

Known Issues

- Recipe images are not stored persistently yet.
- Filtering options need refinement.

Future Enhancements

- Implement dark mode.
- Add a comments section for each recipe.
- Improve search functionality with category-based filters.