

Product Requirements Document (PRD)

Project: Recipe Sharing Platform

Objective:

Develop a simple recipe sharing platform to practice essential full-stack development concepts such as authentication, authorization, CRUD operations, favorites functionality, ownership validation, and advanced data validation.

Feature Breakdown

Feature 1: Authentication & Authorization (AuthN & AuthZ)

- **User Signup Controller:** Registers new users
- **User Login Controller:** Authenticates users and issues JWT tokens
- **User Logout Controller:** Logs out authenticated users
- **Change Password Controller:** Allows users to update their passwords
- **Forgot Password Controller:** Sends reset password links via email
- **User Role Management Controller:** Assigns and manages user roles
- **User Profile Management Controller:** Allows users to view and edit profile information

Feature 2: Recipe Management

- **Create Recipe Controller:** Chefs can create new recipes with title, description, ingredients, and steps
- **Update Recipe Controller:** Chefs can edit their own recipes
- **Delete Recipe Controller:** Chefs can delete their own recipes
- **Fetch All Recipes Controller:** Fetch and display all recipes
- **Fetch Single Recipe Controller:** Fetch details of a specific recipe

★ Feature 3: Favorites Management

- **Favorite Recipe Controller:** Users can mark recipes as favorite
- **Unfavorite Recipe Controller:** Users can remove recipes from favorites
- **Fetch User's Favorite Recipes Controller:** Fetch list of recipes favorited by the user

🔍 Feature 4: Recipe Search and Filtering

- **Search Recipes Controller:** Search recipes based on title or ingredients
- **Filter Recipes Controller:** Filter recipes based on cuisine, cooking time, or dietary preferences
- **Sort Recipes Controller:** Sort recipes based on popularity or latest additions
- **List Featured Recipes Controller:** Fetch highlighted/featured recipes

📌 Additional Information:

- **Roles Involved:**
 - Admin
 - Chef
 - User
- **Auth Mechanism:** JWT-based authentication
- **Database & ORM:** MySQL with Prisma ORM
- **Frontend:** React.js with Tailwind CSS
- **Backend:** Node.js, Express.js