

# Product Backlog

GitHub Link:

[https://github.com/k0c0h/T3\\_AWD\\_RECIPE\\_MANAGEMENT\\_SYSTEM.git](https://github.com/k0c0h/T3_AWD_RECIPE_MANAGEMENT_SYSTEM.git)

## Feature 1: Recipe Management (CRUD for Recipes)

**Description:** Enables users to create, view, edit, and delete recipes with complete details, photos, and categorized organization.

**Detail:**

- The system must allow creating and editing recipes with a name, description, and yield (i.e., the number of servings).
- The user can add a detailed list of ingredients with quantities in different units (grams, ounces, cups, tablespoons, etc.).
- The system must calculate cost per serving and price per serving based on the ingredients added.
- The system must allow adding step-by-step instructions with estimated cooking times.
- The system must categorize recipes by type (starter, main course, dessert, beverage, etc.).
- The system must allow users to search and filter recipes by ingredient or category.

## Feature 2: Smart Unit Conversion

**Description:** Provides intelligent conversions between metric and imperial units, adapting to each ingredient's specific density and enabling dynamic recipe scaling.

**Detail:**

- The system must automatically convert between metric and imperial units (grams ↔ ounces, milliliters ↔ cups, etc.).
- The user can view a conversion table for common ingredients, considering their specific density (e.g., 1 cup of flour ≠ 1 cup of sugar).
- The system must allow recipe scaling: if a recipe serves 2 portions but the user needs 10, ingredient and product quantities must update automatically.
- The system must calculate the yield dynamically based on the number of portions requested.

## Feature 3: Ingredient Catalog

**Description:** Maintains a structured and centralized database of all ingredients, including their properties, pricing, and suppliers.

**Detail:**

- The system must include a catalog of ingredients with their properties (density, equivalences, conversions).
- Each ingredient must have a unit price (per kilogram, liter, or unit).
- The system must associate ingredients with their suppliers and respective prices.
- The system must allow manual updates of ingredient prices.

## Feature 4: Cost Calculation

**Description:** Calculates the total and per-portion cost of recipes based on real ingredient prices and user-defined profit margins.

**Detail:**

- The system must calculate the total cost of each recipe based on the ingredients and quantities used.
- The user can view the cost per portion.
- The system must allow setting a configurable profit margin (per recipe or general).
- The system must suggest a selling price automatically (cost + margin).
- The system must allow comparing costs if ingredients or suppliers are changed.

## Feature 5: Quotations and Budgets

**Description:** Facilitates the creation and management of quotations for clients, automatically calculating costs, taxes, and discounts with PDF export options.

**Detail:**

- The user can create personalized quotations for clients (e.g., catering for 50 people).
- The system must allow selecting multiple recipes to include in a quotation.
- The system must calculate the total cost, taxes (IVA), and applicable discounts.
- The system must allow generating a professional PDF quotation for download or sharing.
- The user can mark quotations as “pending,” “approved,” or “completed.”
- The system must maintain a history of all created quotations.
- The system must include a quotation management panel in the Chef Dashboard.
- The system must include a client management panel in the Chef Dashboard.
- The system must allow chef to:
  - View all incoming quotation requests
  - See detailed information for each quotation request
  - Respond to quotations with:
    - Accept or reject decision
    - Proposed price and payment terms
    - Menu suggestions or modifications
    - Availability confirmation
    - Additional requirements or questions

## Feature 6: Calendar

**Description:** Provides an interactive calendar that integrates with quotations, allowing users to manage events, deadlines, and receive notifications.

**Detail:**

- The system must include a calendar interface connected to the quotations panel.
- The user can:
  - View and manage upcoming events, orders, or quotations by date.
  - Add custom events (e.g., "Client meeting," "Cake delivery," "Restock ingredients") directly by clicking on the calendar.
  - Link quotations or recipes to specific calendar dates (e.g., catering event scheduled for November 3).
  - Receive notifications or reminders for upcoming events, deadlines, or deliveries.
- The system must display different event types with visual distinctions (colors or icons: quotation, delivery, custom note, etc.).

## **Feature 7: Authentication and User Management**

**Description:** Provides secure user authentication with role-based access control, distinguishing between chefs and clients with Google API integration.

**Detail:**

- The system must include a login interface with Google OAuth integration.
- The user can:
  - Sign in using Google account credentials.
  - Be automatically identified as either "Chef" or "Client" based on their registered role.
  - Be redirected to the appropriate dashboard after successful authentication (Chef Dashboard or Client Dashboard).
  - Log out securely from the system.
  - View their profile information (name, email, role).
- The system must maintain session persistence across page refreshes.

## **Feature 8: Client Quotation Request**

**Description:** Allows clients to submit detailed quotation requests to chefs, specifying event requirements, dates, locations, and service details.

**Detail:**

- The system must include a quotation request form accessible from the Client Dashboard.
- The client can:
  - Fill out a comprehensive quotation form with the following fields:
    - Event type (e.g., Wedding, Corporate Event, Birthday Party, Other)
    - Number of servings/guests
    - Event date and time
    - Event location (address and venue name)
    - Client contact information (name, phone, email)
    - Special requirements or dietary restrictions
    - Preferred cuisine type
    - Budget range (optional)

- Additional notes or comments
- Submit the quotation request directly to the chef.
- Receive confirmation notification upon successful submission.
- Save the quotation as "Pending" status until chef responds.
- The system must allow clients to view all their quotation request (history)
- The system must allow chefs to upload images of the recipes when creating in order to create client panel.

## **Feature 9: Reports and Exportations**

- System must generate reports and personalized exportations for:
- Ingredients.
- Recipes.
- Cost Calculations.
- Scaled Recipes.
- Quotations (Both chef and client).

## **Feature prioritization**

### **Phase/Feature 1 – Core Foundations (1.5 weeks)**

#### **1. Feature: Authentication and User Management**

- **Depends on:** None (useful for overall functions)
- **Notes:** Essential for dashboard building and overall project
- **Goal:** Authenticate users based on roles using APIs.

#### **2. Feature: Ingredient Catalog**

- **Depends on:** None (though useful for costing)
- **Notes:** Essential for accurate pricing and conversions. It will serve as the central database for all ingredients, with their prices and suppliers.
- **Goal:** Create and manage the ingredient database with real-time or manual price updates.

#### **3. Feature: Recipe Management**

- **Depends on:** Ingredient Catalog
- **Notes:** This is the foundation of the entire system — without recipes, there can be no quotations or cost calculations.
- **Goal:** Build the CRUD for recipes, and Business Rules for calculations.

### **Phase 2 – Intelligent Operations (1 week)**

#### **1. Feature: Smart Unit Conversion**

- **Depends on:** Recipe Management + Ingredient Catalog
- **Notes:** Enables automatic metric ↔ imperial conversions and dynamic recipe scaling.

- **Goal:** Ensure users can scale portions and get ingredient conversions with precision.

## 2. Feature: Cost Calculation

- **Depends on:** Recipe Management + Ingredient Catalog
- **Notes:** Calculates total and per-portion costs, profit margins, and suggested selling prices.
- **Goal:** Provide accurate costing and profitability analysis for each recipe.

## Phase 3 – Client Interaction & Services (1.5 weeks)

### 1. Feature: Quotations & Budgets

- **Depends on:** Recipe Management + Cost Calculation
- **Notes:** Generates client quotations with automatic tax and discount calculations, and PDF export.
- **Goal:** Allow users to create and manage professional quotations and clients easily.

### 2. Feature: Client Panel - Quotation Request

- **Depends on:** Recipe Management + Quotations & Budgets
- **Notes:** Let users log in, review their quotation history, explore available services, or contact the chef.
- **Goal:** Offer a personalized experience and history tracking for clients.

## Phase 4 – Organization & Follow-Up (1 week)

### 1. Feature: Reports and Exportations.

- **Depends on:** Quotations & Budgets, Cost Calculation, Smart Unit Conversion, Ingredient, Recipe.
- **Notes:** Generate reports (pdf) and personalized exportations (excel, pdfs with filters, etc).
- **Goal:** Allow users to generate and export customized reports for analysis and communication.

### 2. Feature: Calendar

- **Depends on:** Quotations & Budgets
- **Notes:** Links events, deliveries, and deadlines to quotations; adds visual reminders.
- **Goal:** Improve scheduling and operational planning with event tracking and notifications.

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Functional Prototype link:

<https://t3-awd-recipe-management-system-2.onrender.com>