

# Product Requirements Document (PRD)

Title	AI-Powered Recipe Generator
Date & Version	July 15, 2025 - v1.0
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## 1. Purpose

The AI-Powered Recipe Generator aims to assist users in creating personalized recipes based on ingredients, dietary preferences, and cooking time using AI capabilities powered through n8n logic. The app will provide recipe suggestions, preparation steps, and nutritional facts with support for saving favorite recipes and sharing them.

## 2. Background

Many users struggle with cooking ideas based on what they have at home or according to specific dietary needs. This tool leverages AI to simplify recipe discovery and enhance the cooking experience.

## 3. Scope

This project includes:

- Magic link authentication (Supabase)
- Recipe generation using Google Gemini API via n8n
- MongoDB for storing full recipe details
- Supabase for storing user favorites
- Responsive UI for web
- CI/CD deployment using Vercel

## 4. Goals and Success Criteria

### Goals:

- Generate creative, accurate recipes based on user input
- Simple and clean user interface
- Provide nutritional insights
- Enable users to save and share recipes

### Success Criteria:

- User logs in via magic link
  - Inputs ingredients/preferences and gets recipes
  - Can view, save, and share recipes
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## 5. Assumptions

- Users have access to email
  - AI logic setup in n8n with API integration is functional
  - MongoDB and Supabase environments are preconfigured
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## 6. Requirements

### Functional Requirements:

- User authentication with Supabase magic link
- Recipe input form: ingredients, dietary needs, time
- AI-generated recipe display with:
  - Title
  - Ingredients
  - Cooking steps
  - Estimated time
  - Nutritional info (if available)
- Save recipe to Supabase
- Store recipe details in MongoDB

- Shareable recipe view page

### **Non-Functional Requirements:**

- Responsive design
  - Accessible on desktop and mobile
  - Deployed via Vercel with CI/CD
  - Secure API handling and data storage
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## **7. Wireframe Plan**

### **Pages:**

- **Home Page**
    - Welcome message and login option
  - **Dashboard (Post-login)**
    - Input fields: ingredients, dietary restrictions, cook time
    - Button: "Generate Recipe"
  - **Recipe Display**
    - Show full recipe in cards
    - Save and Share buttons
  - **Favorites Page**
    - List of saved recipes with view/delete options
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## **8. Out of Scope**

- Multi-language support
  - Voice input
  - Real-time collaboration or cooking assistant
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9. Timeline

Task	Date
PRD & Wireframe complete	15/07/2025
Backend & DB setup	18/07/2025
Frontend UI	21/07/2025
AI Logic + Testing	24/07/2025
Public Demo Live	27/07/2025
Final Docs + Loom	29/07/2025

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