Recipe Generator (PRD)

### 1. **Project Overview**

The AI-Powered Recipe Generator will be a web application that enables users to input a list of ingredients and receive a tailored recipe. The platform will use **n8n** to trigger an AI agent, which will process the input and generate a recipe in real time. Authentication will be handled through **Supabase magic links**. Recipe history and user data will be stored using **Supabase**. The application will be deployed via **Vercel**.

### 2. **Objectives**

* Allow users to generate recipes dynamically based on ingredients they have.
* Implement secure login using email-based magic links.
* Automate recipe generation using n8n workflows and AI integration.
* Persist user data and recipe history using Supabase.
* Deliver a modern, responsive, and continuously deployable web experience.

### 3. **Core Features**

1. **User Authentication**: Email-based magic link login (Supabase Auth).
2. **Ingredient Input Form**: Users will be able to dynamically add any number of ingredients.
3. **AI Recipe Generation**: User input will be routed via n8n to an AI model for processing.
4. **Webhook Integration**: n8n will trigger and handle recipe requests from the frontend.
5. **Recipe Display**: The generated recipe will be shown on the UI and stored in Supabase.
6. **Data Management**: Recipes will be stored in Supabase.
7. **Deployment**: Hosted on Vercel from GitHub.

### 4. **Tech Stack**

* **Frontend**: Nextjs, TailwindCSS, ShadCN, DaisyUI
* **Automation / Backend**: n8n
* **Database**: Supabase
* **Authentication**: Supabase Magic Link
* **Hosting**: Vercel

### 5. **Wireframe Flow**

1. User signs in via magic link
2. User enters ingredients via dynamic form
3. Form triggers n8n webhook
4. n8n calls AI agent and returns the recipe
5. Recipe is displayed and saved to Supabase

