n8n Workflow - Personal Weekly Meal Plan Generator

What it does:
Generate weekly meal plan with recipes and shopping lists for the meal plan based on user inputs

Why choose to build it:
There are people are struggling with what and how to eat to achieve their personal goals, and if they do research every week, that will cost a lot of time and efforts

Why automating this process is logical and useful:

1. Manually create personal meal plan is time consuming, this workflow saves time
2. Making meal plan is repetitive but with different contents, ai agent could do exactly the same thing
3. Provide a clear document to track food

Who benefits from it:

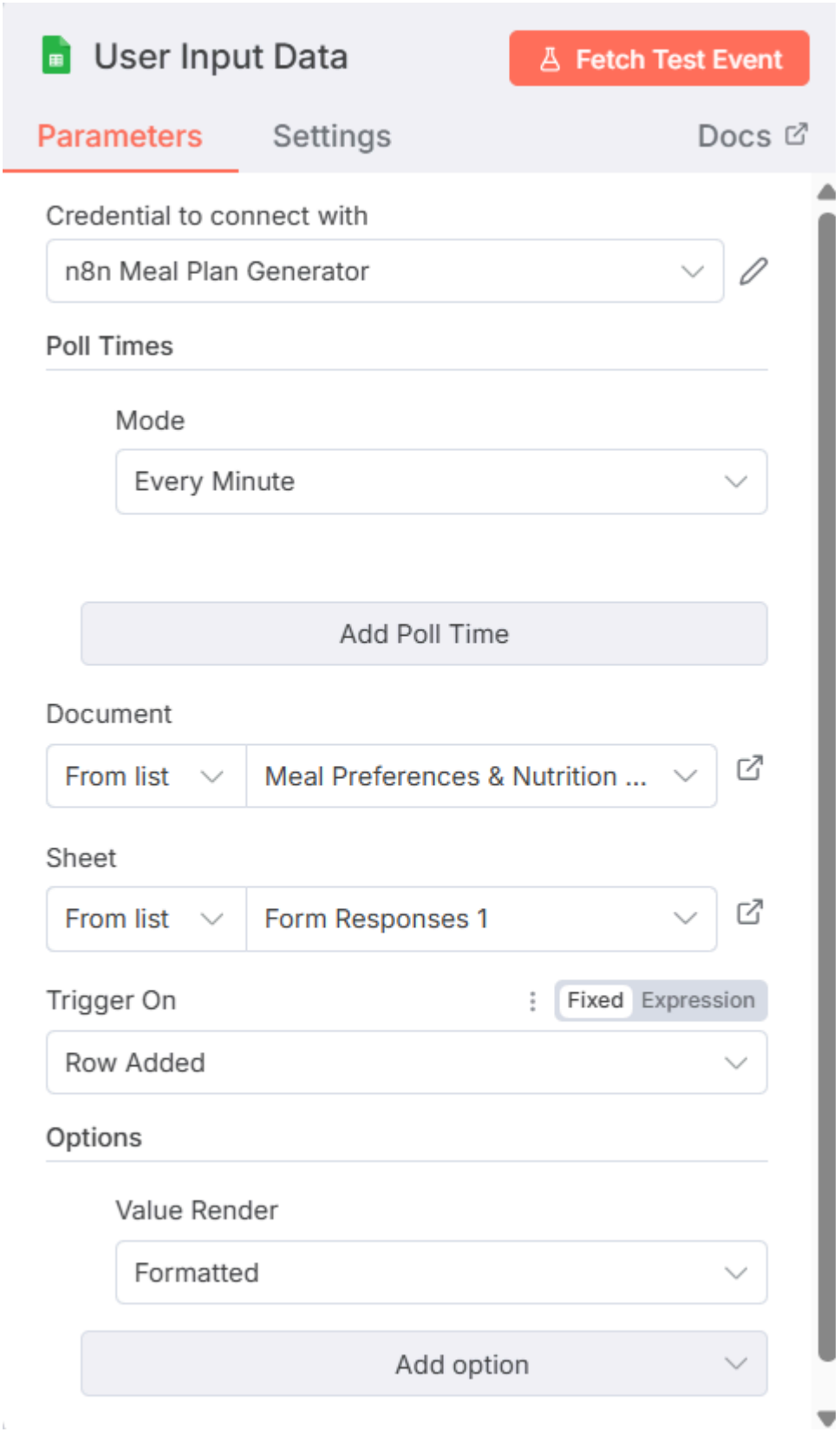
1. Anyone are busy with lives, have no time to think about what to eat and buy, but want to eat healthy and save time and money for their meal preparation
2. Fitness coaches
3. Meal-prep companies
4. Influencers & content creators

Where it would be applied in real life:

1. Health & fitness coaching programs in any platforms
2. Family planning
3. Social media

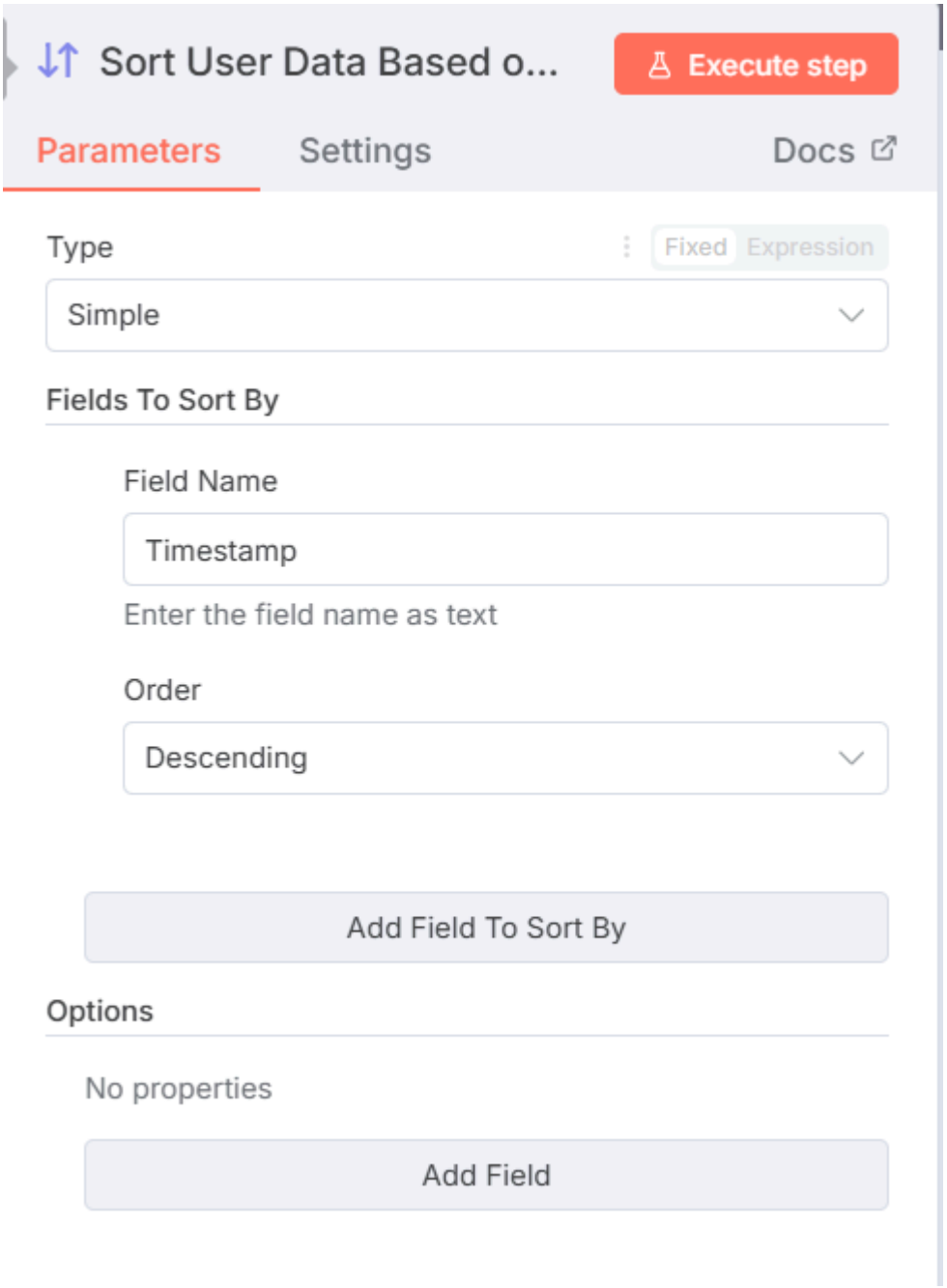
Step 1 Input User Data

- **Google Sheet Node**: A sheet links to a meal plan preferences Google Form. Stored user data.



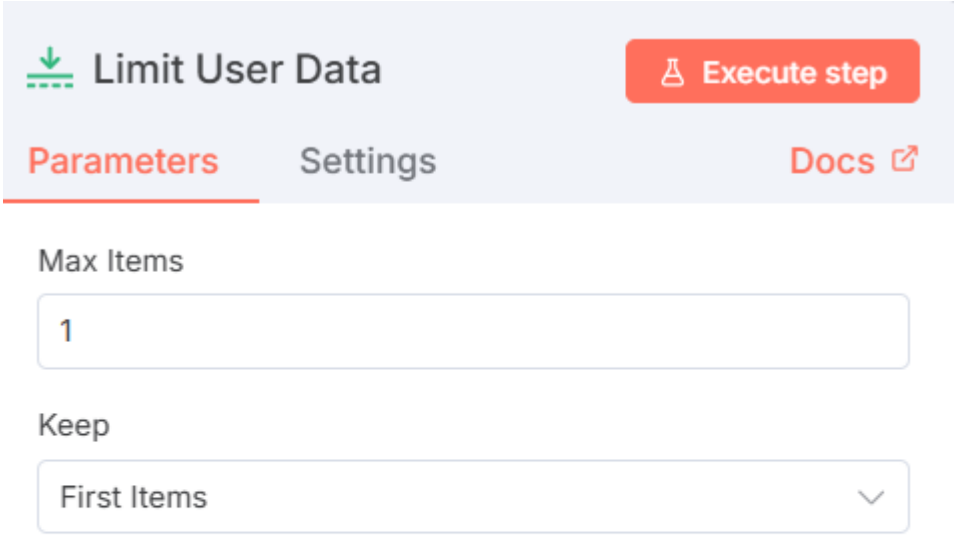
1. Options:
    - Value Render: Formatted
        - **To structure the Timestamp output**

- **Sort**: Sort all the users input from the Google Sheet node and order them with TimeStamp the time updated) in descending order



1. Field Name: Timestamp
    - Oder Timestamp fields
2. Order: Descending
    - The newest item will be listed first on the top to be choosen

- **Limit**: Limit to get only 1 (the newest one) data row from Google sheet to process



1. Max Items: 1
    - Only past 1 newest item (avoid repetition)
2. Keep: First Items
    - Get the newest records

- **Week Tag**: Codes to help to generate week periods for the plan, which are convenient for users to catch up

1. Generate updated week period for documents that with current data

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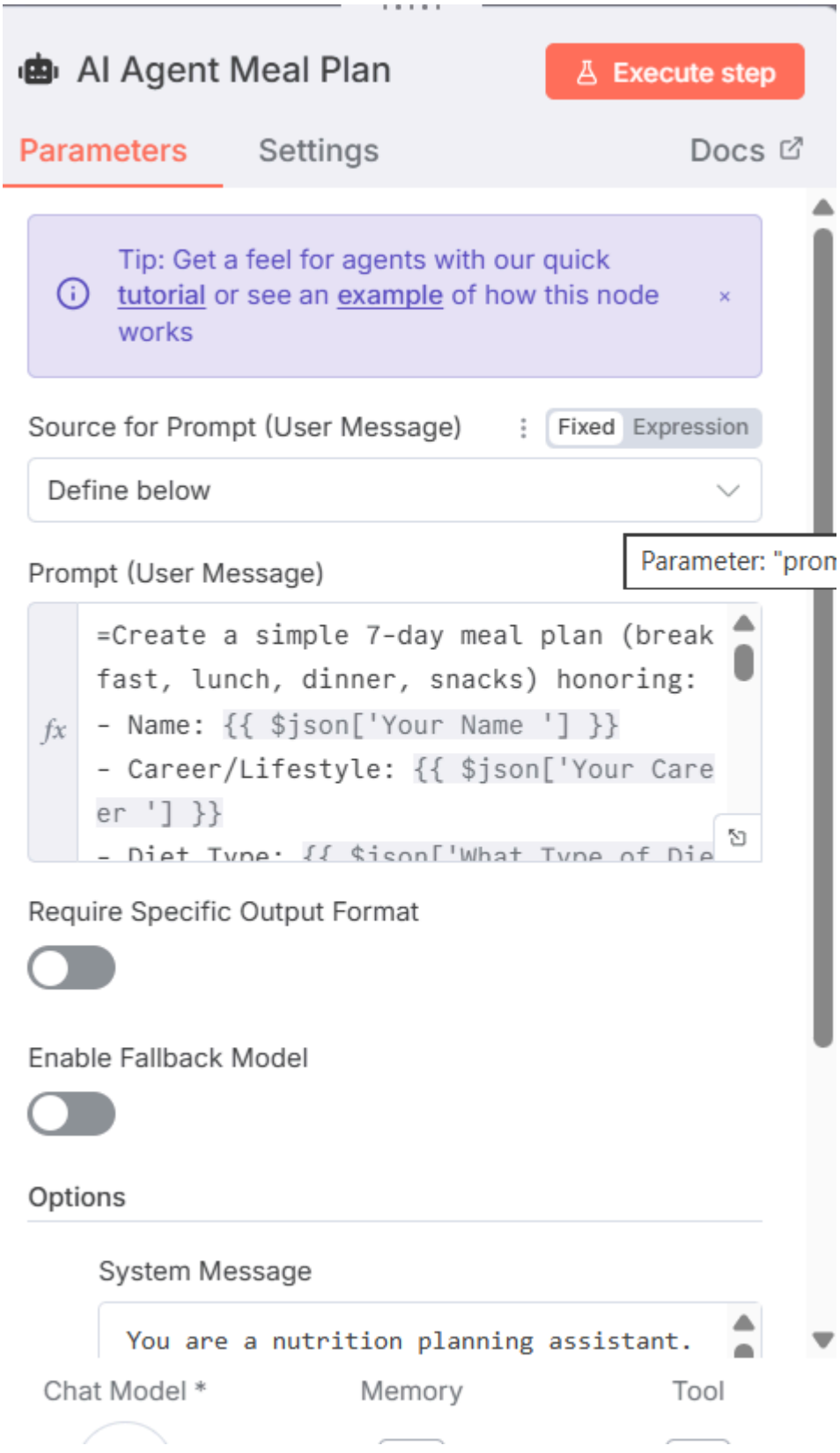
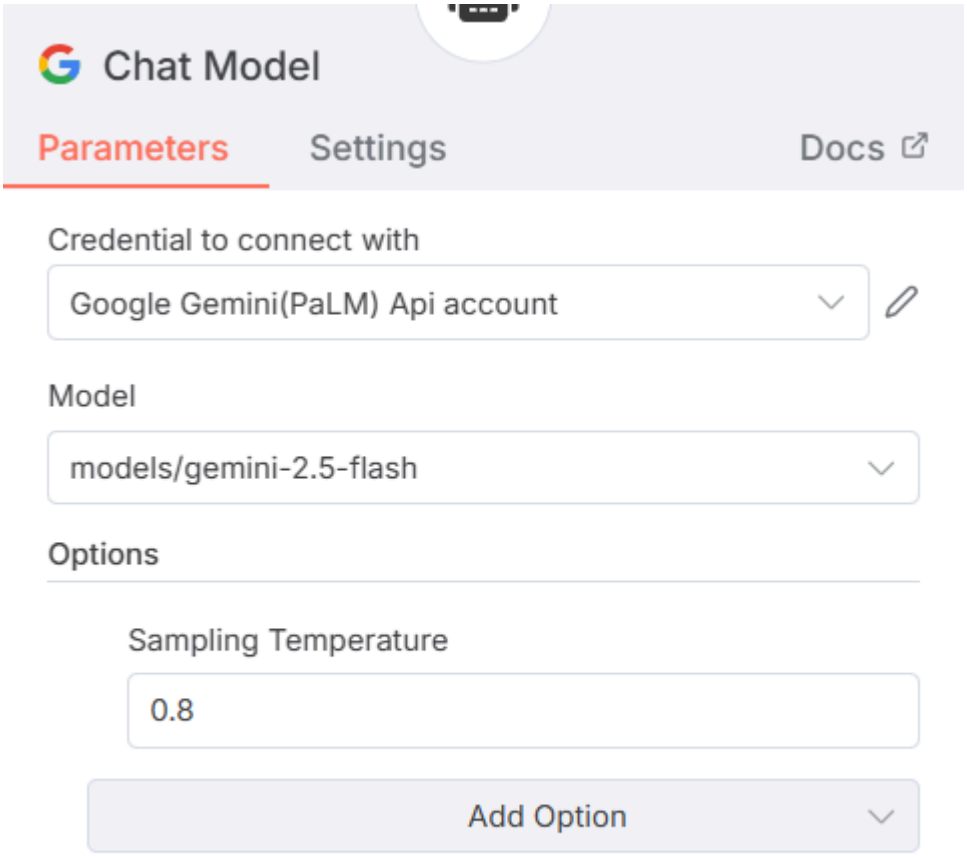
Step 2 Generate Meal Plan

- **AI Agent**: AI agent with Google Gemini chat model to generate weekly meal plan details





1. AI Model: Google Gemini
   - Add options
   - Sampling Temperature: 0.8 (the larger the number, the higher randomness ----> to help ai agent to generate different contents each execution although it may have the same user inputs)
2. Prompt:
   - Create 7-day meal plan based on user inputs
   - Set it generate different meal plan for each execution (even though it has the same user inputs) (not duplicated)
3. System Message:
   - Extra information to structure output, such as not changing the week tag input, let ai agent act as nutrition planning assistant, and check the java codes to avoid errors

- **Code Format Meal Plan**: To structured the contents from AI agent to make it look better in the document

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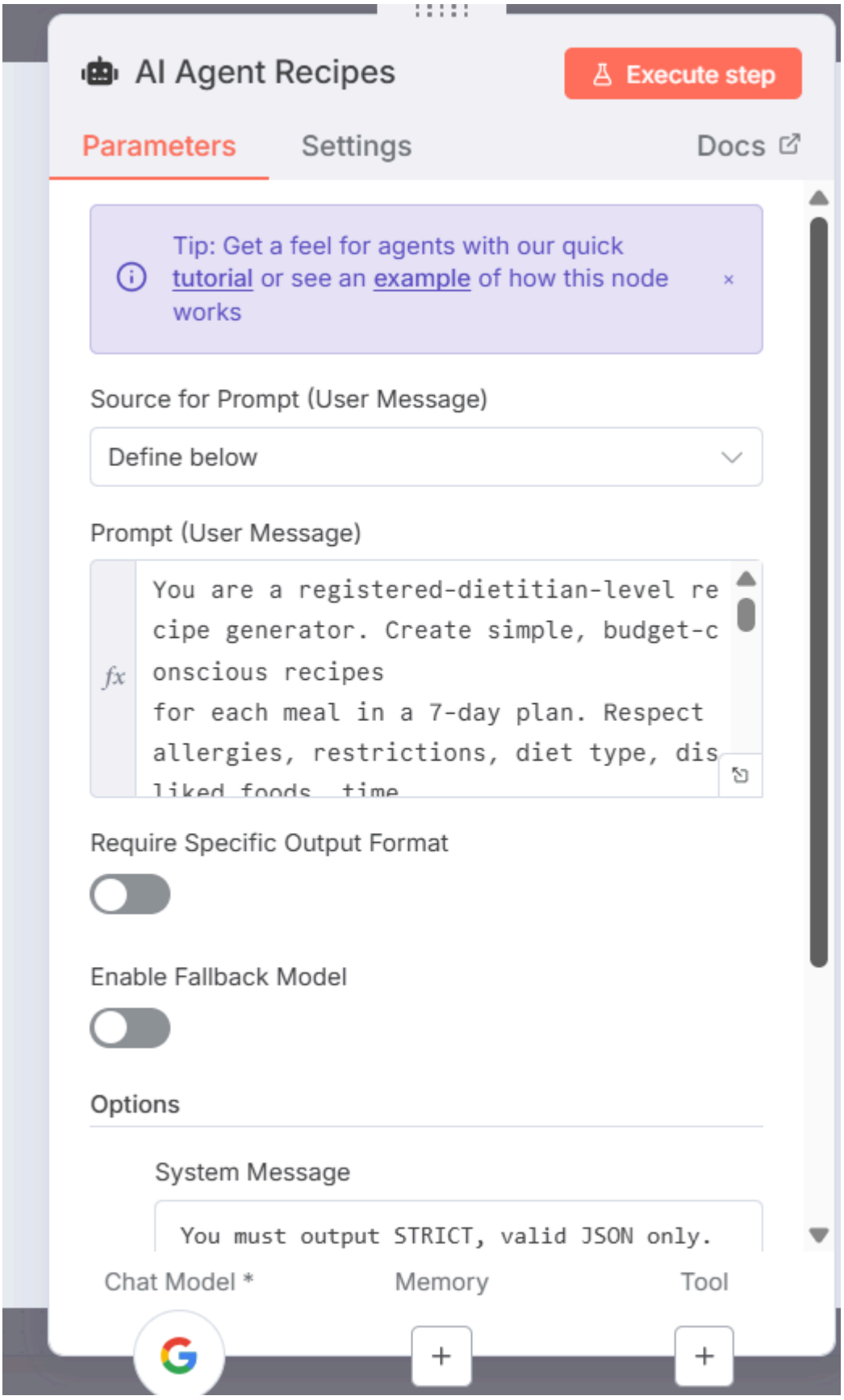
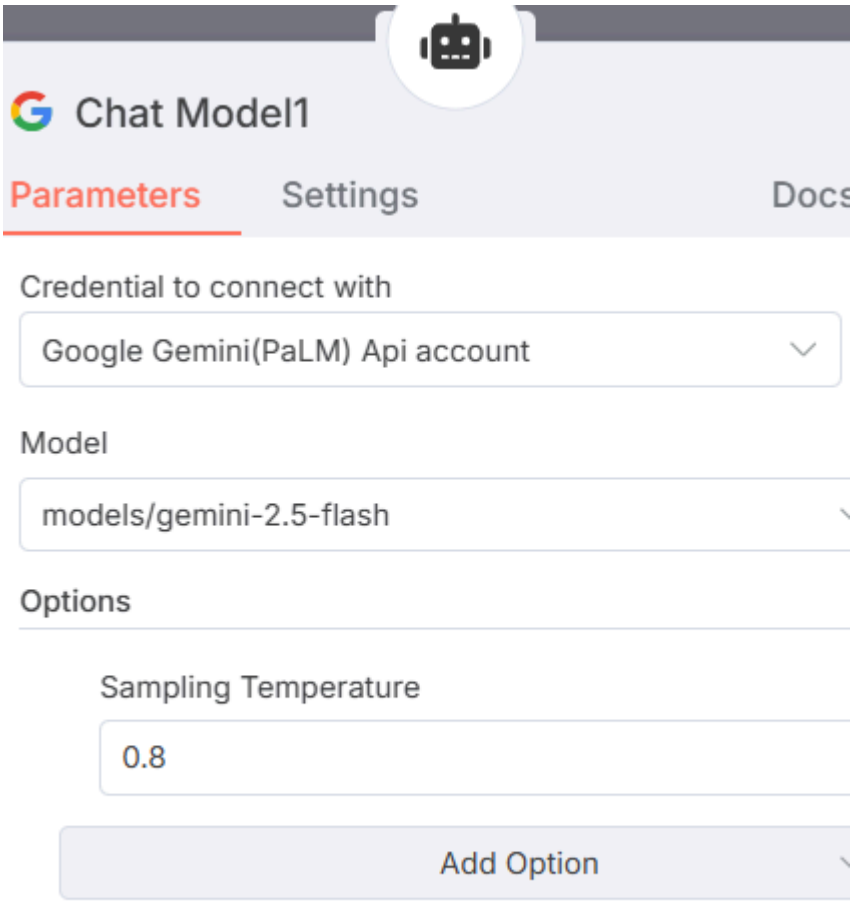
Step 3 Generate Recipes

- **AI Agent**: AI agent with Google Gemini chat model to generate recipes and shopping list





1. AI Model: Google Gemini
   - Add options
   - Sampling Temperature: 0.8 (the larger the number, the higher randomness ----> to help ai agent to generate different contents each execution although it may have the same user inputs)
2. Prompt:
   - Create recipes and shopping lists according to the meal plan
   - Set it generate different ingredients each time
3. System Message:
   - Instruct ai gent to output strict java codes to lower possibility of errors

- **Code Format Recipes**: To structured the contents from AI agent to make it look better in the document

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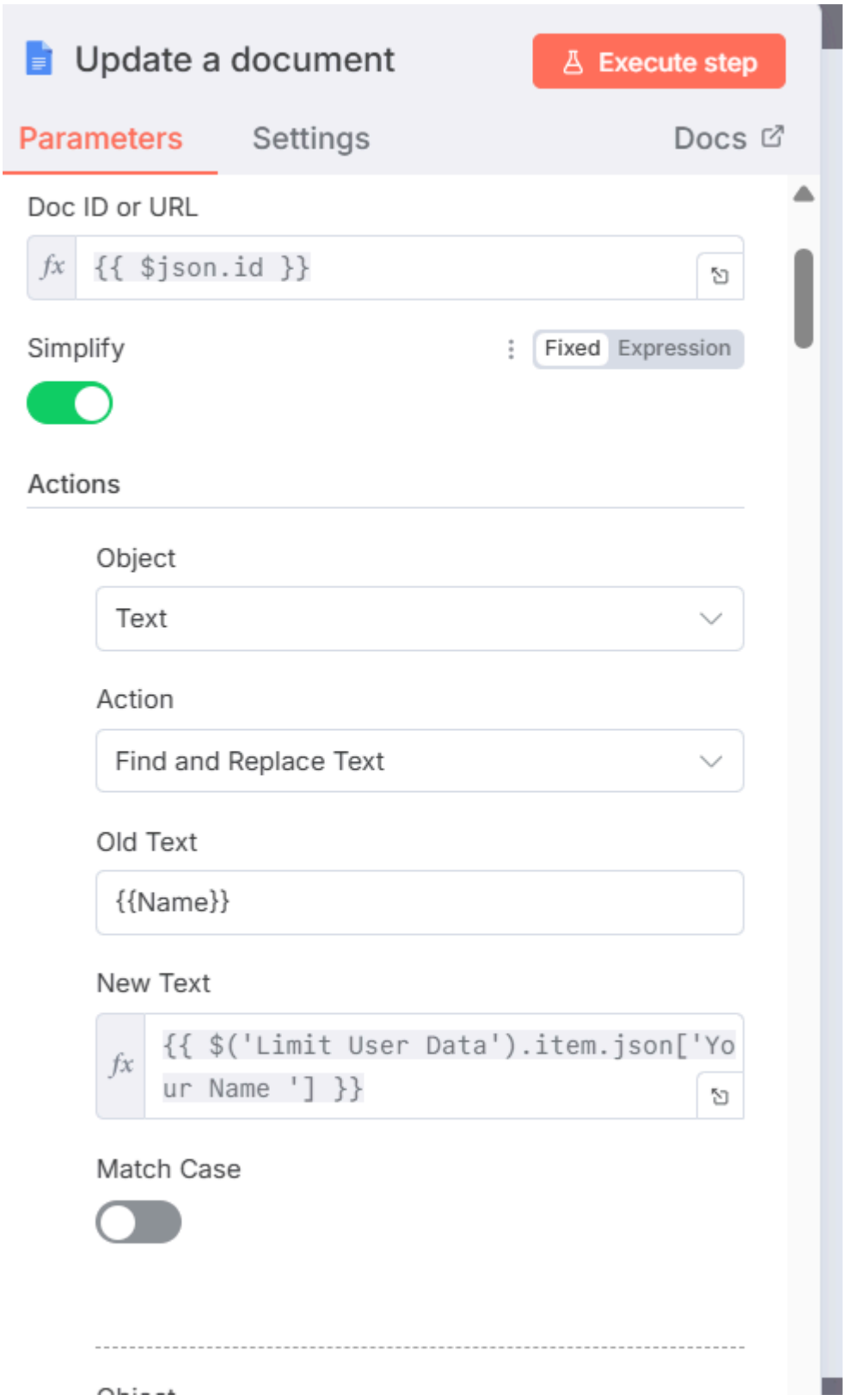
Step 4 Send the Meal Plan

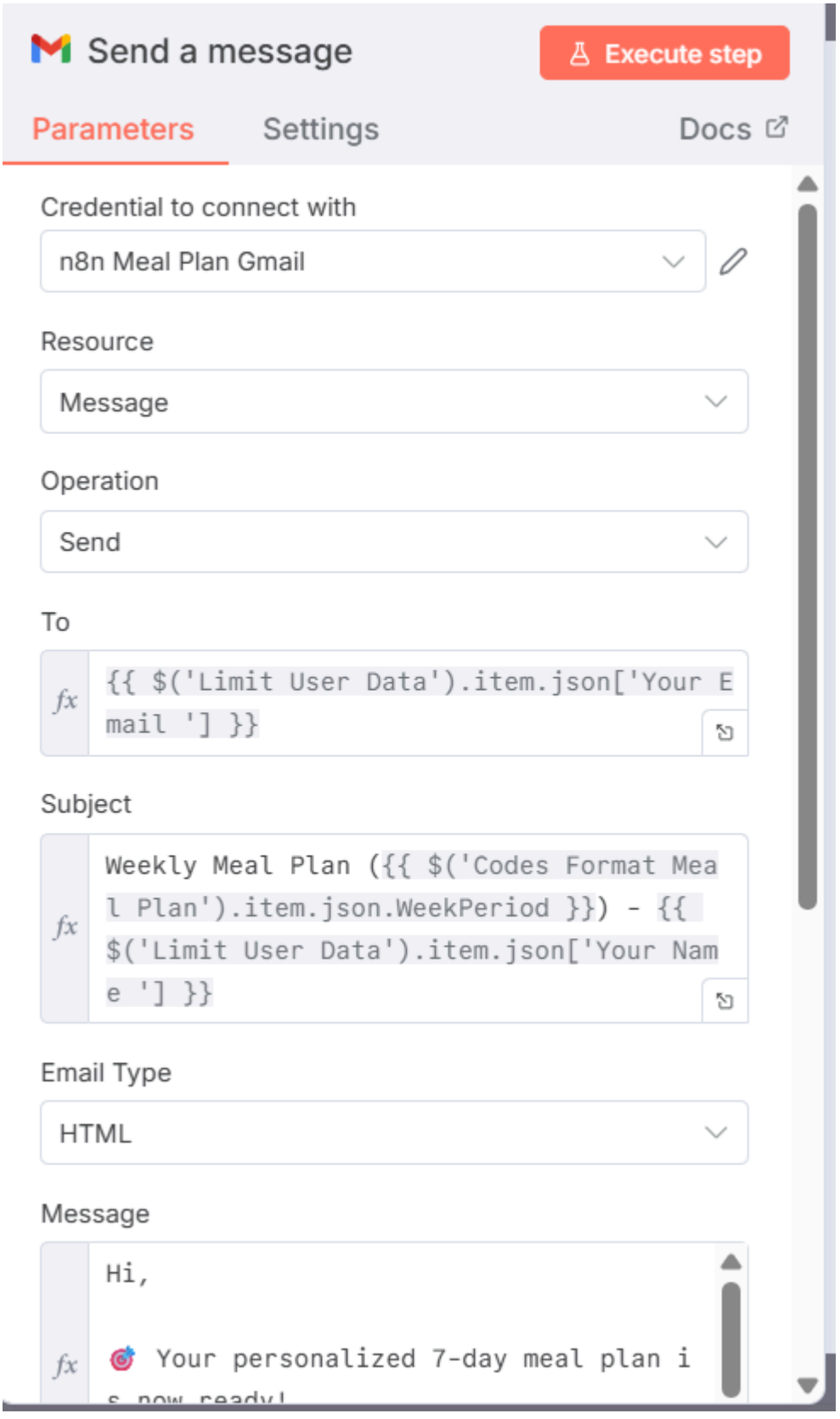
- **Copy file (Google Drive)**: Since we have the meal plan template in the google drive, we use this node to to copy the template to pass it to the next step to fill in user information

- **Update a document (Google Doc)**: Update user input to template



1. Action: Find and Replace Text
   - Find the original text in the copy template and replace it with ai agent contents and user input info

- **Download file**: Convert and download the google doc meal plan file to pdf for user
- **Send a message (Gmail)**: Send the finalized meal plan to user with message and subject



1. To (email):
   - User input email from previous step
2. Subject:
   - Include week tag codes: show week dates