**[Search for Recipes Ideas]**

1. Search recipes by ingredients:

If you have an excess of certain ingredients and want to find ways to use them, searching for related recipes is a great idea.

2. Most popular recipes in the past week/month/year(implement later):

Since my website was just created, this idea might be implemented later.

3. Search by difficulty level and show the distribution of ingredient counts(implement later):

This might not be very useful because these two factors are closely related.

**[Data Analysis]**

1. Pie: Recipe Difficulty Distribution Based on User Search

This visualization is generated after a user searches for recipes by ingredients. The pie chart will display the number of recipes classified into different difficulty levels.

1. X-axis: N/A (Pie charts do not have an X-axis)
2. Y-axis: N/A (Pie charts do not have a Y-axis)
3. Labels: Difficulty levels (Easy, Medium, Intermediate, Hard)
4. Bar Chart: Most Popular Ingredients in Recipes(No need user input)

This bar chart shows the number of recipes that contain each ingredient. It helps identify the most commonly used ingredients across all recipes.

1. X-axis: Ingredients
2. Y-axis: Number of recipes containing each ingredient
3. Labels: Ingredient names
4. Line Chart: Growth of Recipe Database Over Time(No need user input)

The line chart tracks the cumulative number of recipes added to the database over time. It provides insights into recipe submission trends.

1. X-axis: Time (day)
2. Y-axis: Cumulative number of recipes added
3. Labels: Time intervals (daily markers)

**[Execution flow]**

A diagram of a recipe

AI-generated content may be incorrect.

Video: <https://www.youtube.com/watch?v=cMWFPgl1UAI>