



The Foodies!

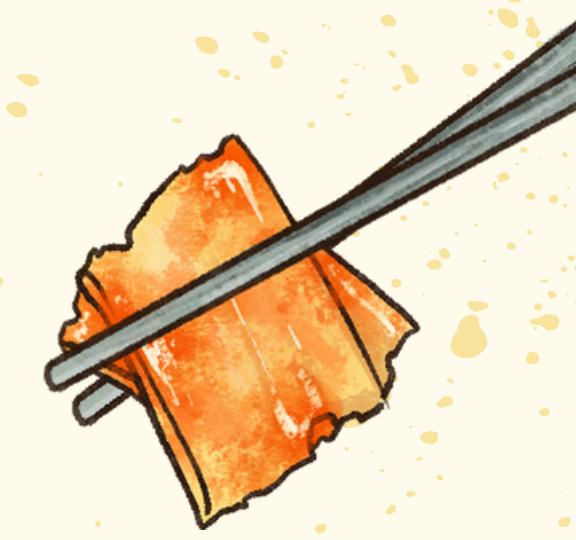
by Anouk de Brouwer
and Lisa Levasseur

Project Recap

Dataset

Kaggle → Food.com

200 000 recipes



Project Recap

Graph Structure

Nodes

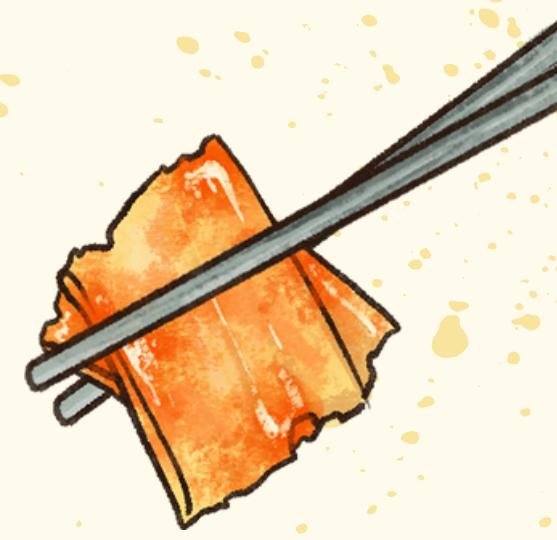
Recipes

Edges

Recipes sharing
same ingredients

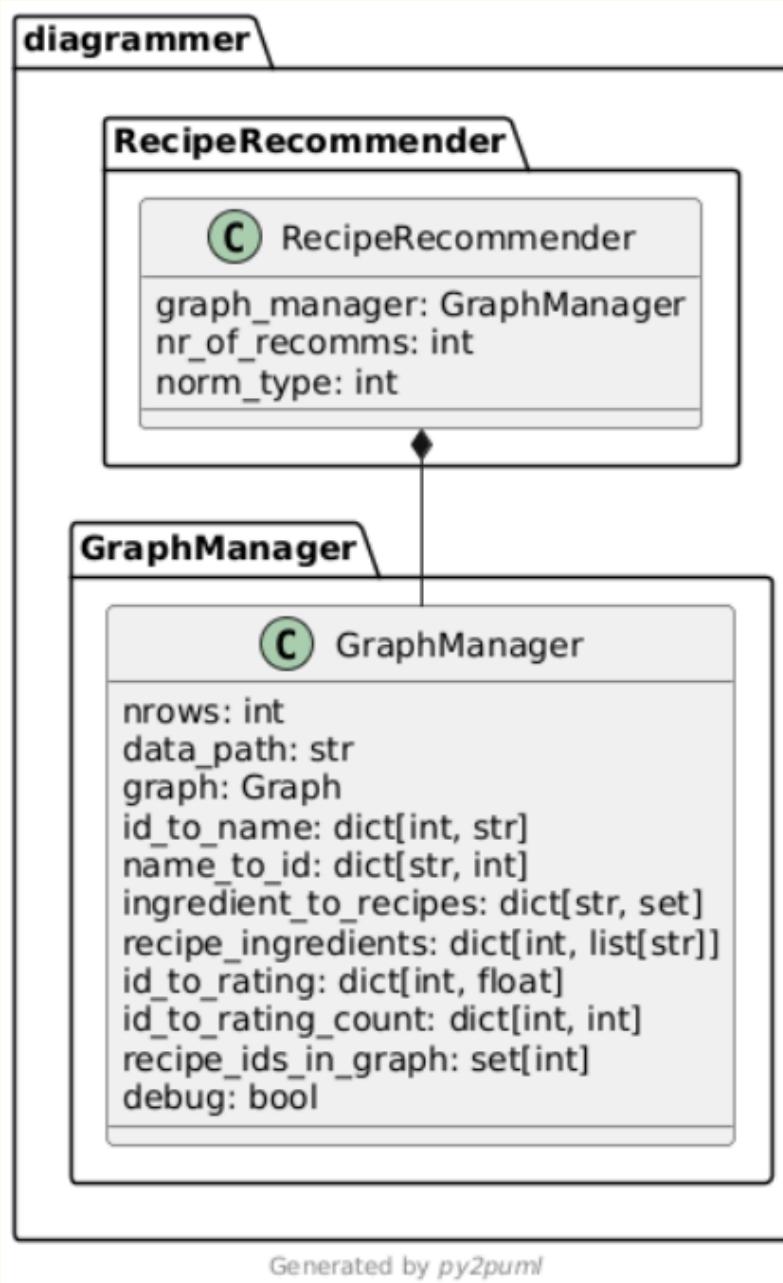
Weights

of shared
ingredients



Project Recap

First Interactive Script



0. *shared ingredients*

$$\frac{\text{shared ingredients}}{\text{all ingredients}}$$

$$\frac{\text{shared ingredients}}{\text{all ingredients}} + \frac{\text{rating}}{5}$$

Final UI interface

Home page

app
recipe

Recipe Recommender

Almond cow

Similarity Calculation Method:
1 - Highest Percentage of Shared Ingredients

👉 Method 1: The number of shared ingredients is divided by the total number of ingredients in the compared recipe. This avoids favoring recipes just because they have many ingredients.

Search

TOP Top 10 Recommendations

Recipe	Common Ingredients	Rating
almond latt	3 common ingredients	★ 4.0
adult chocolate milk	3 common ingredients	★ 5.0
amaretto iced coffee	3 common ingredients	★ 5.0

Details

Details

Details

Final UI interface

Recipe page

The screenshot shows a mobile application interface for a recipe. On the left, there is a vertical navigation bar with two items: "app" and "recipe". The "recipe" item is highlighted with a grey background. The main content area displays a recipe card for "almond latt".
Recipe Title: almond latt
Rating: 4.00 / 5
Cooking time: 5 minutes
Ingredients:

- amaretto
- kahlua
- cream
- milk

Instructions:

Step 1: shake with cubed ice and strain

Review:

a yummy and super easy cream drink!

Evaluation

Form Creation

Recipe Recommender User Survey

Thanks for testing the recipe recommender! Please let us know feedback about your experience.

How interested are you in cooking and/or baking? *

1	2	3	4	5	
Not at all	<input type="radio"/> Very much				

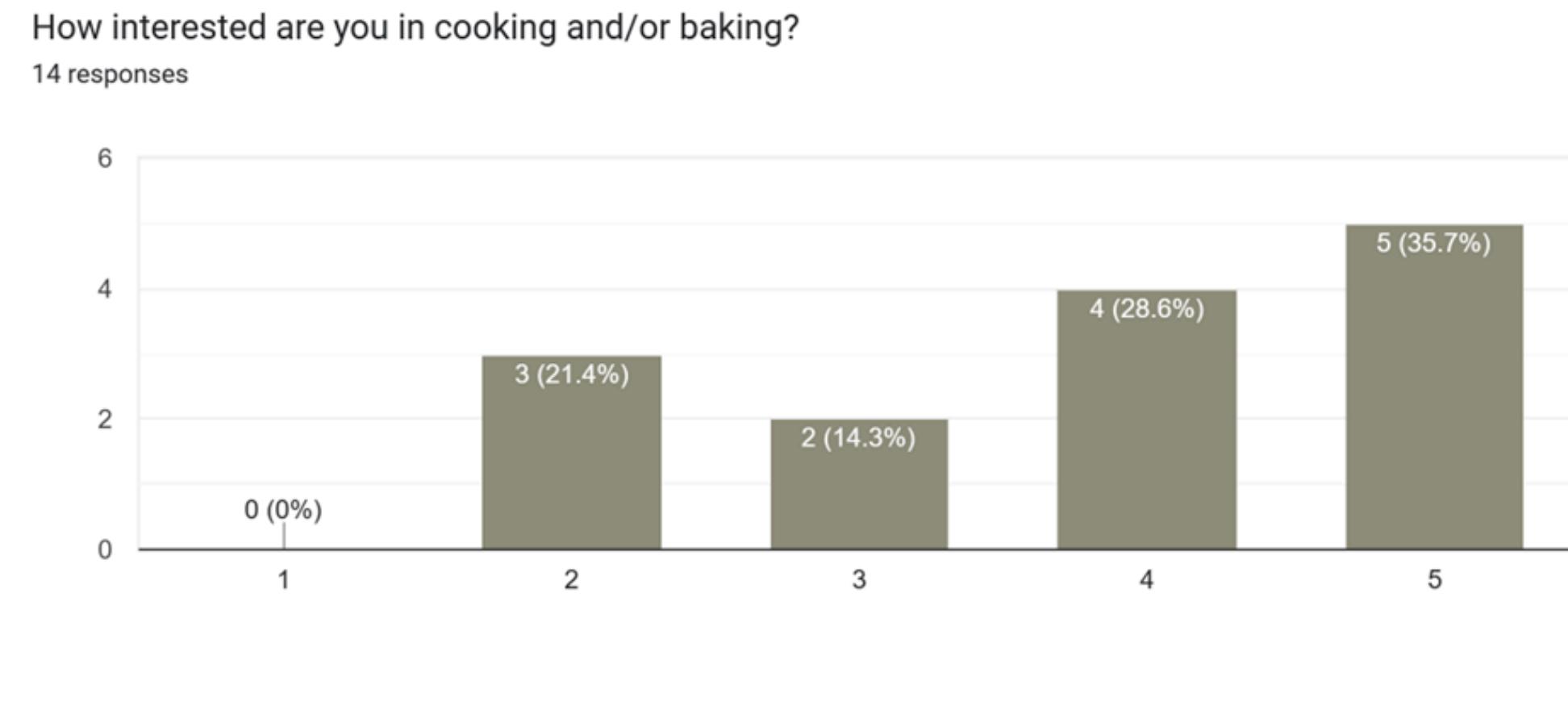
How often do you feel unsure about what to cook or bake? *

- Never
- Rarely
- Sometimes
- Often
- Always

- user-centered evaluation
- non-expert audience
- 12-question survey

Evaluation

Results - Relevant Demographics

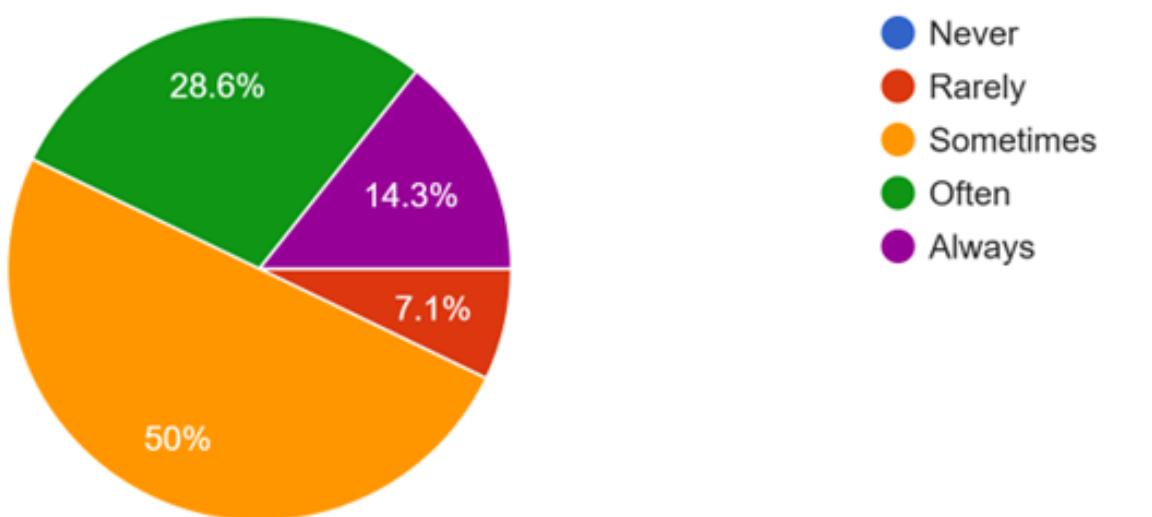


Evaluation

Results - Purpose

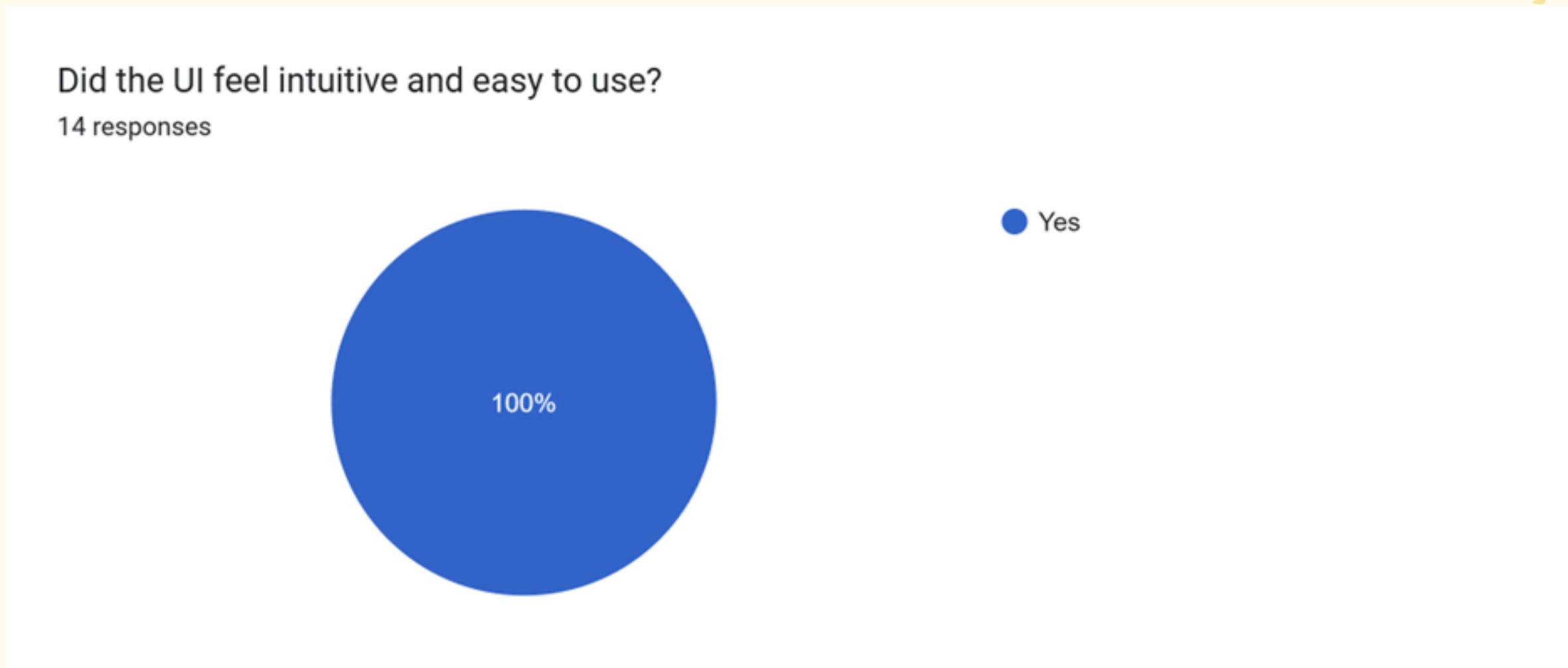
How often do you feel unsure about what to cook or bake?

14 responses



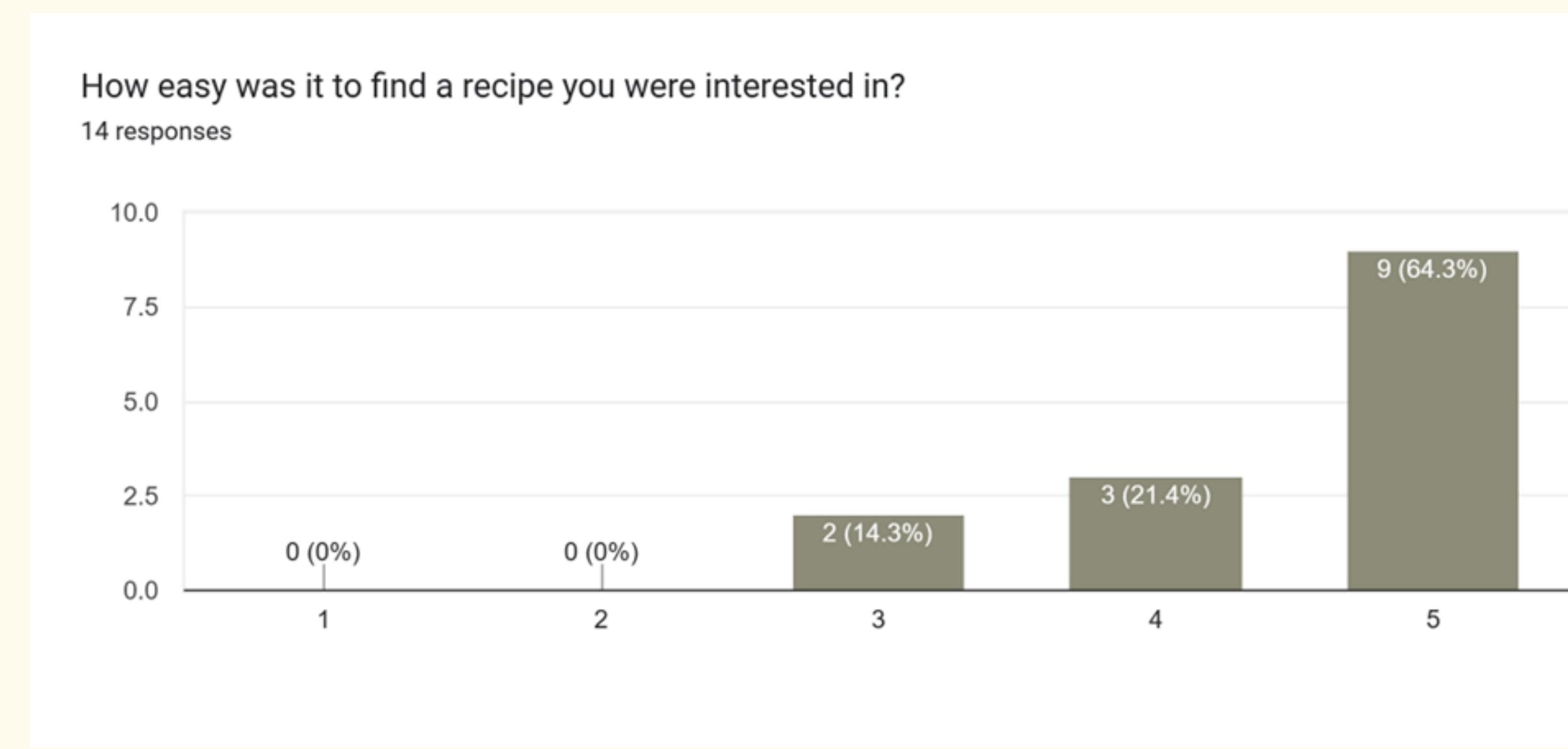
Evaluation

Results - UI



Evaluation

Results - Fuzzy Matching

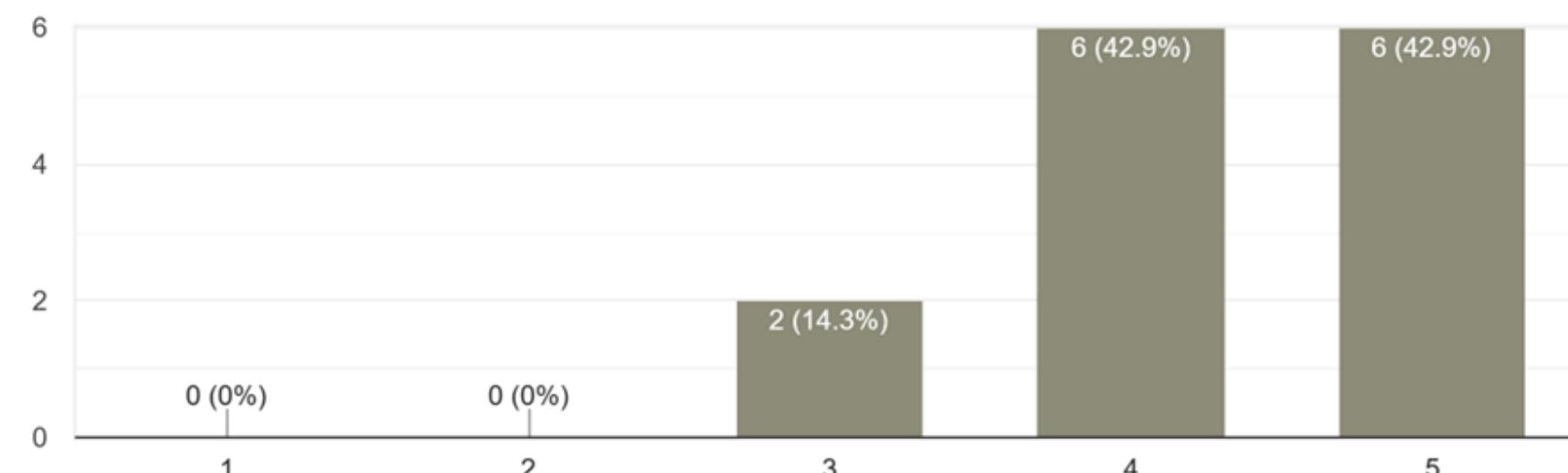


Evaluation

Results - Graph Logic

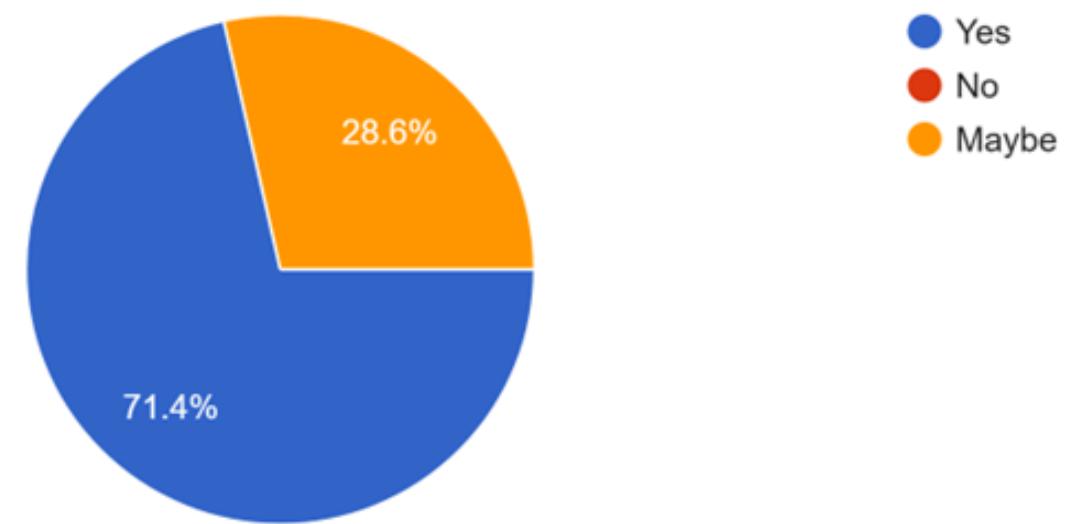
How satisfied were you with the recommended recipes?

14 responses



Would you consider cooking or baking one of the recommended recipes?

14 responses

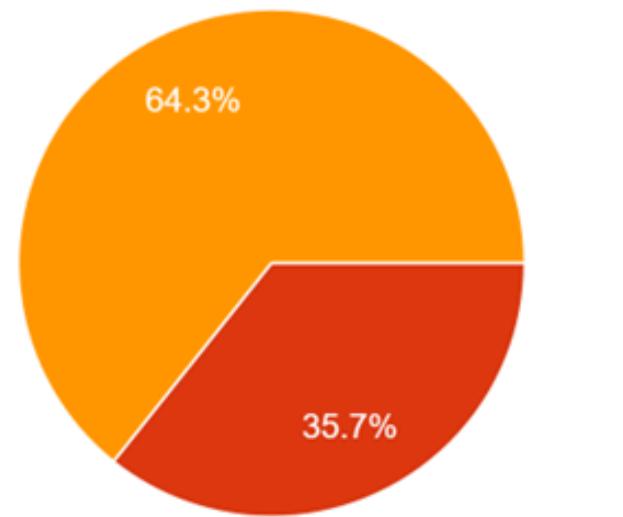


Evaluation

Results - Recommendation Logic

Which recommending type gave you the best results?

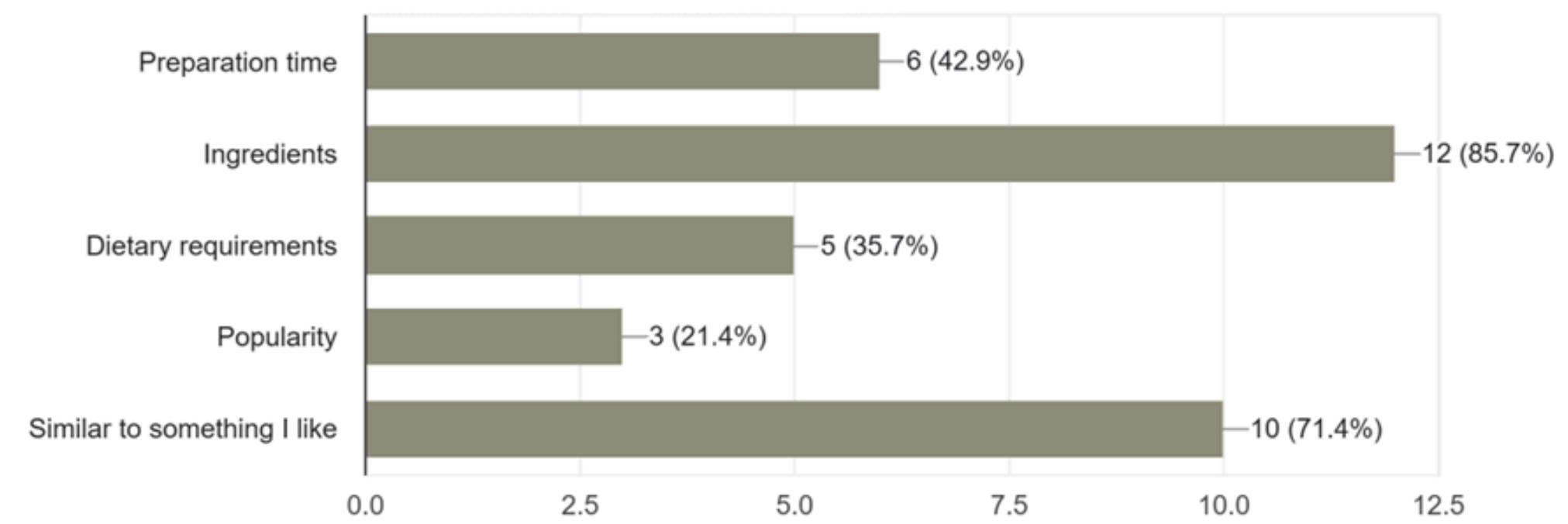
14 responses



- 0 – Absolute shared ingredients
- 1 – Normalized shared ingredients
- 2 – Normalized shared ingredients + normalized rating

What criteria are most important to you when choosing a recipe?

14 responses

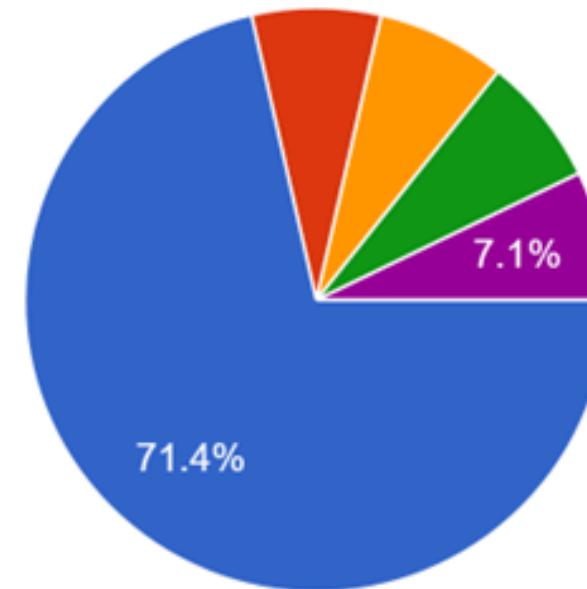


Evaluation

Results - Recommendation Logic

Would you like to see other types of recommendation strategies in the future? If yes which one?

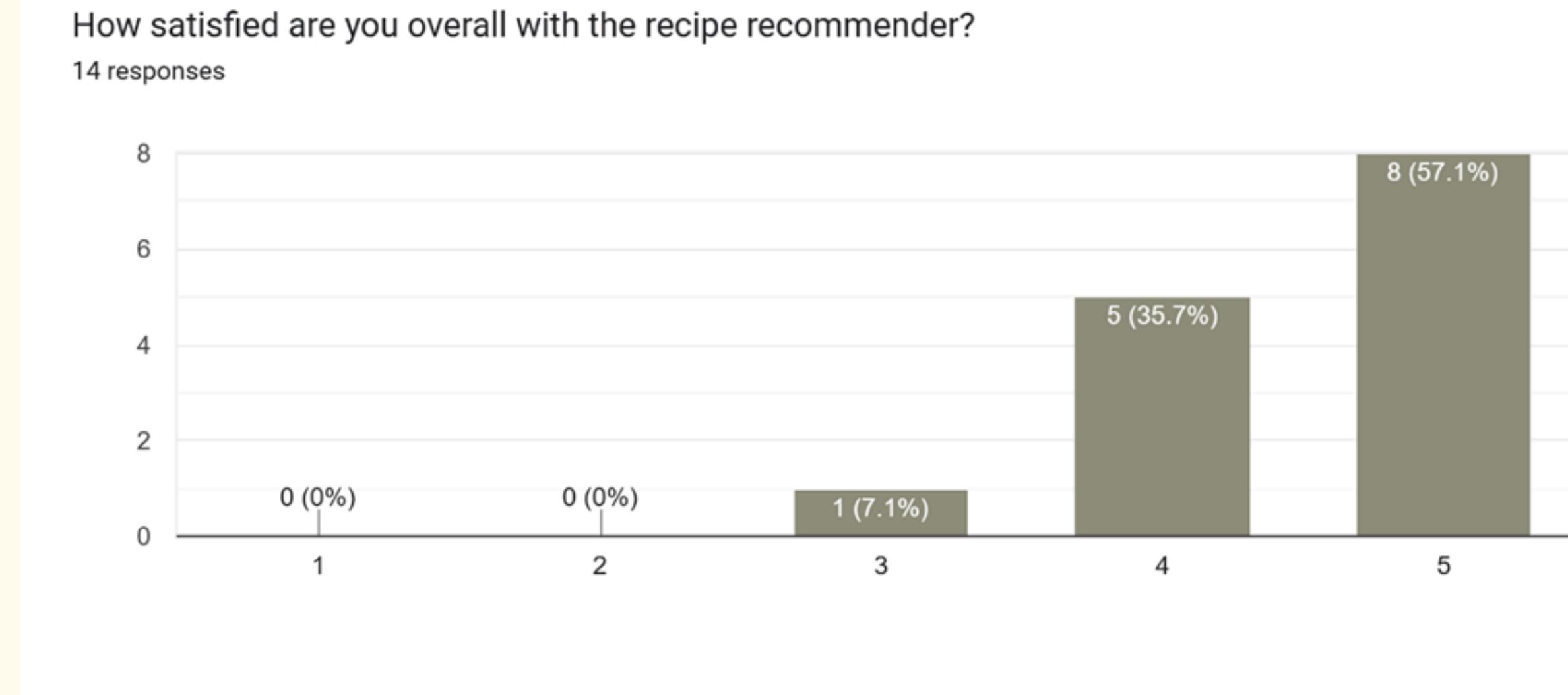
14 responses



- No
- recommendations based on a list of ingredients
- Only rating, just if one wants to find new recipes, maybe tastes one hasn't thought of previously
- A vegan or vegetarian filter would be nice?
- AI

Evaluation

Results



Evaluation

Results - Summary

- recommendation logic user approved
- understandable UI
- more settings wanted



Conclusion

Week 1/2

Preparation

- Brainstorming
- Data collection
- Graph

Week 3/4

Simple Implementation

- Recommending logic
- Command Line
- UI Mockup

Week 5/6

Final Implementation

- Final UI interface
- Evaluation
- Report

Conclusion

Together

- Brainstorming
- Dataset selection
- Report writing

Anouk

- data collection
- command-line recommender
- system evaluation

Lisa

- graph visualizations
- UI mockup
- final UI interface

References

Kaggle Dataset https://www.kaggle.com/datasets/shuyangli94/food-com-recipes-and-user-interactions/data?select=PP_recipes.csv

ChatGPT : <https://chatgpt.com/>

<https://streamlit.io/>

<https://docs.python.org/3/library/difflib.html>

**Thank you for
your attention**