

Task 2.7

- Take some time to think of what you want users to search for, the criterion for search, and format of output. Create a new empty document and call it “Task-2.7”. Place your thoughts in this document. Save the document.
 - I implemented a search form that looks for recipes by name and one that looks for recipes by ingredient.
 - Supports case-insensitive searches.
 - Allows for partial matches for recipe names.
 - Cleans user input, ensuring no empty queries are submitted.
 - Presents search results in a simple html template
 - Raises a validation error if the search query is empty.
 - Utilizes the form's ‘is_valid()’ method for basic validation.
- Data Analysis
 - Recipe Type Distribution (Bar Chart):
 - User Input: User selects a cuisine or category.
 - Data: Displays the number of recipes for each meal type (breakfast, lunch, dinner) in the selected category.
 - X-Axis: Meal Types (Breakfast, Lunch, Dinner).
 - Y-Axis: Number of Recipes.
 - Description:

Explore recipe distribution by meal type using the Bar Chart. Choose a cuisine, and the chart visually represents the quantity of recipes available for breakfast, lunch, and dinner. This helps users quickly assess and select recipes based on their preferred mealtime.
 - Recipe Difficulty Distribution (Pie Chart)
 - User Input: Select a breakfast, lunch, or dinner.

- Data: Distribution of recipes across difficulty levels (easy, medium, hard) in the chosen recipe type.
- X-Axis: Difficulty Levels (Easy, Medium, Hard).
- Y-Axis: Number of Recipes.
- Labels: X-Axis labeled with difficulty levels, Y-Axis with the recipe count.
- Description:
 - Explore the distribution of recipe difficulty levels in a selected recipe types. The bar chart visually represents the number of recipes categorized as easy, medium, and hard, aiding users in finding recipes aligned with their cooking expertise.
- Recipes Created per Month (line plot):
 - Data: Shows the number of recipes created per month (since the app only has 2 months so far, I made up fake data to make the chart look a little more worth-while).
 - X-Axis: Months.
 - Y-Axis: Number of Recipes.
 - Description: Visualize the number of recipes created per month. This chart provides insights into the monthly growth of your recipe collection.

- Execution flow:

- Here is the [link](#) to the execution (user-journey) flow video

