

Search Implementation:

What do I want users to search for?

- Recipes by title
- Recipes by ingredient

What is the search criterion?

- Match full or partial title
- Match full or partial ingredient name (even if it's one of many in the recipe)

Format of output:

- Display results as an HTML table
- Each recipe name is a clickable link to its detail page
- If no results, show a message: "No matching recipes found."

Data Analysis:

Bar Chart

- What it shows: Cooking time for each recipe
- X-axis: Recipe name
- Y-axis: Cooking time
- Label: Time in minutes

Pie Chart

- What it shows: Proportion of total cooking time per recipe

- Labels: Recipe names
- Values: Cooking time

Line Chart

- What it shows: Cooking time trend (this can just plot recipe IDs vs. cooking time to mimic time series)
- X-axis: Recipe ID or index
- Y-axis: Cooking time
- Label: Cooking time

Execution Flow:

1. User navigates to the homepage (`/`)
2. User logs in through the login page (`/login/`)
3. User is redirected to the recipe list page (`/recipes/list/`)
4. User enters a title like "grilled" and selects "bar" chart → clicks search
5. Search results appear in a table, and a chart is shown
6. User clicks on a recipe name and sees the detail view
7. User clicks "Show All Recipes" to reset the list
8. User logs out