SEARCH FUNCTION

Take some time to think of what you want users to search for, the criterion for search, and format of output. Place your thoughts in this document.

Answer: I want users to be able to search recipes by name, difficulty, cooking time and ingredients. So if a user is only looking for easy recipes or recipes that involve tomatoes, or recipes below 15 minutes, they can quickly find them.

DATA ANALYSIS

Note down at least one visualization using a bar, pie, and line chart (at least one for each). For each of the scenarios, identify the x- and y- axes and labels (if any). Also determine if you want charts to be displayed based on user input or simply to provide them at your own discretion.

Answer: I want to provide a pie chart that shows all of the recipes available based on difficulty, without considering any user input at this stage. Now taking their input into consideration, I would like to display a bar chart showing all of the recipes with the selected difficulty, with the x-axis being the names of the recipes and the y-axis being the number of ingredients. Lastly, I'll display a line chart also based on user input, which shows the cooking time in the x axis and the names of the recipes in the y-axis.

EXECUTION FLOW

Think of the user's journey from the moment they land on the homepage, considering all the different navigation possibilities and search options. For example, a user lands on the homepage, logs in to the account, searches for a recipe based on a recent date, sees the plots, checks details, and then logs out. Represent this journey as a flow chart.

```
┌──────────────┐
│  HOMEPAGE    │
└──────┬───────┘
       │
       ▼
┌──────────────┐      ┌──────────────┐
│  LOG IN      │─────▶│  MAIN        │
│  FORM        │      │  RECIPES'    │
└──────────────┘      │  PAGE        │
                      └──────┬───────┘
                             │
                             ▼
                      ┌──────────────┐      ┌──────────────┐
                      │  SEARCH      │─────▶│  RESULTS     │
                      │  FOR RECIPE  │      │  (user clicks│
                      └──────────────┘      │  on recipe)  │
                                            └──────┬───────┘
                                                   │
                                                   ▼
┌──────────────┐                            ┌──────────────┐
│  LOG OUT     │◀───────────────────────────│  RECIPE      │
│  SUCCESS     │                            │  DETAILS     │
│  PAGE        │                            │  PAGE        │
└──────────────┘                            └──────────────┘
```