

I will want the user to be able to search for a recipe by two means as I think they are the most useful when working with a recipe application.

~ Recipe Name  
~Recipe Ingredients

I have made it so that the user can search for these individually or using both parts as a search inquiry.

The most useful thing with regards to recipes would also be the recipe itself along with how many ingredients it has in it. The more ingredients a recipe has the more difficult it can be which is why this information would be best delivered with charts if someone is looking at multiple different recipes.

## Exercise 2.7: Data Analysis and Visualization in Django

### Learning Goals

- Work on elements of two-way communication like creating forms and buttons
- Implement search and visualization (reports/charts) features
- Use QuerySet API, DataFrames (with pandas), and plotting libraries (with matplotlib)

### Reflection Questions

1. Consider your favorite website/application (you can also take CareerFoundry). Think about the various data that your favorite website/application collects. Write down how analyzing the collected data could help the website/application.

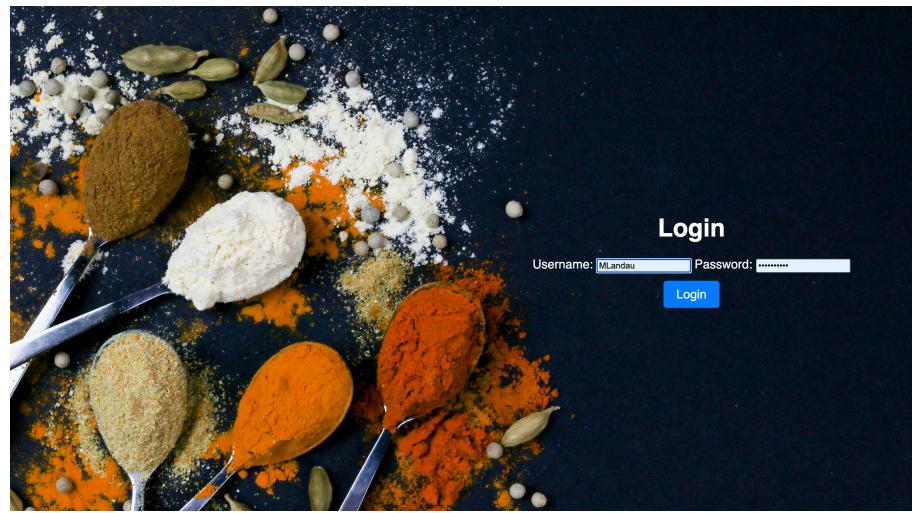
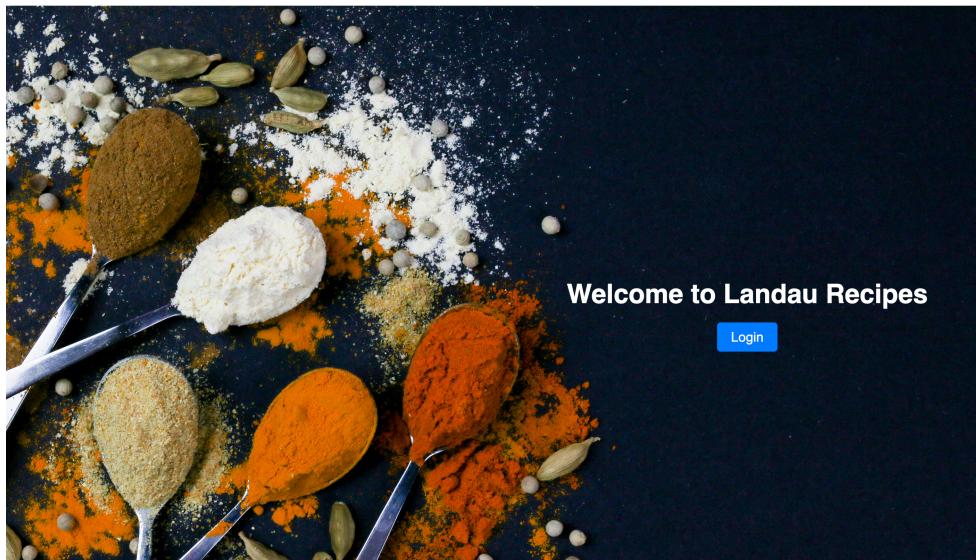
Youtube is my favorite website and it will collect many types of data. To name a couple that are the most important for its function would be search inquiry data, Login information, and viewing history. With this it will allow me to login and have a personal profile that is special for me. Search inquiry allows them to collect what we want to search for so they can deliver specific videos to me. Viewing history allows them to use our past information to predict what else we may want to watch.

2. Read the Django [official documentation on QuerySet API](#). Note down the different ways in which you can evaluate a QuerySet.

A query set can have many functions done to it prior to actually reaching out to the database for more information. You can use many means of querying such as `repr()`, `list()`, slicing, asynchronous iteration and many others to preform different queries.

3. In the Exercise, you converted your QuerySet to DataFrame. Now do some research on the advantages and disadvantages of QuerySet and DataFrame, and explain the ways in which DataFrame is better for data processing.

Pandas and DataFrame are great at fast queries for the database and are best utilized in large databases. As it functions by translating searches into binary it is much more efficient for a computer to retrieve this information and can translate into faster searches for the database to perform.



## Recipe's List

Logout

### Search Recipes

Recipe Name:

Ingredients:

Chart Type: Bar chart

Pork

Pie

Pizza

Chicken Pot Pie

cookies

## Recipe's List

Logout

### Search Recipes

Recipe Name:

Ingredients:

Chart Type: Bar chart

Bar chart showing search results:

Category	Count
Pie	5
Pizza	3
Chicken Pot Pie	10

Pie

Pizza

Chicken Pot Pie

## Recipe's List

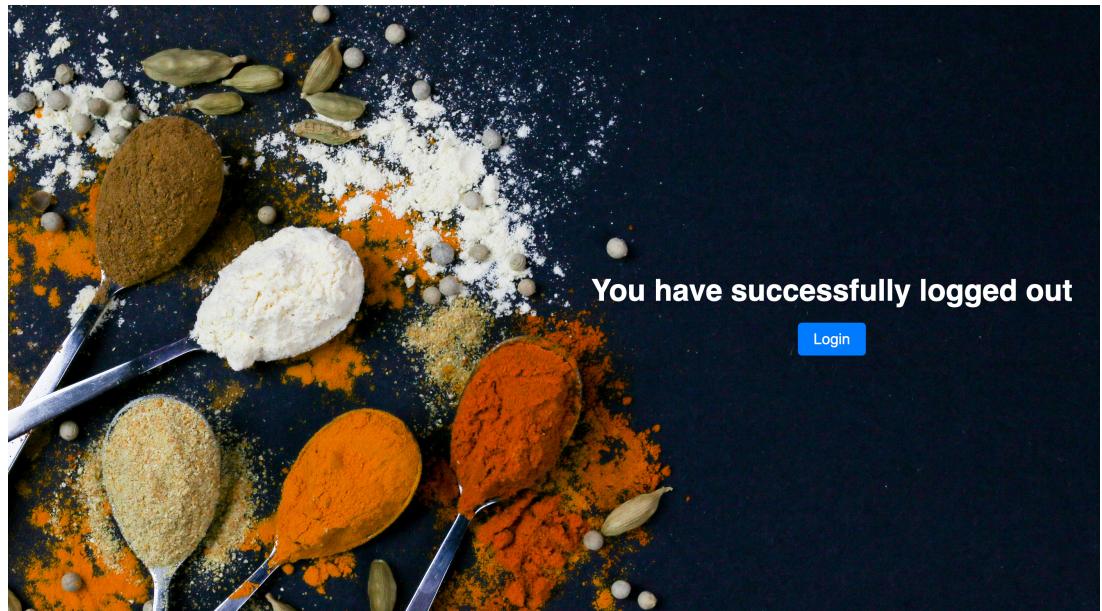
Logout

### Pizza

Cooking Time: 15

Difficulty: easy

Ingredients: Dough, Sausage, Cheese, Sauce



You have successfully logged out

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