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.

Amazon is one of my favorite sites. By analyzing data it keeps a record of all my purchases and provides similar items I also might enjoy. It also lets me keep a favorites list for future purchases and all my personal info such as address and credit info for easy checkout.

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

Iteration

Slicing -

Pickling/Caching -

rep() -

len() -

list() -

bool() -

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.

DataFrame is better for larger databases that can hold millions of entries. pandas is one of the most popular Python libraries and among its many data-oriented tools is the DataFrame. The size of a DataFrame is mutable, which means you can delete or append elements.