Visualizing Data with Matplotlib and Seaborn

3 min

Catherine wants to *visualize* her analysis and share it with her boss. For this, she will use **Matplotlib**, another Python module.

Matplotlib lets Catherine create line charts, bar charts, pie charts, and more. It gives her precise control over colors and labels so that she can create the perfect chart to communicate her findings.

Catherine has written some code using Matplotlib that visualizes hours of usage on Codecademy!

Instructions

1. Checkpoint 1 Passed

1.

Catherine has written some code in **script.py**, but it won't display her new graph until you add the following code to the very end of the file:

plt.show()

This tells Matplotlib to create and display the plot!

script.py

```
import codecademylib3_seaborn

from matplotlib import pyplot as plt

import numpy as np

import pandas as pd


hour = range(24)


viewers_hour = [30, 17, 34, 29, 19, 14, 3, 2, 4, 9, 5, 48, 62, 58, 40, 51, 69, 55, 76, 81, 102, 120, 71, 63]


plt.title("Codecademy Learners Time Series")


plt.xlabel("Hour")

plt.ylabel("Viewers")


plt.plot(hour, viewers_hour)


plt.legend(['2015-01-01'])
```

```
ax = plt.subplot()

ax.set_facecolor('seashell')

ax.set_xticks(hour)
ax.set_yticks([0, 20, 40, 60, 80, 100, 120])

y_upper = [i + (i*0.15) for i in viewers_hour]
y_lower = [i - (i*0.15) for i in viewers_hour]

plt.fill_between(hour, y_lower, y_upper, alpha=0.2)

# Add the code here:
plt.show()
```