

How can I create a stacked bar plot in Seaborn?

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RECOMMENDED CITATION

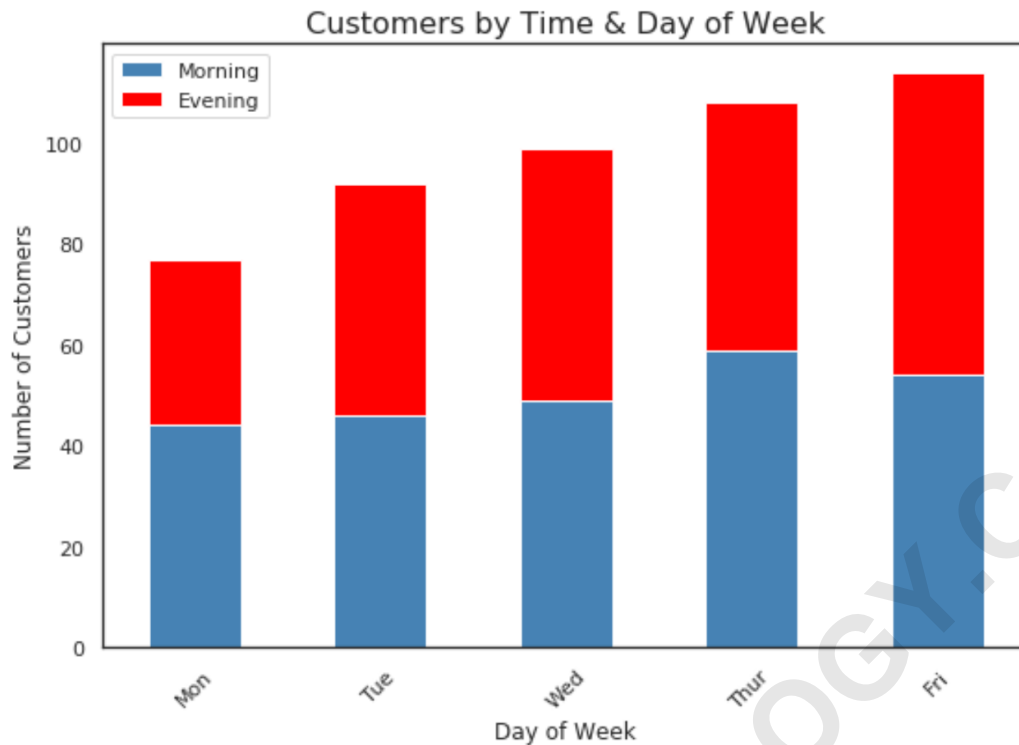
stats writer (2024). *How can I create a stacked bar plot in Seaborn?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=165722>

Creating a stacked bar plot in Seaborn is a simple and effective way to visualize categorical data. This type of plot allows for the comparison of multiple categories within a single bar, making it ideal for displaying proportions or percentages. To create a stacked bar plot in Seaborn, one can use the "barplot" function and specify the variables for the x and y axis, as well as the variable for the color grouping. This will automatically stack the bars and display the relative sizes of each category. Additionally, Seaborn offers customization options such as changing the color palette and adding labels to further enhance the visualization. With its user-friendly interface and versatile capabilities, Seaborn provides a convenient solution for creating stacked bar plots for data analysis and presentation.

Create a Stacked Bar Plot in Seaborn (Step-by-Step)

A stacked bar plot is a type of chart that uses bars divided into a number of sub-bars to visualize the values of multiple variables at once.

This tutorial provides a step-by-step example of how to create the following stacked bar plot in Python using the data visualization package:



Step 1: Create the Data

First, let's create the following pandas DataFrame that shows the total number of customers that a restaurant receives in the morning and evening from Monday through Friday:

```
import pandas as pd
```

```
#create DataFrame
```

```
df = pd.DataFrame({'Day': ,  
'Morning': ,  
'Evening': })
```

```
#view DataFrame
```

```
df
```

```
Day Morning Evening
```

```
0 Mon 44 33
```

```
1 Tue 46 46
```

```
2 Wed 49 50
```

```
3 Thur 59 49
```

```
4 Fri 54 60
```

```
Step 2: Create the Stacked Bar Chart
```

We can use the following code to create a stacked bar chart to visualize the total customers each day:

```
import matplotlib.pyplot as plt
```

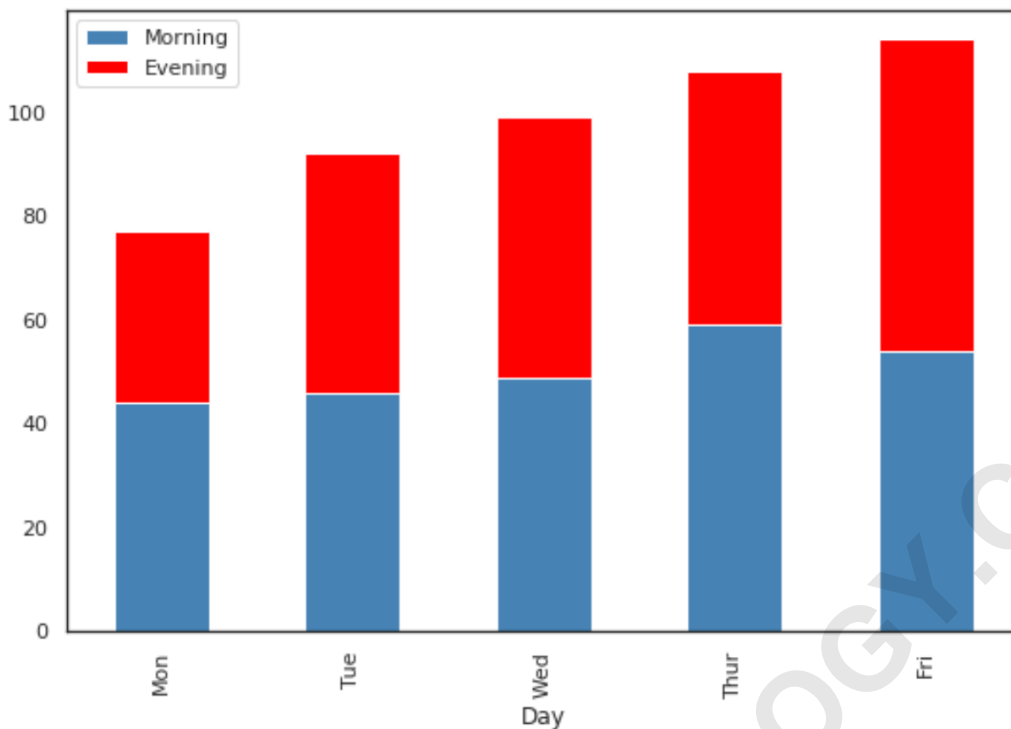
```
import seaborn as sns
```

```
#set seaborn plotting aesthetics
```

```
sns.set(style='white')
```

```
#create stacked bar chart
```

```
df.set_index('Day').plot(kind='bar', stacked=True, color=)
```



The x-axis displays the day of the week and the bars display how many customers visited the restaurant in the morning and evening each day.

Step 3: Customize the Stacked Bar Chart

The following code shows how to add axis titles, add an overall title, and rotate the x-axis labels to make them easier to read:

```
import matplotlib.pyplot as plt
import seaborn as sns

#set seaborn plotting aesthetics
```

```
sns.set(style='white')
```

```
#create stacked bar chart
```

```
df.set_index('Day').plot(kind='bar', stacked=True,  
color=)
```

```
#add overall title
```

```
plt.title('Customers by Time & Day of Week',  
fontsize=16)
```

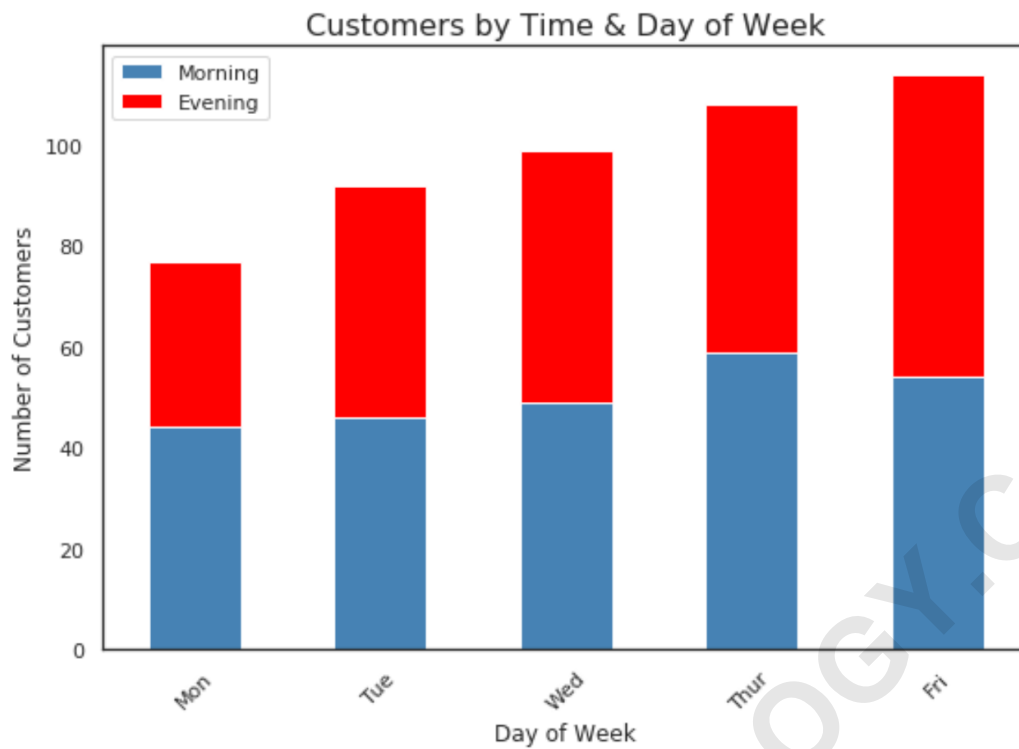
```
#add axis titles
```

```
plt.xlabel('Day of Week')
```

```
plt.ylabel('Number of Customers')
```

```
#rotate x-axis labels
```

```
plt.xticks(rotation=45)
```



Note: We set the seaborn style to 'white' for this plot, but you can find a complete list of seaborn plotting aesthetics on .

Additional Resources