911 Calls

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Abstract

I am using 911 data from Kaggle to figure out what times different response services are called? The approaches I am applied for are bar graphs, line graphs heatmaps and clustermaps. Bar graphs and line graphs help quickly see each response service throughout the weeks and months. Without a doubt, heatmaps and clustermaps give the quickest view on the total number of calls per hour through out the week.

Motivation

To know what response service has a high call rate during a given time.

Dataset(s)

I will be analyzing some 911 call data from Kaggle. The data contains the following fields:

- lat : String variable, Latitude
- lng: String variable, Longitude
- desc: String variable, Description of the Emergency Call
- zip: String variable, Zipcode
- title: String variable, Title
- timeStamp: String variable, YYYY-MM-DD HH:MM:SS
- twp: String variable, Township
- addr: String variable, Address
- e: String variable, Dummy variable (always 1)

Data Preparation and Cleaning

Since this is a popular Kaggle notebook, no preparation or cleaning was needed since this has already been preformed.

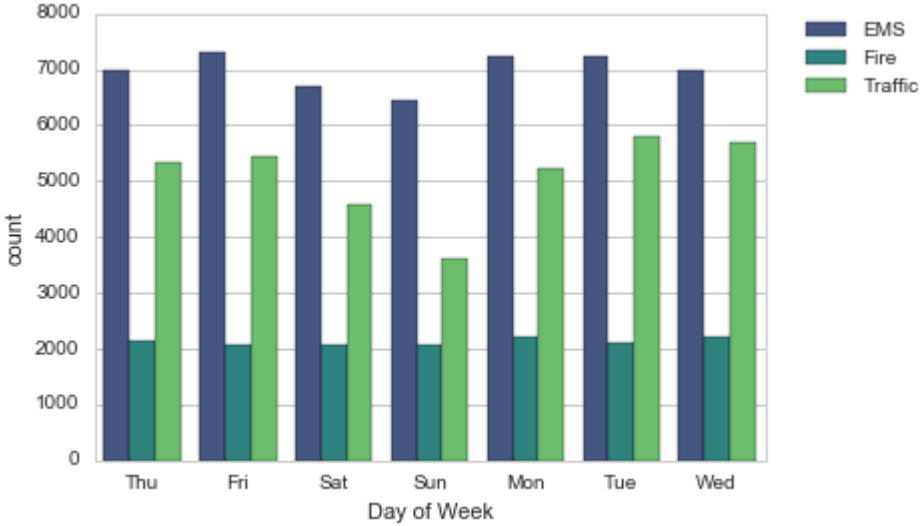
Research Question(s)

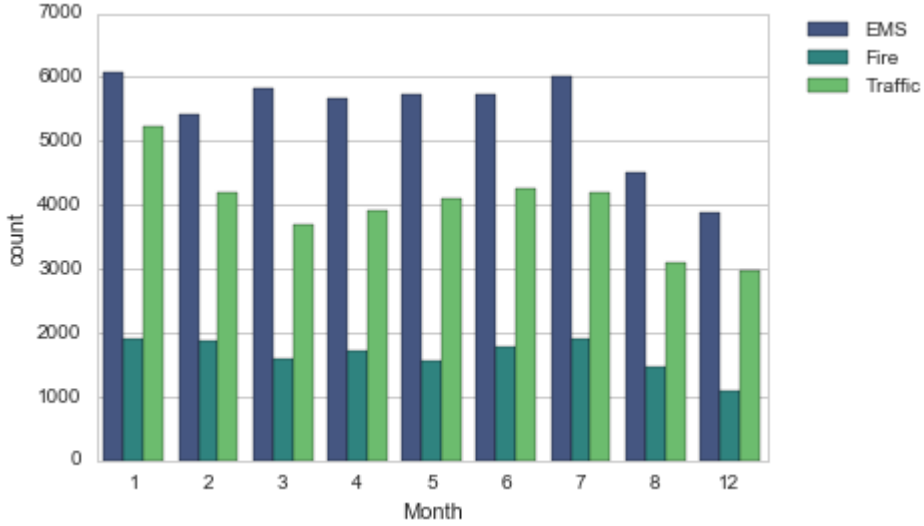
To figure out which response service has the most calls over the past day, week, month, and year?

Methods

The methods I used to analyze the data are bar graphs, line graphs heatmaps and clustermaps. These graphs were the best analytical tools to measure the call data over a period of time.

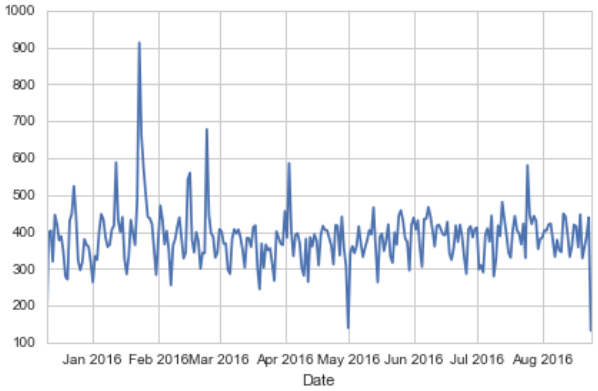
Findings & Conclusion

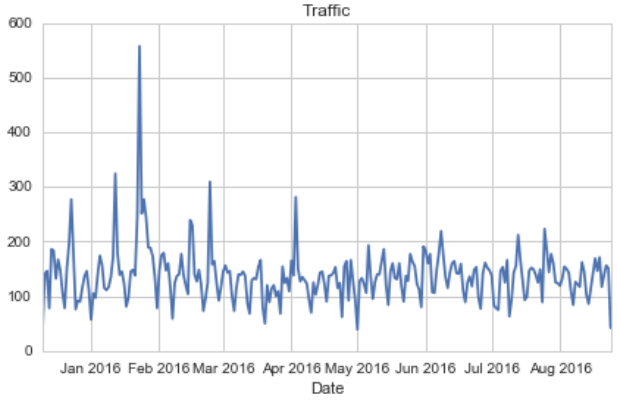


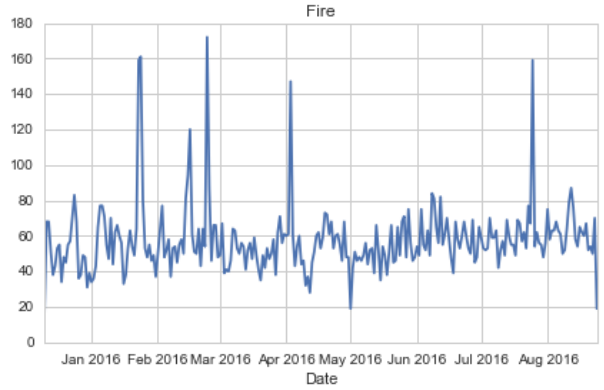


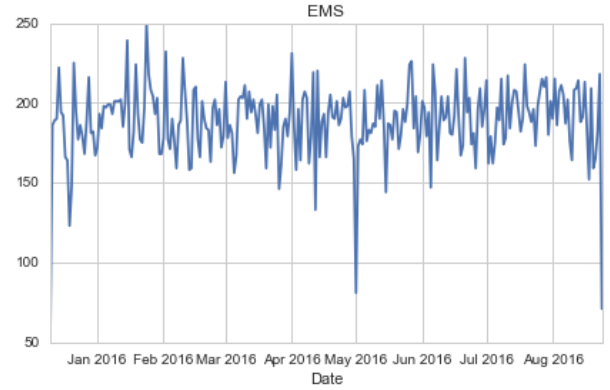
According to the graphs, EMS tends to have the most calls over a week but tends to dip towards the end of the year.

Findings & Conclusion









According to the graphs, the begging of the year is a time where more calls are being place then the summer and fall months.

Acknowledgements

My friend suggested me to use a heatmap and a clustermap because of the days of the week and hours of the day can be visualized this way.

References

I did this presentation on my own.