DSCI 401 - HW 6

Isabel Heard

11/10/2023

Contents

1

Using the data whately 2015 from the macleish package, create an interactive plot using plotly (or ggplotly) displaying time (in days) on the x-axis and temperature on the y-axis with three lines: one for the high temperature of the day, one for the average temperature of the day, and one for the low temperature of the day. A csv version of the file can be found here: https://www.dropbox.com/s/m2nt50qanpijp0m/whately2015.csv?dl=0

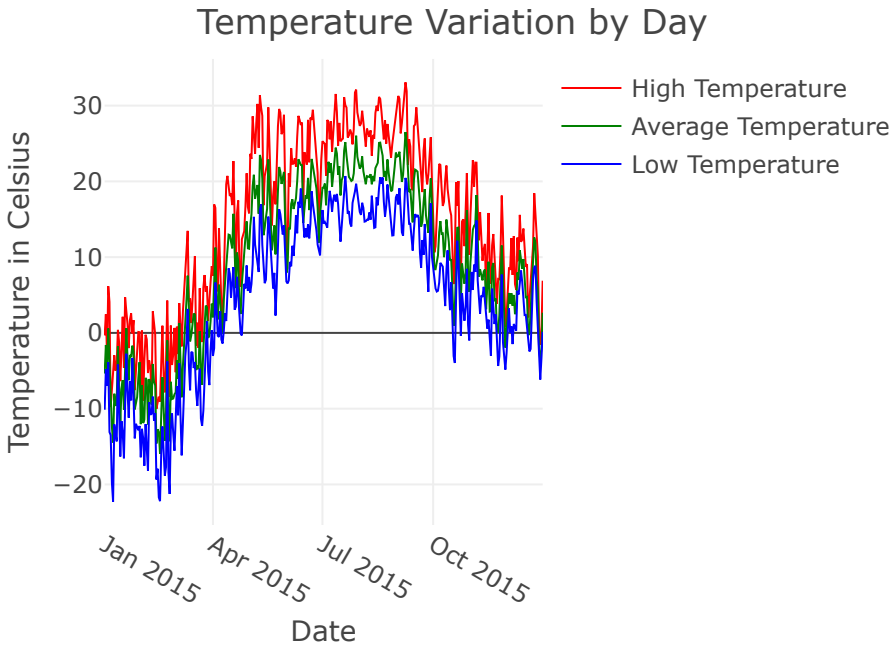
```
library(plotly)
library(tidyverse)
library(dplyr)
library(mdsr)
library(macleish)
#head(whately_2015)
```

```
#Change the when variable to an easier date format to work with
whately_2015$when <- as.POSIXct(whately_2015$when)

#Get high, average, and low temperatures
summary <- whately_2015 %>%
  mutate(day = as.Date(when)) %>%
  group_by(day) %>%
  summarise(high = max(temperature), average = mean(temperature), low = min(temperature))

#Set width to equal 1 to make lines skinnier
summary_plot <- plot_ly(data = summary) %>%
  add_trace(x = ~day, y = ~high, type = 'scatter', mode = 'lines',name = 'High Temperature', line = lis
  add_trace(x = ~day, y = ~average, type = 'scatter', mode = 'lines',name = 'Average Temperature', line
  add_trace(x = ~day, y = ~low, type = 'scatter', mode = 'lines',name = 'Low Temperature', line = list(
  layout(title = "Temperature Variation by Day", xaxis = list(title = "Date"), yaxis = list(title = "Te
summary_plot
```

```
## PhantomJS not found. You can install it with webshot::install_phantomjs(). If it is installed, pleas
```



Python Link

https://colab.research.google.com/drive/1uh6dTnjQZoqzuNtzcQZtht_1HYWpeakH?usp=sharing