Tutorial-10

Dr. Kate Saunders

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Creating Infographics

Learning Objectives

- Practice iterating and polishing your visualisations

- Practice adding additional additive elements to enhance your data narrative

Motivation

> **ℹ Motivation**
>
> Effective communication sometimes requries extending you visualisation by adding narrative elements to guide your audience. This includes elements such as text, highlighting, arrows and labels.
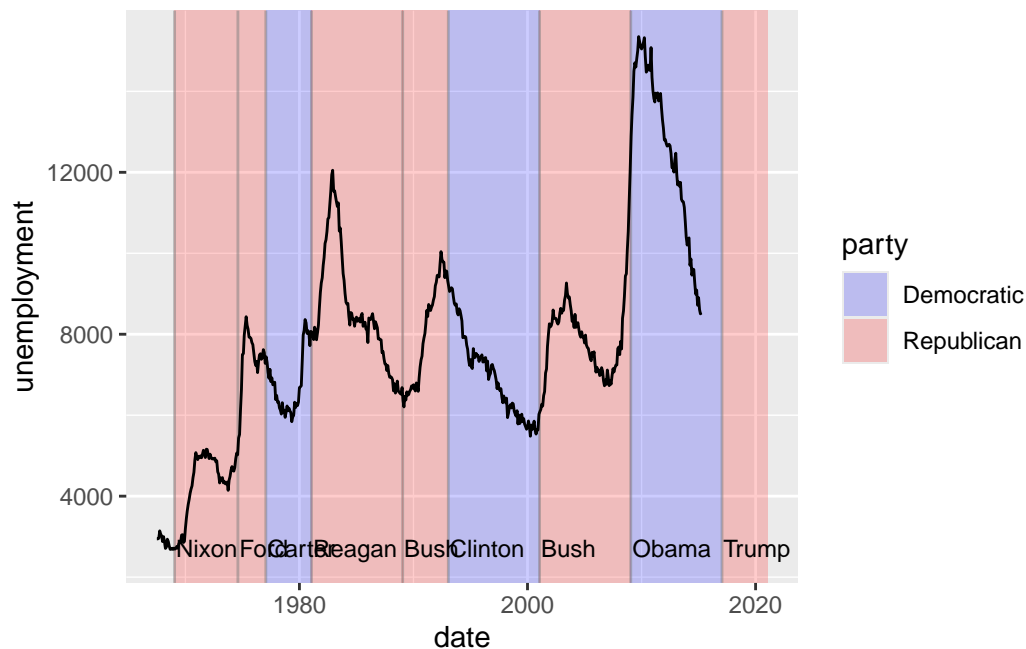>
> In this tutorial, we'll practice adding narrative elements to our visualisation, so we can better deliver the key messages to the audience.

Question 1

The following is a basic example from the ggplot2 book from the section on annotations.
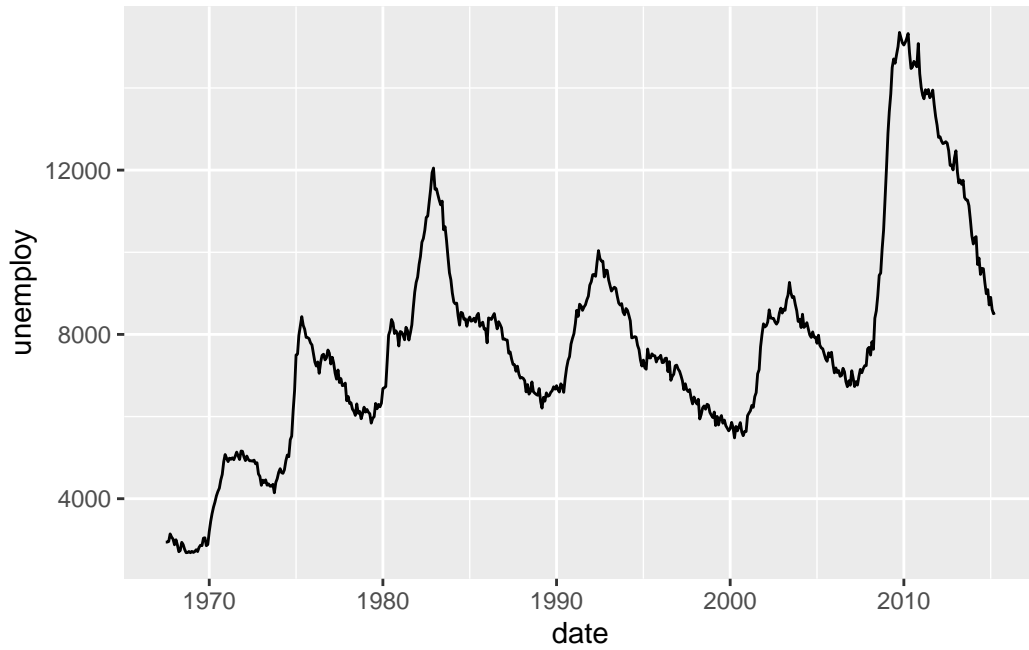
That shows how plots can benefit from additional narrative elements.

(i) Using this code to start. Try adding the text layer to the plot.

```
presidential <- subset(presidential, start > economics$date[1])

ggplot(economics) +
  geom_rect(
    data = presidential,
    aes(xmin = start, xmax = end, fill = party),
    ymin = -Inf, ymax = Inf, alpha = 0.2,
  )  +
  geom_line(aes(date, unemploy))
```

(ii) Fix the colour scale so it appropriately reflects party colours.

(iii) Add vertical lines to better distinguish between the different presidencies.

(iv) Polish the title, axis labels and legends. Use `?economics` to check what units to use.

Question 2

There are other useful ways to add annotations to your plot such as using the `gghighlight` package.

```
if(!require(gghighlight))
  install.packages("gghighlight")

library(gghighlight)
```
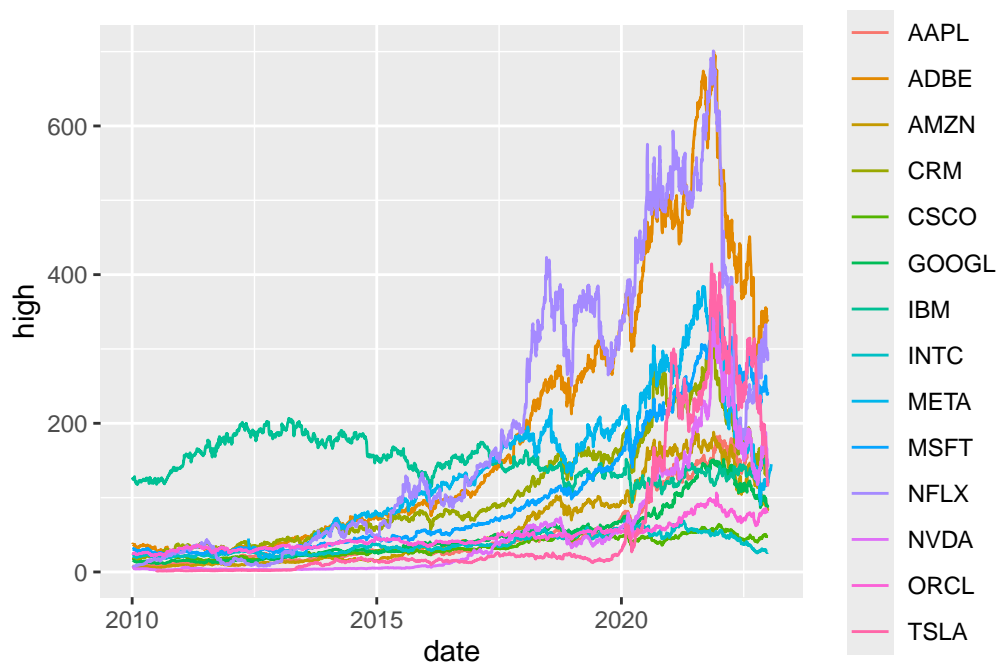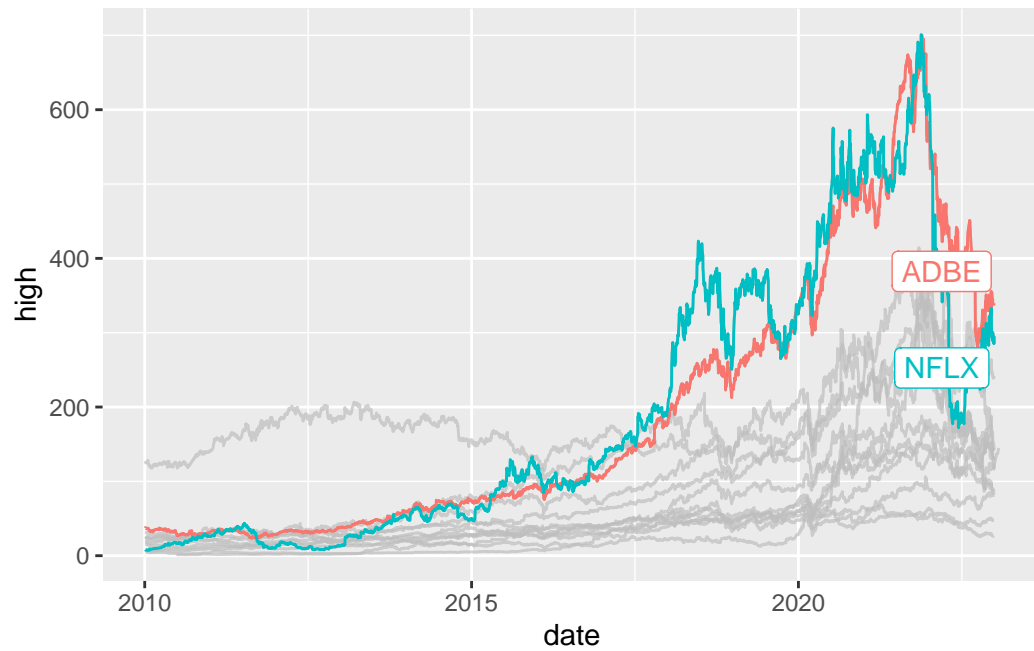
Take a look at the examples here and examples here

   (i) Use this code to generate a basic plot to start - Warning: It's not good.

```
big_tech_data = read_csv("week10/data/big-tech-stock-price.csv")
```
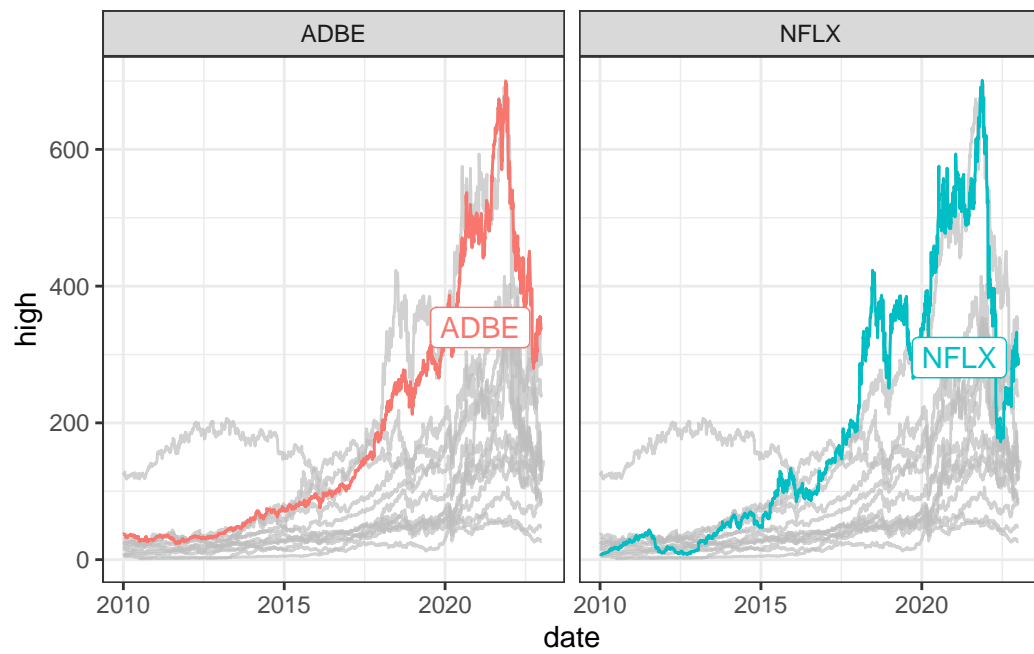
```
ggplot(big_tech_data) +
    geom_line(aes(x= date, y = high, colour = stock_symbol))
```


   (ii) Use `gghighlight` to show stocks with a `high > 600`. Try looking at `?gghighlight` to get started.

(iii) Try this slight variation as well using `facet_wrap()`

Finishing Up

- Make sure you understand how to position text or a label on your plot by changing the x and y coordinates.

- Think how you use colour to highlight your messages.

- Lastly, and most importantly, remember don't always go adding additional elements if they serve your data narrative.