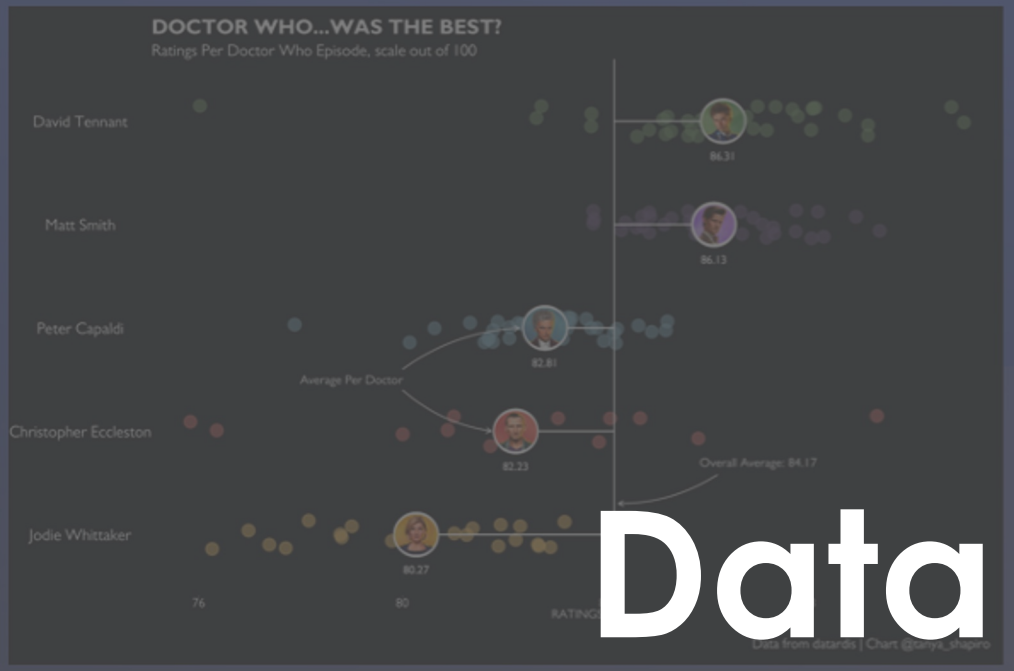
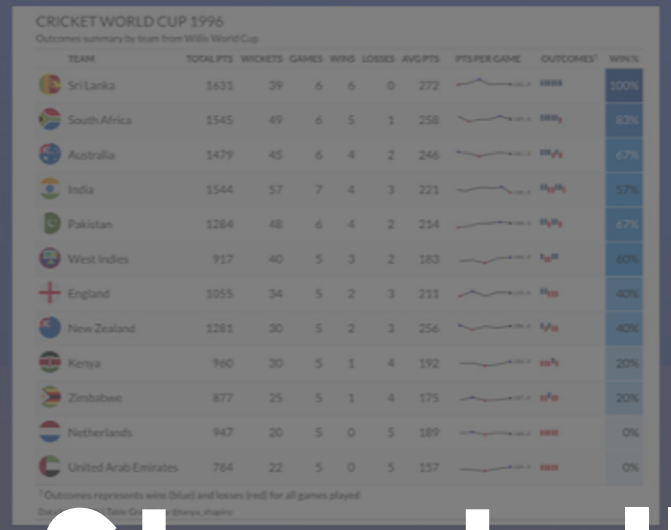
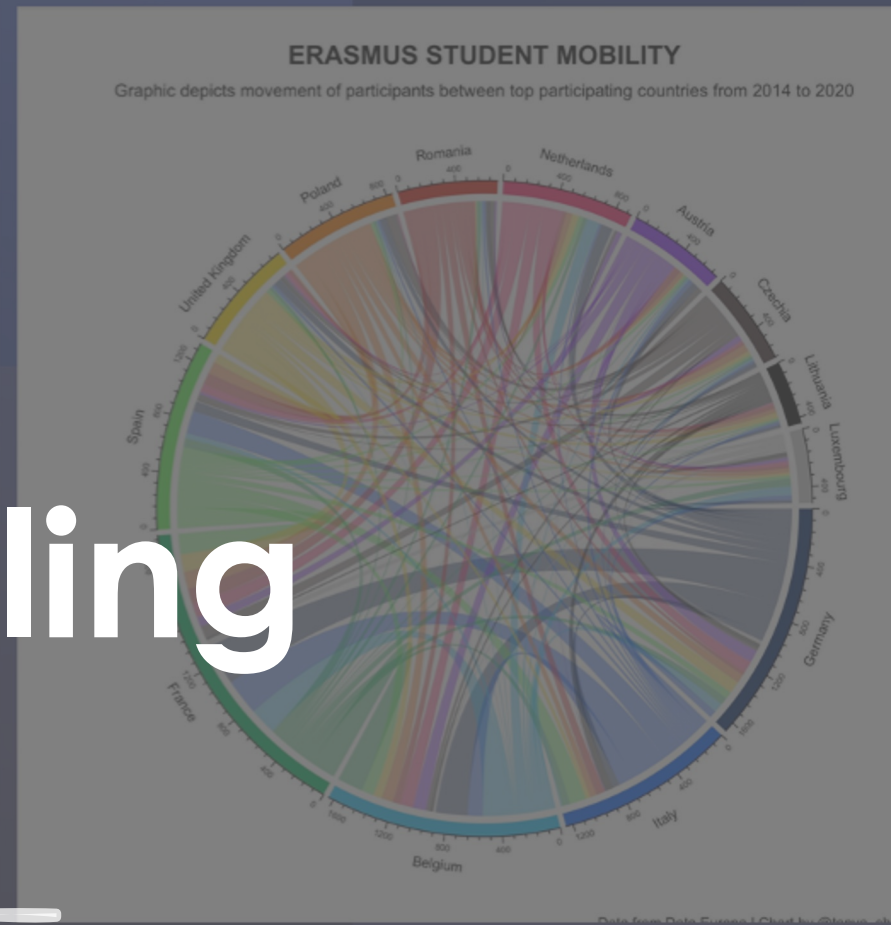
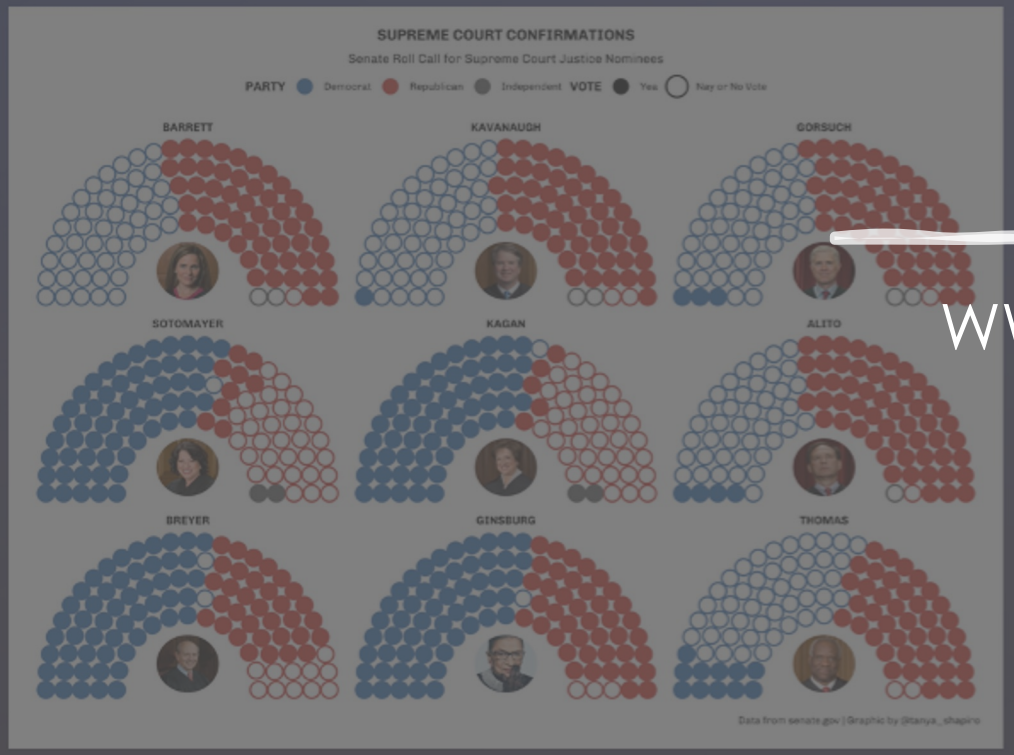
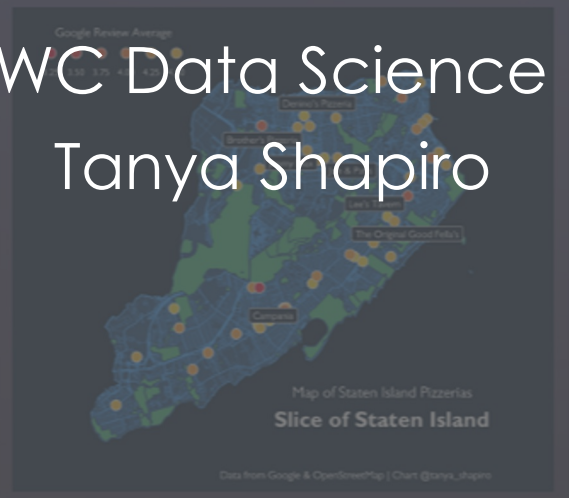


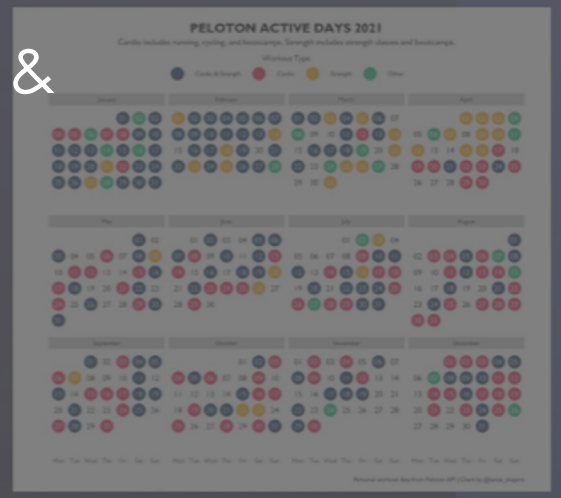


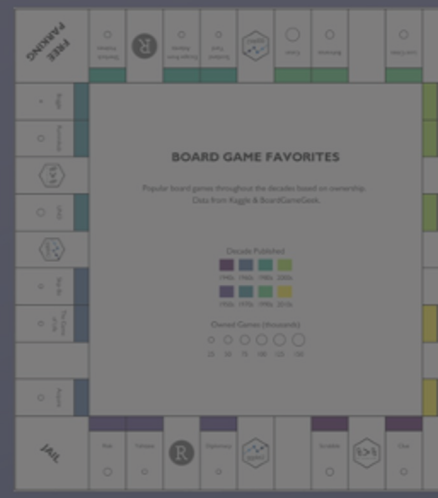


Data Storytelling in R









WWC Data Science &
Tanya Shapiro

Hi!

- Tanya Shapiro @tanya_shapiro
- Obsessed with data viz
- Part of the online R community
- Doing data things for the past 5 years
- Partnering with WWC – all about helping women in tech!

WOMEN WHO CODE

What We'll Learn Today- How To...

WRANGLE, CLEAN, AND MANIPULATE DATA

CREATE DIFFERENT TYPES OF PLOTS

ANNOTATE PLOTS TO GIVE OUR STORY CONTEXT

SPRUCE UP PLOTS WITH CUSTOM THEMES

Phases of Data Visualization

Procuring the Ingredients
TidyTuesday dataset

Preparing the Ingredients
dplyr

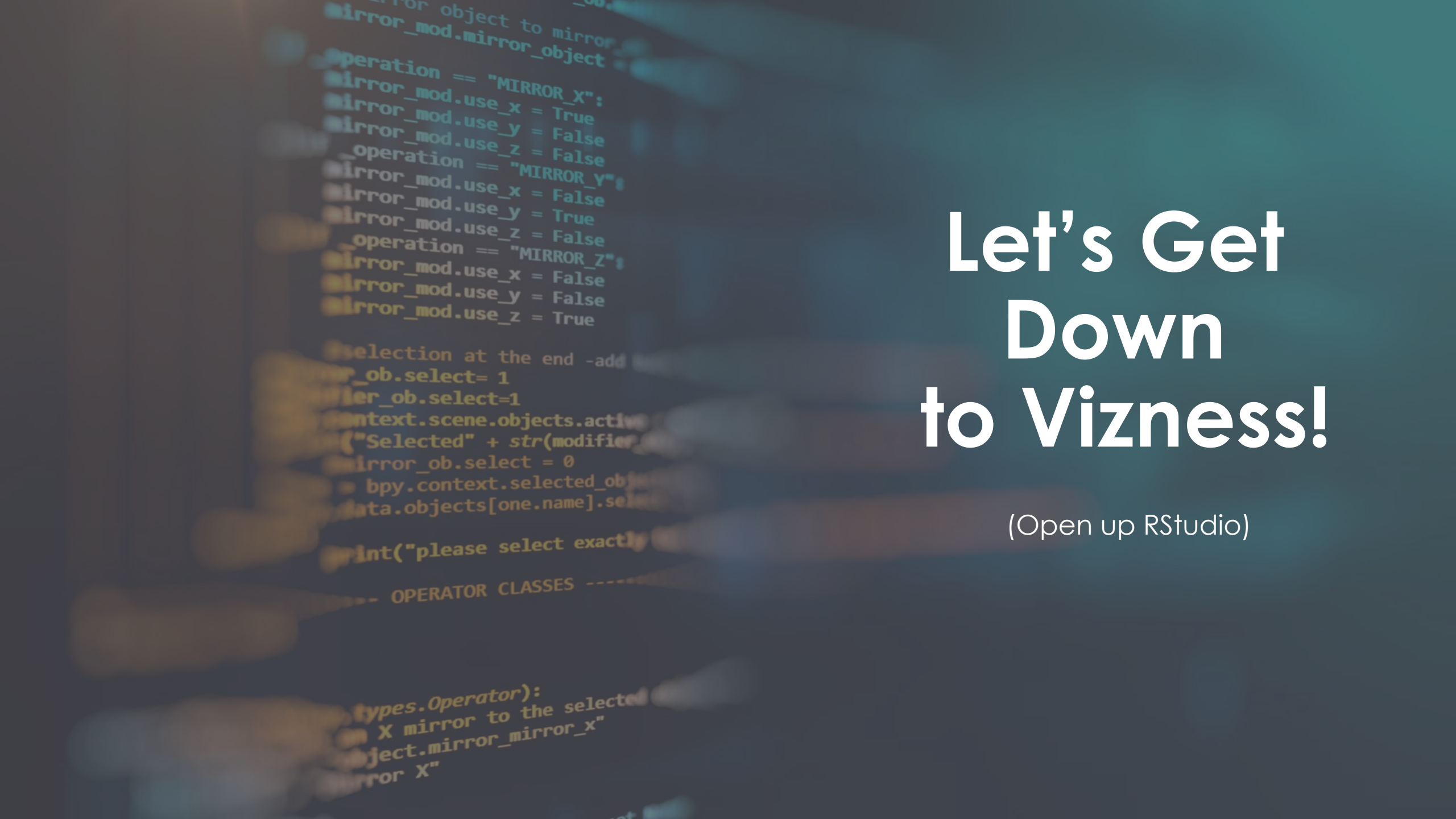
Cooking
ggplot2

Quick Intro to ggplot concepts

- **Aes –** common aesthetic values, specify our variables
- **Geoms** – specifying plot or layer type
- **Scales** – customize axis and legends for color, shape, and fill variables
- **Labs** – how we label our plot, e.g. title, caption
- **Theme** – tweak fonts, colors, spacing, etc.

use **+** to keep building!

```
ggplot(data, aes(x=produce, y=sales, fill = produce))+
  geom_bar(stat = "identity")+
  geom_text(mapping=aes(x=produce, y=sales, label=salees),
                        vjust=-2, size=2, color="black")+
  scale_y_continuous(limits = c(0,100))+
  scale_fill_manual(values = c("red","green","orange"))+
  labs(title = "Total Sales by Produce",
       subtitle = "Sales from Q4 2021",
       x = "PRODUCE",
       y = "SALES ($)",
       caption = "Data from Dan in Finance")+
  theme(text = element_text(family="Arial"),
        plot.title = element_text(face="bold"),
        plot.subtitle=element_text(face="italic"),
        plot.background = element_rect(fill="#000000")
        )
```



Let's Get Down to Vizness!

(Open up RStudio)