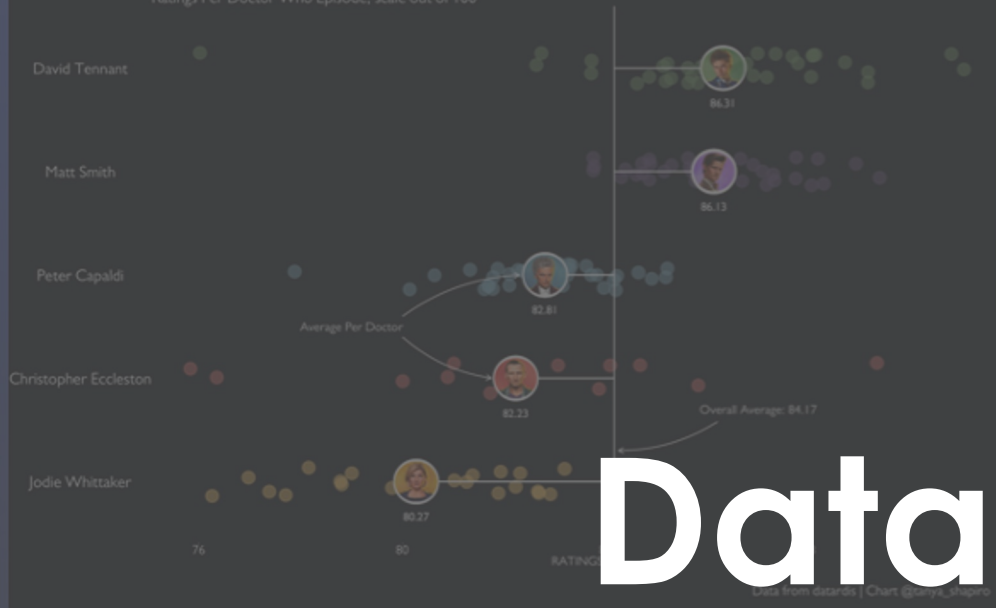


DOCTOR WHO... WAS THE BEST?

Ratings Per Doctor Who Episode, scale out of 100



CRICKET WORLD CUP 1996

Outcomes summary by team from World Cup

TEAM	TOTAL PTS	WICKETS	GAMES	WINS	LOSSES	AVG PTS	PTS PER GAME	OUTCOMES	WIN%
Sri Lanka	1631	39	6	6	0	272		100%	100%
South Africa	1545	49	6	5	1	258		83%	83%
Australia	1479	45	6	4	2	246		67%	67%
India	1544	57	7	4	3	221		57%	57%
Pakistan	1284	48	6	4	2	214		67%	67%
West Indies	917	40	5	3	2	183		60%	60%
England	1055	34	5	2	3	211		40%	40%
New Zealand	1281	30	5	2	3	256		40%	40%
Kenya	960	30	5	1	4	192		20%	20%
Zimbabwe	877	25	5	1	4	175		20%	20%
Netherlands	947	20	5	0	5	189		0%	0%
United Arab Emirates	784	22	5	0	5	157		0%	0%

ERASMUS STUDENT MOBILITY

Graphic depicts movement of participants between top participating countries from 2014 to 2020

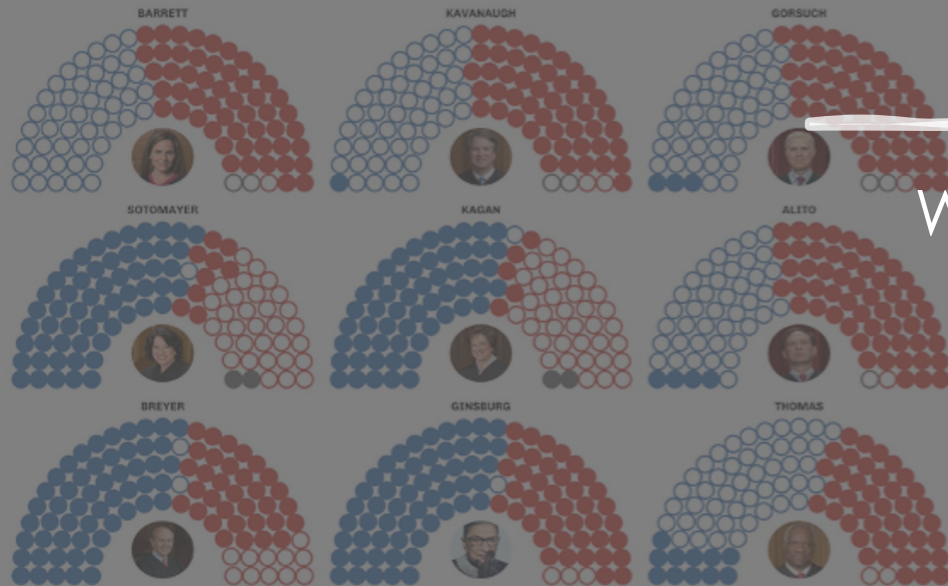


Data Storytelling in R

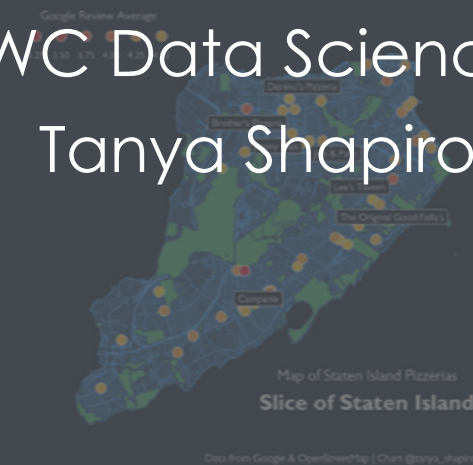
SUPREME COURT CONFIRMATIONS

Senate Roll Call for Supreme Court Justice Nominees

PARTY: Democrat (blue), Republican (red), Independent (grey). VOTE: Yes (black), No or No Vote (white).



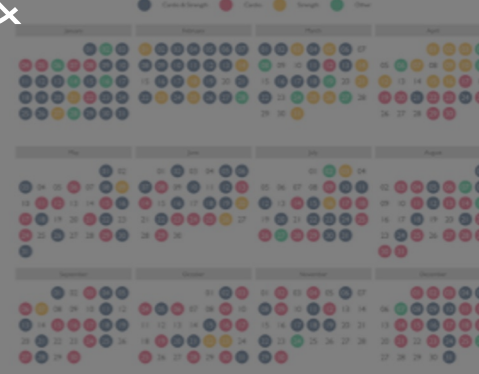
WWC Data Science & Tanya Shapiro



PELOTON ACTIVE DAYS 2021

Calendar includes morning, evening, and weekend. Strength includes strength classes and bootcamps.

Workout Type: Cardio (blue), Strength (red), Other (green).





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!

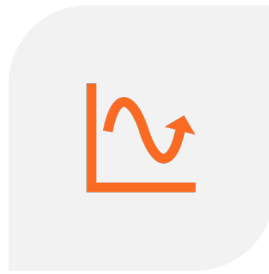


WOMEN WHO
CODE

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



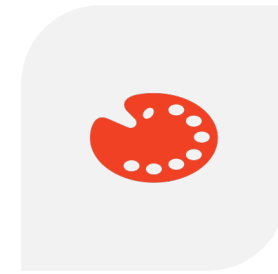
WRANGLE, CLEAN,
AND MANIPULATE
DATA



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

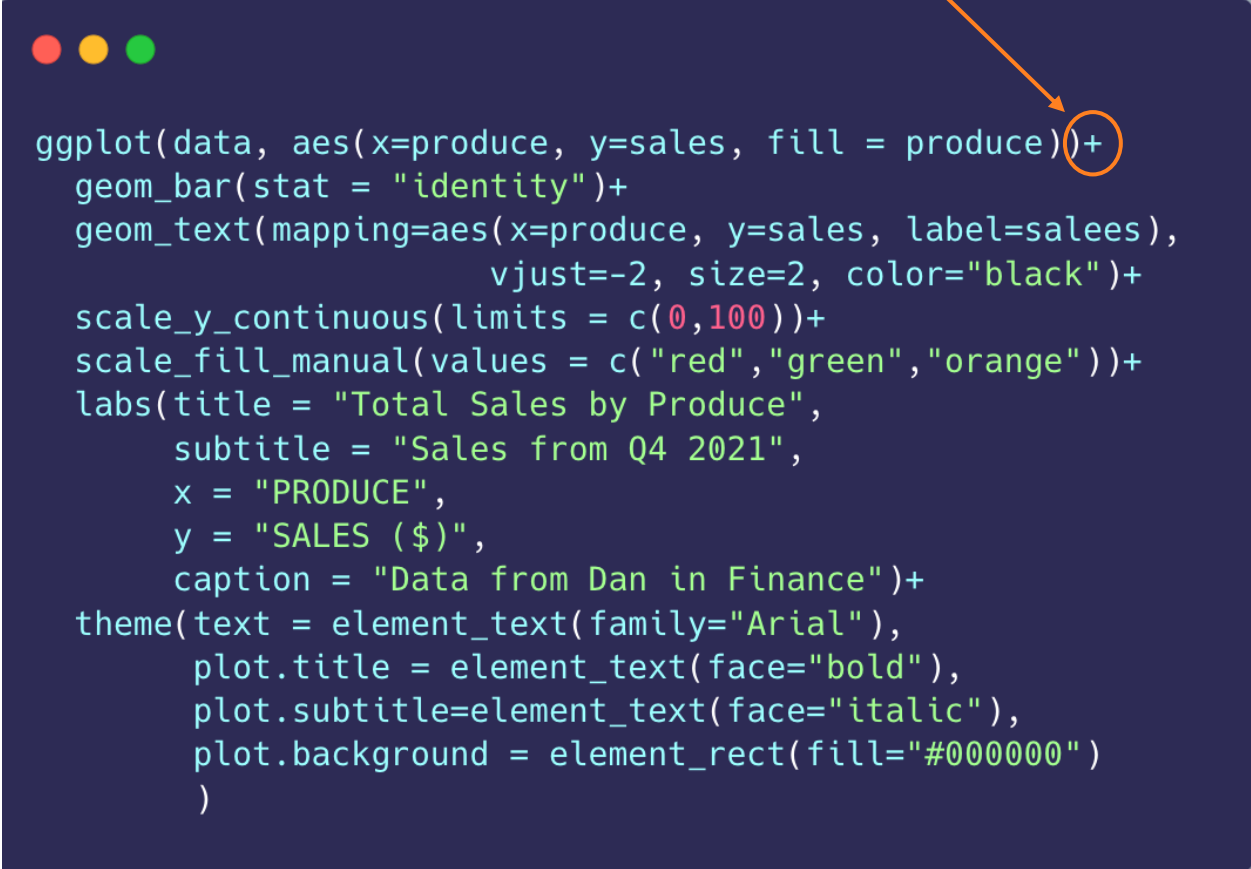


Cooking
ggplot2

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=sales),  
            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)