

# Project 4

Connor Bryson, Nathen Byford, Miguel Iglesias

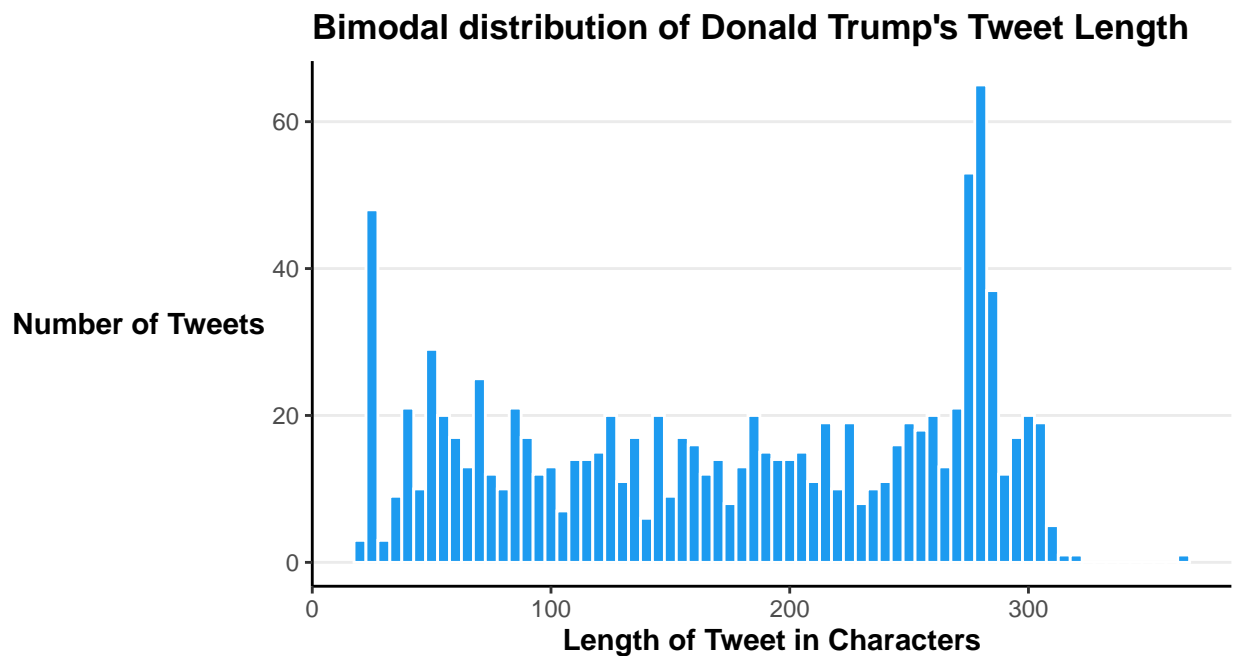
12/2/2021

## Load data

```
dtweets <- read_rds("../data//dtweets.rds")
```

## Question 2

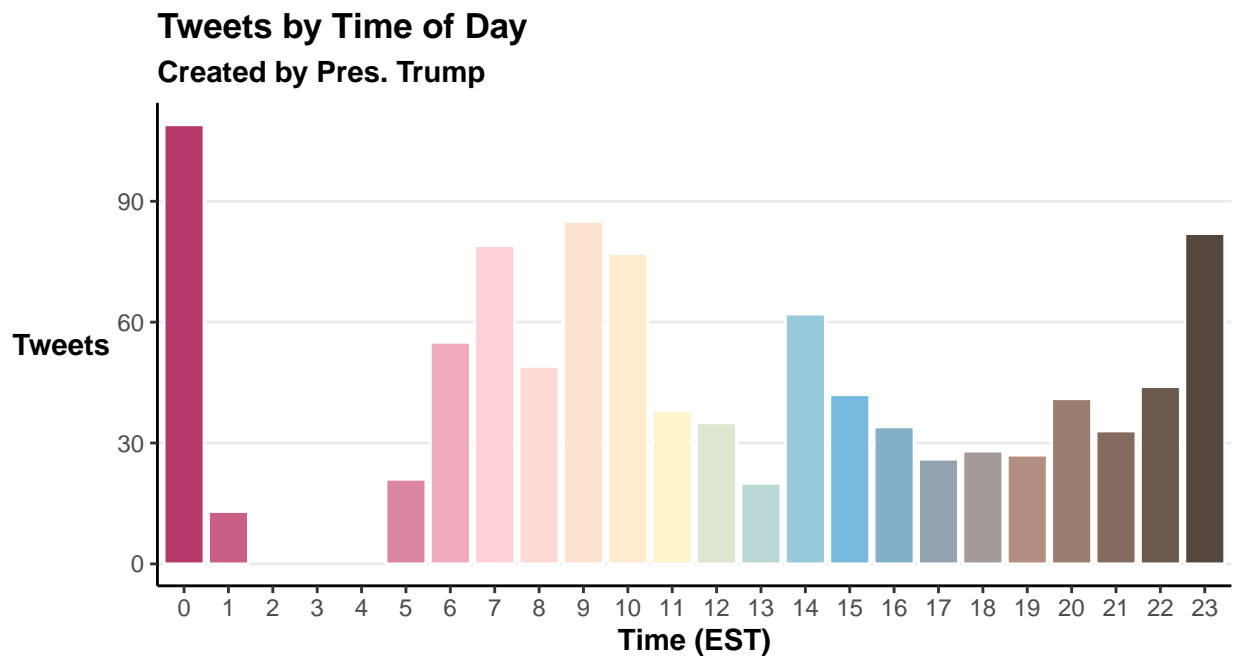
```
dtweets |>
  mutate(length = str_length(text)) |>
  ggplot() +
    geom_histogram(aes(x = length), fill = "#1D9BF0", color = "white", binwidth = 5) +
    labs(title = "Bimodal distribution of Donald Trump's Tweet Length") +
    xlab("Length of Tweet in Characters")+
    ylab("Number of Tweets") +
    theme(legend.position = "none")
```



The interesting finding from this histogram is that there are tweets longer than the 280 character limit.

### Question 3

```
dtweets |>
  mutate(date = with_tz(as_datetime(created_at), tzone = "America/New_york"),
         time = as_hms(date))|>
  ggplot(aes(x = factor(hour(time), levels = 0:23))) +
  geom_bar(aes(fill = as.factor(hour(time))), color = "white") +
  scale_fill_taylor(palette = "lover") +
  scale_x_discrete(drop = FALSE) +
  labs(
    title = "Tweets by Time of Day",
    subtitle = "Created by Pres. Trump",
    x = "Time (EST)",
    y = "Tweets"
  ) +
  theme(legend.position = "none")
```



### Question 4

```
mentions <- dtweets |>
  pull(text) |>
  str_extract_all(pattern = "\\@\\w{4,15}")

map(mentions, str_split, pattern = ", ") |>
  unlist() |>
  as_tibble() |>
  group_by(value) |>
```

```

count() |>
ungroup() |>
arrange(desc(n)) |>
head(n = 20)
## # A tibble: 20 x 2
##   value          n
##   <chr>        <int>
## 1 @realDonaldTrump 108
## 2 @FoxNews         18
## 3 @CDCgov          16
## 4 @POTUS           12
## 5 @foxandfriends   8
## 6 @WhiteHouse       8
## 7 @CMSTGov          6
## 8 @nytimes          6
## 9 @SteveDaines      6
## 10 @Mike_Pence       5
## 11 @trish_regan      5
## 12 @washingtonpost   5
## 13 @Battelle         4
## 14 @FoxBusiness      4
## 15 @GovBillLee       4
## 16 @SenJohnBarrasso  4
## 17 @stevenmnuchin1   4
## 18 @US_FDA           4
## 19 @BretBaier        3
## 20 @DHS_Wolf         3

```

## Question 5

```

dtweets |>
  top_n(favorite_count, n = 10) |>
  select(text) |>
  pull() |>
  str_wrap(width = 40) |>
  cat(sep = "\n\n") |>
  message()
## I am a great friend and admirer of the
## Queen & the United Kingdom. It was
## reported that Harry and Meghan, who left
## the Kingdom, would reside permanently
## in Canada. Now they have left Canada for
## the U.S. however, the U.S. will not pay
## for their security protection. They must
## pay!
##
## THIS IS WHY WE NEED BORDERS!
##
## HYDROXYCHLOROQUINE & AZITHROMYCIN,
## taken together, have a real chance to
## be one of the biggest game changers in

```

```

## the history of medicine. The FDA has
## moved mountains - Thank You! Hopefully
## they will BOTH (H works better with A,
## International Journal of Antimicrobial
## Agents).....
##
## We are going to WIN, sooner rather than
## later!
##
## The world is at war with a hidden enemy.
## WE WILL WIN!
##
## God Bless the USA!
##
## TODAY IS A NATIONAL DAY OF PRAYER. GOD
## BLESS EVERYONE!
##
## THE UNITED STATES LOVES ITALY! https://
## t.co/DESUJ4QM41
##
## It is my great honor to declare Sunday,
## March 15th as a National Day of Prayer.
## We are a Country that, throughout
## our history, has looked to God for
## protection and strength in times like
## these....
##
## Mini Mike, you're easy! https://t.co/
## rxFiqSB9RQ https://t.co/G2M1QHjOHV
##

```

## Question 6

What tweet did Pres. Trump tag the most people in?

```

mentions <- dtweets |>
  pull(text) |>
  str_extract_all(pattern = "\\@\\w{4,15}")

new_mentions <- mentions |>
  map(length) |>
  unlist() |>
  as_tibble() |>
  rename(mentions = value) |>
  mutate(index = row_number()) |>
  arrange(desc(mentions))

dtweets |>
  mutate(index = row_number()) |>
  inner_join(new_mentions) |>
  top_n(mentions, n = 1) |>
  select(text) |>

```

```
str_wrap(width = 40) |>
cat()
## @DrTedros @WHOWPRO @pahowho @WHO_Europe
## @WHOAFRO @WHOEMRO @WHOSEARO "<U+0001F51F> it's
## normal &amp; understandable to feel
## anxious, especially if you live in
## a country or community that has been
## affected. Find out what you can do in
## your community. Discuss how to stay safe
## with your workplace, school or place of
## worship"-@DrTedros #COVID19 #coronavirus
## https://t.co/M4BQzpdh2j
```